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Analytical Data Report for Sediment Samples Collected From 200 BP 5 OU, C7514 (299-E28-30) L-Well

Michael Lindberg

June 2010

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06/15/10 10:32

To: Dale Dyekman

From: M ichael J. Lindberg

Environmental Sciences Laboratory
Energy and Environment Directorate, Pacific Northwest National Laboratory

Subject: Analytical Data Report for Sediment Samples Collected From 200 BP 5 OU, C7514 (299-E28-30) L-Well, Sample Delivery Group ESL090008, SAF Number F10-024

This letter contains the following information for sample delivery group ESL090008

- Cover Sheet
- Narrative
- Analytical Results
- Quality Control
- Geologic Logs
- Geologic Photos
- Chain of Custodies

Introduction

Between November 12, 2009 and November 30, 2009 sediment samples were received from 200 BP 5 OU, C7514 (299-E28-30) L-Well for geochemical studies.

Analytical Results/Methodology

The analyses for this project were performed at the 325 building located in the 300 Area of the Hanford Site. The analyses were performed according to Pacific Northwest National Laboratory (PNNL) approved procedures and/or nationally recognized test procedures. The data sets include the sample identification numbers, analytical results, estimated quantification limits (EQL), and quality control data.

Quality Control

The preparatory and analytical quality control requirements, calibration requirements, acceptance criteria, and failure actions are defined in the on-line QA plan "Conducting Analytical Work in Support of Regulatory Programs" (CAW). This QA plan implements the Hanford Analytical Services Quality Assurance Requirements Documents (HASQARD) for PNNL.

Definitions

Dup	Duplicate
RPD	Relative Percent Difference
NR	No Recovery (percent recovery less than zero)
ND	Non-Detectable
%REC	Percent Recovery

Sample Receipt

Samples were received with a chain of custody (COC) and were analyzed according to the sample identification numbers supplied by the client. All Samples were refrigerated upon receipt until prepared for analysis.

All samples were received with custody seals intact unless noted in the Case Narrative.

Holding Times

Holding time is defined as the time from sample preparation to the time of analyses. The prescribed holding times were met for all analytes unless noted in the Case Narrative.

Analytical Results

All reported analytical results meet the requirements of the CAW or client specified SOW unless noted in the case narrative.

Case Narrative Report

Hold Time:

Due to the requirements of the statement of work and sampling events in the field, the 28 day and the 48 hr requirements can not be met. The statement of work requires samples to be selected at the completion of the borehole. It is not always possible to complete a borehole and have the samples shipped to the laboratory within the hold time requirements.

Preparation Blank (PB):

No discrepancies noted.

Duplicate (DUP):

No discrepancies noted.

Laboratory Control Samples (LCS):

No discrepancies noted.

Post Spike (PS):

Post-Spike Recovery for Calcium (135%) was outside acceptance limits (75-125) in 0B15003-PS1 for ICP-OES Vadose-WE
The native sample concentration was greater than 5 times the spike concentration. There should be no impact to data as reported.

Post-Spike Recovery for Aluminum (211%) was outside acceptance limits (75-125) in 0B16001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be no impact to data as reported.

Post-Spike Recovery for Calcium (329%) was outside acceptance limits (75-125) in 0B16001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be no impact to data as reported.

Post-Spike Recovery for Iron (553%) was outside acceptance limits (75-125) in 0B16001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be no impact to data as reported.

Post-Spike Recovery for Magnesium (279%) was outside acceptance limits (75-125) in 0B16001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be no impact to data as reported.

Post-Spike Recovery for Silver (71.9%) was outside acceptance limits (75-125) in 0B16001-PS1 for ICP-OES Vadose-AE
Low spike recovery may be due to a sample matrix effect. Results for the samples associated with this batch were below the EQL. There should be no impact to data as reported.

Matrix Spike (MS):

Matrix Spike Recovery for Chromium, Hexavalent (38.4%) was outside acceptance limits (75-125) in 0D08006-MS1 for Hexavalent Chromium/Soil
Potential Matrix interference. Sample results associated with this batch are below the EQL. There should be no impact to the data as reported.

Other QC Criteria:

No discrepancies noted.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager as verified by this signature.

Michael Lindberg

DISCLAIMER

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SAMPLES INCLUDED IN THIS REPORT

200 BP 5 OU, C7514 (299-E24-25) L-Well

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B22TK8	0911013-11	SOIL	11/9/09 14:36	11/12/09 12:42
B22TL9	0911013-23	SOIL	11/10/09 12:48	11/12/09 12:42
B22TN1	0911013-37	SOIL	11/11/09 12:09	11/12/09 12:42
B22TN6	0911013-45	SOIL	11/12/09 08:56	11/16/09 13:30
B22TP7	0911013-59	SOIL	11/12/09 13:35	11/16/09 13:30
B22TR8	0911013-72	SOIL	11/13/09 12:54	11/16/09 13:30
B22TV3	0911013-90	SOIL	11/16/09 12:40	11/18/09 11:30
B22TV8	0911013-96	SOIL	11/18/09 07:14	11/18/09 11:30
B22TW5	0911013-AE	SOIL	11/18/09 09:50	11/18/09 11:30
B22TX5	0911013-AT	SOIL	11/20/09 14:36	11/23/09 11:40
B22TY7	0911013-CK	SOIL	11/24/09 10:06	11/30/09 11:15
B22TY8	0911013-CL	SOIL	11/24/09 12:35	11/30/09 11:15
B22V02	0911013-CT	SOIL	11/30/09 08:00	11/30/09 11:15

The following analyses were performed on the following samples included in this report:

Metals 1:1 DI Water Extract by ICPMS
Metals Acid Extract by ICPMS
AGG-TOC-001
Alkalinity, Titrimetic (pH 4.5)
Anions By Ion Chromatography
Carbon, Total, Combustion or Oxidation
Cyanide by Mircodistillation/Colorimetric
GEA No Preparation
Hexavalent Chromium by Colorimetric
Inorganic Carbon, Total, Combustion or Oxidation
Iodine-129 1:1 DI Water Extract by ICPMS
Mercury 1:1 DI Water Extract by ICPMS
Mercury Acid Extract by ICPMS
Metals 1:1 Water Extract by ICPOES
Metals Acid Extract by ICPOES
Moisture Content
pH of Waters By Electrode
Specific Conductance
Tc_U Acid Extract by ICPMS
Tc_U 1:1 DI Water Extract by ICPMS
Total Alpha Total Beta 1:1 DI Water Extract By LSC
Total Alpha Total Beta Acid Extract By LSC

SAMPLES ANALYZED IN THIS REPORT

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B22TK8	0911013-11	SOIL	11/9/09 14:36	11/12/09 12:42
B22TL9	0911013-23	SOIL	11/10/09 12:48	11/12/09 12:42
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B22TN6	0911013-45	SOIL	11/12/09 08:56	11/16/09 13:30
B22TP7	0911013-59	SOIL	11/12/09 13:35	11/16/09 13:30
B22TR8	0911013-72	SOIL	11/13/09 12:54	11/16/09 13:30
B22TV3	0911013-90	SOIL	11/16/09 12:40	11/18/09 11:30
B22TV8	0911013-96	SOIL	11/18/09 07:14	11/18/09 11:30
B22TW5	0911013-AE	SOIL	11/18/09 09:50	11/18/09 11:30
B22TX5	0911013-AT	SOIL	11/20/09 14:36	11/23/09 11:40
B22TY7	0911013-CK	SOIL	11/24/09 10:06	11/30/09 11:15
B22TY8	0911013-CL	SOIL	11/24/09 12:35	11/30/09 11:15
B22V02	0911013-CT	SOIL	11/30/09 08:00	11/30/09 11:15

Wet Chemistry

Alkalinity as CaCO3 (ug/g dry) by Standard Methods 2320B

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	5.10E1	2.35E1	2/11/10	0B09003
0911013-23	B22TL9	6.25E1	2.34E1	2/11/10	0B09003
0911013-37	B22TN1	4.60E1	2.34E1	2/11/10	0B09003
0911013-45	B22TN6	3.79E1	2.35E1	2/11/10	0B09003
0911013-59	B22TP7	5.02E1	2.34E1	2/11/10	0B09003
0911013-72	B22TR8	5.11E1	2.35E1	2/11/10	0B09003
0911013-90	B22TV3	4.45E1	2.35E1	2/11/10	0B09003
0911013-96	B22TV8	5.52E1	2.35E1	2/11/10	0B09003
0911013-AE	B22TW5	4.18E1	2.34E1	2/11/10	0B09003
0911013-AT	B22TX5	5.25E1	2.38E1	2/11/10	0B09003
0911013-CK	B22TY7	4.45E1	2.35E1	2/11/10	0B09003
0911013-CL	B22TY8	4.61E1	2.35E1	2/11/10	0B09003
0911013-CT	B22V02	4.03E1	2.34E1	2/11/10	0B09003

Wet Chemistry

Specific Conductance (EC) (mS/cm) by EPA 120.1

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	4.03E-1	1.00E-2	2/09/10	0B09002
0911013-23	B22TL9	1.57E-1	1.00E-2	2/09/10	0B09002
0911013-37	B22TN1	2.31E-1	1.00E-2	2/09/10	0B09002
0911013-45	B22TN6	3.36E-1	1.00E-2	2/09/10	0B09002
0911013-59	B22TP7	1.39E-1	1.00E-2	2/09/10	0B09002
0911013-72	B22TR8	1.46E-1	1.00E-2	2/09/10	0B09002
0911013-90	B22TV3	1.20E-1	1.00E-2	2/09/10	0B09002
0911013-96	B22TV8	1.53E-1	1.00E-2	2/09/10	0B09002
0911013-AE	B22TW5	1.31E-1	1.00E-2	2/09/10	0B09002
0911013-AT	B22TX5	1.65E-1	1.00E-2	2/09/10	0B09002
0911013-CK	B22TY7	1.19E-1	1.00E-2	2/09/10	0B09002
0911013-CL	B22TY8	1.36E-1	1.00E-2	2/09/10	0B09002
0911013-CT	B22V02	1.36E-1	1.00E-2	2/09/10	0B09002

Wet Chemistry

Moisture Content (% by Weight) by AGG-WC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	5.56E0	N/A	12/23/09	9L09005
0911013-23	B22TL9	3.46E0	N/A	12/23/09	9L09005
0911013-37	B22TN1	3.97E0	N/A	12/23/09	9L09005
0911013-45	B22TN6	5.00E0	N/A	12/23/09	9L09005
0911013-59	B22TP7	4.56E0	N/A	12/23/09	9L09005
0911013-72	B22TR8	3.19E0	N/A	12/23/09	9L09005
0911013-90	B22TV3	3.41E0	N/A	12/23/09	9L09005
0911013-96	B22TV8	4.51E0	N/A	12/23/09	9L09005
0911013-AE	B22TW5	3.51E0	N/A	12/23/09	9L09005
0911013-AT	B22TX5	3.86E0	N/A	12/23/09	9L09005
0911013-CK	B22TY7	3.39E0	N/A	12/23/09	9L09005
0911013-CL	B22TY8	4.39E0	N/A	12/23/09	9L09005
0911013-CT	B22V02	3.32E0	N/A	12/23/09	9L09005

Wet Chemistry

pH (pH Units) by AGG-pH-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	7.32E0	N/A	2/09/10	0B09001
0911013-23	B22TL9	7.91E0	N/A	2/09/10	0B09001
0911013-37	B22TN1	7.63E0	N/A	2/09/10	0B09001
0911013-45	B22TN6	7.45E0	N/A	2/09/10	0B09001
0911013-59	B22TP7	7.88E0	N/A	2/09/10	0B09001
0911013-72	B22TR8	7.93E0	N/A	2/09/10	0B09001
0911013-90	B22TV3	7.96E0	N/A	2/09/10	0B09001
0911013-96	B22TV8	7.94E0	N/A	2/09/10	0B09001
0911013-AE	B22TW5	7.92E0	N/A	2/09/10	0B09001
0911013-AT	B22TX5	7.95E0	N/A	2/09/10	0B09001
0911013-CK	B22TY7	7.91E0	N/A	2/09/10	0B09001
0911013-CL	B22TY8	7.96E0	N/A	2/09/10	0B09001
0911013-CT	B22V02	7.88E0	N/A	2/09/10	0B09001

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
16984-48-8	Fluoride	1.40E0	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	2.57E1	ug/g dry	4.99E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	2.37E1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	9.69E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
16984-48-8	Fluoride	5.76E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.09E0	ug/g dry	4.99E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.24E0	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.19E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
16984-48-8	Fluoride	9.63E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.63E0	ug/g dry	4.99E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	6.26E1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.16E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
16984-48-8	Fluoride	1.04E0	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.65E0	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.19E2	ug/g dry	1.00E1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.10E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
16984-48-8	Fluoride	4.70E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	6.74E-1	ug/g dry	4.99E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.98E-1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.70E1	ug/g dry	9.98E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.01E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
16984-48-8	Fluoride	5.50E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.16E0	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	4.38E0	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.46E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
16984-48-8	Fluoride	4.10E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.05E0	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	5.43E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	8.55E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
16984-48-8	Fluoride	5.00E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	1.17E0	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	4.13E0	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.45E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
16984-48-8	Fluoride	4.03E-1	ug/g dry	1.99E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	<4.98E-1	ug/g dry	4.98E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.96E-1	ug/g dry	9.96E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.96E-1	ug/g dry	9.96E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.14E1	ug/g dry	9.96E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.18E1	ug/g dry	1.49E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.49E0	ug/g dry	1.49E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
16984-48-8	Fluoride	5.59E-1	ug/g dry	2.02E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	7.10E-1	ug/g dry	5.05E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<1.01E0	ug/g dry	1.01E0	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<1.01E0	ug/g dry	1.01E0	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.26E1	ug/g dry	1.01E0	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.70E1	ug/g dry	1.52E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.52E0	ug/g dry	1.52E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
16984-48-8	Fluoride	5.33E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	<5.00E-1	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<1.00E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	9.06E0	ug/g dry	1.00E0	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	8.05E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
16984-48-8	Fluoride	5.07E-1	ug/g dry	2.00E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	5.15E-1	ug/g dry	5.00E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.99E-1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	1.19E1	ug/g dry	9.99E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.32E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
16984-48-8	Fluoride	5.43E-1	ug/g dry	1.99E-1	2/10/10	0B10015	AGG-IC-001
16887-00-6	Chloride	9.39E-1	ug/g dry	4.99E-1	2/10/10	0B10015	AGG-IC-001
14797-65-0	Nitrite	<9.97E-1	ug/g dry	9.97E-1	2/10/10	0B10015	AGG-IC-001
24959-67-9	Bromide	<9.97E-1	ug/g dry	9.97E-1	2/10/10	0B10015	AGG-IC-001
14797-55-8	Nitrate	7.12E0	ug/g dry	9.97E-1	2/10/10	0B10015	AGG-IC-001
14808-79-8	Sulfate	1.61E1	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/10/10	0B10015	AGG-IC-001

Cyanide by Mircodistillation/Colorimetric

Cyanide (ug/g dry) by MICRODIST Cyanide Method

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	<1.07E-1	1.07E-1	4/07/10	0D07001
0911013-23	B22TL9	<1.01E-1	1.01E-1	4/07/10	0D07001
0911013-37	B22TN1	<1.02E-1	1.02E-1	4/07/10	0D07001
0911013-45	B22TN6	<1.06E-1	1.06E-1	4/07/10	0D07001
0911013-59	B22TP7	<1.05E-1	1.05E-1	4/07/10	0D07001
0911013-72	B22TR8	<1.02E-1	1.02E-1	4/07/10	0D07001
0911013-90	B22TV3	<1.02E-1	1.02E-1	4/07/10	0D07001
0911013-96	B22TV8	<1.06E-1	1.06E-1	4/07/10	0D07001
0911013-AE	B22TW5	<1.01E-1	1.01E-1	4/07/10	0D07001
0911013-AT	B22TX5	<1.02E-1	1.02E-1	4/07/10	0D07001
0911013-CK	B22TY7	<1.03E-1	1.03E-1	4/07/10	0D07001
0911013-CL	B22TY8	<1.05E-1	1.05E-1	4/07/10	0D07001
0911013-CT	B22V02	<1.05E-1	1.05E-1	4/07/10	0D07001

Hexavalent Chromium/Soil

Chromium, Hexavalent (ug/g dry) by Colorimetric Determination

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	<5.31E-1	5.31E-1	3/09/10	0D08006
0911013-23	B22TL9	<5.09E-1	5.09E-1	3/09/10	0D08006
0911013-37	B22TN1	<5.09E-1	5.09E-1	3/09/10	0D08006
0911013-45	B22TN6	<5.12E-1	5.12E-1	3/09/10	0D08006
0911013-59	B22TP7	<4.90E-1	4.90E-1	3/09/10	0D08006
0911013-72	B22TR8	<5.17E-1	5.17E-1	3/09/10	0D08006
0911013-90	B22TV3	<4.95E-1	4.95E-1	3/09/10	0D08006
0911013-96	B22TV8	<5.03E-1	5.03E-1	3/09/10	0D08006
0911013-AE	B22TW5	<5.01E-1	5.01E-1	3/09/10	0D08006
0911013-AT	B22TX5	<4.88E-1	4.88E-1	3/09/10	0D08006
0911013-CK	B22TY7	<5.00E-1	5.00E-1	3/09/10	0D08006
0911013-CL	B22TY8	<4.98E-1	4.98E-1	3/09/10	0D08006
0911013-CT	B22V02	<4.80E-1	4.80E-1	3/09/10	0D08006

Total Metals by PNNL-AGG-ICP-AES/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
7429-90-5	Aluminum	<9.36E-2	ug/g dry	9.36E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.72E1	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.83E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.77E-2	ug/g dry	8.77E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.85E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	7.42E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.24E-2	ug/g dry	6.24E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.66E-2	ug/g dry	9.66E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.86E-1	ug/g dry	9.86E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	3.91E1	ug/g dry	7.96E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
7429-90-5	Aluminum	<9.35E-2	ug/g dry	9.35E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.30E1	ug/g dry	4.51E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.03E-1	ug/g dry	1.03E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	3.52E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.76E-2	ug/g dry	8.76E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.71E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.06E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.23E-2	ug/g dry	6.23E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.65E-2	ug/g dry	9.65E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.86E-1	ug/g dry	9.86E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.05E1	ug/g dry	7.95E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
7429-90-5	Aluminum	<9.35E-2	ug/g dry	9.35E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.33E1	ug/g dry	4.51E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.83E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.76E-2	ug/g dry	8.76E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.01E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.19E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.23E-2	ug/g dry	6.23E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	1.15E-1	ug/g dry	9.65E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.86E-1	ug/g dry	9.86E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TN1**	**Lab ID:**		**0911013-37**			
7440-23-5	Sodium	1.00E1	ug/g dry	7.95E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TN6**	**Lab ID:**		**0911013-45**			
7429-90-5	Aluminum	<9.37E-2	ug/g dry	9.37E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.12E-1	ug/g dry	3.12E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	3.58E1	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.78E-2	ug/g dry	8.78E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.04E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	5.13E0	ug/g dry	4.89E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	2.66E-1	ug/g dry	9.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.88E-1	ug/g dry	9.88E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	9.89E0	ug/g dry	7.97E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.68E-2	ug/g dry	5.68E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TP7**	**Lab ID:**		**0911013-59**			
7429-90-5	Aluminum	<9.35E-2	ug/g dry	9.35E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.01E1	ug/g dry	4.51E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.83E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.77E-2	ug/g dry	8.77E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.68E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.27E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.23E-2	ug/g dry	6.23E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.65E-2	ug/g dry	9.65E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.86E-1	ug/g dry	9.86E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.16E1	ug/g dry	7.95E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TR8**	**Lab ID:**		**0911013-72**			
7429-90-5	Aluminum	<9.37E-2	ug/g dry	9.37E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.28E0	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.78E-2	ug/g dry	8.78E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.63E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.07E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.24E-2	ug/g dry	6.24E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.67E-2	ug/g dry	9.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TR8**	**Lab ID:**		**0911013-72**			
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.87E-1	ug/g dry	9.87E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.46E1	ug/g dry	7.97E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.68E-2	ug/g dry	5.68E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TV3**	**Lab ID:**		**0911013-90**			
7429-90-5	Aluminum	<9.37E-2	ug/g dry	9.37E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.12E-1	ug/g dry	3.12E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.04E0	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.79E-2	ug/g dry	8.79E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.42E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.86E0	ug/g dry	4.89E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.67E-2	ug/g dry	9.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.88E-1	ug/g dry	9.88E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.02E1	ug/g dry	7.97E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.68E-2	ug/g dry	5.68E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TV8**	**Lab ID:**		**0911013-96**			
7429-90-5	Aluminum	1.13E-1	ug/g dry	9.36E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	9.02E0	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.78E-2	ug/g dry	8.78E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.51E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.27E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.24E-2	ug/g dry	6.24E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.66E-2	ug/g dry	9.66E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.87E-1	ug/g dry	9.87E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.42E1	ug/g dry	7.96E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TW5**	**Lab ID:**		**0911013-AE**			
7429-90-5	Aluminum	9.35E-2	ug/g dry	9.33E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.10E-1	ug/g dry	3.10E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.41E0	ug/g dry	4.50E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.03E-1	ug/g dry	1.03E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.83E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.75E-2	ug/g dry	8.75E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.58E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
7439-95-4	Magnesium	2.97E0	ug/g dry	4.87E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.22E-2	ug/g dry	6.22E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.63E-2	ug/g dry	9.63E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.60E-1	ug/g dry	1.60E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.84E-1	ug/g dry	9.84E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.01E1	ug/g dry	7.94E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.66E-2	ug/g dry	5.66E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
7429-90-5	Aluminum	1.24E-1	ug/g dry	9.47E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.15E-1	ug/g dry	3.15E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	9.89E0	ug/g dry	4.57E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.87E-2	ug/g dry	2.87E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.88E-2	ug/g dry	8.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.10E-1	ug/g dry	1.06E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.53E0	ug/g dry	1.31E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.26E0	ug/g dry	4.94E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.31E-2	ug/g dry	6.31E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.78E-2	ug/g dry	9.78E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.63E-1	ug/g dry	1.63E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.21E0	ug/g dry	1.21E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.99E-1	ug/g dry	9.99E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.64E1	ug/g dry	8.06E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.74E-2	ug/g dry	5.74E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
7429-90-5	Aluminum	<9.38E-2	ug/g dry	9.38E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.12E-1	ug/g dry	3.12E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.47E0	ug/g dry	4.53E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.79E-2	ug/g dry	8.79E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.86E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.63E0	ug/g dry	4.89E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.68E-2	ug/g dry	9.68E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.89E-1	ug/g dry	9.89E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.12E1	ug/g dry	7.98E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.68E-2	ug/g dry	5.68E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
7429-90-5	Aluminum	1.04E-1	ug/g dry	9.37E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.61E0	ug/g dry	4.52E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.04E-1	ug/g dry	1.04E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.84E-2	ug/g dry	2.84E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
7440-50-8	Copper	<8.78E-2	ug/g dry	8.78E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.88E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.58E0	ug/g dry	4.88E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.24E-2	ug/g dry	6.24E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.67E-2	ug/g dry	9.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.61E-1	ug/g dry	1.61E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.87E-1	ug/g dry	9.87E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.31E1	ug/g dry	7.97E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.67E-2	ug/g dry	5.67E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
7429-90-5	Aluminum	1.54E-1	ug/g dry	9.34E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-38-2	Arsenic	<3.11E-1	ug/g dry	3.11E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.87E0	ug/g dry	4.51E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.03E-1	ug/g dry	1.03E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<2.83E-2	ug/g dry	2.83E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.76E-2	ug/g dry	8.76E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.17E-1	ug/g dry	1.05E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.71E0	ug/g dry	1.29E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.58E0	ug/g dry	4.87E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.23E-2	ug/g dry	6.23E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-02-0	Nickel	<9.64E-2	ug/g dry	9.64E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.60E-1	ug/g dry	1.60E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<1.20E0	ug/g dry	1.20E0	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<9.85E-1	ug/g dry	9.85E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.17E1	ug/g dry	7.95E-1	2/15/10	0B15003	PNNL-AGG-ICP-AES
7440-22-4	Silver	<5.66E-2	ug/g dry	5.66E-2	2/15/10	0B15003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**	**Lab ID:**		**0911013-11**			
7429-90-5	Aluminum	4.96E3	ug/g dry	2.38E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.12E3	ug/g dry	2.47E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.30E0	ug/g dry	1.30E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	7.51E0	ug/g dry	2.08E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.82E0	ug/g dry	6.82E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.18E4	ug/g dry	6.41E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.06E3	ug/g dry	9.12E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.05E3	ug/g dry	6.79E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.30E2	ug/g dry	2.13E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	8.31E0	ug/g dry	4.94E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.07E1	ug/g dry	1.07E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<6.05E1	ug/g dry	6.05E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.42E1	ug/g dry	3.42E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.64E2	ug/g dry	6.71E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.23E0	ug/g dry	3.23E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TL9**	**Lab ID:**		**0911013-23**			
7429-90-5	Aluminum	4.97E3	ug/g dry	2.32E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	7.41E3	ug/g dry	2.41E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	7.47E0	ug/g dry	2.03E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.65E0	ug/g dry	6.65E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.17E4	ug/g dry	6.25E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.67E2	ug/g dry	8.90E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.91E3	ug/g dry	6.62E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.13E2	ug/g dry	2.08E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	8.02E0	ug/g dry	4.82E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.90E1	ug/g dry	5.90E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.34E1	ug/g dry	3.34E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.07E2	ug/g dry	6.55E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.15E0	ug/g dry	3.15E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TN1**	**Lab ID:**		**0911013-37**			
7429-90-5	Aluminum	4.99E3	ug/g dry	2.32E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	7.57E3	ug/g dry	2.41E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	6.71E0	ug/g dry	2.03E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.65E0	ug/g dry	6.65E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.23E4	ug/g dry	6.25E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.68E2	ug/g dry	8.90E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.82E3	ug/g dry	6.62E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.12E2	ug/g dry	2.08E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	7.69E0	ug/g dry	4.82E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.90E1	ug/g dry	5.90E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.34E1	ug/g dry	3.34E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.08E2	ug/g dry	6.55E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.15E0	ug/g dry	3.15E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TN6**	**Lab ID:**		**0911013-45**			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TN6**	**Lab ID:**	**0911013-45**				
7429-90-5	Aluminum	5.54E3	ug/g dry	2.28E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.75E3	ug/g dry	2.36E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.24E0	ug/g dry	1.24E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	9.03E0	ug/g dry	1.98E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.51E0	ug/g dry	6.51E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.14E4	ug/g dry	6.12E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.26E3	ug/g dry	8.71E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.92E3	ug/g dry	6.48E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.30E2	ug/g dry	2.03E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	9.82E0	ug/g dry	4.72E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.02E1	ug/g dry	1.02E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.77E1	ug/g dry	5.77E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.26E1	ug/g dry	3.26E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	9.97E1	ug/g dry	6.41E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.08E0	ug/g dry	3.08E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TP7**	**Lab ID:**	**0911013-59**				
7429-90-5	Aluminum	5.64E3	ug/g dry	2.37E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	7.19E3	ug/g dry	2.46E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.29E0	ug/g dry	1.29E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	8.34E0	ug/g dry	2.07E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.77E0	ug/g dry	6.77E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.19E4	ug/g dry	6.37E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.07E3	ug/g dry	9.06E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.18E3	ug/g dry	6.74E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.32E2	ug/g dry	2.12E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	9.95E0	ug/g dry	4.91E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.06E1	ug/g dry	1.06E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<6.01E1	ug/g dry	6.01E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.40E1	ug/g dry	3.40E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.20E2	ug/g dry	6.67E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.21E0	ug/g dry	3.21E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TR8**	**Lab ID:**	**0911013-72**				
7429-90-5	Aluminum	5.43E3	ug/g dry	2.33E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.34E3	ug/g dry	2.42E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	7.56E0	ug/g dry	2.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.68E0	ug/g dry	6.68E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.21E4	ug/g dry	6.28E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	9.88E2	ug/g dry	8.94E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.68E3	ug/g dry	6.65E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.05E2	ug/g dry	2.09E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	7.32E0	ug/g dry	4.84E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.92E1	ug/g dry	5.92E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.35E1	ug/g dry	3.35E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.66E2	ug/g dry	6.58E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.16E0	ug/g dry	3.16E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TV3**	**Lab ID:**	**0911013-90**				

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TV3**	**Lab ID:**		**0911013-90**			
7429-90-5	Aluminum	5.03E3	ug/g dry	2.24E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.76E3	ug/g dry	2.33E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.22E0	ug/g dry	1.22E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	7.43E0	ug/g dry	1.96E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.42E0	ug/g dry	6.42E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.21E4	ug/g dry	6.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.02E2	ug/g dry	8.59E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.66E3	ug/g dry	6.39E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.92E2	ug/g dry	2.01E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	8.75E0	ug/g dry	4.66E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.00E1	ug/g dry	1.00E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.70E1	ug/g dry	5.70E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.22E1	ug/g dry	3.22E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.60E2	ug/g dry	6.33E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.04E0	ug/g dry	3.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TV8**	**Lab ID:**		**0911013-96**			
7429-90-5	Aluminum	5.29E3	ug/g dry	2.34E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.34E3	ug/g dry	2.43E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	9.68E0	ug/g dry	2.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.68E0	ug/g dry	6.68E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.26E4	ug/g dry	6.28E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.51E2	ug/g dry	8.95E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.96E3	ug/g dry	6.66E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.05E2	ug/g dry	2.09E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	1.12E1	ug/g dry	4.85E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.05E1	ug/g dry	1.05E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.93E1	ug/g dry	5.93E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.35E1	ug/g dry	3.35E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.74E2	ug/g dry	6.58E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.17E0	ug/g dry	3.17E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TW5**	**Lab ID:**		**0911013-AE**			
7429-90-5	Aluminum	5.16E3	ug/g dry	2.31E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.57E3	ug/g dry	2.40E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.26E0	ug/g dry	1.26E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	9.01E0	ug/g dry	2.02E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.62E0	ug/g dry	6.62E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.07E4	ug/g dry	6.22E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	9.09E2	ug/g dry	8.86E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.92E3	ug/g dry	6.59E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.92E2	ug/g dry	2.07E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	1.07E1	ug/g dry	4.80E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.87E1	ug/g dry	5.87E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.32E1	ug/g dry	3.32E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.24E2	ug/g dry	6.52E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.14E0	ug/g dry	3.14E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TX5**	**Lab ID:**		**0911013-AT**			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
7429-90-5	Aluminum	5.17E3	ug/g dry	2.28E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.23E3	ug/g dry	2.37E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.24E0	ug/g dry	1.24E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	9.15E0	ug/g dry	1.99E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.51E0	ug/g dry	6.51E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.26E4	ug/g dry	6.13E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.58E2	ug/g dry	8.72E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.89E3	ug/g dry	6.49E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.04E2	ug/g dry	2.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	1.12E1	ug/g dry	4.72E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.02E1	ug/g dry	1.02E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.78E1	ug/g dry	5.78E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.27E1	ug/g dry	3.27E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.60E2	ug/g dry	6.42E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.09E0	ug/g dry	3.09E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
7429-90-5	Aluminum	5.30E3	ug/g dry	2.31E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.81E3	ug/g dry	2.40E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.26E0	ug/g dry	1.26E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	7.75E0	ug/g dry	2.02E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.62E0	ug/g dry	6.62E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.29E4	ug/g dry	6.22E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.93E2	ug/g dry	8.86E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.66E3	ug/g dry	6.59E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.16E2	ug/g dry	2.07E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	7.84E0	ug/g dry	4.80E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.87E1	ug/g dry	5.87E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.32E1	ug/g dry	3.32E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.39E2	ug/g dry	6.52E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.14E0	ug/g dry	3.14E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
7429-90-5	Aluminum	5.41E3	ug/g dry	2.34E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.15E3	ug/g dry	2.43E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	6.91E0	ug/g dry	2.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.73E0	ug/g dry	6.69E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.63E4	ug/g dry	6.29E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	7.50E2	ug/g dry	8.96E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.41E3	ug/g dry	6.67E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.19E2	ug/g dry	2.09E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	6.31E0	ug/g dry	4.85E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.05E1	ug/g dry	1.05E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.94E1	ug/g dry	5.94E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.36E1	ug/g dry	3.36E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.46E2	ug/g dry	6.59E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.17E0	ug/g dry	3.17E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
7429-90-5	Aluminum	4.79E3	ug/g dry	2.34E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	3.40E3	ug/g dry	2.42E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-43-9	Cadmium	<1.27E0	ug/g dry	1.27E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-47-3	Chromium	6.86E0	ug/g dry	2.04E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.72E0	ug/g dry	6.68E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.29E4	ug/g dry	6.28E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.03E2	ug/g dry	8.94E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.81E3	ug/g dry	6.65E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.87E2	ug/g dry	2.09E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-02-0	Nickel	6.67E0	ug/g dry	4.84E0	2/16/10	0B16001	PNNL-AGG-ICP-AES
7439-92-1	Lead	<1.04E1	ug/g dry	1.04E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7782-49-2	Selenium	<5.93E1	ug/g dry	5.93E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-28-0	Thallium	<3.35E1	ug/g dry	3.35E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.83E2	ug/g dry	6.58E1	2/16/10	0B16001	PNNL-AGG-ICP-AES
7440-22-4	Silver	<3.16E0	ug/g dry	3.16E0	2/16/10	0B16001	PNNL-AGG-ICP-AES

Radionuclides by ICP-MS/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
14133-76-7	Technetium-99	<5.18E-3	ug/g dry	5.18E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	4.52E-1	ug/g dry	3.53E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
14133-76-7	Technetium-99	<5.06E-3	ug/g dry	5.06E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	1.03E0	ug/g dry	3.44E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
14133-76-7	Technetium-99	<5.06E-3	ug/g dry	5.06E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	2.61E0	ug/g dry	3.44E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
14133-76-7	Technetium-99	<4.95E-3	ug/g dry	4.95E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.71E0	ug/g dry	3.37E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
14133-76-7	Technetium-99	<5.15E-3	ug/g dry	5.15E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.28E-1	ug/g dry	3.51E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
14133-76-7	Technetium-99	<5.08E-3	ug/g dry	5.08E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.14E-1	ug/g dry	3.46E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
14133-76-7	Technetium-99	<4.88E-3	ug/g dry	4.88E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	2.80E-1	ug/g dry	3.32E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
14133-76-7	Technetium-99	<5.08E-3	ug/g dry	5.08E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	2.99E-1	ug/g dry	3.46E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
14133-76-7	Technetium-99	<5.03E-3	ug/g dry	5.03E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.26E-1	ug/g dry	3.43E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
14133-76-7	Technetium-99	<4.95E-3	ug/g dry	4.95E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	4.72E-1	ug/g dry	3.37E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
14133-76-7	Technetium-99	<5.03E-3	ug/g dry	5.03E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.72E-1	ug/g dry	3.43E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
14133-76-7	Technetium-99	<5.09E-3	ug/g dry	5.09E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.05E-1	ug/g dry	3.47E-2	2/02/10	0B02001	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
14133-76-7	Technetium-99	<5.08E-3	ug/g dry	5.08E-3	2/02/10	0B02001	PNNL-AGG-415
	Uranium 238	3.38E-1	ug/g dry	3.46E-2	2/02/10	0B02001	PNNL-AGG-415

Radionuclides by ICP-MS/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
15046-84-1	Iodine-129	<9.98E-5	ug/g dry	9.98E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
15046-84-1	Iodine-129	<9.98E-5	ug/g dry	9.98E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
15046-84-1	Iodine-129	<4.99E-5	ug/g dry	4.99E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
15046-84-1	Iodine-129	<4.99E-5	ug/g dry	4.99E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
15046-84-1	Iodine-129	<4.98E-5	ug/g dry	4.98E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
15046-84-1	Iodine-129	<5.05E-5	ug/g dry	5.05E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
15046-84-1	Iodine-129	<5.00E-5	ug/g dry	5.00E-5	5/03/10	0C05004	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
15046-84-1	Iodine-129	<4.99E-5	ug/g dry	4.99E-5	5/03/10	0C05004	PNNL-AGG-415

Radionuclides by ICP-MS/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
14133-76-7	Technetium-99	<3.89E-5	ug/g dry	3.89E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	2.91E-3	ug/g dry	7.99E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
14133-76-7	Technetium-99	<3.89E-5	ug/g dry	3.89E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	1.34E-2	ug/g dry	7.98E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
14133-76-7	Technetium-99	<3.89E-5	ug/g dry	3.89E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	1.90E-1	ug/g dry	7.98E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	2.64E-1	ug/g dry	8.00E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
14133-76-7	Technetium-99	<3.89E-5	ug/g dry	3.89E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	6.58E-4	ug/g dry	7.98E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	6.25E-4	ug/g dry	8.00E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	7.99E-4	ug/g dry	8.00E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	8.64E-4	ug/g dry	7.99E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
14133-76-7	Technetium-99	<3.88E-5	ug/g dry	3.88E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	7.33E-4	ug/g dry	7.97E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
14133-76-7	Technetium-99	<3.94E-5	ug/g dry	3.94E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	6.54E-4	ug/g dry	8.09E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	7.01E-4	ug/g dry	8.01E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
14133-76-7	Technetium-99	<3.90E-5	ug/g dry	3.90E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	5.99E-4	ug/g dry	7.99E-5	2/10/10	0B10001	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
14133-76-7	Technetium-99	<3.89E-5	ug/g dry	3.89E-5	2/10/10	0B10001	PNNL-AGG-415
	Uranium 238	3.74E-4	ug/g dry	7.98E-5	2/10/10	0B10001	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
15756-10-2	Mercury	<6.53E-3	ug/g dry	6.53E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
15756-10-2	Mercury	<6.52E-3	ug/g dry	6.52E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
15756-10-2	Mercury	<6.53E-3	ug/g dry	6.53E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
15756-10-2	Mercury	<6.54E-3	ug/g dry	6.54E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
15756-10-2	Mercury	<6.53E-3	ug/g dry	6.53E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
15756-10-2	Mercury	<6.54E-3	ug/g dry	6.54E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
15756-10-2	Mercury	<6.54E-3	ug/g dry	6.54E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
15756-10-2	Mercury	<6.53E-3	ug/g dry	6.53E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
15756-10-2	Mercury	<6.51E-3	ug/g dry	6.51E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
15756-10-2	Mercury	<6.61E-3	ug/g dry	6.61E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
15756-10-2	Mercury	<6.55E-3	ug/g dry	6.55E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
15756-10-2	Mercury	<6.54E-3	ug/g dry	6.54E-3	2/11/10	0B11002	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
15756-10-2	Mercury	<6.52E-3	ug/g dry	6.52E-3	2/11/10	0B11002	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
14265-72-6	Antimony	<6.57E-4	ug/g dry	6.57E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
14265-72-6	Antimony	9.65E-4	ug/g dry	6.57E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
14265-72-6	Antimony	<6.57E-4	ug/g dry	6.57E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
14265-72-6	Antimony	<6.59E-4	ug/g dry	6.59E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
14265-72-6	Antimony	7.75E-4	ug/g dry	6.57E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
14265-72-6	Antimony	7.96E-4	ug/g dry	6.58E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
14265-72-6	Antimony	<6.59E-4	ug/g dry	6.59E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
14265-72-6	Antimony	7.22E-4	ug/g dry	6.58E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
14265-72-6	Antimony	<6.56E-4	ug/g dry	6.56E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
14265-72-6	Antimony	7.28E-4	ug/g dry	6.66E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
14265-72-6	Antimony	<6.59E-4	ug/g dry	6.59E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
14265-72-6	Antimony	<6.58E-4	ug/g dry	6.58E-4	2/17/10	0B17008	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
14265-72-6	Antimony	1.15E-3	ug/g dry	6.57E-4	2/17/10	0B17008	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
15756-10-2	Mercury	<1.61E-1	ug/g dry	1.61E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
15756-10-2	Mercury	<1.57E-1	ug/g dry	1.57E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
15756-10-2	Mercury	<1.57E-1	ug/g dry	1.57E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
15756-10-2	Mercury	<1.54E-1	ug/g dry	1.54E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
15756-10-2	Mercury	<1.60E-1	ug/g dry	1.60E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
15756-10-2	Mercury	<1.58E-1	ug/g dry	1.58E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
15756-10-2	Mercury	<1.52E-1	ug/g dry	1.52E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
15756-10-2	Mercury	<1.58E-1	ug/g dry	1.58E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
15756-10-2	Mercury	<1.57E-1	ug/g dry	1.57E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
15756-10-2	Mercury	<1.54E-1	ug/g dry	1.54E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
15756-10-2	Mercury	<1.57E-1	ug/g dry	1.57E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
15756-10-2	Mercury	<1.59E-1	ug/g dry	1.59E-1	2/12/10	0B12006	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
15756-10-2	Mercury	<1.58E-1	ug/g dry	1.58E-1	2/12/10	0B12006	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**			
7440-38-2	Arsenic	2.40E0	ug/g dry	2.89E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.86E-1	ug/g dry	1.86E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**			
7440-38-2	Arsenic	2.25E0	ug/g dry	2.82E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.81E-1	ug/g dry	1.81E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**			
7440-38-2	Arsenic	2.96E0	ug/g dry	2.82E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.81E-1	ug/g dry	1.81E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**			
7440-38-2	Arsenic	3.34E0	ug/g dry	2.76E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.77E-1	ug/g dry	1.77E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**			
7440-38-2	Arsenic	2.78E0	ug/g dry	2.87E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.84E-1	ug/g dry	1.84E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**			
7440-38-2	Arsenic	1.87E0	ug/g dry	2.83E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.82E-1	ug/g dry	1.82E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**			
7440-38-2	Arsenic	1.61E0	ug/g dry	2.72E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.75E-1	ug/g dry	1.75E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**			
7440-38-2	Arsenic	1.75E0	ug/g dry	2.84E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.82E-1	ug/g dry	1.82E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**			
7440-38-2	Arsenic	2.06E0	ug/g dry	2.81E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.80E-1	ug/g dry	1.80E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**			
7440-38-2	Arsenic	1.57E0	ug/g dry	2.76E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.77E-1	ug/g dry	1.77E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**			
7440-38-2	Arsenic	1.75E0	ug/g dry	2.81E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.80E-1	ug/g dry	1.80E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**			
7440-38-2	Arsenic	9.04E-1	ug/g dry	2.84E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.82E-1	ug/g dry	1.82E-1	2/04/10	0B02002	PNNL-AGG-415
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**			
7440-38-2	Arsenic	9.17E-1	ug/g dry	2.83E-1	2/04/10	0B02002	PNNL-AGG-415
14265-72-6	Antimony	<1.82E-1	ug/g dry	1.82E-1	2/04/10	0B02002	PNNL-AGG-415

Carbon Analysis/Soil

Total Organic Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-23	B22TL9	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-37	B22TN1	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-45	B22TN6	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-59	B22TP7	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-72	B22TR8	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-90	B22TV3	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-96	B22TV8	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-AE	B22TW5	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-AT	B22TX5	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-CK	B22TY7	2.53E2	2.00E2	2/17/10	[CALC]
0911013-CL	B22TY8	<2.00E2	2.00E2	2/17/10	[CALC]
0911013-CT	B22V02	2.72E2	2.00E2	2/17/10	[CALC]

Carbon Analysis/Soil

Total Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	1.76E3	2.00E2	2/17/10	0B15004
0911013-23	B22TL9	2.63E3	2.00E2	2/17/10	0B15004
0911013-37	B22TN1	2.33E3	2.00E2	2/17/10	0B15004
0911013-45	B22TN6	2.32E3	2.00E2	2/17/10	0B15004
0911013-59	B22TP7	2.03E3	2.00E2	2/17/10	0B15004
0911013-72	B22TR8	1.87E3	2.00E2	2/17/10	0B15004
0911013-90	B22TV3	2.46E3	2.00E2	2/17/10	0B15004
0911013-96	B22TV8	1.34E3	2.00E2	2/17/10	0B15004
0911013-AE	B22TW5	1.56E3	2.00E2	2/17/10	0B15004
0911013-AT	B22TX5	1.25E3	2.00E2	2/17/10	0B15004
0911013-CK	B22TY7	1.36E3	2.00E2	2/17/10	0B15004
0911013-CL	B22TY8	1.32E3	2.00E2	2/17/10	0B15004
0911013-CT	B22V02	5.81E2	2.00E2	2/17/10	0B15004

Carbon Analysis/Soil

Total Inorganic Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0911013-11	B22TK8	1.72E3	2.00E2	2/17/10	0B16002
0911013-23	B22TL9	2.47E3	2.00E2	2/17/10	0B16002
0911013-37	B22TN1	2.47E3	2.00E2	2/17/10	0B16002
0911013-45	B22TN6	2.19E3	2.00E2	2/17/10	0B16002
0911013-59	B22TP7	2.01E3	2.00E2	2/17/10	0B16002
0911013-72	B22TR8	1.72E3	2.00E2	2/17/10	0B16002
0911013-90	B22TV3	2.32E3	2.00E2	2/17/10	0B16002
0911013-96	B22TV8	1.14E3	2.00E2	2/17/10	0B16002
0911013-AE	B22TW5	1.47E3	2.00E2	2/17/10	0B16002
0911013-AT	B22TX5	1.16E3	2.00E2	2/17/10	0B16002
0911013-CK	B22TY7	1.10E3	2.00E2	2/17/10	0B16002
0911013-CL	B22TY8	1.16E3	2.00E2	2/17/10	0B16002
0911013-CT	B22V02	3.09E2	2.00E2	2/17/10	0B16002

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**				
10198-40-0	Cobalt-60	<2.33E-1	pCi/g dry	2.33E-1		2/17/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.61E-1	pCi/g dry	2.61E-1		2/17/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.04E0	pCi/g dry	1.04E0		2/17/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<6.19E-1	pCi/g dry	6.19E-1		2/17/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<9.51E-1	pCi/g dry	9.51E-1		2/17/10	0B18001	AGG-RRL-001
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**				
10198-40-0	Cobalt-60	<2.33E-1	pCi/g dry	2.33E-1		2/18/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.53E-1	pCi/g dry	2.53E-1		2/18/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.11E0	pCi/g dry	1.11E0		2/18/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<6.49E-1	pCi/g dry	6.49E-1		2/18/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<1.04E0	pCi/g dry	1.04E0		2/18/10	0B18001	AGG-RRL-001
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**				
10198-40-0	Cobalt-60	<2.26E-1	pCi/g dry	2.26E-1		2/18/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.66E-1	pCi/g dry	2.66E-1		2/18/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.08E0	pCi/g dry	1.08E0		2/18/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<6.33E-1	pCi/g dry	6.33E-1		2/18/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<1.03E0	pCi/g dry	1.03E0		2/18/10	0B18001	AGG-RRL-001
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**				
10198-40-0	Cobalt-60	<2.33E-1	pCi/g dry	2.33E-1		2/18/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.72E-1	pCi/g dry	2.72E-1		2/18/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.12E0	pCi/g dry	1.12E0		2/18/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<6.57E-1	pCi/g dry	6.57E-1		2/18/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<1.04E0	pCi/g dry	1.04E0		2/18/10	0B18001	AGG-RRL-001
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**				
10198-40-0	Cobalt-60	<2.23E-1	pCi/g dry	2.23E-1		2/18/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.68E-1	pCi/g dry	2.68E-1		2/18/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.04E0	pCi/g dry	1.04E0		2/18/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<6.25E-1	pCi/g dry	6.25E-1		2/18/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<9.61E-1	pCi/g dry	9.61E-1		2/18/10	0B18001	AGG-RRL-001
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**				
10198-40-0	Cobalt-60	<1.90E-1	pCi/g dry	1.90E-1		2/18/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.30E-1	pCi/g dry	2.30E-1		2/18/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<8.87E-1	pCi/g dry	8.87E-1		2/18/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.28E-1	pCi/g dry	5.28E-1		2/18/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<8.08E-1	pCi/g dry	8.08E-1		2/18/10	0B18001	AGG-RRL-001
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**				
10198-40-0	Cobalt-60	<1.88E-1	pCi/g dry	1.88E-1		2/19/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.25E-1	pCi/g dry	2.25E-1		2/19/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<9.16E-1	pCi/g dry	9.16E-1		2/19/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.36E-1	pCi/g dry	5.36E-1		2/19/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<8.11E-1	pCi/g dry	8.11E-1		2/19/10	0B18001	AGG-RRL-001
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**				
10198-40-0	Cobalt-60	<2.11E-1	pCi/g dry	2.11E-1		2/19/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.27E-1	pCi/g dry	2.27E-1		2/19/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<9.25E-1	pCi/g dry	9.25E-1		2/19/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.47E-1	pCi/g dry	5.47E-1		2/19/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<8.41E-1	pCi/g dry	8.41E-1		2/19/10	0B18001	AGG-RRL-001

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**				
10198-40-0	Cobalt-60	<2.28E-1	pCi/g dry	2.28E-1		2/19/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.64E-1	pCi/g dry	2.64E-1		2/19/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<1.05E0	pCi/g dry	1.05E0		2/19/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.91E-1	pCi/g dry	5.91E-1		2/19/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<9.23E-1	pCi/g dry	9.23E-1		2/19/10	0B18001	AGG-RRL-001
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**				
10198-40-0	Cobalt-60	<1.80E-1	pCi/g dry	1.80E-1		2/19/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.24E-1	pCi/g dry	2.24E-1		2/19/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<9.18E-1	pCi/g dry	9.18E-1		2/19/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.34E-1	pCi/g dry	5.34E-1		2/19/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<8.10E-1	pCi/g dry	8.10E-1		2/19/10	0B18001	AGG-RRL-001
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**				
10198-40-0	Cobalt-60	<2.01E-1	pCi/g dry	2.01E-1		2/22/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.46E-1	pCi/g dry	2.46E-1		2/22/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<9.42E-1	pCi/g dry	9.42E-1		2/22/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<5.52E-1	pCi/g dry	5.52E-1		2/22/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<8.42E-1	pCi/g dry	8.42E-1		2/22/10	0B18001	AGG-RRL-001
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**				
10198-40-0	Cobalt-60	<1.77E-1	pCi/g dry	1.77E-1		2/22/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<1.90E-1	pCi/g dry	1.90E-1		2/22/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<8.19E-1	pCi/g dry	8.19E-1		2/22/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<4.74E-1	pCi/g dry	4.74E-1		2/22/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<7.12E-1	pCi/g dry	7.12E-1		2/22/10	0B18001	AGG-RRL-001
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**				
10198-40-0	Cobalt-60	<1.60E-1	pCi/g dry	1.60E-1		2/22/10	0B18001	AGG-RRL-001
10045-97-3	Cesium-137	<2.09E-1	pCi/g dry	2.09E-1		2/22/10	0B18001	AGG-RRL-001
14683-23-9	Europium-152	<8.05E-1	pCi/g dry	8.05E-1		2/22/10	0B18001	AGG-RRL-001
15585-10-1	Europium-154	<4.78E-1	pCi/g dry	4.78E-1		2/22/10	0B18001	AGG-RRL-001
14391-16-3	Europium-155	<7.23E-1	pCi/g dry	7.23E-1		2/22/10	0B18001	AGG-RRL-001

Total Alpha Total Beta/Acid Extract

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**				
12587-47-2	Gross Beta	<4.63E1	pCi/g dry	4.63E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.98E1	pCi/g dry	1.98E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**				
12587-47-2	Gross Beta	<4.51E1	pCi/g dry	4.51E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.93E1	pCi/g dry	1.93E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**				
12587-47-2	Gross Beta	<4.51E1	pCi/g dry	4.51E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.93E1	pCi/g dry	1.93E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**				
12587-47-2	Gross Beta	<4.42E1	pCi/g dry	4.42E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.89E1	pCi/g dry	1.89E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**				
12587-47-2	Gross Beta	<4.60E1	pCi/g dry	4.60E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.97E1	pCi/g dry	1.97E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**				
12587-47-2	Gross Beta	<4.53E1	pCi/g dry	4.53E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.94E1	pCi/g dry	1.94E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**				
12587-47-2	Gross Beta	<4.36E1	pCi/g dry	4.36E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.86E1	pCi/g dry	1.86E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**				
12587-47-2	Gross Beta	<4.54E1	pCi/g dry	4.54E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.94E1	pCi/g dry	1.94E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**				
12587-47-2	Gross Beta	<4.49E1	pCi/g dry	4.49E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.92E1	pCi/g dry	1.92E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**				
12587-47-2	Gross Beta	<4.42E1	pCi/g dry	4.42E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.89E1	pCi/g dry	1.89E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**				
12587-47-2	Gross Beta	<4.49E1	pCi/g dry	4.49E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.92E1	pCi/g dry	1.92E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**				
12587-47-2	Gross Beta	<4.55E1	pCi/g dry	4.55E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.94E1	pCi/g dry	1.94E1		2/12/10	0C16001	AGG-RRL-002
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**				
12587-47-2	Gross Beta	<4.53E1	pCi/g dry	4.53E1		2/12/10	0C16001	AGG-RRL-002
12587-46-1	Gross Alpha	<1.94E1	pCi/g dry	1.94E1		2/12/10	0C16001	AGG-RRL-002

Total Alpha Total Beta/Water Extract

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B22TK8**		**Lab ID:**	**0911013-11**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.94E0	pCi/g dry	5.94E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TL9**		**Lab ID:**	**0911013-23**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.94E0	pCi/g dry	5.94E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TN1**		**Lab ID:**	**0911013-37**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.94E0	pCi/g dry	5.94E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TN6**		**Lab ID:**	**0911013-45**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.95E0	pCi/g dry	5.95E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TP7**		**Lab ID:**	**0911013-59**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.94E0	pCi/g dry	5.94E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TR8**		**Lab ID:**	**0911013-72**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.95E0	pCi/g dry	5.95E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TV3**		**Lab ID:**	**0911013-90**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.95E0	pCi/g dry	5.95E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TV8**		**Lab ID:**	**0911013-96**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.95E0	pCi/g dry	5.95E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TW5**		**Lab ID:**	**0911013-AE**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.93E0	pCi/g dry	5.93E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TX5**		**Lab ID:**	**0911013-AT**				
12587-47-2	Gross Beta	<1.29E1	pCi/g dry	1.29E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<6.02E0	pCi/g dry	6.02E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TY7**		**Lab ID:**	**0911013-CK**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.96E0	pCi/g dry	5.96E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22TY8**		**Lab ID:**	**0911013-CL**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.95E0	pCi/g dry	5.95E0		2/15/10	0B15005	AGG-RRL-002
HEIS No.	**B22V02**		**Lab ID:**	**0911013-CT**				
12587-47-2	Gross Beta	<1.27E1	pCi/g dry	1.27E1		2/15/10	0B15005	AGG-RRL-002
12587-46-1	Gross Alpha	<5.93E0	pCi/g dry	5.93E0		2/15/10	0B15005	AGG-RRL-002

Wet Chemistry - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B09001 - 1:1 Water Extract (pH_EC_Alk)										
LCS (0B09001-BS1)				Prepared: 02/09/10		Analyzed: 03/17/10				
pH	7.01E0	N/A	pH Units	7.00E0		100	80-120			
Duplicate (0B09001-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/09/10						
pH	7.76E0	N/A	pH Units		7.32E0			5.84	35	
Duplicate (0B09001-DUP2)		**Source: 0911013-AE**		Prepared & Analyzed: 02/09/10						
pH	7.73E0	N/A	pH Units		7.92E0			2.43	35	
Batch 0B09002 - 1:1 Water Extract (pH_EC_Alk)										
Blank (0B09002-BLK1)				Prepared & Analyzed: 02/09/10						
Specific Conductance (EC)	<1.00E-2	1.00E-2	mS/cm							
LCS (0B09002-BS1)				Prepared: 02/09/10		Analyzed: 03/17/10				
Specific Conductance (EC)	9.65E-2	1.00E-2	mS/cm	1.00E-1		96.5	80-120			
Duplicate (0B09002-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/09/10						
Specific Conductance (EC)	4.21E-1	1.00E-2	mS/cm		4.03E-1			4.30	35	
Batch 0B09003 - 1:1 Water Extract (pH_EC_Alk)										
Blank (0B09003-BLK1)				Prepared: 02/09/10		Analyzed: 02/11/10				
Alkalinity as CaCO3	<2.35E1	2.35E1	ug/g wet							
Duplicate (0B09003-DUP1)		**Source: 0911013-11**		Prepared: 02/09/10		Analyzed: 02/11/10				
Alkalinity as CaCO3	4.68E1	2.34E1	ug/g dry		5.10E1			8.62	35	

Anions by Ion Chromatography - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B10015 - 1:1 Water Extract (IC)										
Blank (0B10015-BLK1)				Prepared: 02/09/10		Analyzed: 02/10/10				
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Chloride	<5.00E-1	5.00E-1	"							
Nitrite	<1.00E0	1.00E0	"							
Bromide	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (0B10015-BS1)				Prepared: 02/09/10		Analyzed: 02/10/10				
Fluoride	2.02E0	2.00E-1	ug/g wet	2.00E0		101	80-120			
Chloride	4.99E0	5.00E-1	"	5.00E0		99.9	80-120			
Nitrite	1.05E1	1.00E0	"	9.99E0		105	80-120			
Bromide	9.93E0	1.00E0	"	9.99E0		99.4	80-120			
Nitrate	1.04E1	1.00E0	"	9.99E0		104	80-120			
Sulfate	1.51E1	1.50E0	"	1.50E1		101	80-120			
Phosphate	1.50E1	1.50E0	"	1.50E1		100	80-120			
Duplicate (0B10015-DUP1)		**Source: 0911013-11**		Prepared: 02/09/10		Analyzed: 02/10/10				
Fluoride	1.43E0	1.99E-1	ug/g dry		1.40E0			2.04	35	D
Chloride	2.47E1	4.98E-1	"		2.57E1			4.21	35	D
Nitrite	<9.96E-1	9.96E-1	"		ND				35	
Bromide	<9.96E-1	9.96E-1	"		ND				35	
Nitrate	2.24E1	9.96E-1	"		2.37E1			5.92	35	D
Sulfate	9.28E1	1.49E0	"		9.69E1			4.36	35	D
Phosphate	<1.49E0	1.49E0	"		ND				35	
Post Spike (0B10015-PS1)		**Source: 0911013-23**		Prepared: 02/09/10		Analyzed: 02/10/10				
Fluoride	1.31E0	N/A	ug/mL	7.69E-1	5.77E-1	95.2	75-125			D
Chloride	2.99E0	N/A	"	1.92E0	1.09E0	98.8	75-125			D
Nitrite	3.91E0	N/A	"	3.85E0	2.68E-1	94.6	75-125			D
Bromide	3.77E0	N/A	"	3.85E0	ND	98	75-125			D
Nitrate	5.18E0	N/A	"	3.85E0	1.24E0	102	75-125			D
Sulfate	1.74E1	N/A	"	5.77E0	1.20E1	93.6	75-125			D
Phosphate	5.91E0	N/A	"	5.77E0	6.06E-2	101	75-125			D

Cyanide by Mircodistillation/Colorimetric - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0D07001 - NO PREP										
Blank (0D07001-BLK1)				Prepared & Analyzed: 04/07/10						
Cyanide	<1.00E-1	1.00E-1	ug/g wet							
LCS (0D07001-BS1)				Prepared & Analyzed: 04/07/10						
Cyanide	9.81E-1	5.00E-1	ug/g wet	1.01E0		97.4	80-120			
Duplicate (0D07001-DUP1)		**Source: 0911013-CT**		Prepared & Analyzed: 04/07/10						
Cyanide	<1.03E-1	1.03E-1	ug/g dry		ND				20	

Hexavalent Chromium/Soil - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0D08006 - Hexavalent Chromium Digest										
Blank (0D08006-BLK1)				Prepared: 03/03/10		Analyzed: 03/09/10				
Chromium, Hexavalent	<2.50E0	2.50E0	ug/g wet							
LCS (0D08006-BS1)				Prepared: 03/03/10		Analyzed: 03/09/10				
Chromium, Hexavalent	2.09E1	2.50E0	ug/g wet	2.50E1		83.4	70-130			
Duplicate (0D08006-DUP1)		**Source: 0911013-11**		Prepared: 03/03/10		Analyzed: 03/09/10				
Chromium, Hexavalent	<5.28E-1	5.28E-1	ug/g dry		ND				20	
Matrix Spike (0D08006-MS1)		**Source: 0911013-23**		Prepared: 03/03/10		Analyzed: 03/09/10				
Chromium, Hexavalent	1.95E-1	N/A	ug/mL	5.00E-1	3.00E-3	38.4	75-125			

Total Metals by PNNL-AGG-ICP-AES/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B15003 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0B15003-BLK1)				Prepared: 02/04/10	Analyzed: 02/15/10					
Aluminum	<1.56E-1	1.56E-1	ug/g wet							
Arsenic	<5.19E-1	5.19E-1	"							
Calcium	<7.54E-1	7.54E-1	"							
Iron	<1.75E-1	1.75E-1	"							
Potassium	<2.15E0	2.15E0	"							
Magnesium	<8.14E-2	8.14E-2	"							
Thallium	<1.65E0	1.65E0	"							
Sodium	<1.33E0	1.33E0	"							
Blank (0B15003-BLK2)				Prepared: 02/09/10	Analyzed: 02/15/10					
Aluminum	<9.37E-2	9.37E-2	ug/g wet							
Arsenic	<3.12E-1	3.12E-1	"							
Calcium	<4.52E-1	4.52E-1	"							
Iron	<1.05E-1	1.05E-1	"							
Potassium	<1.29E0	1.29E0	"							
Magnesium	<4.89E-2	4.89E-2	"							
Thallium	<9.88E-1	9.88E-1	"							
Sodium	<7.97E-1	7.97E-1	"							
LCS (0B15003-BS1)				Prepared: 02/09/10	Analyzed: 02/15/10					
Aluminum	4.85E0	9.37E-2	ug/g wet	5.00E0		97.1	80-120			
Arsenic	5.00E0	3.12E-1	"	5.00E0		100	80-120			
Calcium	5.01E0	4.52E-1	"	5.00E0		100	80-120			
Iron	4.90E0	1.05E-1	"	5.00E0		98.0	80-120			
Potassium	4.99E1	1.29E0	"	5.00E1		99.9	80-120			
Magnesium	4.91E0	4.89E-2	"	5.00E0		98.3	80-120			
Thallium	5.15E0	9.88E-1	"	5.00E0		103	80-120			
Sodium	5.43E0	7.97E-1	"	5.00E0		109	80-120			

Total Metals by PNNL-AGG-ICP-AES/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B15003 - 1:1 Water Extract (ICP/ICPMS)										
Duplicate (0B15003-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/15/10						
Aluminum	<9.34E-2	9.34E-2	ug/g dry		ND				35	
Arsenic	<3.10E-1	3.10E-1	"		ND				35	
Calcium	2.69E1	4.51E-1	"		2.72E1			1.18	35	
Iron	<1.04E-1	1.04E-1	"		ND				35	
Potassium	6.80E0	1.29E0	"		6.85E0			0.816	35	
Magnesium	7.07E0	4.87E-2	"		7.42E0			4.85	35	
Thallium	<9.84E-1	9.84E-1	"		ND				35	
Sodium	3.98E1	7.94E-1	"		3.91E1			1.79	35	
Post Spike (0B15003-PS1)		**Source: 0911013-23**		Prepared & Analyzed: 02/15/10						
Aluminum	5.07E2	N/A	ug/L	5.00E2	2.45E1	96.5	75-125			
Arsenic	5.24E2	N/A	"	5.00E2	2.26E0	104	75-125			
Calcium	5.02E3	N/A	"	5.00E2	4.34E3	135	75-125			
Iron	5.38E2	N/A	"	5.00E2	2.54E1	102	75-125			
Potassium	3.18E3	N/A	"	1.25E3	1.91E3	102	75-125			
Magnesium	1.89E3	N/A	"	5.00E2	1.36E3	108	75-125			
Thallium	4.99E2	N/A	"	5.00E2	ND	104	75-125			
Sodium	4.12E3	N/A	"	5.00E2	3.50E3	125	75-125			
Silver	5.19E2	N/A	"	5.00E2	ND	104	75-125			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B16001 - ASTM D 5198 (ICP/ICPMS)										
Blank (0B16001-BLK1)				Prepared: 01/28/10	Analyzed: 02/16/10					
Aluminum	<6.76E0	6.76E0	ug/g wet							
Calcium	<7.02E0	7.02E0	"							
Cadmium	<3.68E-1	3.68E-1	"							
Chromium	<5.90E-1	5.90E-1	"							
Copper	<1.93E0	1.93E0	"							
Iron	<1.82E0	1.82E0	"							
Potassium	<2.59E1	2.59E1	"							
Magnesium	<1.92E0	1.92E0	"							
Manganese	<6.04E-1	6.04E-1	"							
Nickel	<1.40E0	1.40E0	"							
Lead	<3.02E0	3.02E0	"							
Selenium	<1.72E1	1.72E1	"							
Thallium	<9.70E0	9.70E0	"							
Sodium	<1.90E1	1.90E1	"							
Silver	<9.16E-1	9.16E-1	"							
LCS (0B16001-BS1)				Prepared: 01/28/10	Analyzed: 02/16/10					
Aluminum	5.52E0	6.76E-1	ug/g wet	6.01E0		91.8	80-120			
Calcium	5.89E0	7.02E-1	"	6.01E0		98.0	80-120			
Cadmium	5.67E0	3.68E-2	"	6.01E0		94.3	80-120			
Chromium	5.99E0	5.90E-2	"	6.01E0		99.7	80-120			
Copper	5.93E0	1.93E-1	"	6.01E0		98.7	80-120			
Iron	5.75E0	1.82E-1	"	6.01E0		95.7	80-120			
Potassium	5.76E1	2.59E0	"	6.01E1		95.8	80-120			
Magnesium	5.58E0	1.92E-1	"	6.01E0		92.8	80-120			
Manganese	5.82E0	6.04E-2	"	6.01E0		96.8	80-120			
Nickel	5.71E0	1.40E-1	"	6.01E0		94.9	80-120			
Lead	5.75E0	3.02E-1	"	6.01E0		95.6	80-120			
Selenium	5.27E0	1.72E0	"	6.01E0		87.7	80-120			
Thallium	5.72E0	9.70E-1	"	6.01E0		95.2	80-120			
Sodium	6.23E0	1.90E0	"	6.01E0		104	80-120			
Silver	5.65E0	9.16E-2	"	6.01E0		93.9	80-120			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B16001 - ASTM D 5198 (ICP/ICPMS)										
Duplicate (0B16001-DUP1)		**Source: 0911013-11**		Prepared: 01/28/10	Analyzed: 02/16/10					
Aluminum	5.61E3	2.33E1	ug/g dry		4.96E3			12.3	35	
Calcium	6.41E3	2.42E1	"		6.12E3			4.59	35	
Cadmium	<1.27E0	1.27E0	"		ND				35	
Chromium	7.09E0	2.03E0	"		7.51E0			5.83	35	
Copper	<6.66E0	6.66E0	"		ND				35	
Iron	1.23E4	6.26E0	"		1.18E4			3.67	35	
Potassium	1.07E3	8.92E1	"		1.06E3			0.666	35	
Magnesium	3.96E3	6.63E0	"		4.05E3			2.11	35	
Manganese	2.08E2	2.08E0	"		2.30E2			10.0	35	
Nickel	7.86E0	4.83E0	"		8.31E0			5.52	35	
Lead	<1.04E1	1.04E1	"		ND				35	
Selenium	<5.91E1	5.91E1	"		ND				35	
Thallium	<3.34E1	3.34E1	"		ND				35	
Sodium	1.57E2	6.56E1	"		1.64E2			4.31	35	
Silver	<3.16E0	3.16E0	"		ND				35	
Post Spike (0B16001-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/16/10						
Aluminum	2.92E4	N/A	ug/L	5.00E2	2.81E4	211	75-125			
Calcium	3.64E4	N/A	"	5.00E2	3.47E4	329	75-125			
Cadmium	2.44E2	N/A	"	2.50E2	ND	99	75-125			
Chromium	1.69E2	N/A	"	1.25E2	4.26E1	101	75-125			
Copper	5.33E2	N/A	"	5.00E2	3.60E1	99.4	75-125			
Iron	7.00E4	N/A	"	5.00E2	6.72E4	553	75-125			
Potassium	7.43E3	N/A	"	1.25E3	6.04E3	111	75-125			
Magnesium	2.44E4	N/A	"	5.00E2	2.30E4	279	75-125			
Manganese	1.59E3	N/A	"	2.50E2	1.31E3	113	75-125			
Nickel	5.28E2	N/A	"	5.00E2	4.71E1	96.2	75-125			
Lead	4.92E2	N/A	"	5.00E2	ND	99.1	75-125			
Selenium	4.57E2	N/A	"	5.00E2	ND	95.7	75-125			
Thallium	3.84E2	N/A	"	5.00E2	ND	102	75-125			
Sodium	1.45E3	N/A	"	5.00E2	9.28E2	105	75-125			
Silver	3.59E2	N/A	"	5.00E2	ND	74.9	75-125			

Radionuclides by ICP-MS/Acid Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B02001 - ASTM D 5198 (ICP/ICPMS)										
Blank (0B02001-BLK1)				Prepared & Analyzed: 02/02/10						
Technetium-99	<1.47E-3	1.47E-3	ug/g wet							
Uranium 238	<1.00E-2	1.00E-2	"							
Duplicate (0B02001-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/02/10						
Technetium-99	<5.07E-3	5.07E-3	ug/g dry		ND				35	
Uranium 238	3.62E-1	3.45E-2	"		4.52E-1			21.9	35	
Post Spike (0B02001-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/02/10						
Technetium-99	4.99E-1	N/A	ug/L	5.00E-1	5.61E-4	99.8	75-125			
Uranium 238	1.74E0	N/A	"	5.00E-1	1.28E0	92	75-125			

Radionuclides by ICP-MS/Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B10001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0B10001-BLK1)				Prepared & Analyzed: 02/10/10						
Technetium-99	<3.90E-5	3.90E-5	ug/g wet							
Uranium 238	<8.00E-5	8.00E-5	"							
Duplicate (0B10001-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/10/10						
Technetium-99	<3.89E-5	3.89E-5	ug/g dry		ND				35	
Uranium 238	2.91E-3	7.97E-5	"		2.91E-3			0.0609	35	
Post Spike (0B10001-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/10/10						
Technetium-99	4.95E-1	N/A	ug/L	5.00E-1	ND	103	75-125			
Uranium 238	1.10E0	N/A	"	5.00E-1	5.83E-1	104	75-125			
Batch 0C05004 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0C05004-BLK1)				Prepared & Analyzed: 05/03/10						
Iodine-129	<5.00E-5	5.00E-5	ug/g wet							
Duplicate (0C05004-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 05/03/10						
Iodine-129	<9.96E-5	9.96E-5	ug/g dry		ND				35	
Post Spike (0C05004-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 05/03/10						
Iodine-129	9.43E-2	N/A	ug/L	1.00E-1	ND	96.8	75-125			

RCRA Metals By PNNL-AGG-415/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B11002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0B11002-BLK1)				Prepared & Analyzed: 02/11/10						
Mercury	<6.54E-3	6.54E-3	ug/g wet							U
Duplicate (0B11002-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/11/10						
Mercury	<6.52E-3	6.52E-3	ug/g dry		ND				35	U
Post Spike (0B11002-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/11/10						
Mercury	1.15E0	N/A	ug/L	1.00E0	1.31E-1	102	75-125			
Batch 0B17008 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0B17008-BLK1)				Prepared & Analyzed: 02/17/10						
Antimony	<6.58E-4	6.58E-4	ug/g wet							
Duplicate (0B17008-DUP1)		**Source: 0911013-11**		Prepared & Analyzed: 02/17/10						
Antimony	<6.56E-4	6.56E-4	ug/g dry		ND				35	
Post Spike (0B17008-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/17/10						
Antimony	5.09E0	N/A	ug/L	5.00E0	1.30E-1	99.2	75-125			

RCRA Metals By PNNL-AGG-415/Acid Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B02002 - ASTM D 5198 (ICP/ICPMS)										
Blank (0B02002-BLK1)				Prepared: 02/02/10		Analyzed: 02/04/10				
Arsenic	<8.20E-2	8.20E-2	ug/g wet							
Antimony	<5.26E-2	5.26E-2	"							
LCS (0B02002-BS1)				Prepared: 02/02/10		Analyzed: 02/04/10				
Arsenic	6.22E0	4.10E-1	ug/g wet	6.01E0		104	80-120			
Antimony	6.00E0	2.63E-1	"	6.01E0		99.8	80-120			
Duplicate (0B02002-DUP1)		**Source: 0911013-11**		Prepared: 02/02/10		Analyzed: 02/04/10				
Arsenic	2.46E0	2.83E-1	ug/g dry		2.40E0			2.37	35	
Antimony	<1.81E-1	1.81E-1	"		ND				35	
Post Spike (0B02002-PS1)		**Source: 0911013-11**		Prepared: 02/02/10		Analyzed: 02/04/10				
Arsenic	1.22E1	N/A	ug/L	5.00E0	6.80E0	108	75-125			
Antimony	4.77E0	N/A	"	5.00E0	1.13E-1	93.1	75-125			
Batch 0B12006 - ASTM D 5198 (ICP/ICPMS)										
Blank (0B12006-BLK1)				Prepared & Analyzed: 02/12/10						
Mercury	<4.58E-2	4.58E-2	ug/g wet							U
Duplicate (0B12006-DUP1)				Prepared & Analyzed: 02/12/10						
Mercury	<1.49E-1	1.49E-1	ug/g wet						35	U
Post Spike (0B12006-PS1)		**Source: 0911013-11**		Prepared & Analyzed: 02/12/10						
Mercury	8.41E-1	N/A	ug/L	1.00E0	9.04E-3	83.2	75-125			

Total Alpha Total Beta/Acid Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0C16001 - ASTM D 5198 (RadChem)										
Blank (0C16001-BLK1)				Prepared: 02/11/10		Analyzed: 02/12/10				
Gross Beta	<1.31E1	1.31E1	pCi/g wet							
Gross Alpha	<5.61E0	5.61E0	"							
Duplicate (0C16001-DUP1)		**Source: 0911013-11**		Prepared: 02/11/10		Analyzed: 02/12/10				
Gross Beta	<4.52E1	4.52E1	pCi/g dry		ND				35	
Gross Alpha	<1.93E1	1.93E1	"		ND				35	

Total Alpha Total Beta/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B15005 - 1:1 Water Extract (RadChem)										
Blank (0B15005-BLK1)				Prepared: 02/14/10		Analyzed: 02/15/10				
Gross Beta	<1.27E1	1.27E1	pCi/g wet							
Gross Alpha	<5.95E0	5.95E0	"							
Duplicate (0B15005-DUP1)		**Source: 0911013-11**		Prepared: 02/14/10		Analyzed: 02/15/10				
Gross Beta	<1.27E1	1.27E1	pCi/g dry		ND				35	
Gross Alpha	<5.93E0	5.93E0	"		ND				35	

Pacific Northwest National Laboratory	**GEOLOGIC LOG**	Boring/Well No C7514 / 299-E84-25	Depth 0-17.5'	Date 12/17/09	Sheet 1 of 14
		Location	Project BP-5 "L" well		

Logged by Michelle Valenta (Print) Michelle Valenta (Sign) | (Print) (Sign)

Reviewed by (Print) (Sign) Date

Lithologic Class. Scheme Folk-Wentworth (Print) (Sign) Procedure Rev

Drilling Contractor

Driller

Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
2.5		B22TJ8	M		S- sand. 80% fine sand, 20% silt + v. fine sand, trace G. mod. sorted. loose w/ some fine sand weakly consolidated. 2.5Y 5/3 (light olive brown). max part. = 6mm. 10% mafic, 90% felsic. no rxn HCl.	Samples from 1 L poly bottles, poured into weigh boats for photos and geology
5	G	B22TJ9	M		(g)S - Slightly gravelly sand. fine to v. coarse sand - 95%, 5% G. max part. size = 13mm (med. pebbles). loose, w/ weakly consol. fine sand. G- primarily basalt, sub to well rounded. S- 30% mafic, 70% felsic. 2.5Y 4/2 (dark grayish brown). poorly sorted. mod. rxn to HCl.	
7.5	G	B22TK0	SM			
	G	B22TK1	D		gS- gravelly sand. 20% G, 80% v. fine to fine sand. max size = 25mm (coarse pebbles). G- 80% basalt, sub to well rounded, some broken. S- 10% mafic, 90% felsic. loose. poorly sorted. 2.5Y 5/2 (grayish brown). mod. rxn to HCl.	
10						
12.5	G	B22TK2	D			
	G	B22TK3	M		(g)S- Slightly gravelly sand. 10% G, 90% fine to v. coarse sand. max size = 14mm (med. pebbles). G- sub-angular to sub-round, 90% basalt. sand- 50% mafic, 50% felsic. loose, poorly sorted. 2.5Y 5/1 (gray). no rxn to HCl.	
15						
17.5	G	B22TK4	SM			
					gS- gravelly sand. 20% G, 80% fine to v. coarse sand. max size = 23mm remainder - same as above.	
					S- sand. mod. sand. max size - v. coarse sand well-sorted. loose. 2.5Y 5/3 (lt. olive brown). 10% mafic, 90% felsic. sub-round to angular. weak to no rxn to HCl.	
					(g)S- Slightly gravelly sand. 5% G, 95% fine to v. coarse sand. max size = 5mm (fine pebbles). mod. sorted. loose. S- 10% mafic, 90% felsic. 2.5Y 6/3 (lt. yellowish brown) weak rxn to HCl	

KEY
S = sand
G = gravel
V = very
mod. = moderate
max = maximum
part. = particle
rxn = reaction
med = medium
Z = fines (clay + silt)

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514 / 299-E24-25	Depth 17.5 - 33.5	Date 12/17/09	Sheet 2 of 14
		Location	Project BP-5 L well		

Logged by Michele Valera (Print) | Michelle Valera (Sign)
Reviewed by (Print) (Sign) Date
Lithologic Class. Scheme Folk-Wentworth Procedure Rev
Drilling Contractor
Driller
Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
	G	B22TK5	SM		S- Sand. fine to v. coarse sand, trace gravel. max part. = 3mm loose, mod. sorted. 20% mafic, 80% felsic, sub-round to angular. 2.5Y 6/3 (lt. yellowish brown). weak rxn to HCl.	
20						
	G	B22TK6	SM		(g)S- Slightly gravelly sand. 5% G, 95% v. fine to v. coarse sand. max size = 1mm. G primarily broken, 50% broken. S- 20% mafic, 80% felsic. mod. sorted, loose w/ some mod. cemented. 2.5Y 6/3 (lt. yellowish brown). S- weak to no rxn to HCl, cemented sand - strong rxn to HCl.	
22.5						
	G	B22TK7	SM			
25						
	G	B22TK8	SM		sand - trace gravel. fine to v. coarse sand. max size = 5mm. 20% mafic, 80% felsic. loose, mod sorted. 2.5Y 5/3 (lt. olive brown). weak rxn to HCl.	
27.5						
	G	B22TK9	SM			
30					(m) S- Slightly muddy sand. 10% Z, 90% v. fine to coarse sand. max part = v. coarse sand. loose w/ some consol. of fines. mod. sorted. 10% mafic, 90% felsic. 2.5Y 5/3 (lt. olive brown). weak to no rxn to HCl.	
33.5	G	B22TL0	SM		(g)S- Slightly gravelly sand 5% G, 95% fine to v. coarse sand - primarily coarse to v. coarse sand. max. part. = 3mm. S- 40% mafic, 60% felsic. loose, mod. sorted. S- sub-angular to angular. 2.5Y 4/2 (dark grayish brown). no rxn to HCl.	
					(m)S- Slightly muddy sand. 5% Z, 95% v. fine to coarse sand trace G. max. part = 6mm. (fine pebbles) mod. sorted, loose w/ some mod. consol. of fines. 2.5Y 6/3 (lt. yellowish brown).	TL0 - depth 33.5 (no range)

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514/299-E24-25	Depth 33.5-57.5	Date 12/17/09	Sheet 3 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta / Michelle Valenta
Reviewed by _____ Date _____
Lithologic Class. Scheme Folk-Wentworth Procedure _____ Rev _____

Drilling Contractor _____
Driller _____
Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
30	G	B22TL1	SM		(g)S- Slightly gravelly sand. 5% G, 95% med. to v. coarse sand. max. size = 4mm (fine pebbles). S- 30% mafic, 70% felsic. loose, mod sorted. 2.5Y 5/2 (grayish brown) weak rxn to HCl.	
35	G	B22TL2	SM		same as above weak rxn to HCl	
40	G	B22TL3	SM		same as above	
42.5	G	B22TL4	SM		Same as above. higher percentage of fine sand - less v. coarse sand. 10% G, 90% S. weak rxn to HCl. 2.5Y 6/2 (lt. brownish gray).	
45	G	B22TL5	SM		Same as above - max = 7mm. 5% G, 95% med. to v. coarse sand.	TLS depth only given at 45'
47.5	G	B22TL6	SM		(g)S- Slightly gravelly sand. 10% G, 90% Sand - primarily med. sand, some coarse and fine sand. max size = 9mm. loose, mod-sorted. 2.5Y 5/2 (grayish brown). S- 30% mafic, 70% felsic. weak rxn to HCl.	
50	G	B22TL7	SM			
52.5	G	B22TL9	SM		same as above.	
55	G	B22TL8	SM		S- sand. fine to coarse sand. trace G + Z. max. size = 6mm (fine pebbles). mod-sorted. loose, some mod cementation - contain fine lenses. S- 20% mafic, 80% felsic. 2.5Y 6/3 (lt. yellowish brown). S- mod rxn to HCl.	
57.5	G	B22TM10	SM		cemented sand - strong rxn to HCl	
					S- sand - fine to v. coarse, trace G. max. size = 8mm. loose mod-sorted. S- sub-angular to angular, 30% mafic, 70% felsic. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
					same as above - no trace G. more med to coarse sand - less v. coarse sand. well-sorted.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C-5514/299-E24-25	Depth 57.5'-82.6'	Date 12/17/09	Sheet 4 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta | Michelle Valenta (Print / Sign)

Reviewed by _____ (Print / Sign) Date _____

Lithologic Class. Scheme Folk-Wentworth Procedure _____ Rev _____

Drilling Contractor _____

Driller _____

Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
					Same as above - sand - med. to coarse well sorted. weak rxn to HCl.	
	G	B22TM1	SM			
60					S-sand. fine to coarse sand. max size = v. coarse sand. loose w/ some mod consol (< 10%). S- 20% mafic, 80% felsic, mod-sorted, 2.5Y 6/3 (lt. yellowish brown). weak to no rxn to HCl.	
	G	B22TM2	SM			
62.5					S-sand - med. to v. coarse. v. coarse max size. S- 30% mafic, 70% felsic, loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
66	G	B22TM3	SM			
67	G	B22TM4	SM		S-sand. fine to v. coarse sand. same as above. mod rxn to HCl.	
70.5	G	B22TM5	SM		S-sand. fine to v. coarse sand, trace G. max size = 6mm. S- 30% mafic 70% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn HCl	
72.5	G	B22TM6	SM		S-v. fine to med sand - 80% - 20% coarse to v. coarse sand, max size = v. coarse sand. 40% mafic, 60% felsic. mod-sorted. loose - small amount of mod. consol. (< 5%). 2.5Y 6/2 (lt. brownish gray). mod rxn to HCl.	
75	G	B22TM7	SM			
77.5	G	B22TM8	SM		S-sand. v. fine to v. coarse. max size = v. coarse sand. 20% mafic, 80% felsic. mod-sorted, loose. 2.5Y 4/2 (dark grayish brown).	
80	G	B22TM9	SM		Same as above.	
82.6	G	B22TN0	SM		Same as above. trace G. max size = 4mm.	
					(g)S- Slightly gravelly sand. 5% G, 95% v. fine to v. coarse sand max size = 6mm. S- 30% mafic, 70% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	

W - Wet, M - Moist, SM - Slightly Moist, D - Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514 / 299-E24-25	Depth 85-102.5'	Date 12/17/09	Sheet 5 of 14
		Location	Project BP-5 L well		

Logged by Vicevic, Valenta / Michelle Valo
Reviewed by _____ Date _____
Lithologic Class. Scheme Folk-Wentworth Procedure _____ Rev _____

Drilling Contractor _____
Driller _____
Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
85	G	B22TN1	SM		S- sand fine to v. coarse sand, trace G. Max size = 3mm. S- 20% mafic 80% felsic. mod-sorted, loose w/ some weak consol. (N 10%). 2.5Y 4/2 (dark grayish brown).	
88	G	B22TN2	SM		same as above. Sand- weak rxn to HCl, consol.- strong rxn to HCl.	
90.4	G	B22TN3	SM		S- sand v. fine to coarse sand. max size = v. coarse sand. S- 40% mafic, 60% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl	
92.5	G	B22TN4	SM			
94.5	G	B22TN5	SM		S- v. fine to medium sand. max size = v. coarse sand. S- 30% mafic, 70% felsic, mod-sorted. loose w/ some mod. cementation. 2.5Y 6/2 (lt. brownish gray). S- weak rxn to HCl, cemented sand- mod rxn HCl	
97.5	G	B22TN6	M		S- med. sand 80%, 10% coarse, 10% fine sand. max size = v. coarse sand. S- 10% mafic, 90% felsic, loose, weak consol. due to moisture, mod-sorted, 2.5Y 5/2 (grayish brown).	
100.6	G	B22TN7	M		S- fine to med. sand. max size = coarse sand. well-sorted. S- 10% mafic, 90% felsic. loose. 2.5Y 5/2 (grayish brown).	
102.5	G	B22TN8	SM		S- sand. fine to coarse sand. max size = v. coarse sand. mod-sorted. S- 30% mafic, 70% felsic. 2.5Y 4/2 (dark grayish brown). loose. weak rxn to HCl.	
					S- Sand. med to coarse sand. max size = v. coarse sand. well-sorted, loose, small amount of weak consol. S- 40% mafic, 60% felsic, angular to sub-angular. 2.5Y 4/2 (dark grayish brown). no rxn to HCl.	

W - Wet, M - Moist, SM - Slightly Moist, D - Dry

2008/DCL/FORMS/GeoLog/001 (03/18)

Pacific Northwest National Laboratory	**GEOLOGIC LOG**	Boring/Well No C7514 / 299-E24-25	Depth 105-127'	Date 12/17/09	Sheet 6 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta (Michelle Valenta) (Print / Sign)
Reviewed by _____ (Print / Sign) Date _____
Lithologic Class. Scheme Folk - Wentworth Procedure _____ Rev ____

Drilling Contractor _____
Driller _____
Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
105	G	B22TN9	SM		S- sand. fine to v. coarse sand. trace G. max size = 3mm. loose, mod-sorted S- 20% mafic, 80% felsic. 2.5Y 5/2 (grayish brown). no rxn to HCl.	
107.5	G	B22TP0	SM		same as above - higher % of fine and medium sand - less v. coarse sand. max. size = 5mm. weak rxn to HCl.	
110	G	B22TP1	SM		S- sand. 80% fine + medium sand, 20% coarse sand. max size = v. coarse sand. 30% mafic, 70% felsic. mod-sorted. loose - lithic consol. due to moisture. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
112.5	G	B22TP2	SM			
115	G	B22TP3	SM		S- fine to coarse sand. trace G. max size = 6mm. S- 30% mafic, 70% felsic. loose, mod. sorted. 2.5Y 5/2 (grayish brown). weak rxn HCl	
117.5	G	B22TP4	SM		same as above. max size = 3mm.	
120	G	B22TP5	SM		G/S - Slightly gravelly sand - 10% G, 90% fine to v. coarse sand. max size = 3mm. S- 40% mafic, 60% felsic, G- primarily basalt. mod-sorted. loose, small amount of mod. cementing. 2.5Y 5/2 (grayish brown). mod. rxn to HCl.	
122.5	G	B22TP6	SM			
125	G	B22TP7	M		S- fine to coarse sand. trace G, max size = 4mm. 30% mafic, 70% felsic. loose. mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn HCl.	
127	G	B22TP8	M		S- fine to med. sand. max size = v. coarse sand. well-sorted. loose w/ some weak consol. 2.5Y 5/2 (grayish brown). S- mod. rxn to HCl. Consol - strong rxn to HCl.	
					same as above - more consolidation (~30%)	
					same as above - loose (no consolidation).	

W - Wet, M - Moist, SM - Slightly Moist, D - Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514/299-E24-25	Depth 130-147.5	Date 12/18/09	Sheet 7 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta Michelle Valenta (Print / Sign)

Reviewed by _____ (Print / Sign) Date _____

Lithologic Class. Scheme Folk-Wentworth Procedure _____ Rev _____

Drilling Contractor _____

Driller _____

Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
130'	G	B22TP9	SM		S-sand- fine to medium sand, trace G. Max size = 4mm. S: 10% mafic 90% felsic, loose, mod-sorted. 2.5Y 5/2 (grayish brown). no rxn to HCl.	
132.5	G	B22TR0	SM		Same as above, with some mod. consolidation (~10%). S- weak rxn to HCl. consol- mod rxn to HCl	
136	G	B22TR1	SM		Same as above. 5% gravel, 95% sand. 2.5Y 6/3 (lt. yellowish brown). no rxn to HCl.	
137.5	G	B22TR2	SM		Same as above - sand, fine to medium (90%), some coarse sand (10%) trace G. loose (no consol.). 2.5Y 5/2 (grayish brown) 20% mafic, 80% felsic weak rxn to HCl.	
140.4	G	B22TR3	SM			
142.5	G	B22TR4	SM		(g)S- Slightly gravelly sand. 5%G, 95% fine to v. coarse sand. max size = 4mm. S- 30% mafic, 70% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
144	G	B22TR5	SM			
147.5	G	B22TR6	SM		S-sand. fine (70% fine + med.) to v. coarse sand (30% coarse + v. coarse), trace G. max size = 4mm. mod-sorted. loose w/some mod. consolidation. 20% mafic, 80% felsic, sub-round to angular. 2.5Y 6/2 (lt. brownish gray). no rxn to HCl.	
					S-sand. fine (40% fine + med sand) to v. coarse sand (60% coarse + v. coarse sand). trace G. max size = 3mm. S- 40% mafic, 60% felsic. loose, mod-sorted. 2.5Y 5/3 (lt. olive brown). weak rxn to HCl.	
					S-sand. fine to medium sand, some coarse + v. coarse) trace G. max size = 3mm. S- 20% mafic, 80% felsic. mod-sorted. loose w/ some weak to mod. consol. 2.5Y 6/2 (lt. brownish gray). mod. rxn to HCl.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

2008/DCL/FORMS/GeoLog/001 (03/18)

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514/299-E24-25	Depth 149.9-167.5'	Date 12/18/09	Sheet 8 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta Michelle Valenta (Print / Sign / Print / Sign)
Reviewed by _____ (Print / Sign) Date _____
Lithologic Class. Scheme Folk - Wentworth Procedure _____ Rev _____

Drilling Contractor _____
Driller _____
Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
149.9	G	B22TR7	SM		(g)S- Slightly gravelly sand 95% fine to v. coarse sand, 5% G. max size = 4mm. S-30% mafic, 70% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl	
152.5	G	B22TR8	D		S- v. fine to med. sand, trace G. max size = 3mm. mod-sorted. loose w/ mod cementation. 2.5Y 6/2 (lt. brownish gray). strong rxn to HCl.	
155	G	B22TR9	SM		S- sand. fine to v. coarse, trace G. max size = 3mm. S- 30% mafic, 70% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). no rxn HCl.	
157.5	G	B22TT0	SM		(g)S- Slightly gravelly sand 5% G, 95% fine to v. coarse sand max size = 3mm. S- 50% mafic, 50% felsic. loose, mod-sorted. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
160.3	G	B22TT1	SM		same as above w/ some cementation. 2.5Y 6/2 (lt. brownish gray). some consol- contains iron staining. weak rxn to HCl.	
162.5	G	B22TT2	D		(g)S - Slightly gravelly sand. v. fine to fine sand 95%, 5% G. max size = 14mm (broken gravel). loose w/ some mod cementation. poorly sorted. 2.5Y 7/3 (pale yellow). mod rxn to HCl (sand), consol sand - mod rxn to HCl.	
165	G	B22TT3	SM		S- fine to v. coarse sand, trace G. max size = 3mm. loose, mod-sorted. S- 90% mafic, 80% felsic. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
167.5	G	B22TT4	SM		(g)S- Sl. gravelly sand. fine to coarse sand - 95%, 5% G. max size = 11mm (med. pebbles). loose, poorly sorted. G- basalt, well-rounded. S- 30% mafic, 70% felsic. 2.5Y 5/2 (grayish brown) mod. rxn to HCl.	

W - Wet, M - Moist, SM - Slightly Moist, D - Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514 / 299-E24-25	Depth 170-190'	Date 12/18/09	Sheet 9 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valente (Print) Michelle Valente (Sign)

Reviewed by (Print) (Sign) Date

Lithologic Class. Scheme Folk-Wentworth Procedure Rev

Drilling Contractor

Driller

Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
170	G	B22TT5	SM		S- fine to coarse sand, trace G. max size = 3mm. loose, mod-sorted. 30% mafic, 70% felsic. 2.5Y 5/2 (grayish brown). weak rxn HCl	
172.5	G	B22TT6	D		S- sand fine to med. sand- max. size = v. coarse sand loose w/some cementation (<10%). well sorted. 20% mafic, 80% felsic. 2.5Y 7/3 (pale yellow).	
175	G	B22TT7	SM			
177.5	G	B22TT8	SM		same as above. trace G. max size = 3mm. loose w/ some weak consol. more moisture - 2.5Y 5/3 (light olive brown). mod rxn to HCl.	
180	G	B22TT9	SM		S- sand fine to v. coarse, trace G. max size = 4mm. loose, mod-sorted. 40% mafic, 60% felsic. 2.5Y 4/2 (dark grayish brown). weak rxn to HCl.	
182.5	G	B22TV0	SM		(g)S- slightly gravelly sand 5% G, 95% fine to v. coarse sand. max size = 4mm. loose, mod-sorted. 40% mafic, 60% felsic. 2.5Y 5/2 (grayish brown). weak rxn to HCl.	
185	G	B22TV1	SM			
187.5	G	B22TV2	SM		(g)S- 95% fine to med. sand, 5% G. max size = 10mm. loose, mod-sorted. S- 20% mafic, 80% felsic. 2.5Y 6/2 (light brownish gray). weak rxn to HCl.	
190	G	B22TV3	SM			
					same as above. G- max size = 15mm (broken basalt).	
					S sand. fine to coarse sand. trace G. max size = 4mm. loose, mod-sorted. S- 20% mafic, 80% felsic. 2.5Y 5/2 (grayish brown). weak rxn HCl	
					same as above. 5% G. max size = 4mm.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514 / 299-E24-25	Depth 192.5-217.5	Date 12/18/09	Sheet 10 of 14
		Location	Project BP-5 L well		

Logged by Michael Valenta / Michelle Valero (Print / Sign) | Drilling Contractor

Reviewed by (Print / Sign) | Date | Driller

Lithologic Class. Scheme Folk - Wentworth | Procedure | Rev | Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
192.5	G	B22TV4	D		S- sand. v. fine to med sand - 95%, 5% G. max size = 5mm. loose w/ some cementation. mod-sorted. 2.5Y 6/2 (lt. brownish gray). S- mod rxn to HCl. cemented sand - strong rxn HCl.	
195	G	B22TV5	SM		S- sand fine to coarse sand, trace G. max size = 5mm. S- 40% mafic, 60% felsic. loose. mod-sorted. 2.5Y 5/2 (grayish brown). weak to mod. rxn to HCl.	
197.5	G	B22TV6	SM			
200	G	B22TV7	SM		same as above.	
202.5	G	B22TV8	SM		same as above.	
205	G	B22TV9	SM		same as above w/ some mod. consolidation.	
207.5	G	B22TW0	SM		S- sand. fine to v. coarse sand (higher % of coarse and v. coarse), trace G. max size = 5mm. loose, mod-sorted. 30% mafic, 70% felsic. 2.5Y 4/2 (dark grayish brown) weak rxn to HCl.	
210	G	B22TW1	SM		same as above. (g) Slightly gravelly sand. 95% fine to v. coarse sand, 5% G. max size = 5mm	
212.5	G	B22TW2	SM		same as above.	
215	G	B22TW3	SM		same as above w/ slightly higher gravel content - 10% G, 90% sand. S- 60% mafic, 40% felsic. G- 90% basalt. max size = 6mm.	
217.5	G	B22TW4	SM		same as above	
					(g) S- Slightly gravelly sand. 10% G, 90% fine to v. coarse sand. loose. max size = 11mm. S- 40% mafic, 60% felsic. G- 90% basalt. 2.5Y 4/2 (dark grayish brown) mod-sorted. weak to no rxn to HCl.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	**GEOLOGIC LOG**	Boring/Well No C7514/299-E24-25	Depth 220-240'	Date 12/18/09	Sheet 11 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta (Print) Michelle Valenta (Sign) (Print) (Sign) — Drilling Contractor
Reviewed by (Print) (Sign) Date — Driller
Lithologic Class. Scheme Fok-Wentworth Procedure Rev — Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
220	G	B22TW5	SM		S- fine and medium sand. max size = v. coarse sand. well sorted. loose. 20% mafic. 80% felsic. 2.5Y 5/3 (lt. Olive brown). weak rxn to HCl.	
222.5	G	B22TW6	SM		G,S: Slightly gravelly sand. 95% v. fine to med sand, 5% gravel. max size = 3mm. 1/1- 90% basalt. S- 10% mafic. 90% felsic. loose w/ some mod. consolidation. mod-sorted. 2.5Y 6/3 (lt. yellowish brown). S- mod rxn to HCl. consol. S- strong rxn.	
225	G	B22TW7	SM			
227	G	B22TW8	SM			
230	G	B22TW9	SM		S- sand fine to coarse sand, trace G. max size = 3mm. 30% mafic, 70% felsic. 2.5Y 5/2 (grayish brown). mod-sorted. loose w/ some weak consol. (<10%). weak to mod rxn to HCl.	
232.5	G	B22TX0	D		S- fine to med. sand. max size = v. coarse sand loose. well sorted. 20% mafic, 80% felsic. 2.5Y 5/3 (lt. olive brown). weak to mod rxn to HCl.	
235	G	B22TX1	SM		S- fine to v. coarse sand. max size = v. coarse sand mod-sorted, loose. 20% mafic, 80% felsic. 2.5Y 5/3. weak rxn to HCl.	
237.5	G	B22TX2	SM		S- v. fine to med sand. max size = coarse sand. 20% mafic, 80% felsic. loose w/ some weak to mod consol (<10%). 2.5Y 6/2 (lt. brownish gray). weak to mod. rxn to HCl.	
240	G	B22TX3	SM		S- fine to v. coarse sand, trace G. max size = 3mm. 30% mafic, 70% felsic. loose w/ some weak consol. 2.5Y 5/3 (lt. olive brown). mod-sorted. no rxn to HCl.	
					same as above. less v. coarse and coarse sand, more fine med. sand	
					same as above	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	**GEOLOGIC LOG**	Boring/Well No C7514 / 299-E24-25	Depth 242.5-262.4	Date 12/18/09	Sheet 12 of 14
		Location	Project B-25 L well		

Logged by Michelle Valerio (Print) Michelle Valerio (Sign) (Print) (Sign)
Reviewed by (Print) (Sign) Date
Lithologic Class. Scheme Folk-Wentworth Procedure Rev
Drilling Contractor
Driller
Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
242.5	G	B22TX4	SM		S-sand v. fine to med sand, trace G. max size = 3mm. 20% mafic 80% felsic. loose w. some mod consol. (<10%). mod-sorted. 2.5Y 6/3 (lt. yellowish brown). sand-mod rxn to HCl. consol. sand-strong rxn to HCl	
245	G	B22TX5	SM			
	G	B22TX6	SM		same as above - more consol. (~20%)	
247.5	G	B22TX7	SM		sand. fine to med sand (80%), coarse to v. coarse sand (20%) trace G. max size = 3mm. 20% mafic, 80% felsic. loose, mod-sorted. mod rxn to HCl. 2.5Y 6/3 (lt. yellowish brown).	
249.9						
252.5	G	B22TX8	SM		(g)S. Slightly gravelly sand. 10% G, 90% fine to v. coarse sand. max size = 7mm. S-60% mafic, 40% felsic. G-80% basalt, subround to subangular. loose, poorly sorted. 2.5Y 5/2 (grayish brown). no rxn to HCl.	
255	G	B22TX9	SM			
257.5	G	B22TY0	SM		(g)S. Sl. gravelly sand. 5% G, 95% fine to v. coarse sand. max size = 7mm. S-40% mafic. 60% felsic. G-70% basalt, sub-angular to ang. loose, mod-sorted. 2.5Y 5/3 (lt. olive brown). weak to no rxn to HCl.	
	G	B22TY1	SM			
260					same as above. max size = 10mm.	
262.4	G	B22TY2	SM		(g)S. 10% G, 90% fine to v. coarse sand. max size = 8mm. S-40% mafic, 60% felsic. G-80% basalt, ang. to sub-round. loose, poorly sorted. 2.5Y 5/2 (grayish brown). weak to mod. rxn to HCl.	
					same as above. max size = 10mm. poorly sorted.	
					same as above.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

2008/DCL/FORMS/GeoLog/001 (03/18)

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514/299-E24-25 Location	Depth 265-285.5 Date 12/18/09 Project BP-5 L well	Sheet 13 of 14

Logged by Victoria Valerio Michelle Valerio
Reviewed by _____ Date _____
Lithologic Class. Scheme Folk-Wentworth Procedure _____ Rev _____

Drilling Contractor _____
Driller _____
Drill Method _____

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
265	G	B22TY3	SM		gS- gravelly sand. 20% G. 80% med (20%) to v. coarse sand. max size = 10mm G- 80% basalt, sub-rounded to angular. S- 70% mafic, 30% felsic. loose. poorly-sorted. 2.5Y 4/2 (dark grayish brown). no rxn to HCl.	
269.5	G	B22TY4	SM		Same as 262.4 ft. max size = 14mm.	
270	G	B22TY5	SM		Same as above	
273.5	G	B22TY6	SM		gS - gravelly sand. 10% G, 90% fine (80% sand fine-med) to v. coarse (20% coarse + v. coarse). max size = 8mm. loose, poorly sorted. G- 80% basalt, rounded to sub-ang. S- 40% mafic, 60% felsic. 2.5Y 5/3 (lt. olive brown). no to weak rxn to HCl.	
275	G	B22TY7	SM			
277.5	G	B22TY8	SM		S- sand, fine to v. coarse sand, trace G. max part. = 3mm. S- 40% mafic 60% felsic. loose. mod-sorted. 2.5Y 5/2 (grayish brown). no rxn HCl.	
280	G	B22TY9	SM		gS- gravelly sand. 30% G, 70% fine to v. coarse sand max size = 17 mm. G- 70% basalt, sub-ang. to well rounded. S- 40% mafic, 60% felsic, loose, poorly sorted. 2.5Y 4/2 (dark grayish brown). no rxn to HCl.	
284	G	B22V00	SM		Same as above. max size = 16mm. broken gravel.	
285.5	G	B22V01	D		(m)gS- Slightly muddy gravelly sand. 20% G, 70% v. fine - fine sand, 10% Z. max size = 11mm. loose. poorly sorted. 2.5Y 6/2 (lt. brownish gray). G- well-rounded to sub-ang. no rxn to HCl.	
					Same as above. broken gravel. 2.5Y 7/2 (light gray). - drier G- 30%, sand-70% no rxn to HCl.	

W = Wet, M = Moist, SM = Slightly Moist, D = Dry

Pacific Northwest National Laboratory	GEOLOGIC LOG	Boring/Well No C7514/299-E24-25	Depth 287.5-295.1	Date 12/18/09	Sheet 14 of 14
		Location	Project BP-5 L well		

Logged by Michelle Valenta (Print) Michelle Valenta (Sign) | (Print) (Sign)

Reviewed by (Print) (Sign) Date

Lithologic Class. Scheme Folk-Wentworth Procedure Rev

Drilling Contractor

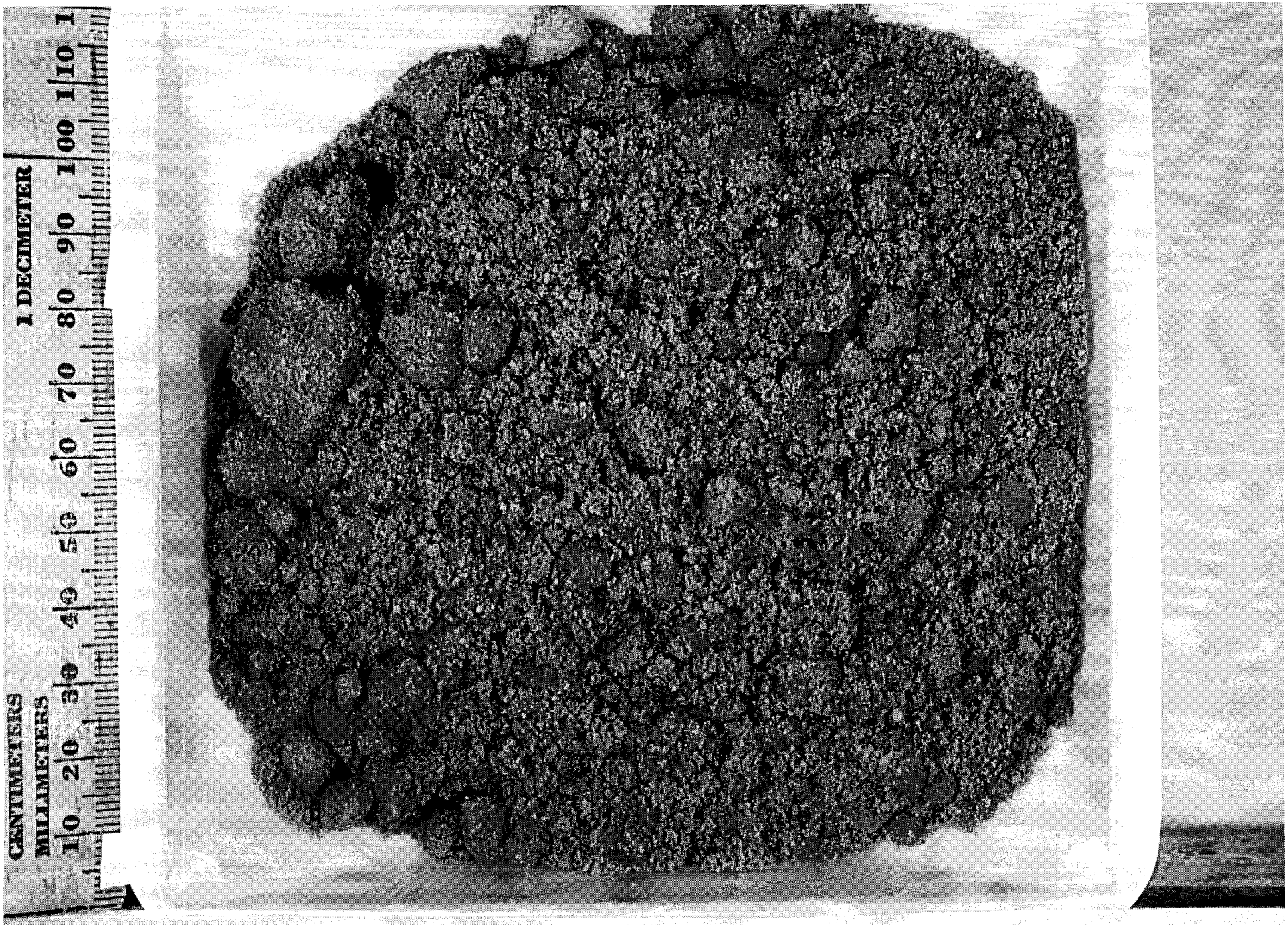
Driller

Drill Method

DEPTH (ft)	SAMPLES TYPE	SAMPLES ID NUMBER	MOISTURE	GRAPHIC LOG C Z S G	LITHOLOGIC DESCRIPTION (sediment class, range in particle size, maximum particle size, mafic %, sorting, roundness, color, consolidation, reaction to 10% HCl, structure, fabric, and any other characteristics)	COMMENTS
287.5	G	B22V02	D		same as above - more gravel. sG - sandy gravel 40% G, 50% v. fine to fine sand, 10% Z. max size = 14mm. G - 60% basalt - broken. 2.5Y 6/2 (lt. brownish gray).	
290.5	G	B22V03	M		msG - muddy sandy gravel 80% G, 10% sand, 10% Z. max size = 20mm (coarse pebbles) G - sub-ang. to well-rounded. mudy coating on gravel - can't tell type. v poorly sorted. 2.5Y 4/1 (dark gray).	
292.5	G	B23249	W			292.5 → 295.1 in 100ml glass jars saturated zone.
295.1	G	B23300	W		Same as above - less sand + Z - 90% G, 5% S, 5% Z. max size = 13mm. G - 80% mafic, well-rounded to sub-ang. 2.5Y 3/1 (very dark gray).	
					Same as above - smaller gravel (max = 9mm). more Z + S - 80% G, 10% S, 10% Z.	

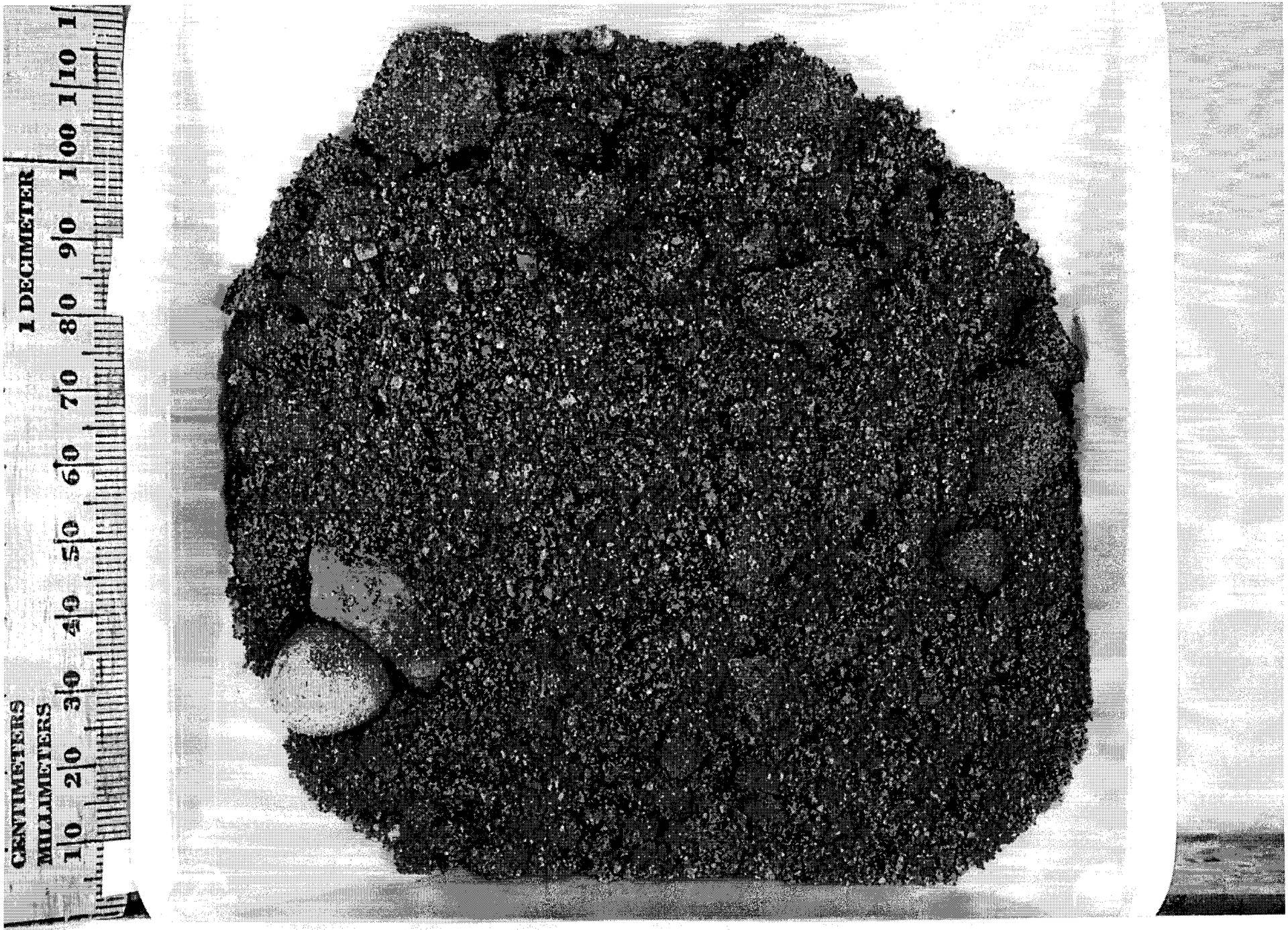
W = Wet, M = Moist, SM = Slightly Moist, D = Dry

2008/DCL/FORMS/GeoLog/001 (03/18)



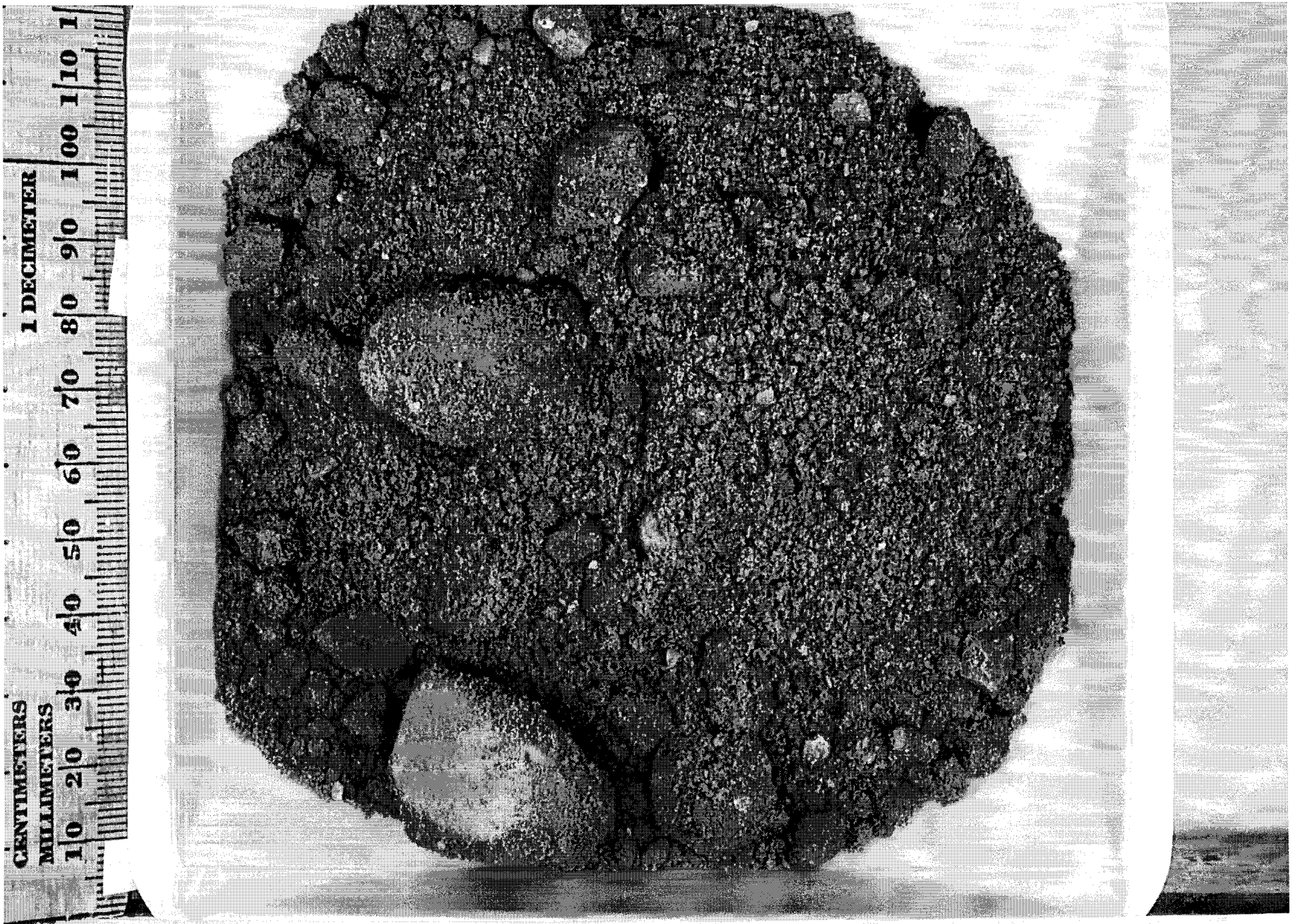
C7514 B22TJ8 0-2.5 ft Grab Sample

Depth from Chain-of-Custody



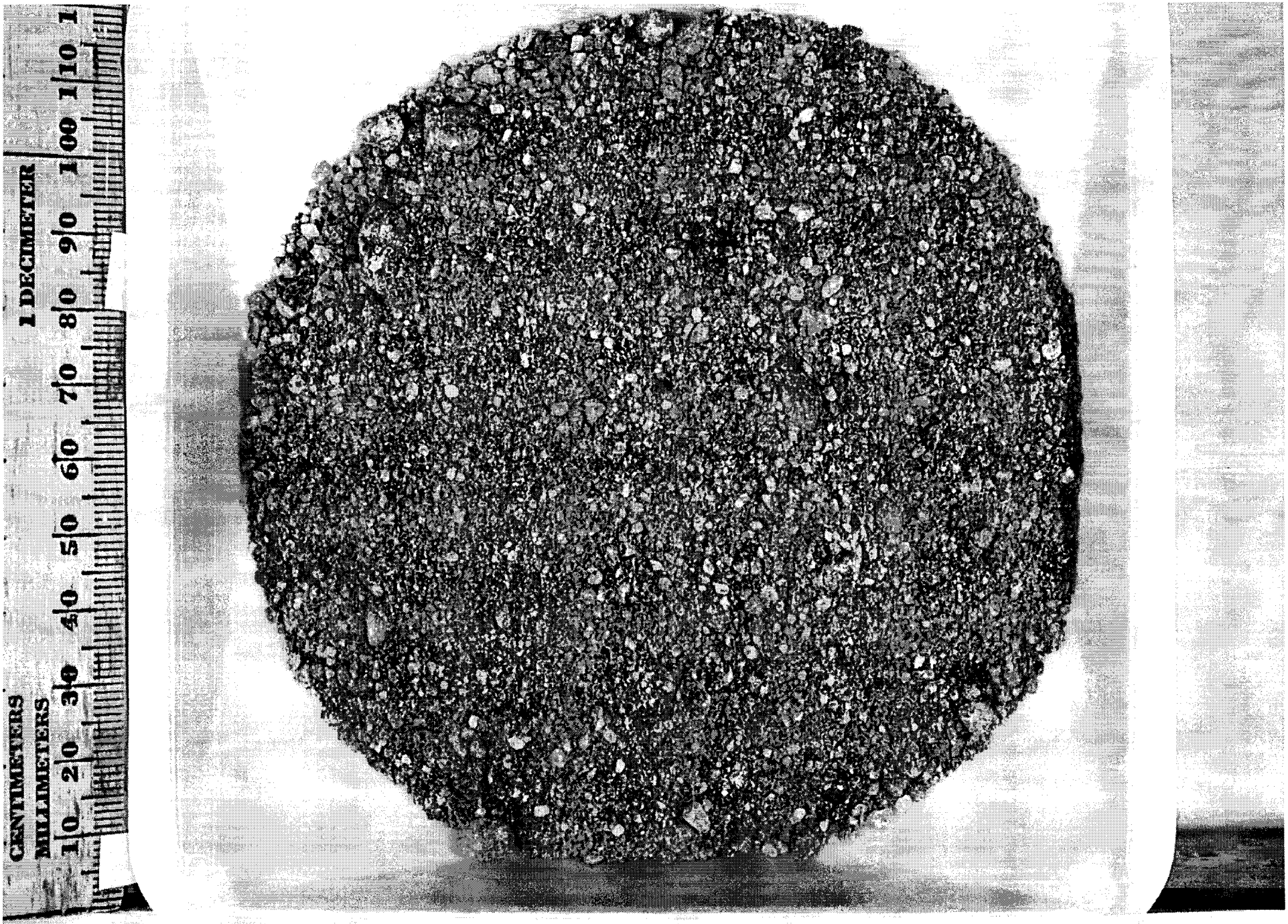
C7514 B22TJ9 2.5-5 ft Grab Sample

Depth from Chain-of-Custody



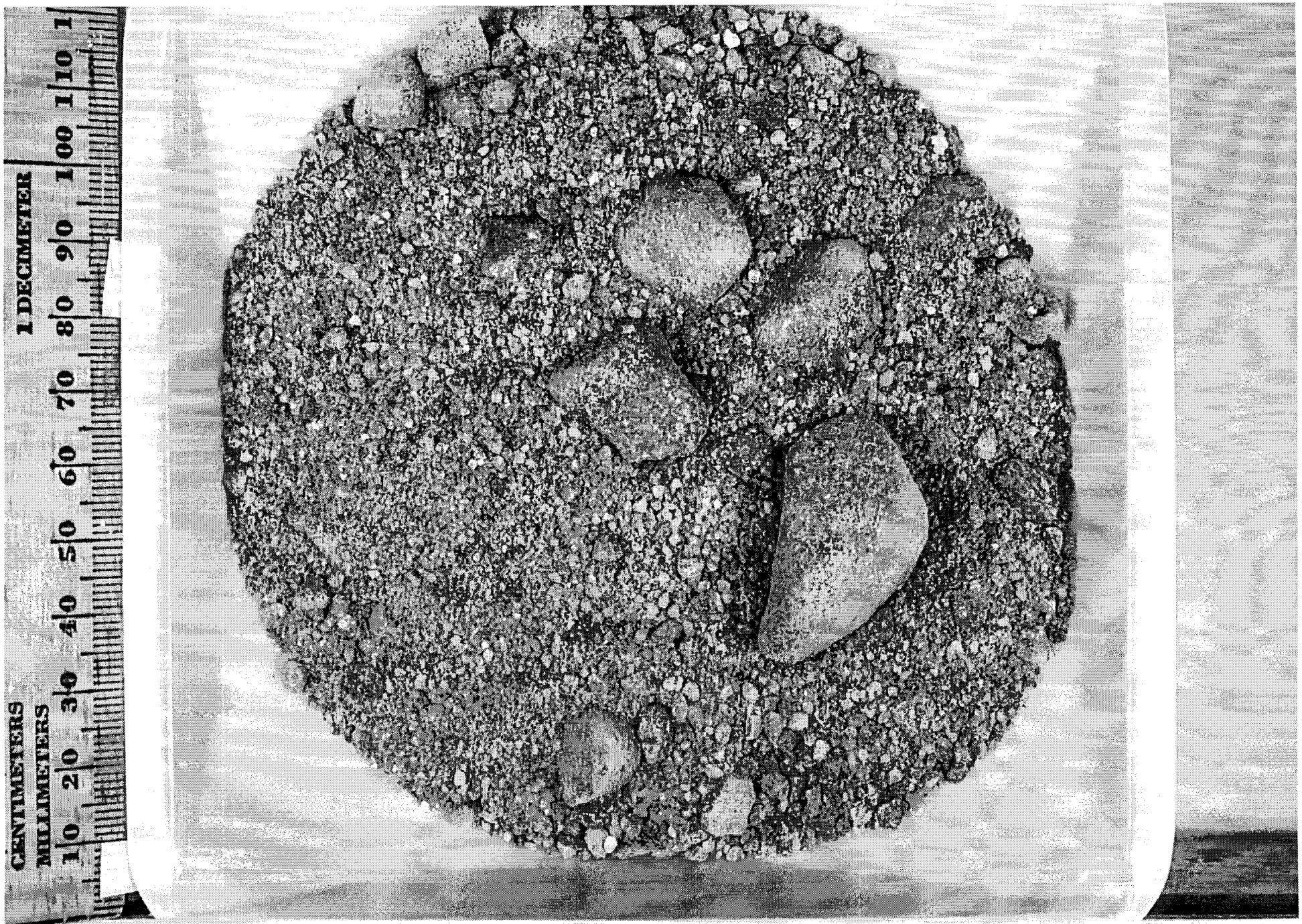
C7514 B22TK0 5-7.5 ft Grab Sample

Depth from Chain-of-Custody



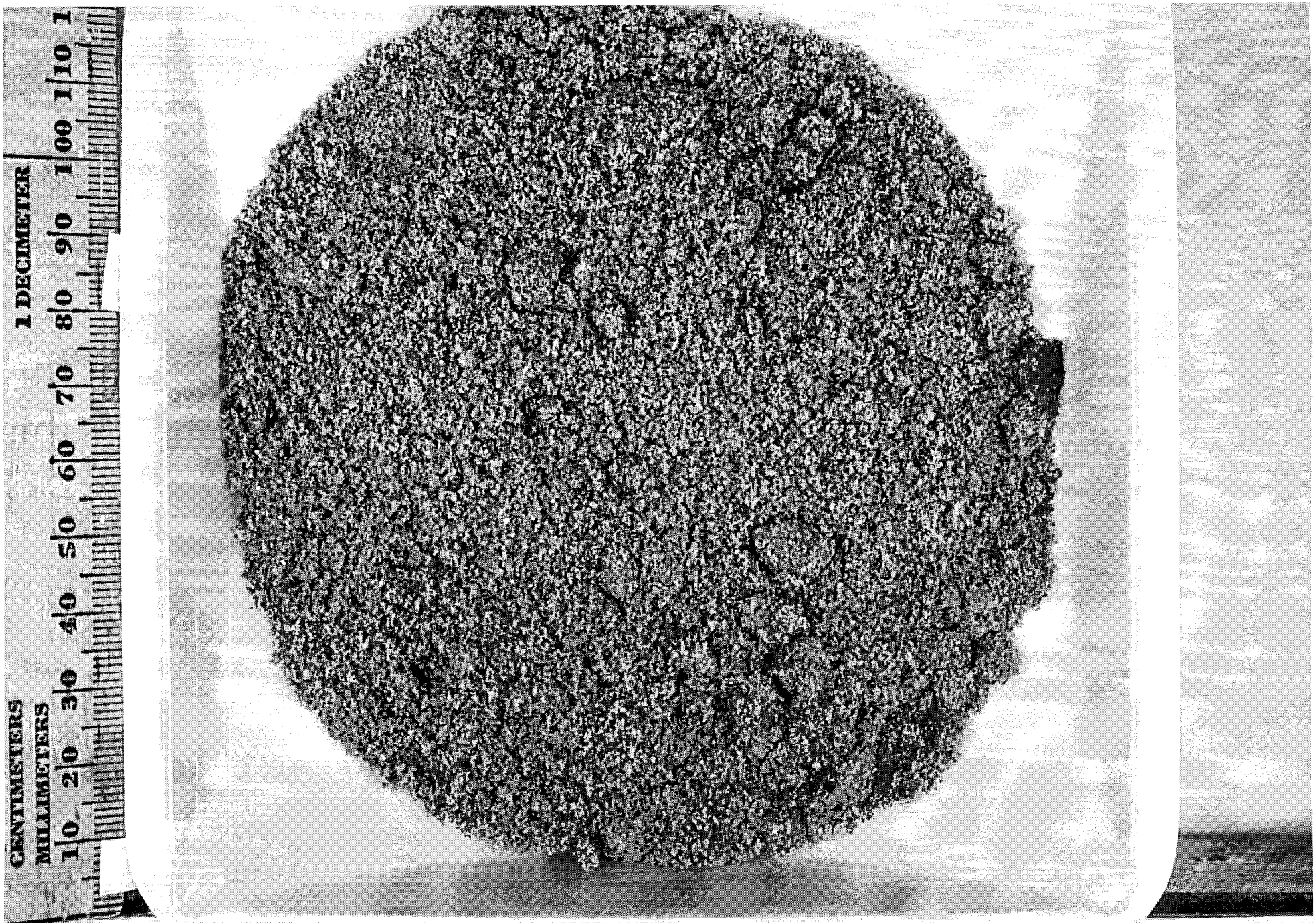
C7514 B22TK1 7.5-10 ft Grab Sample

Depth from Chain-of-Custody



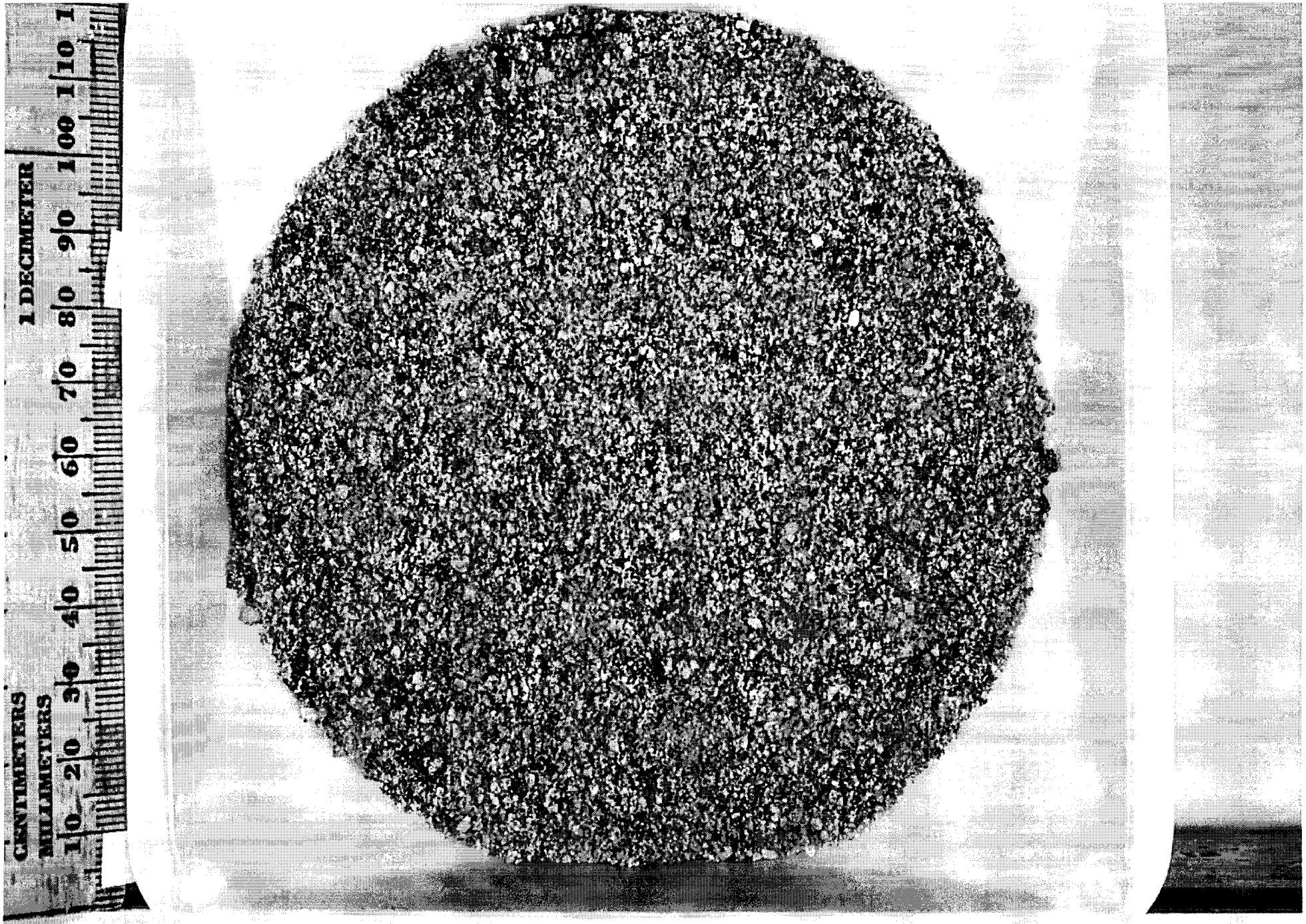
C7514 B22TK2 9.9-12.5 ft Grab Sample

Depth from Chain-of-Custody



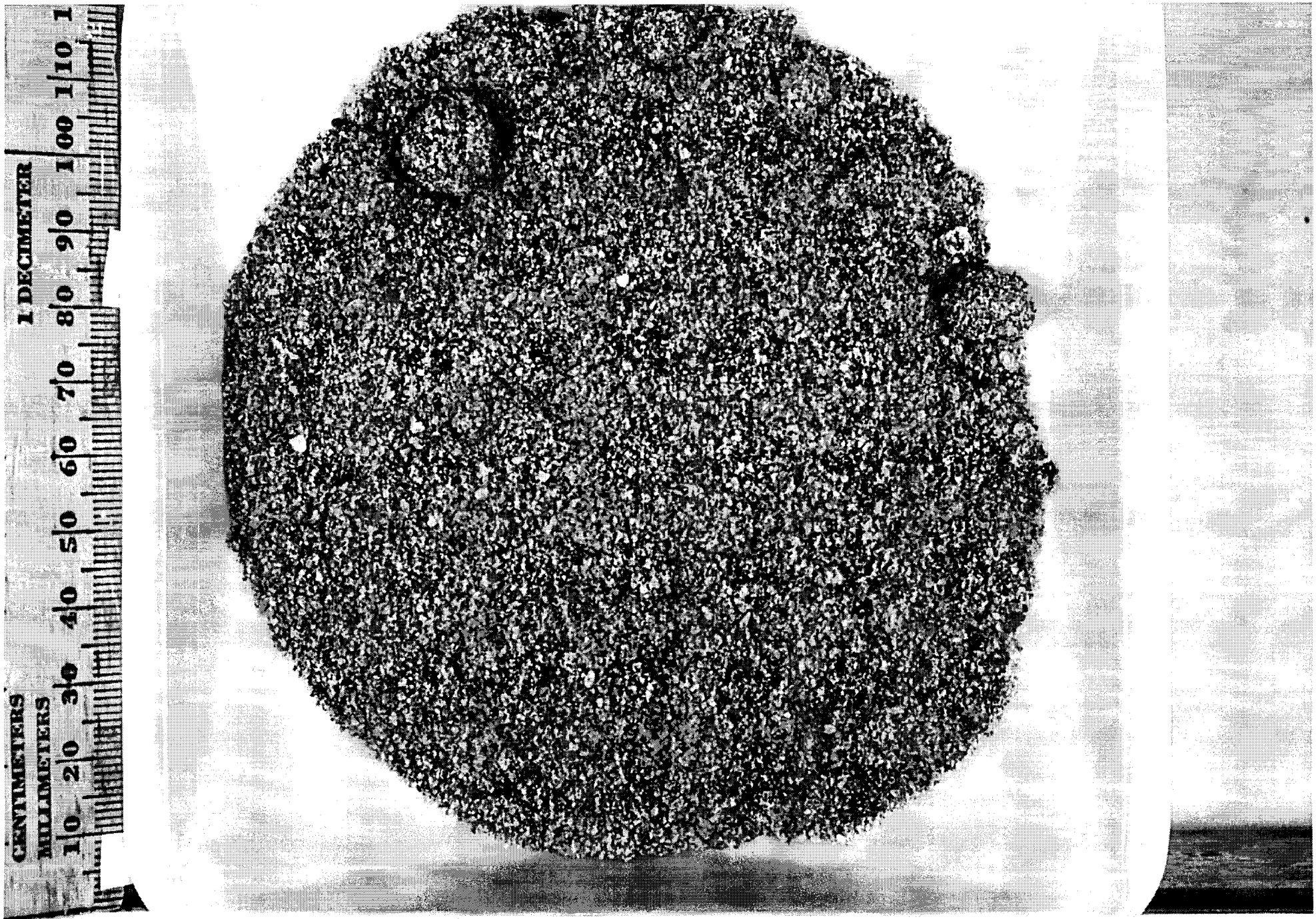
C7514 B22TK3 12.5-15 ft Grab Sample

Depth from Chain-of-Custody



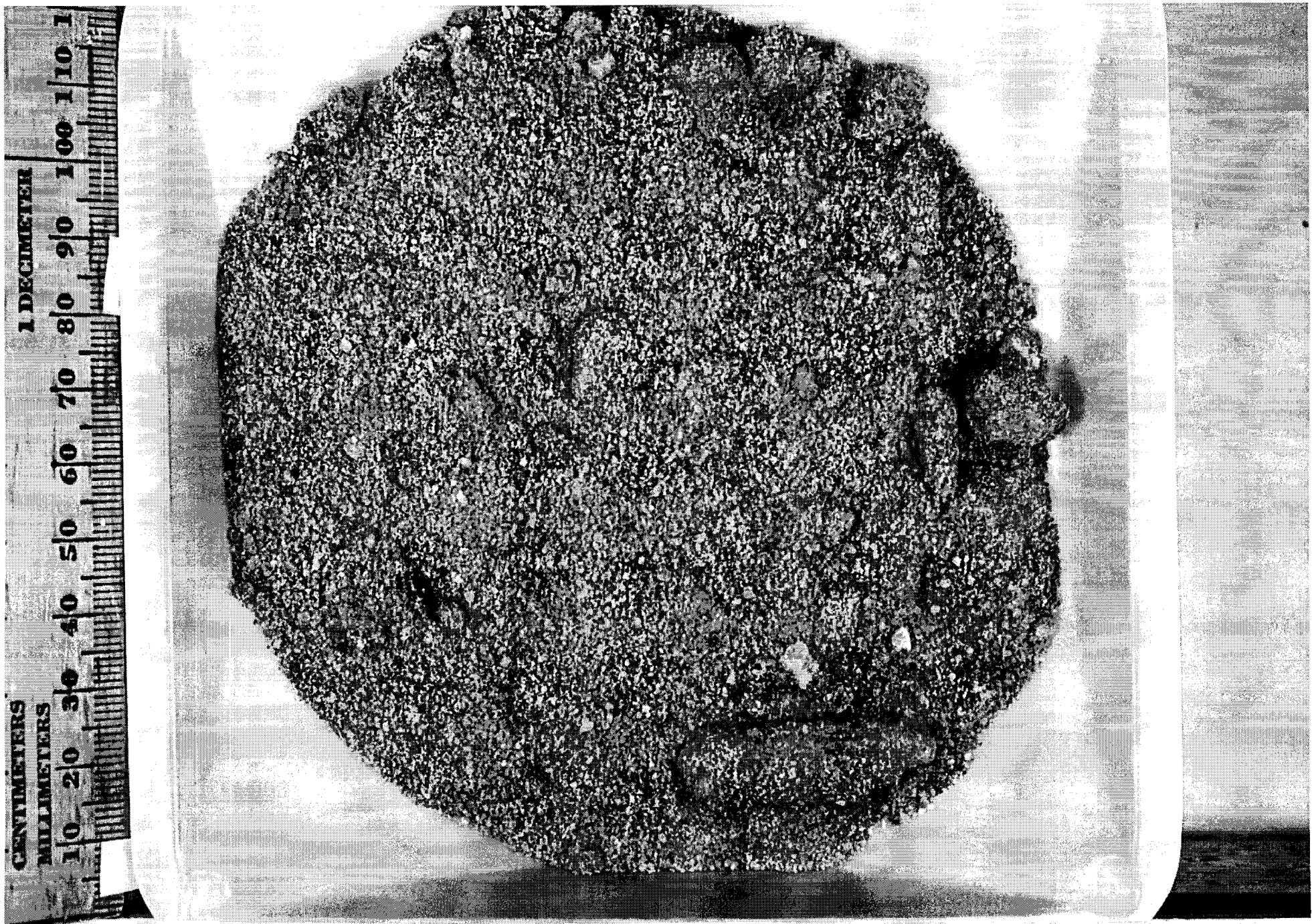
C7514 B22TK4 15-17.5 ft Grab Sample

Depth from Chain-of-Custody



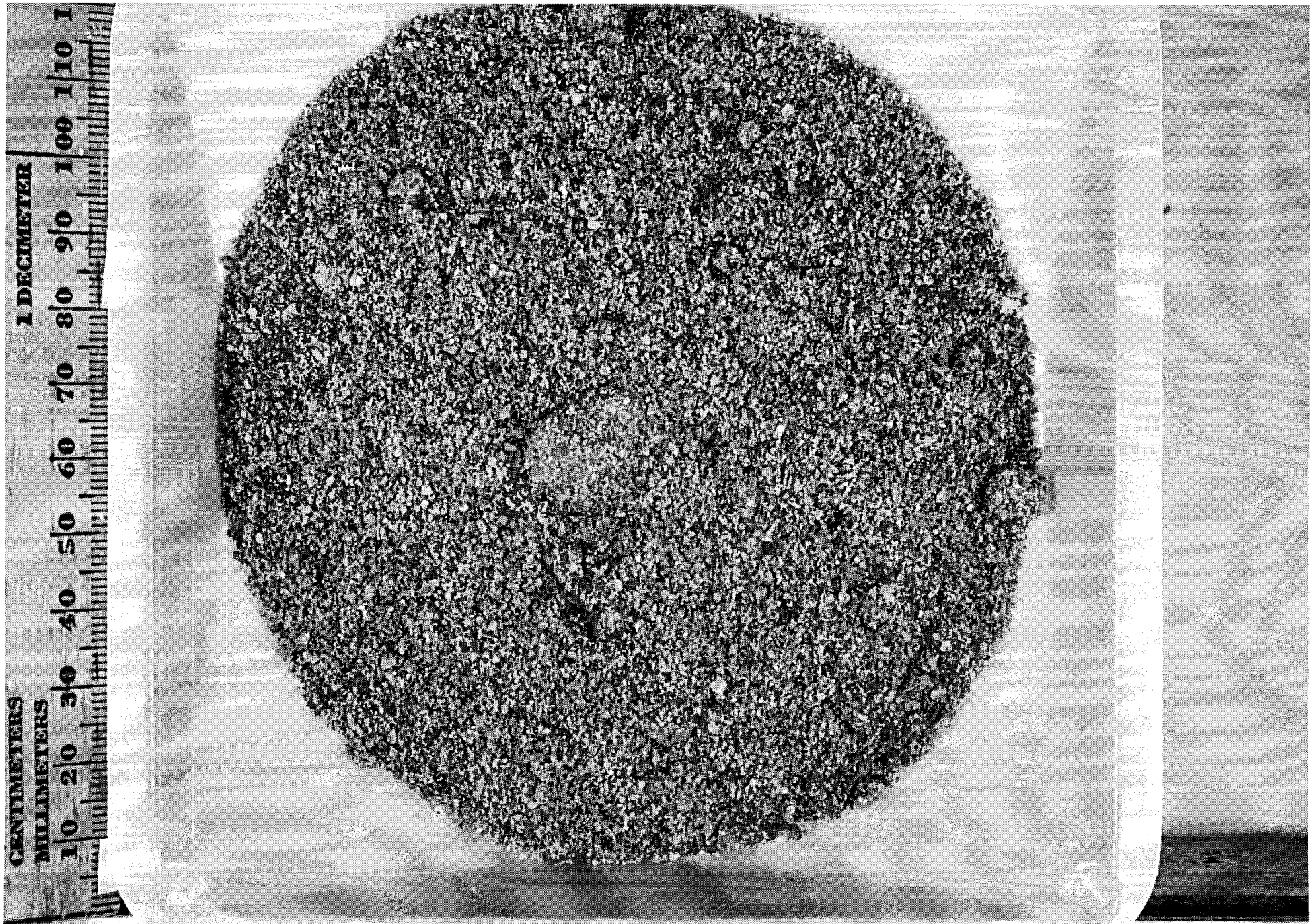
C7514 B22TK5 17.5-20 ft Grab Sample

Depth from Chain-of-Custody



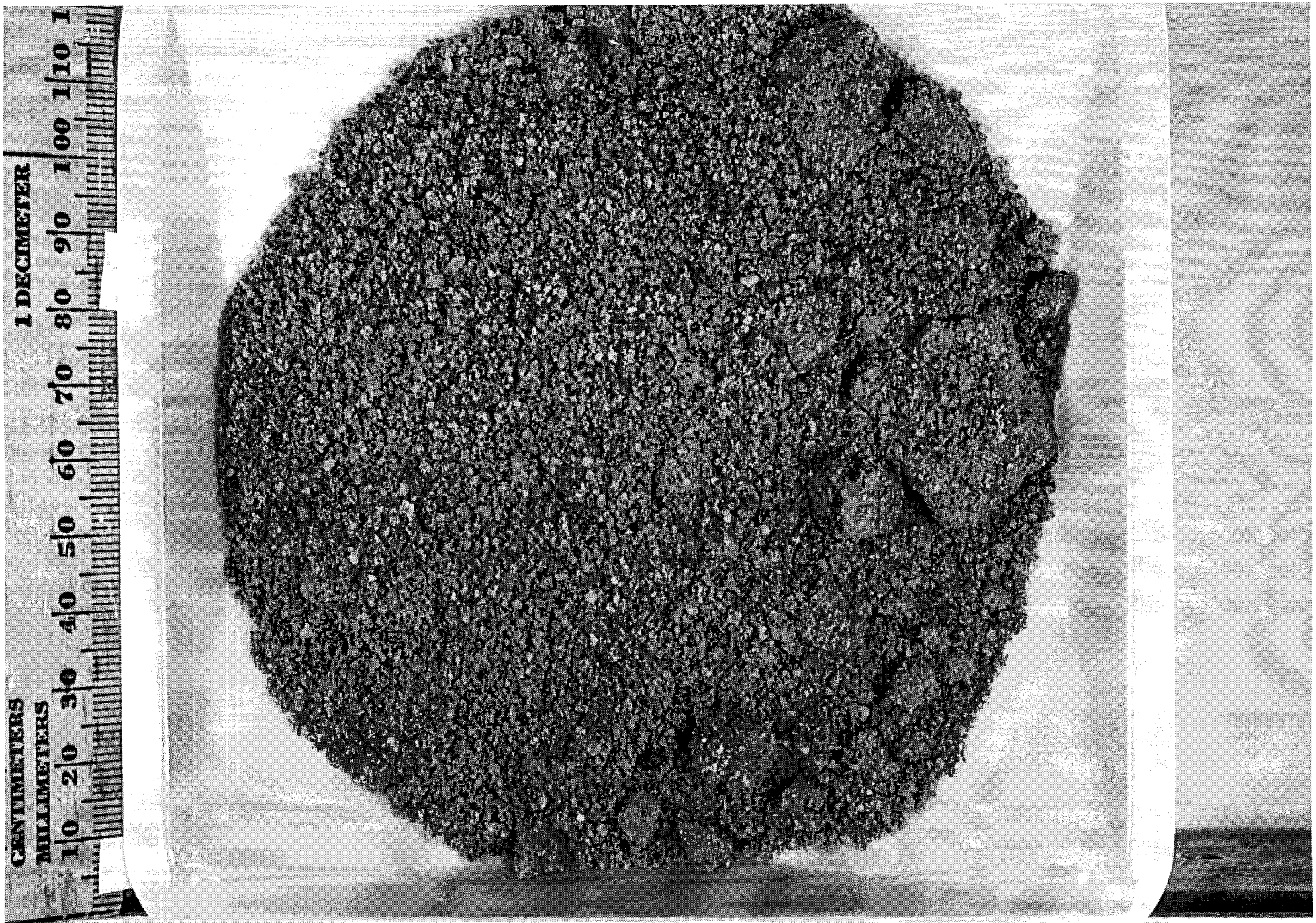
C7514 B22TK6 20-22.5 ft Grab Sample

Depth from Chain-of-Custody



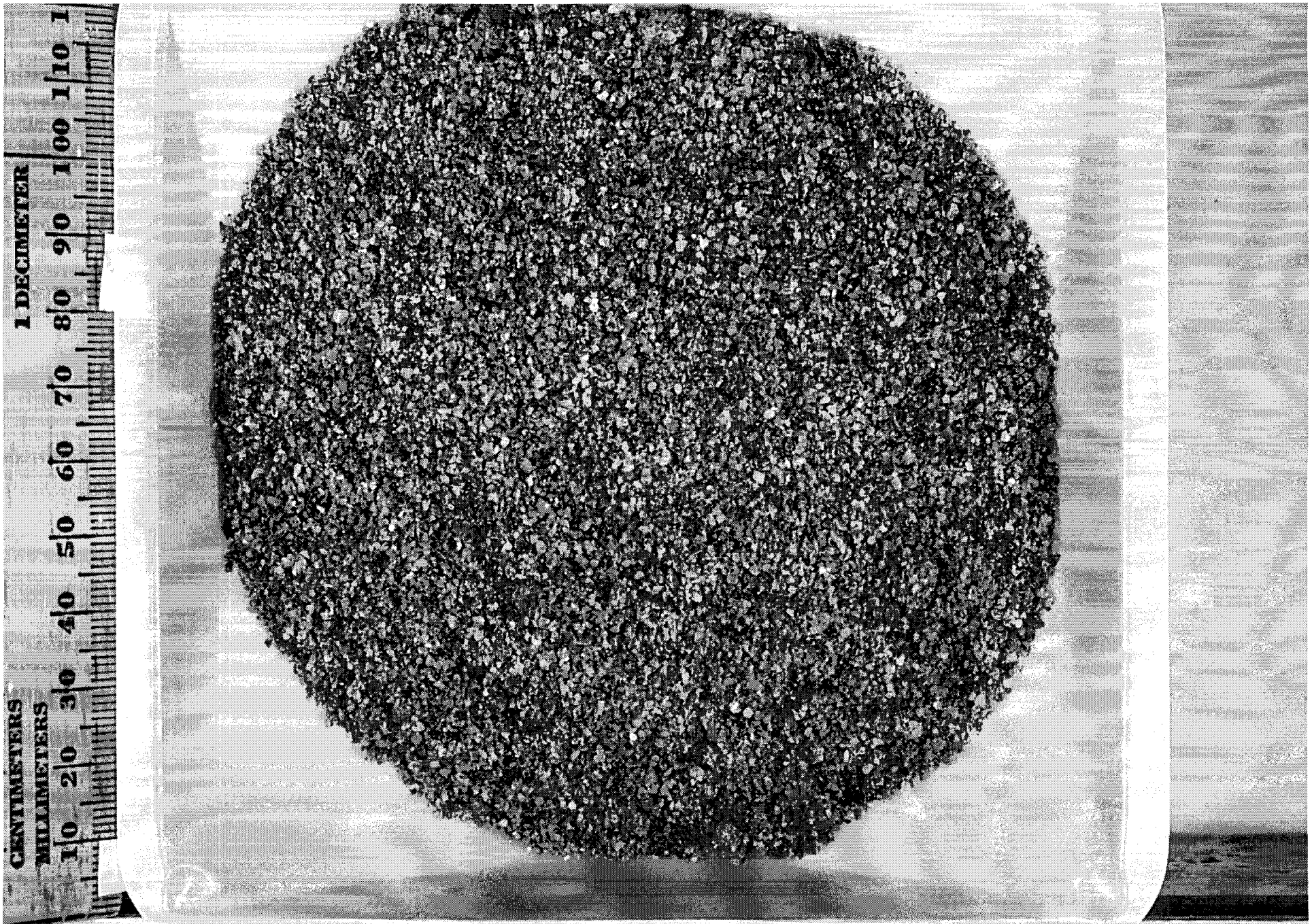
C7514 B22TK7 22.5-25 ft Grab Sample

Depth from Chain-of-Custody



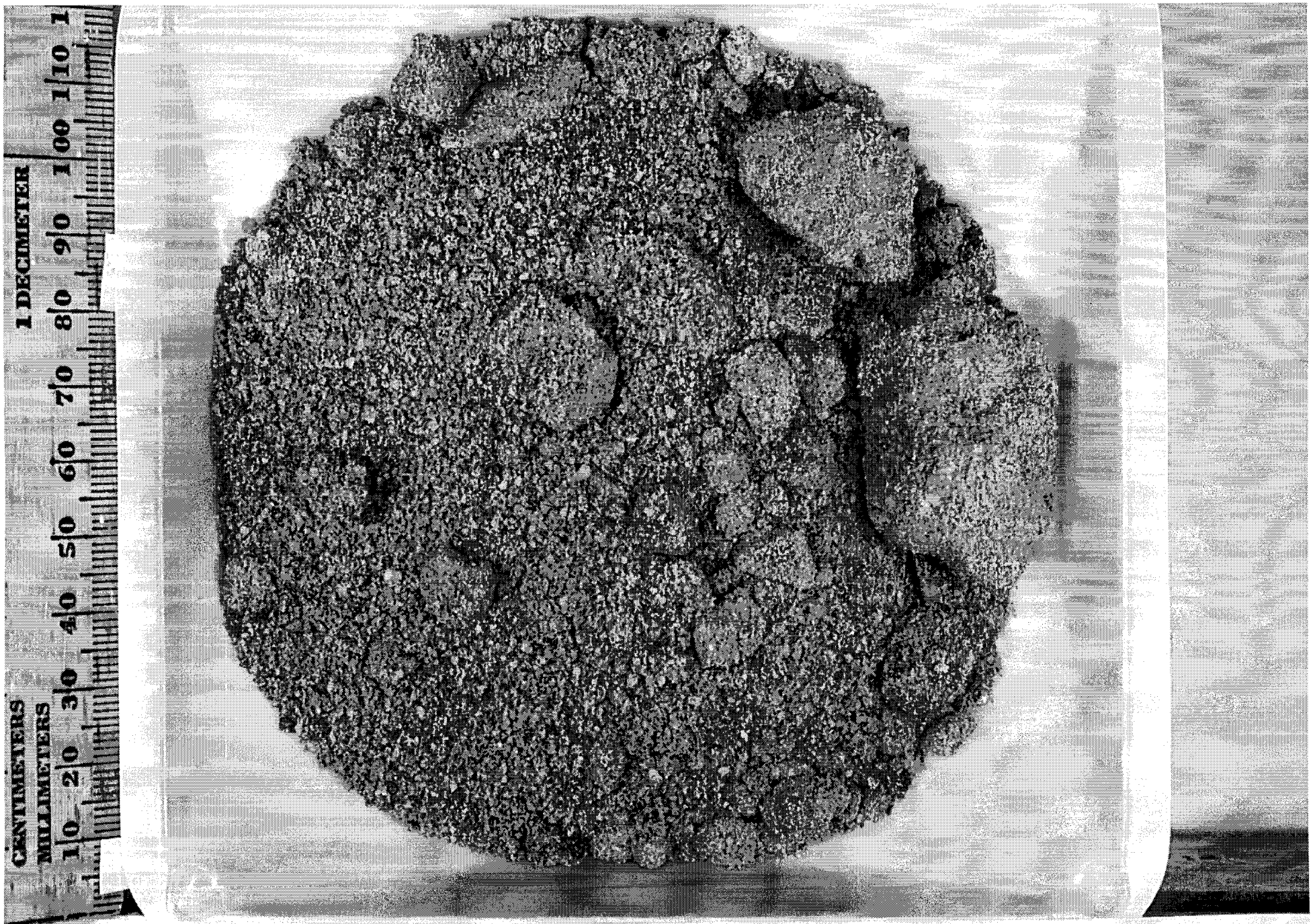
C7514 B22TK8 25-27.5 ft Grab Sample

Depth from Chain-of-Custody



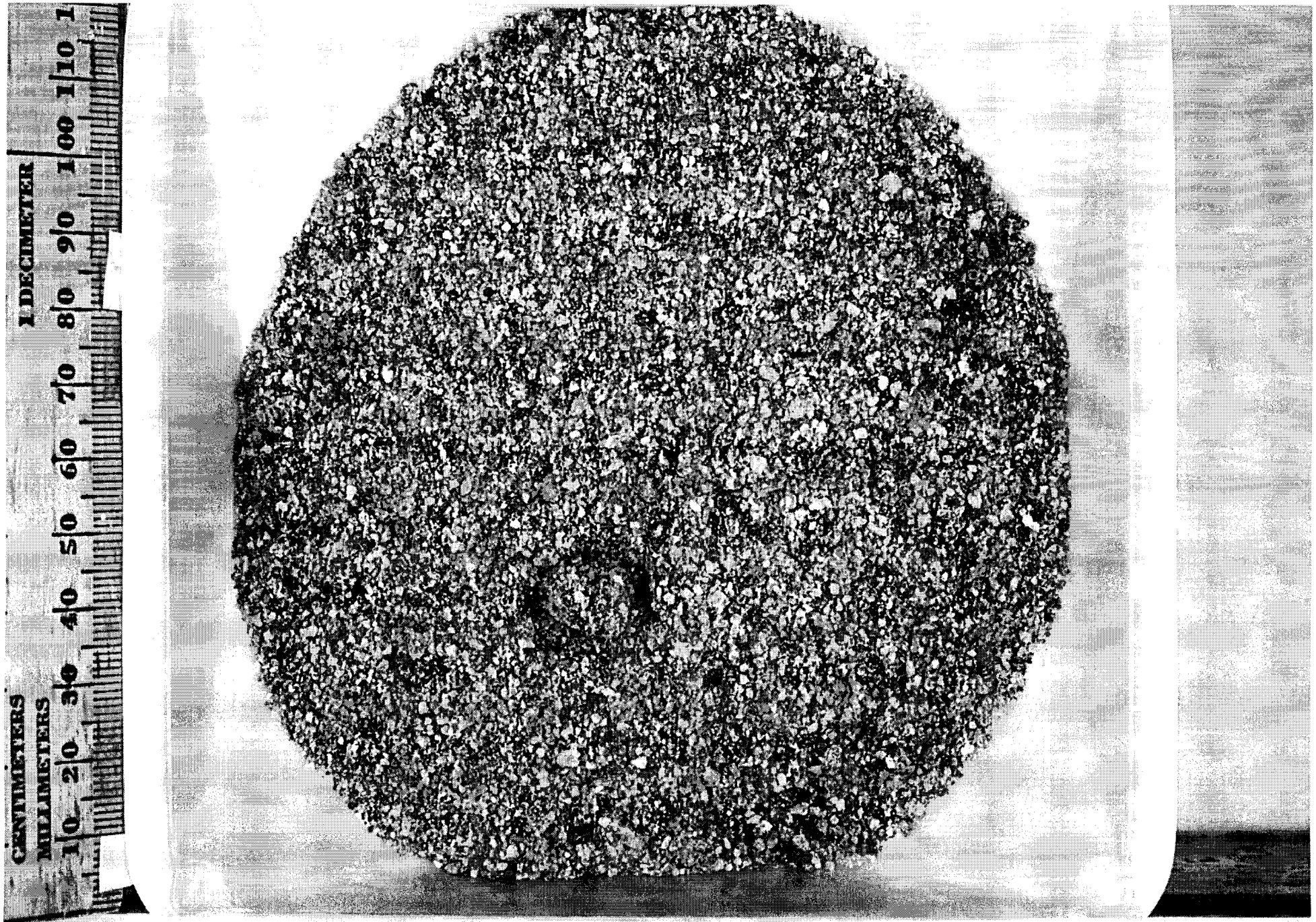
C7514 B22TK9 27.5-30 ft Grab Sample

Depth from Chain-of-Custody



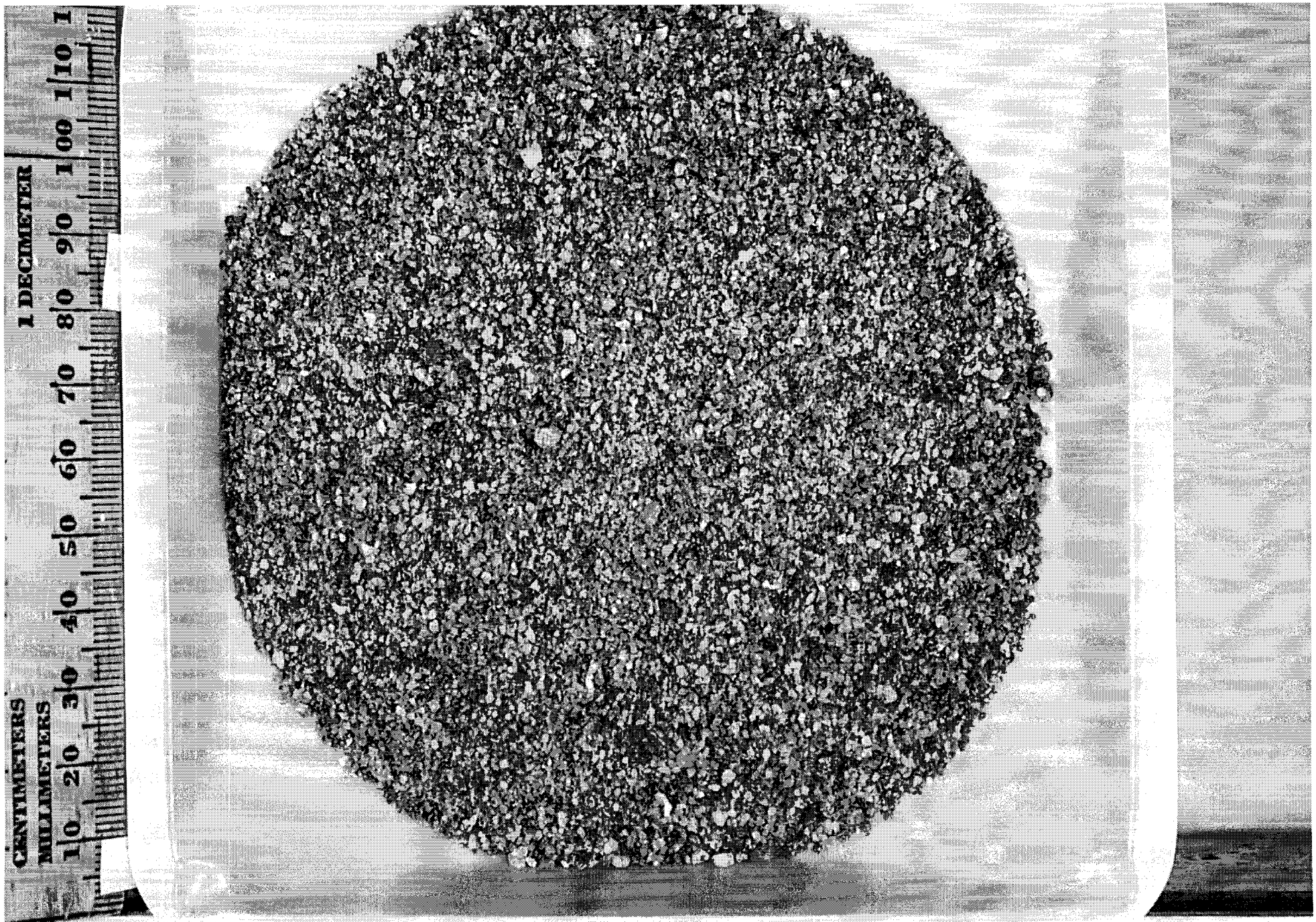
C7514 B22TL0 33.5-33.5 ft Grab Sample

Depth from Chain-of-Custody



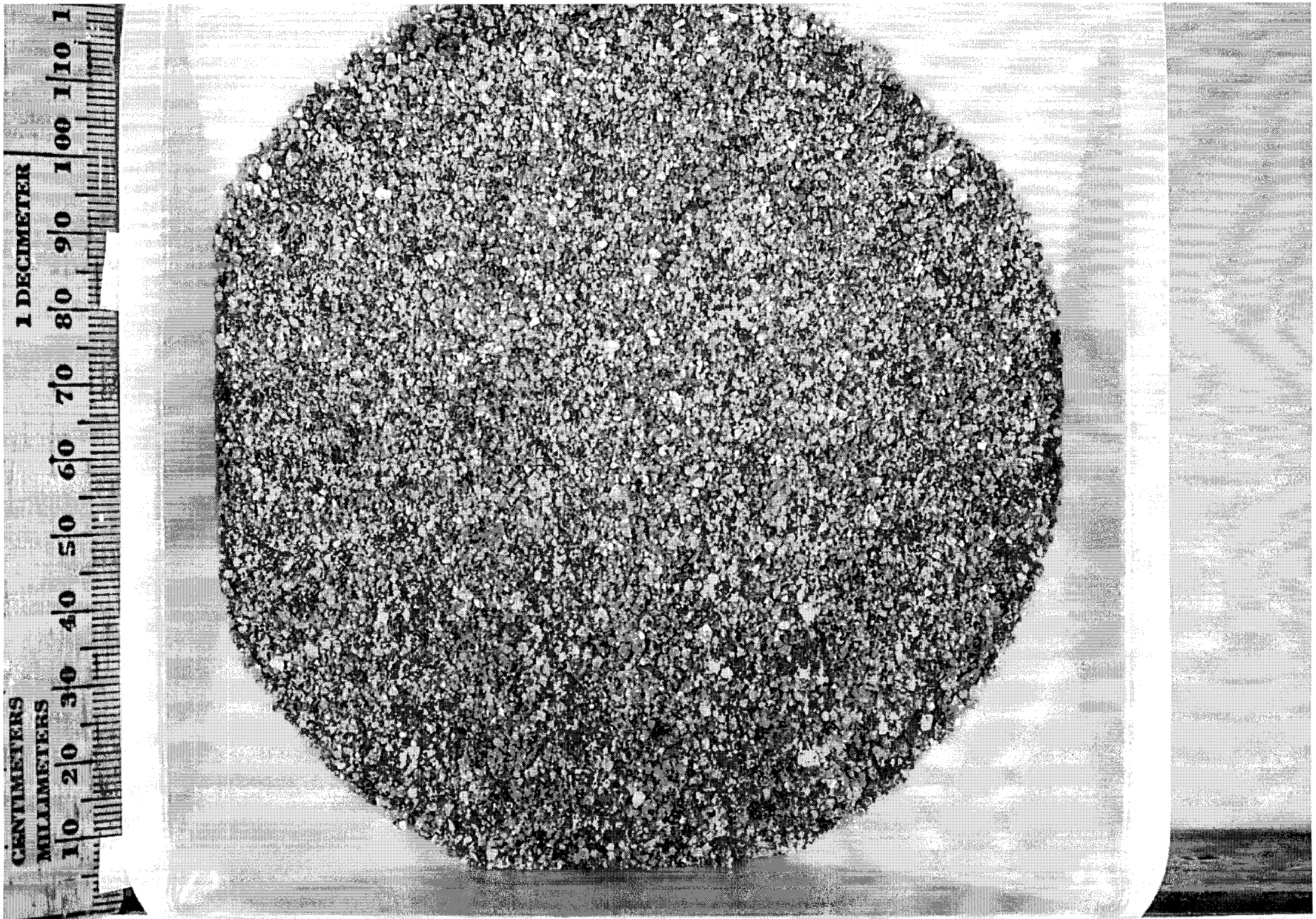
C7514 B22TL1 33.5-36 ft Grab Sample

Depth from Chain-of-Custody



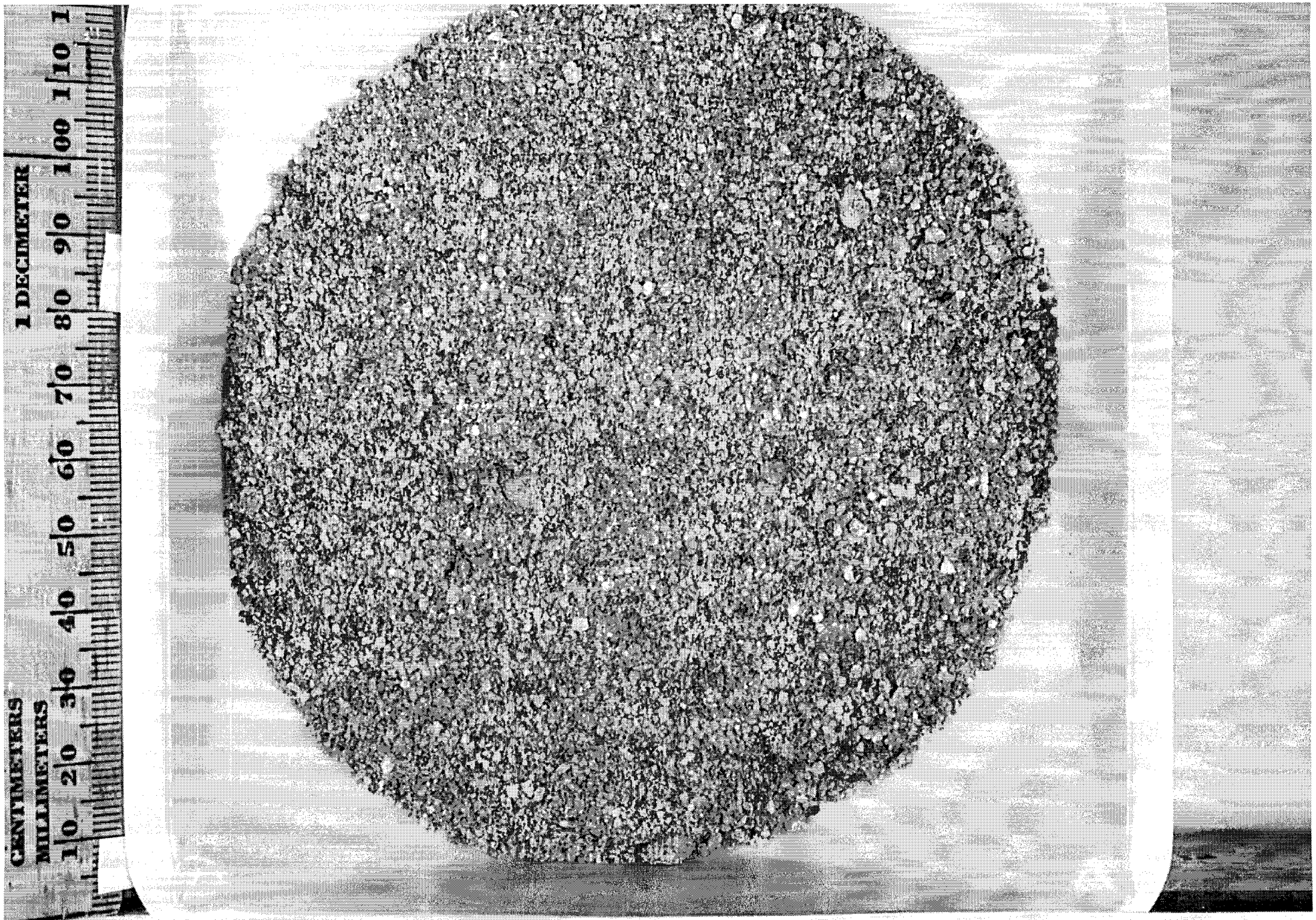
C7514 B22TL2 36-38.5 ft Grab Sample

Depth from Chain-of-Custody



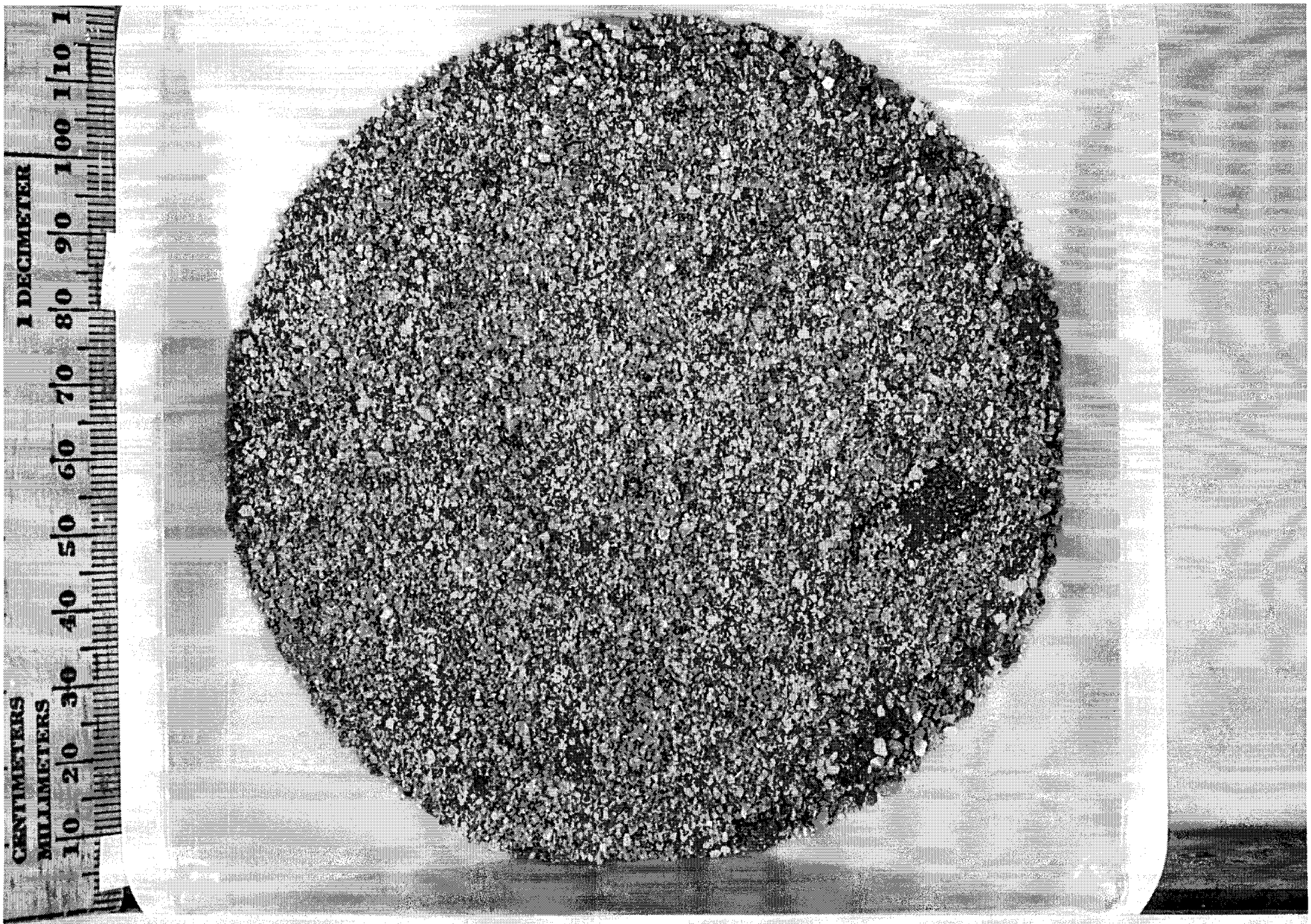
C7514 B22TL3 38.5-40 ft Grab Sample

Depth from Chain-of-Custody



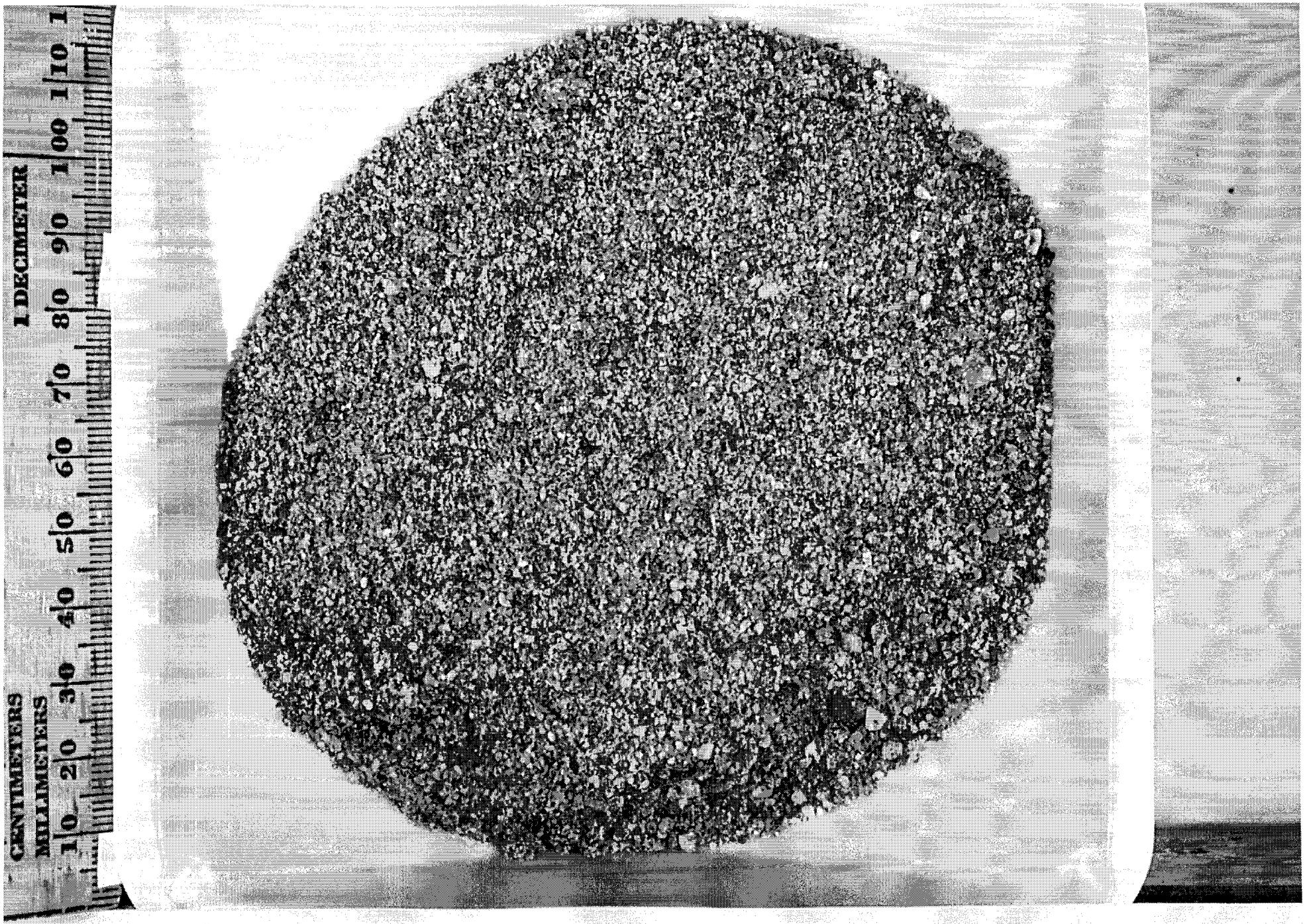
C7514 B22TL4 39.8-42.5 ft Grab Sample

Depth from Chain-of-Custody



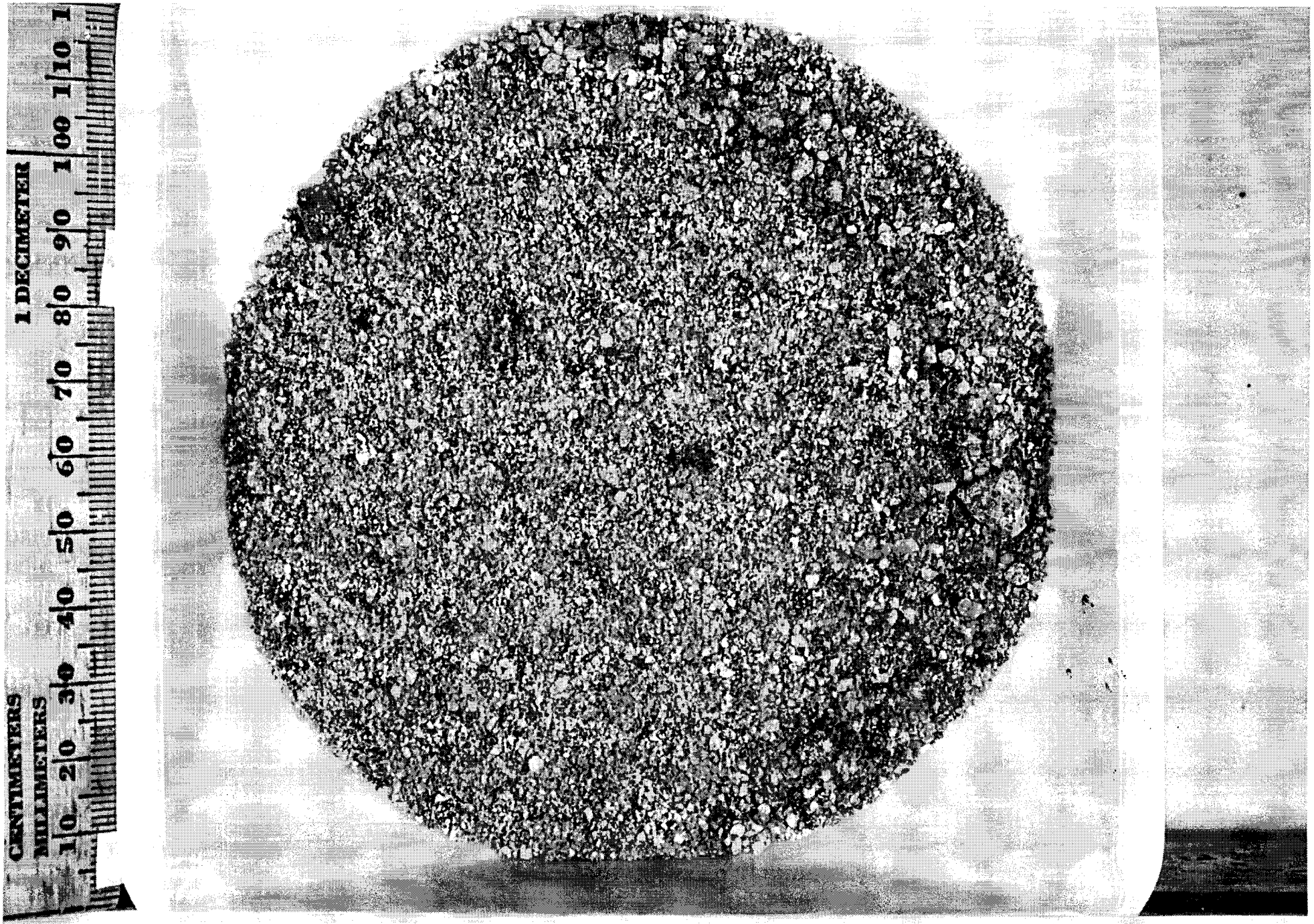
C7514 B22TL5 45-45 ft Grab Sample

Depth from Chain-of-Custody



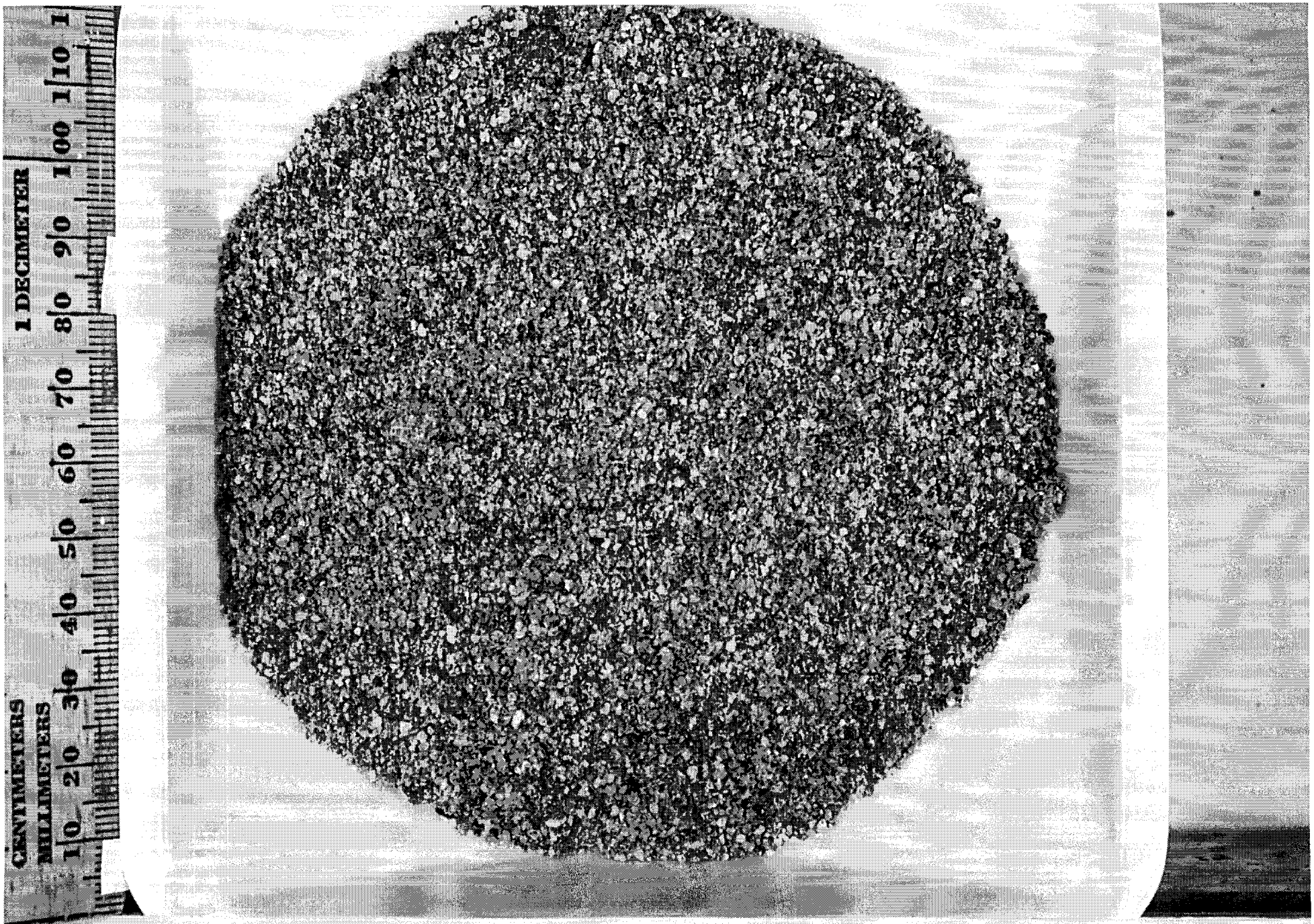
C7514 B22TL6 45-47.5 ft Grab Sample

Depth from Chain-of-Custody



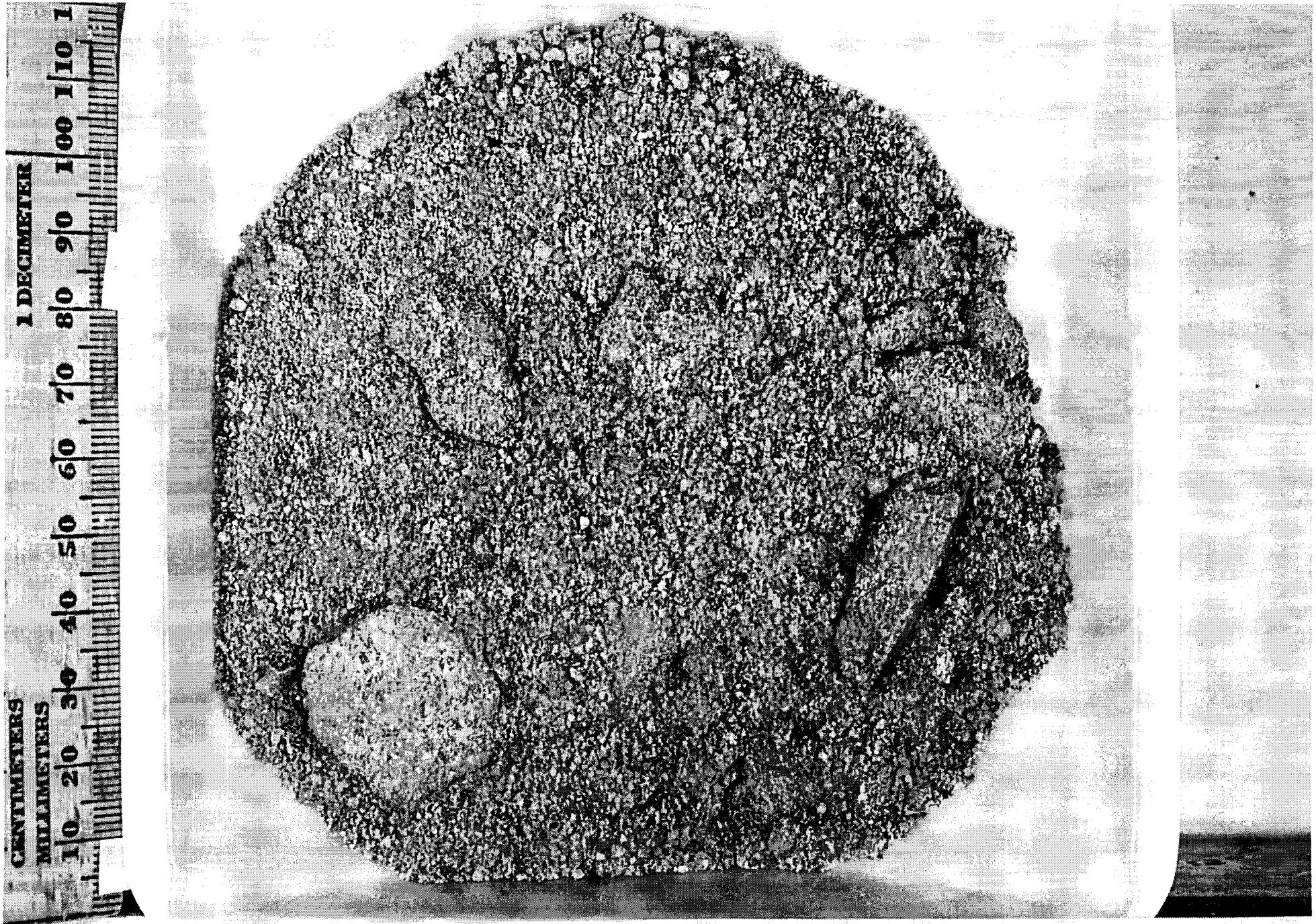
C7514 B22TL7 47.5-50 ft Grab Sample

Depth from Chain-of-Custody



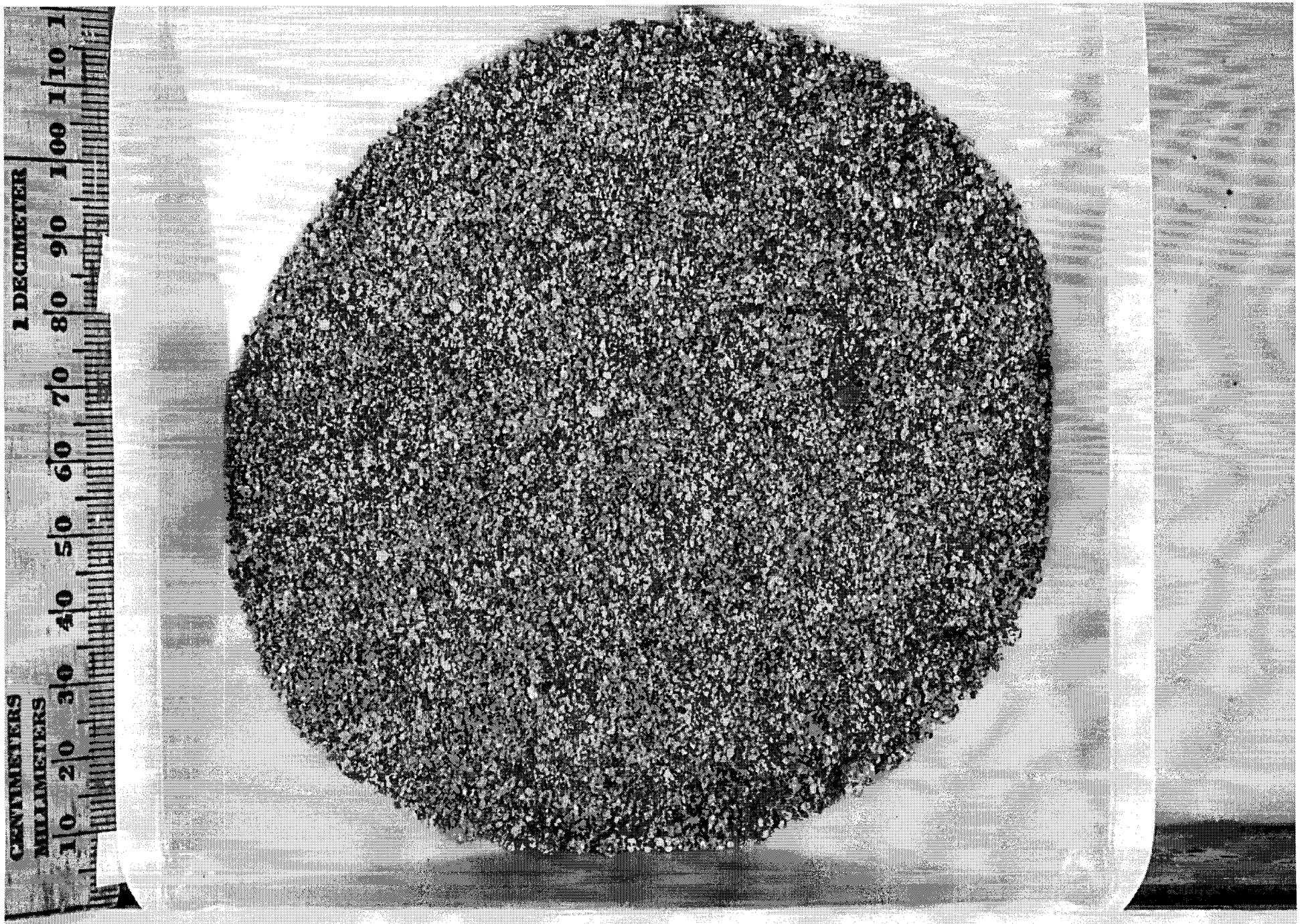
C7514 B22TL8 52.5-55 ft Grab Sample

Depth from Chain-of-Custody



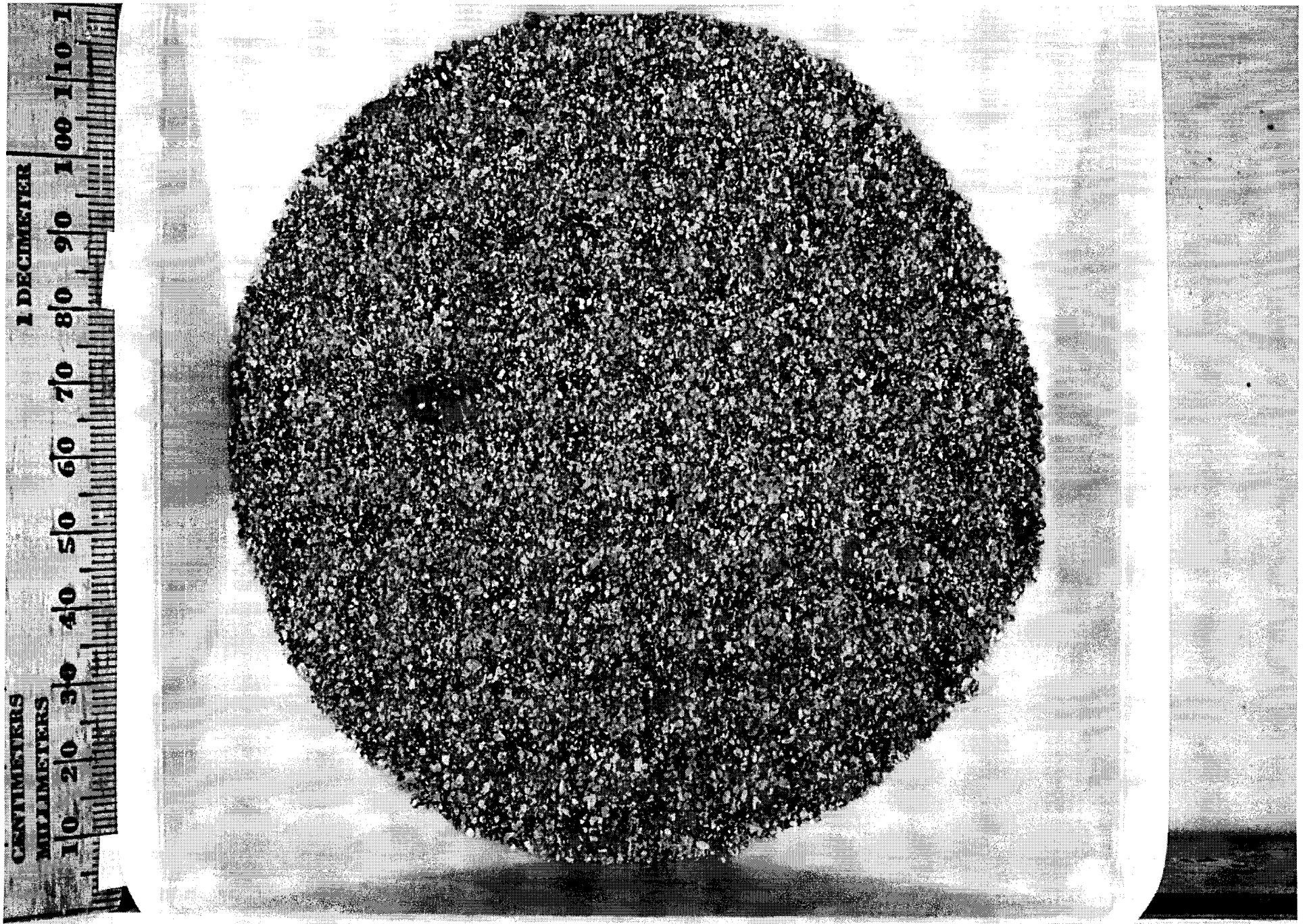
C7514 B22TL9 50-52.5 ft Grab Sample

Depth from Chain-of-Custody



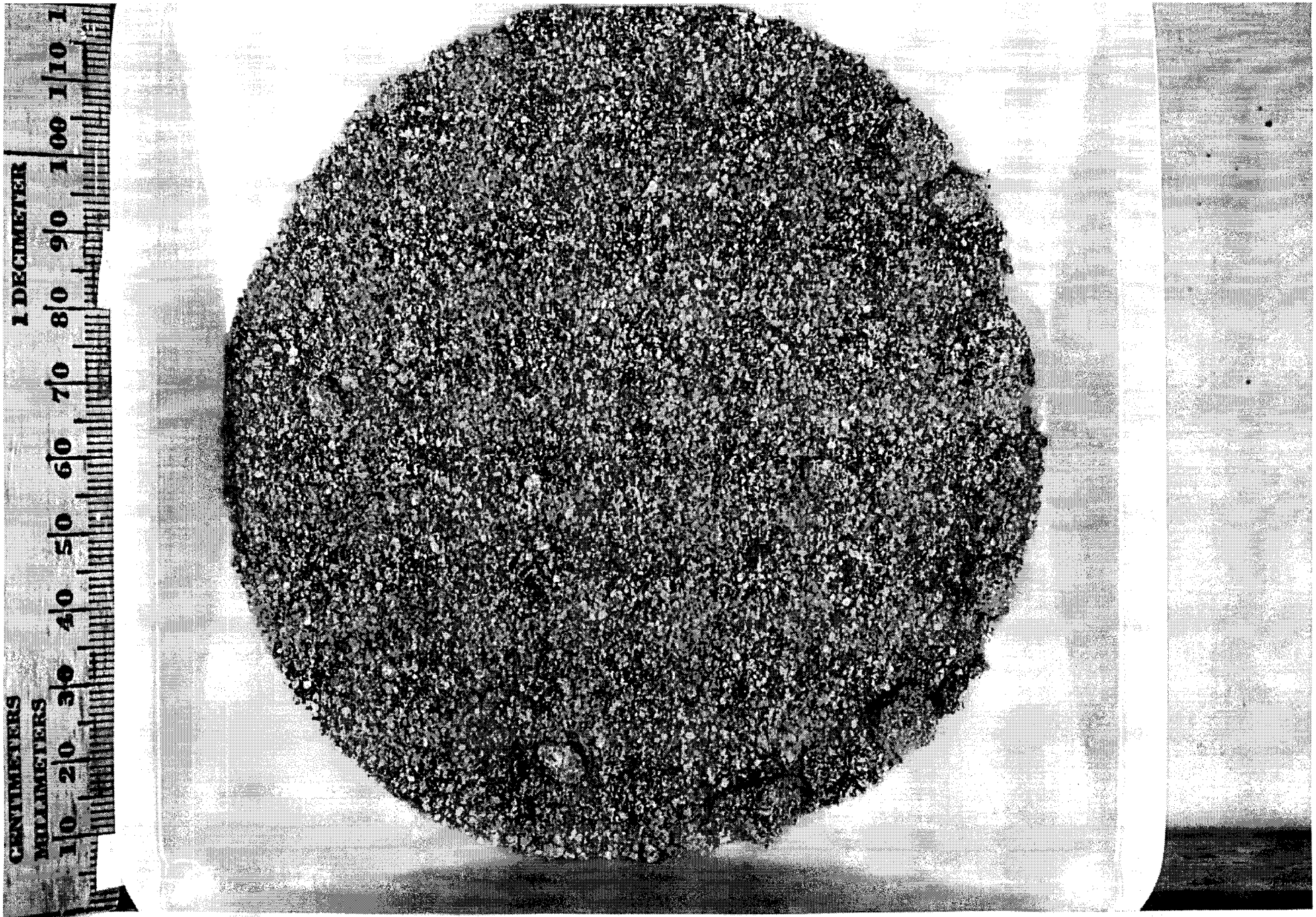
C7514 B22TM0 55-57.5 ft Grab Sample

Depth from Chain-of-Custody



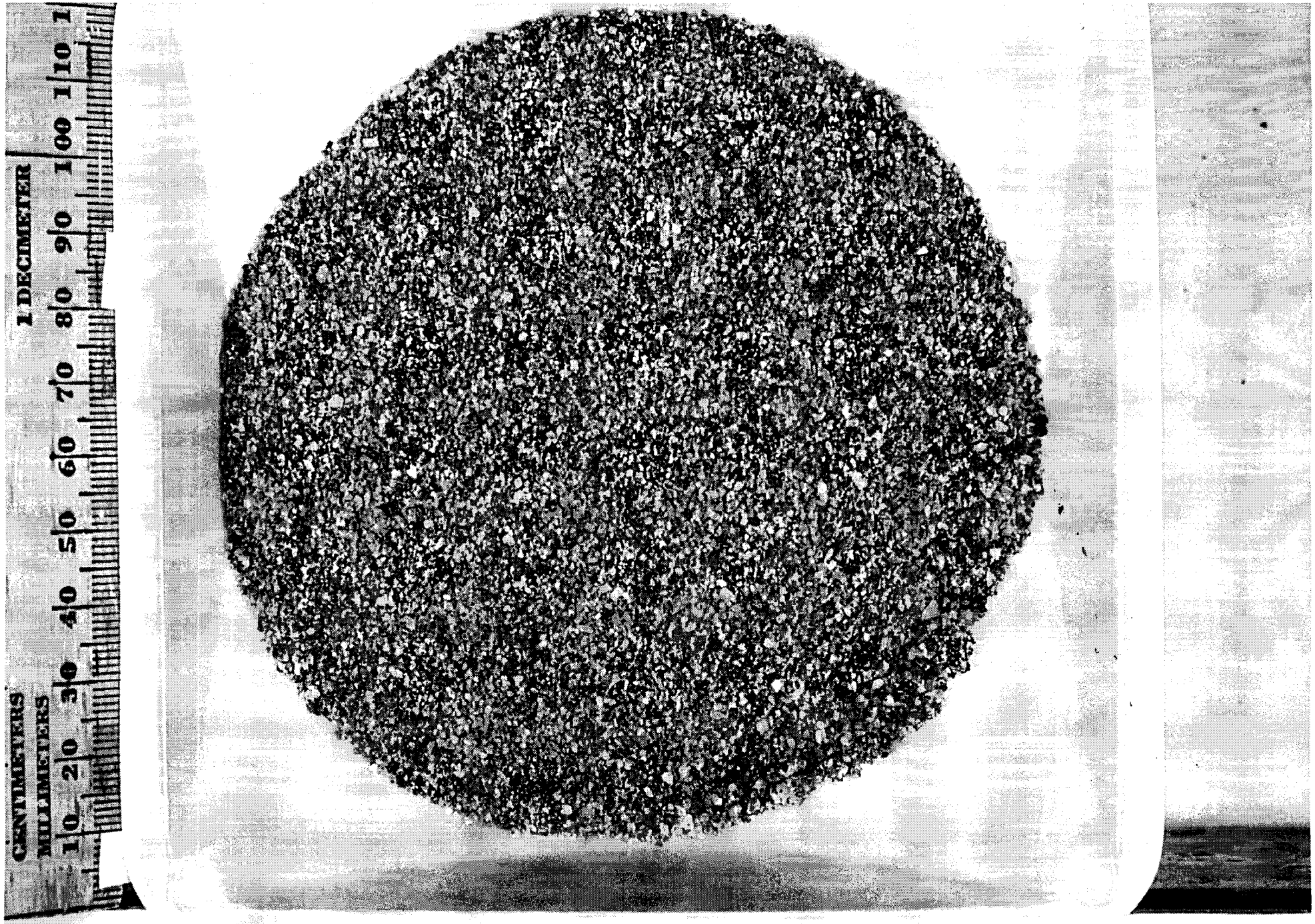
C7514 B22TM1 57.5-60 ft Grab Sample

Depth from Chain-of-Custody



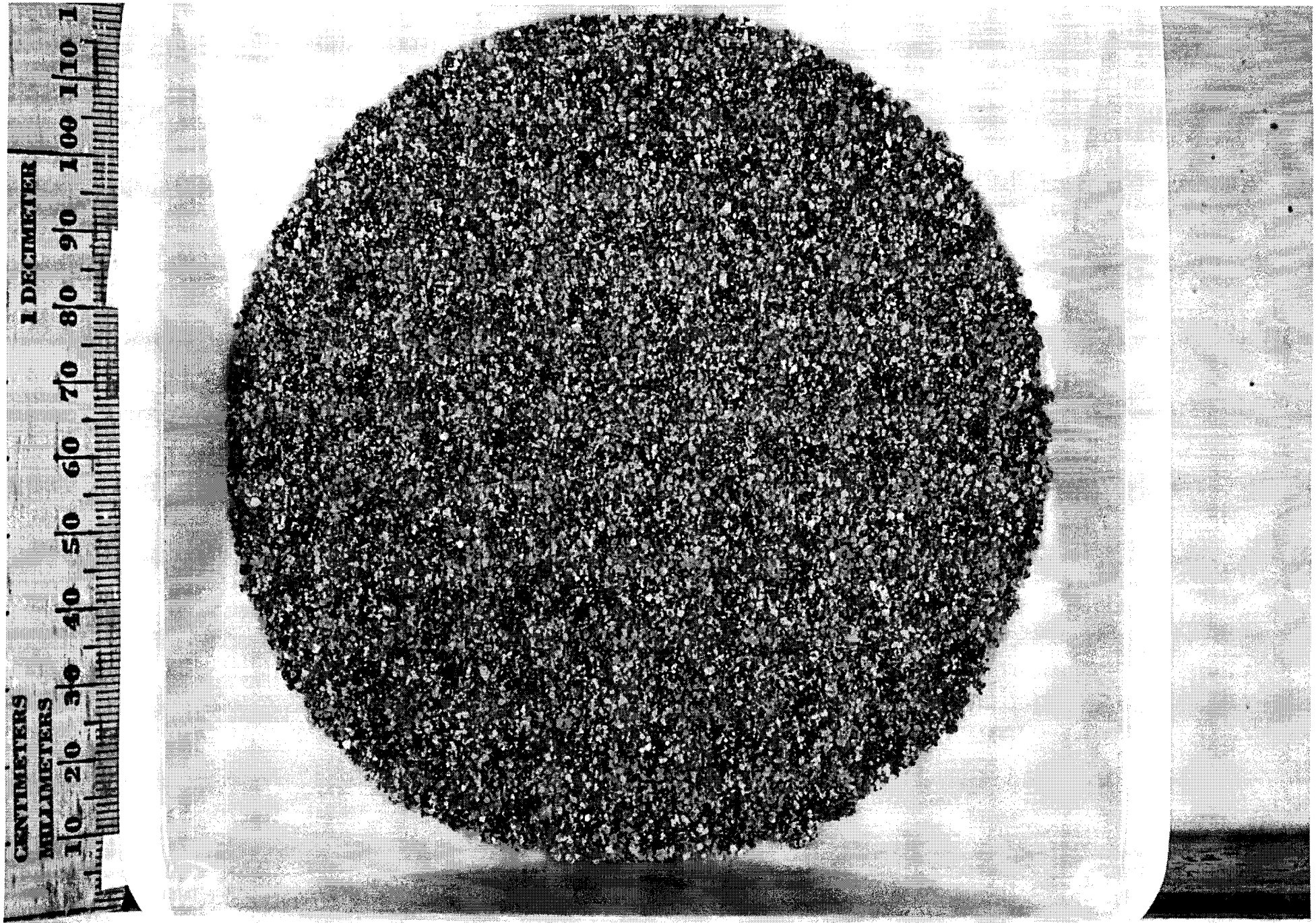
C7514 B22TM2 60-62.5 ft Grab Sample

Depth from Chain-of-Custody



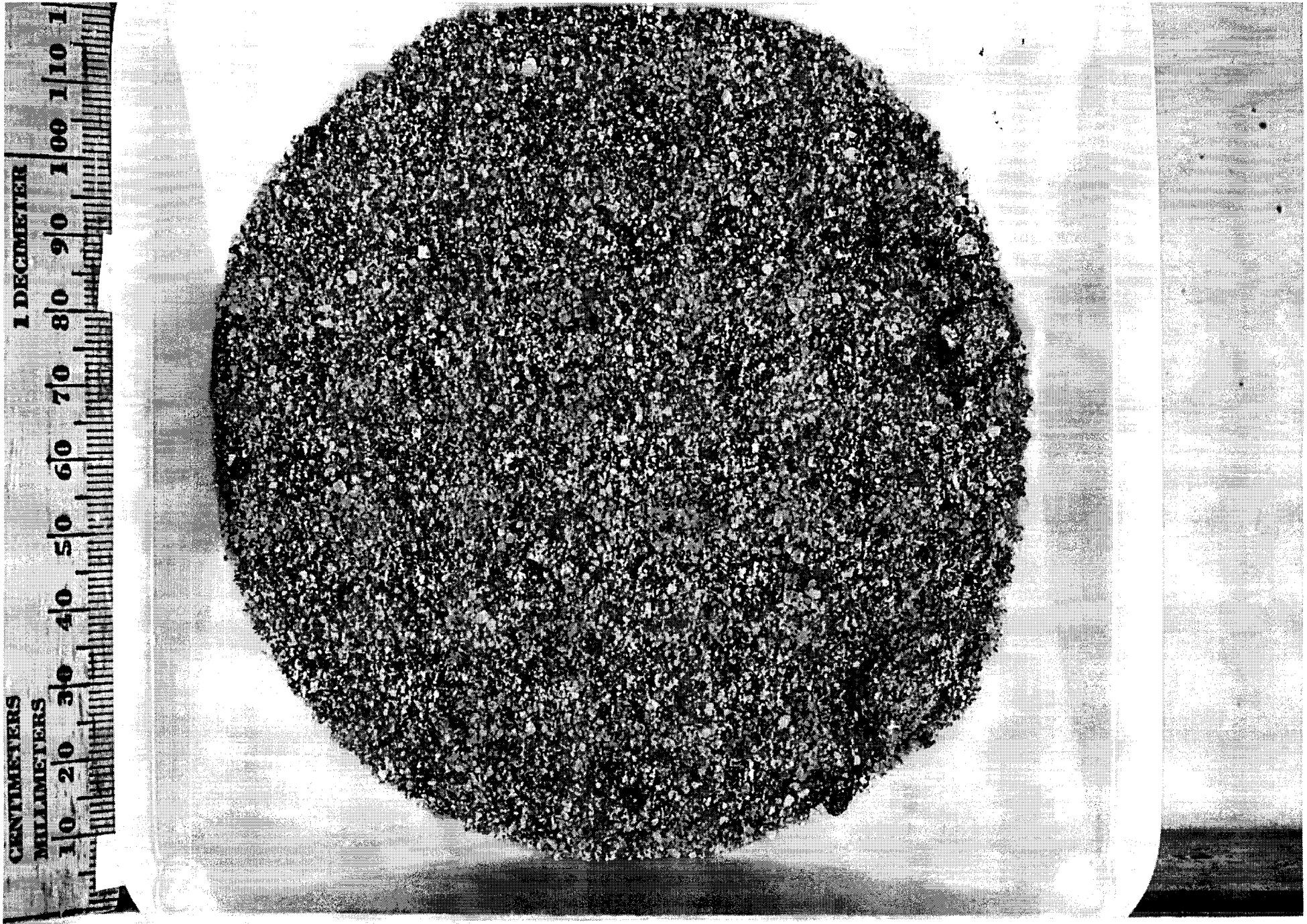
C7514 B22TM3 66-66 ft Grab Sample

Depth from Chain-of-Custody



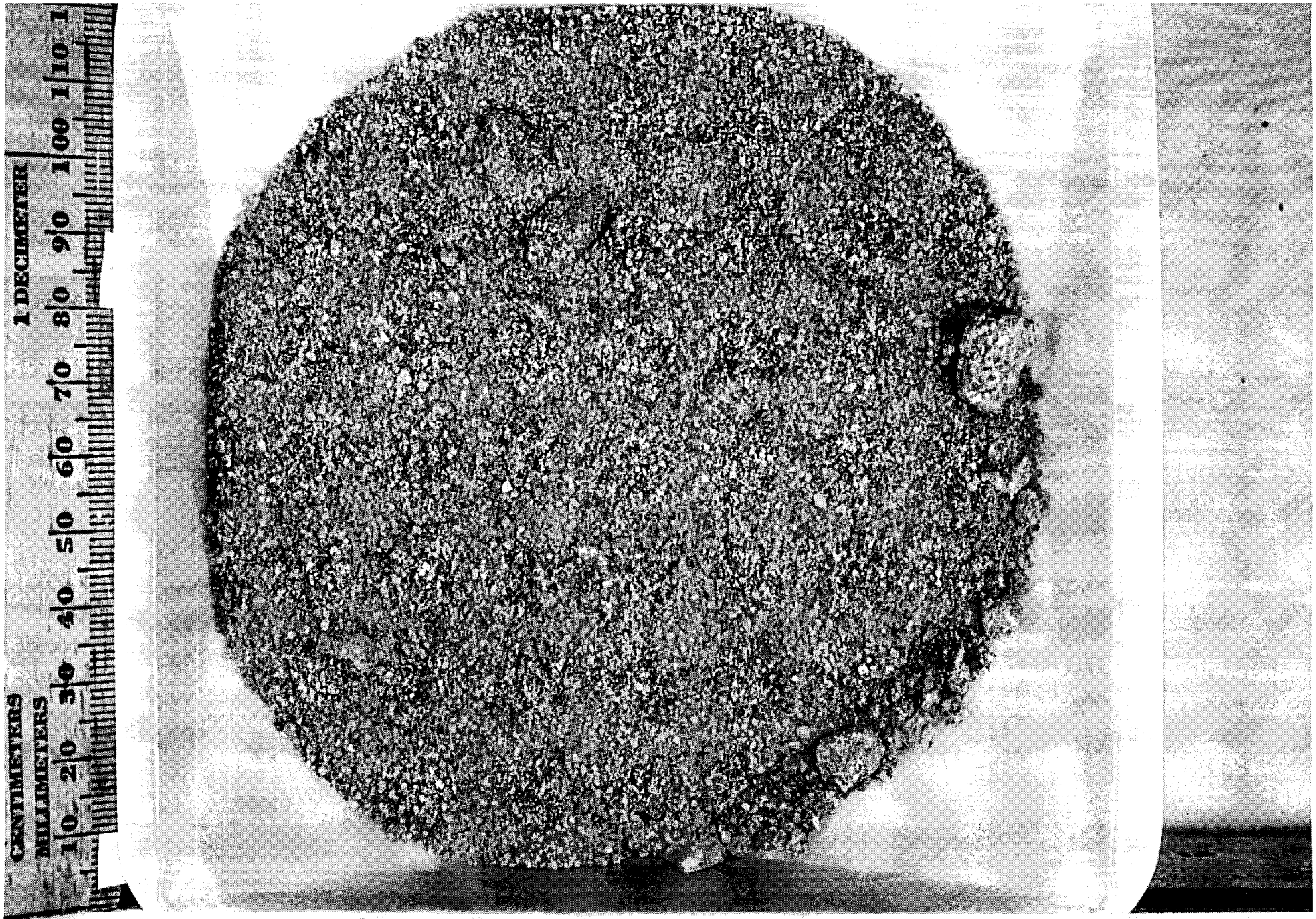
C7514 B22TM4 66-67 ft Grab Sample

Depth from Chain-of-Custody



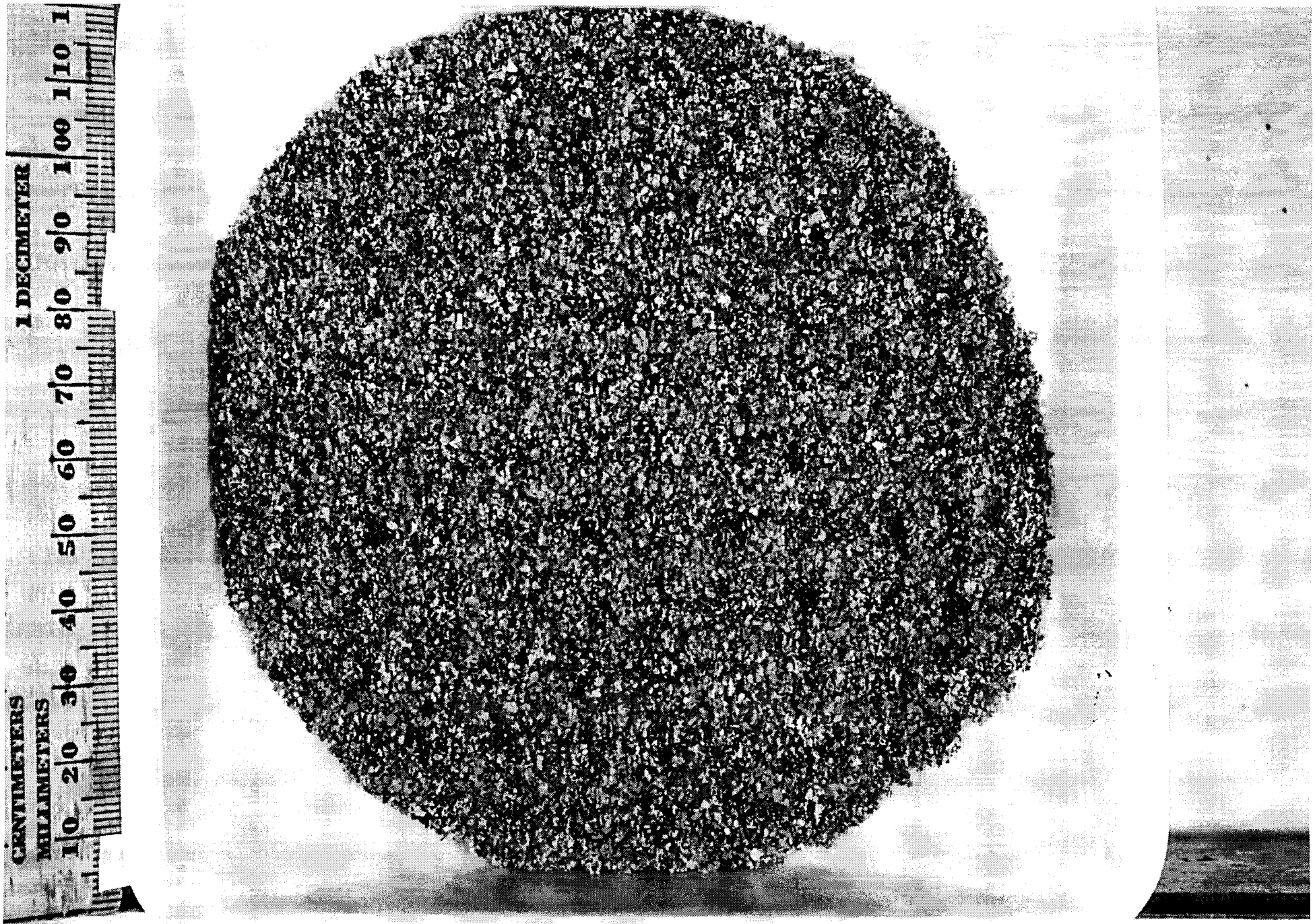
C7514 B22TM5 70.5-70.5 ft Grab Sample

Depth from Chain-of-Custody



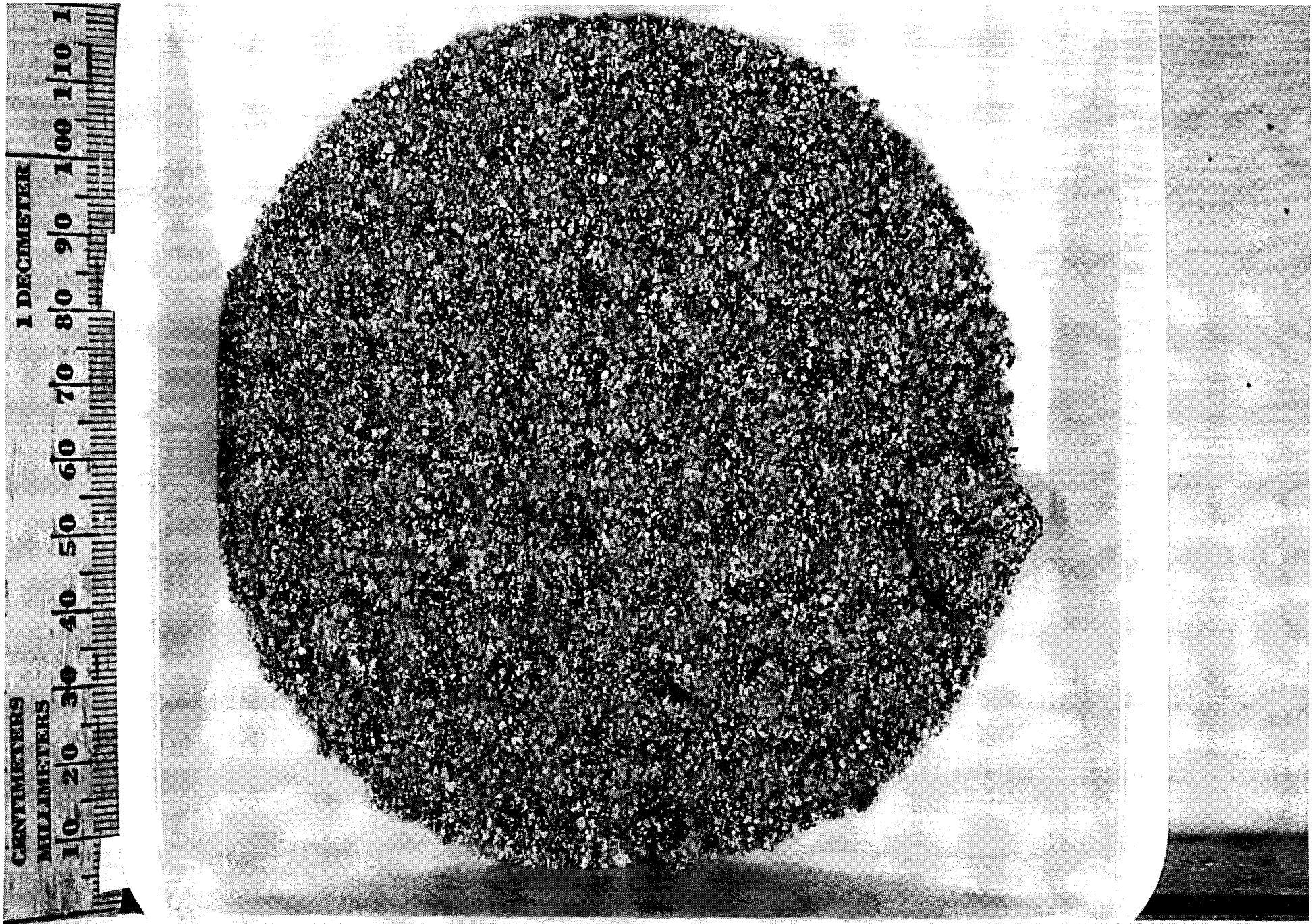
C7514 B22TM6 72.5-72.5 ft Grab Sample

Depth from Chain-of-Custody



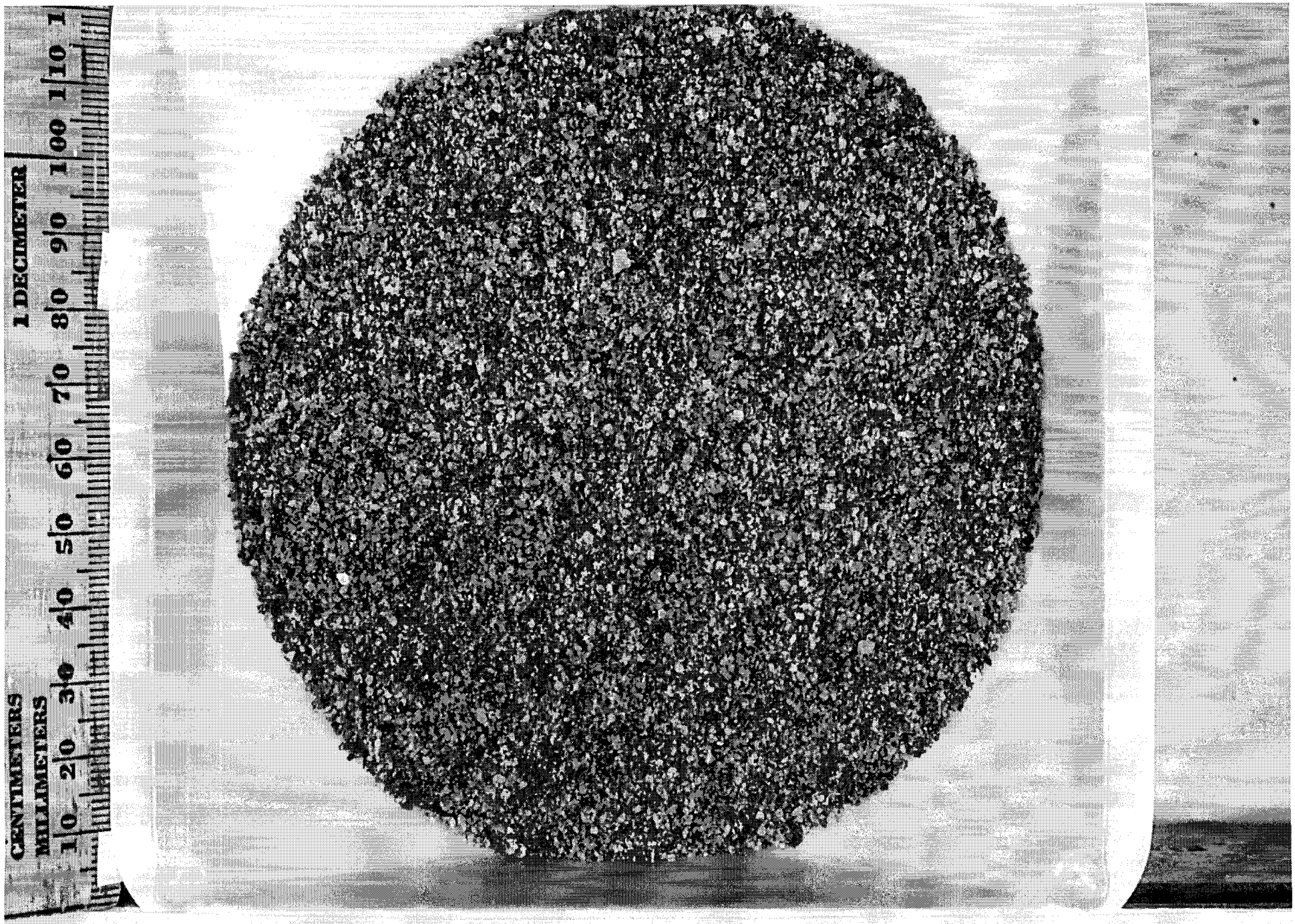
C7514 B22TM7 75-75 ft Grab Sample

Depth from Chain-of-Custody



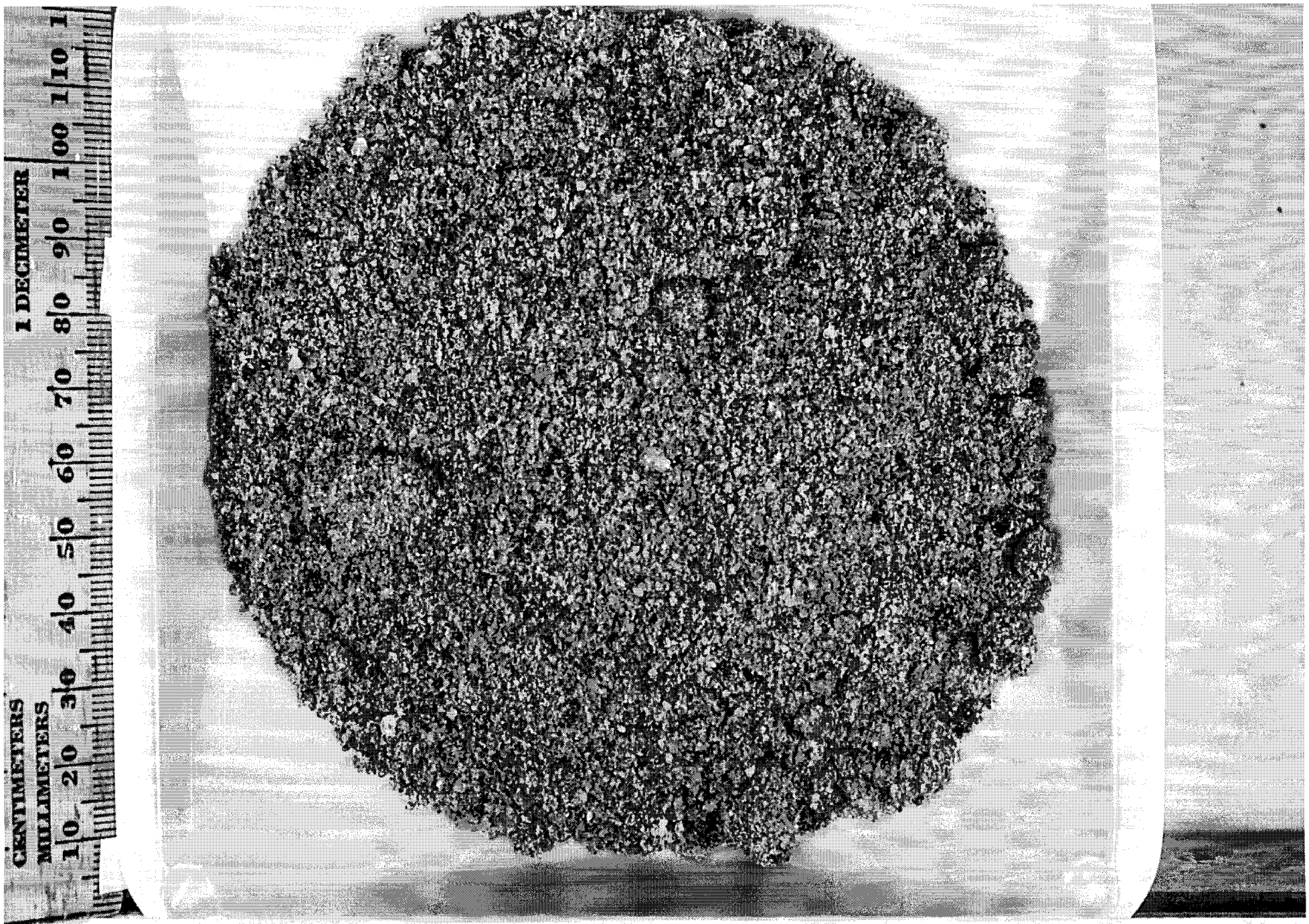
C7514 B22TM8 77.5-77.5 ft Grab Sample

Depth from Chain-of-Custody



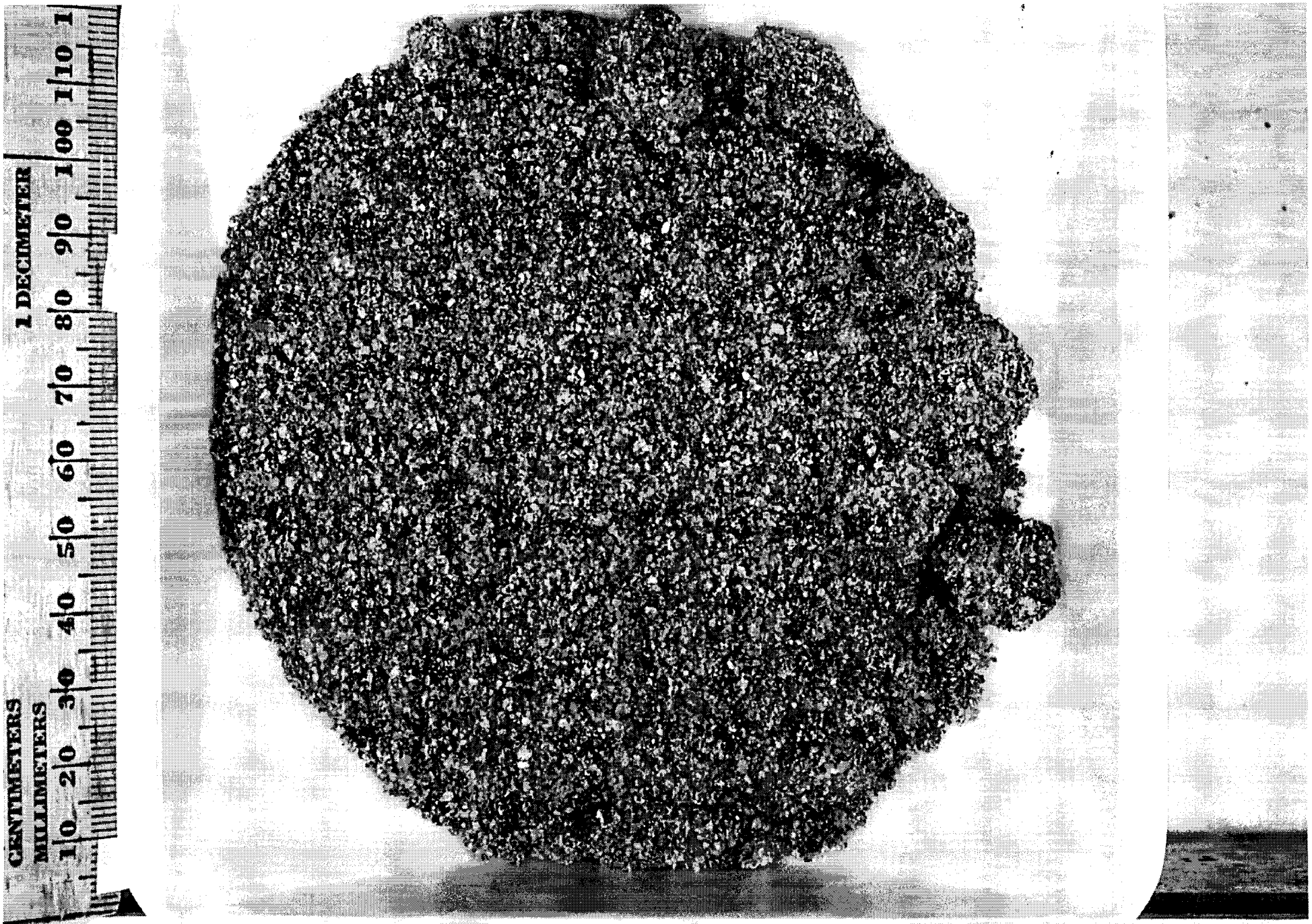
C7514 B22TM9 80-80 ft Grab Sample

Depth from Chain-of-Custody



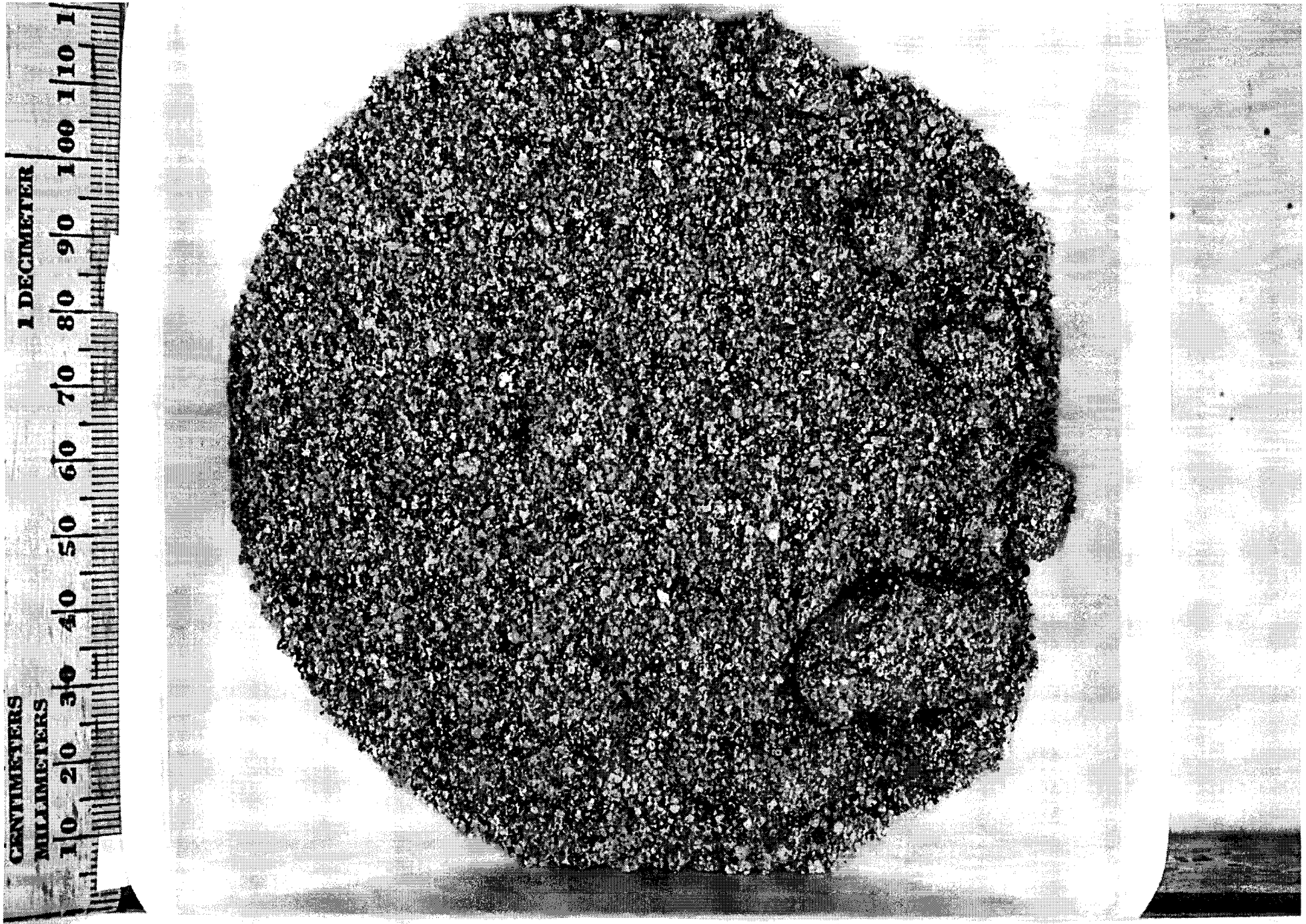
C7514 B22TN0 82.6-82.6 ft Grab Sample

Depth from Chain-of-Custody



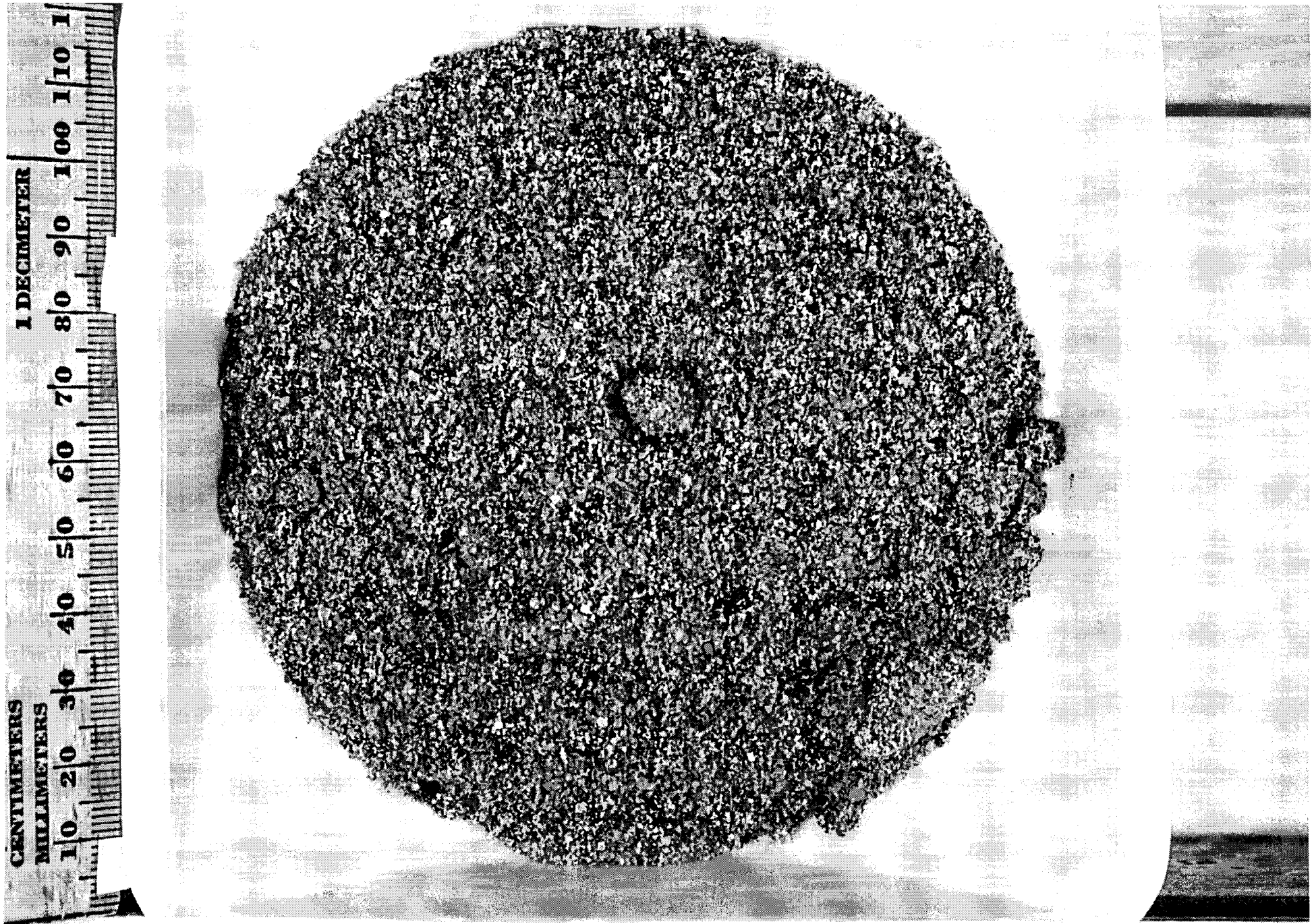
C7514 B22TN1 85-85 ft Grab Sample

Depth from Chain-of-Custody



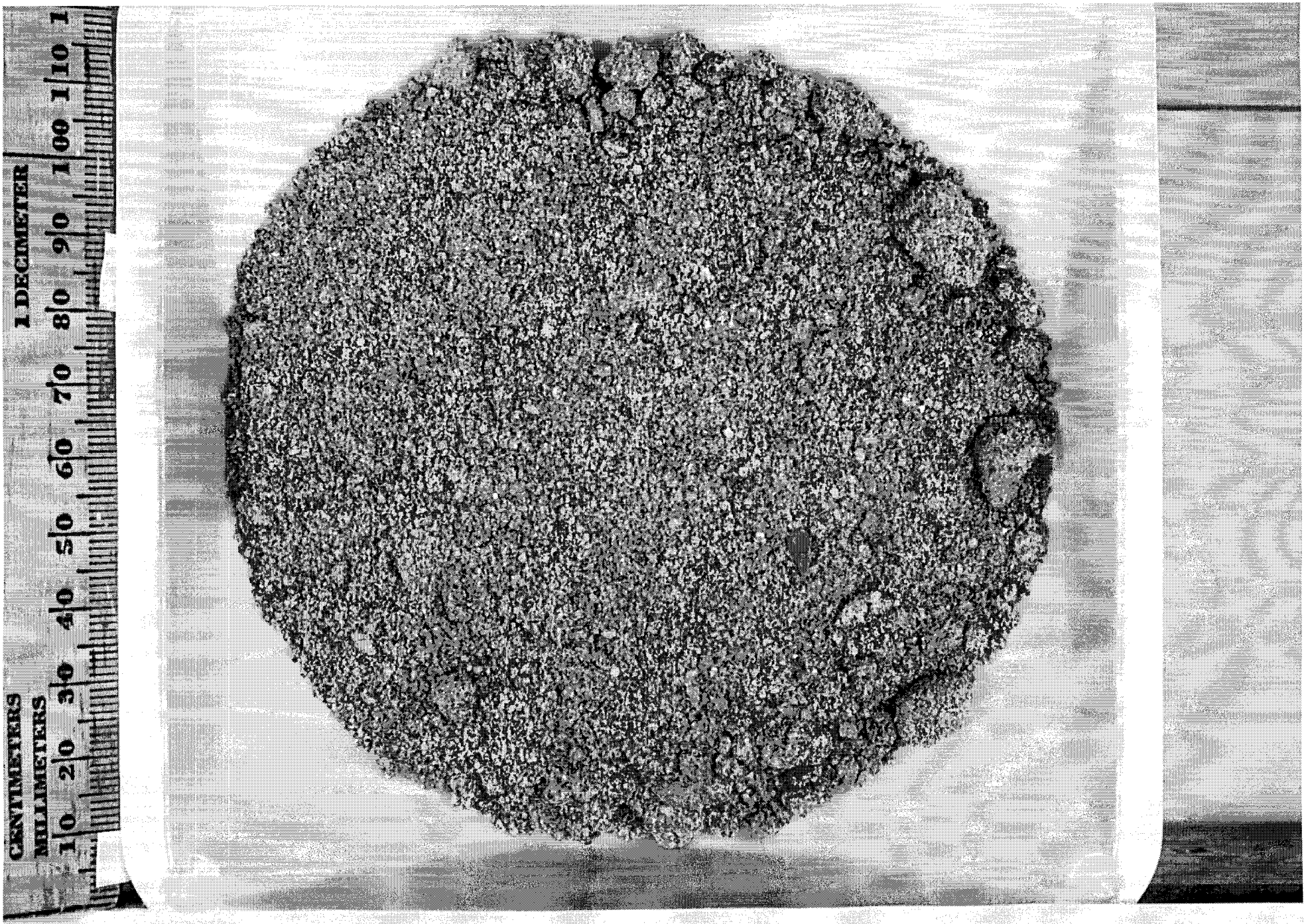
C7514 B22TN2 88-88 ft Grab Sample

Depth from Chain-of-Custody



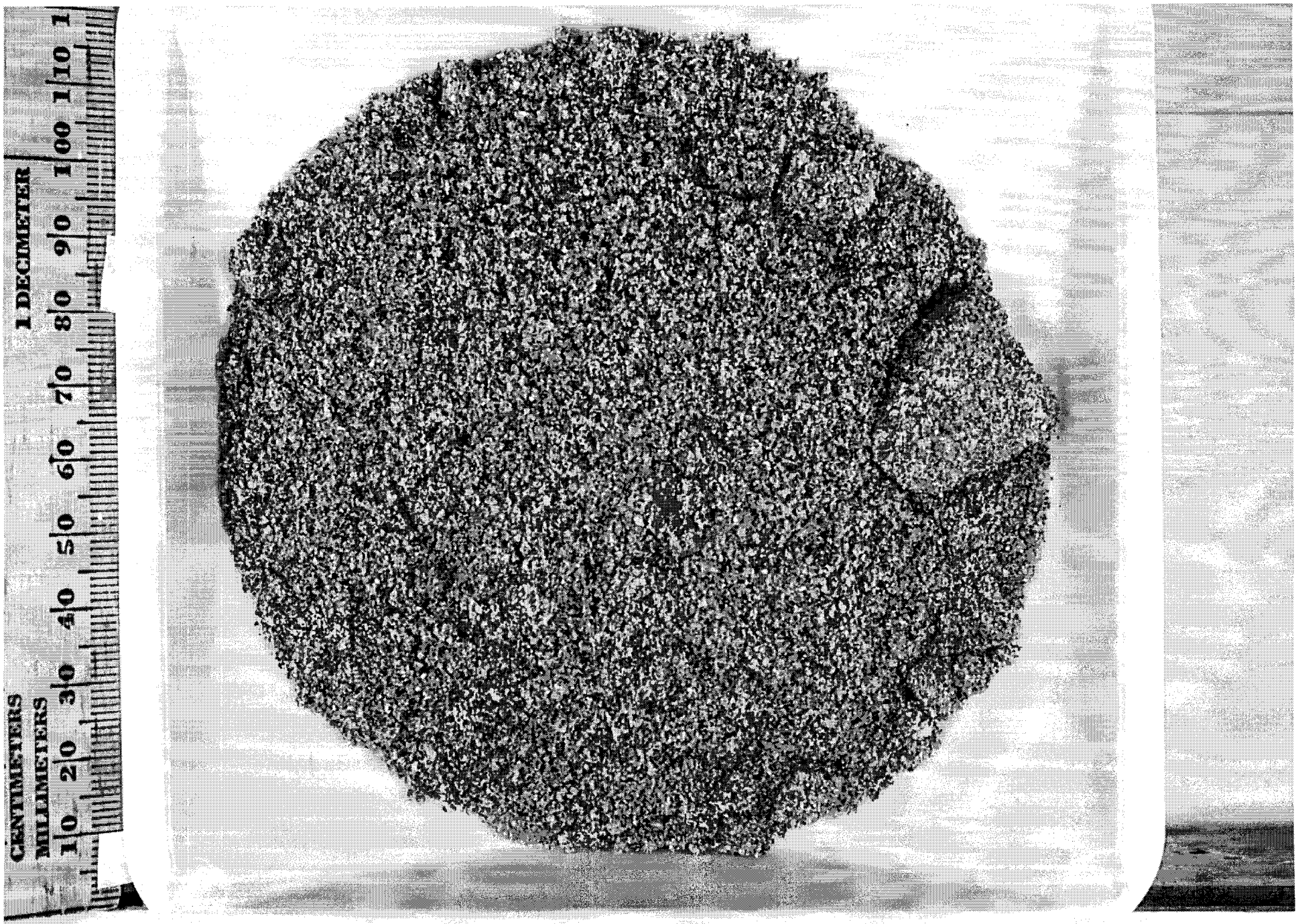
C7514 B22TN3 90.4-90.4 ft Grab Sample

Depth from Chain-of-Custody



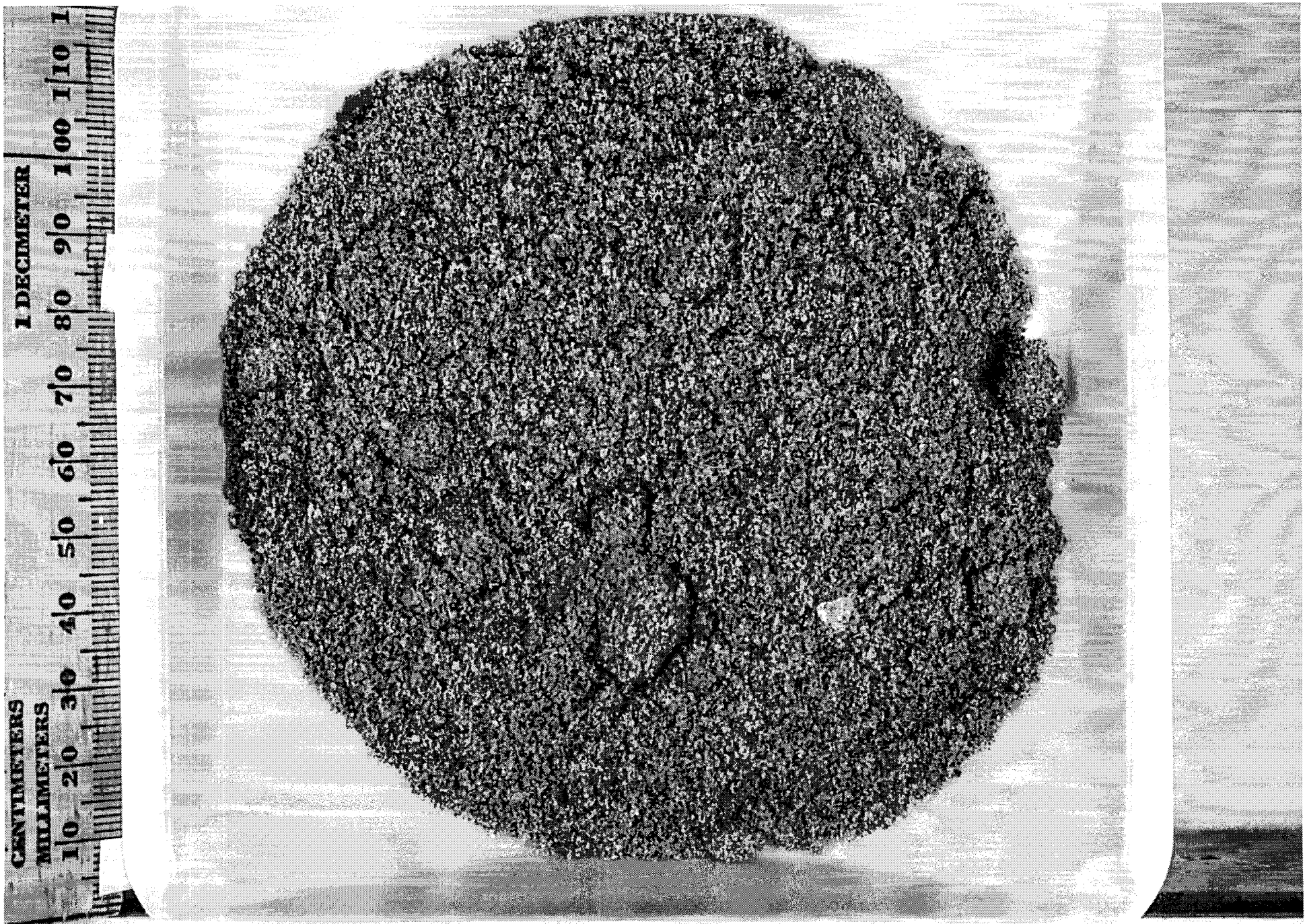
C7514 B22TN4 90-92.5 ft Grab Sample

Depth from Chain-of-Custody



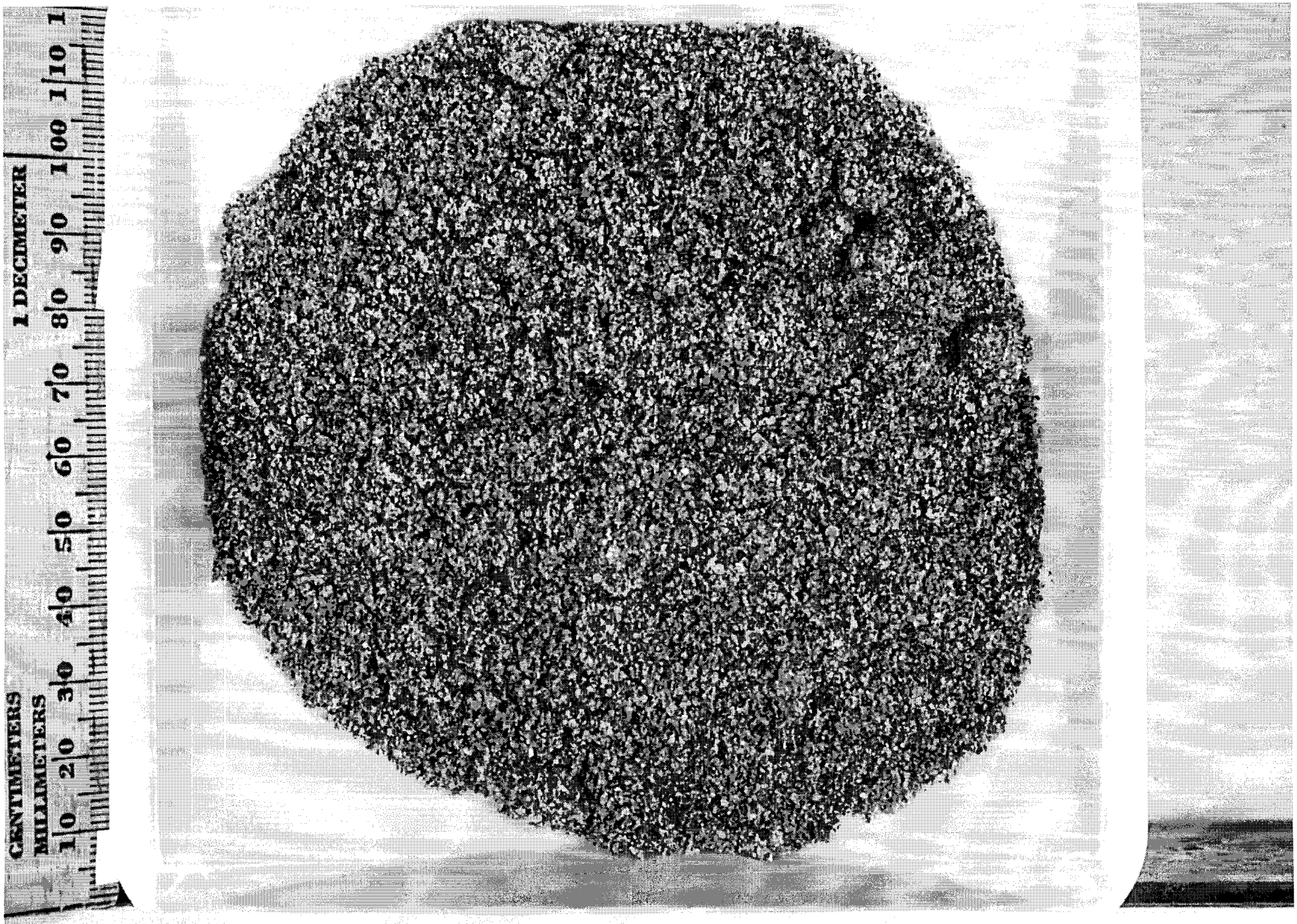
C7514 B22TN5 94.5-94.5 ft Grab Sample

Depth from Chain-of-Custody



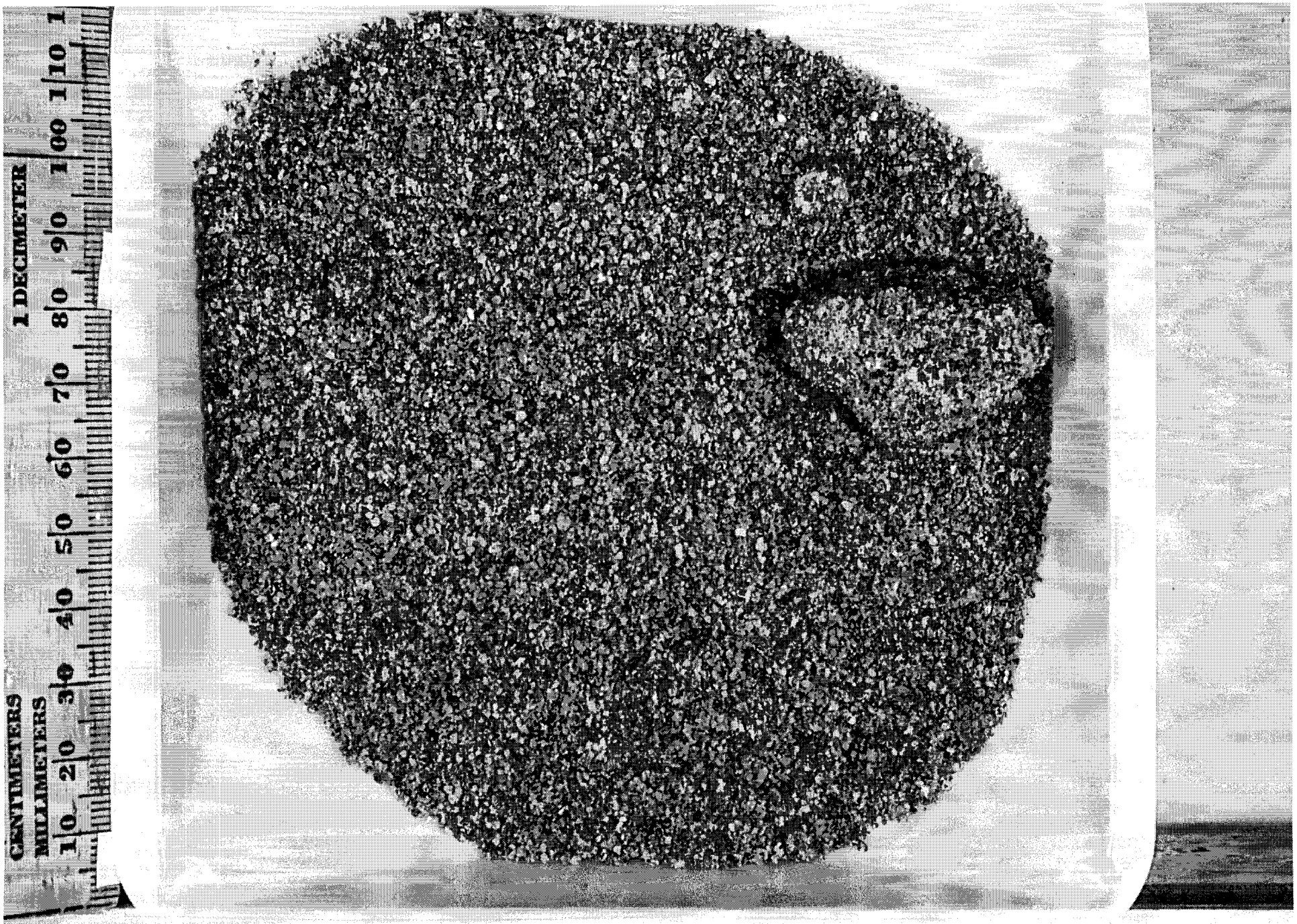
C7514 B22TN6 97.5-97.5 ft Grab Sample

Depth from Chain-of-Custody



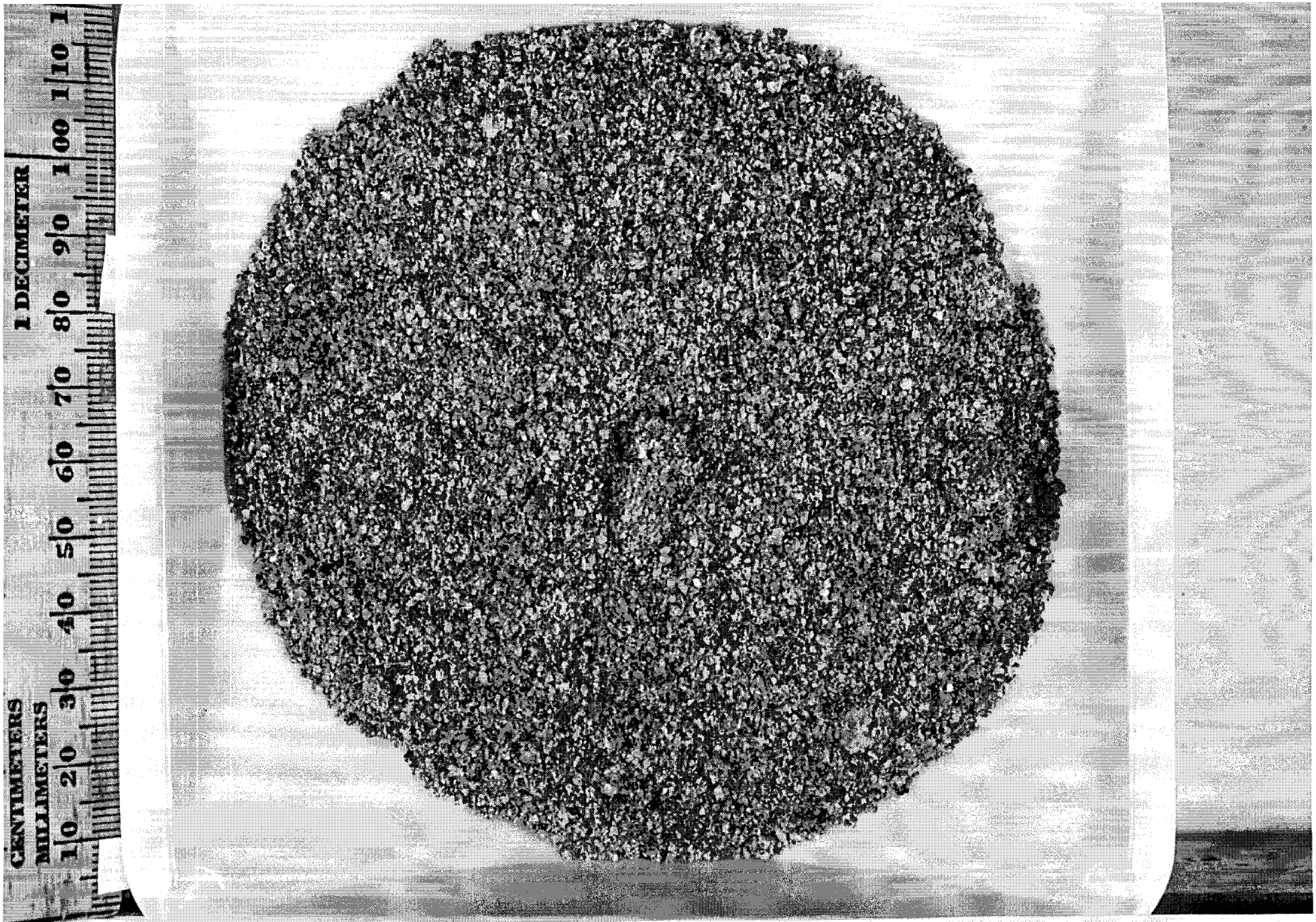
C7514 B22TN7 100.6-100.6 ft Grab Sample

Depth from Chain-of-Custody



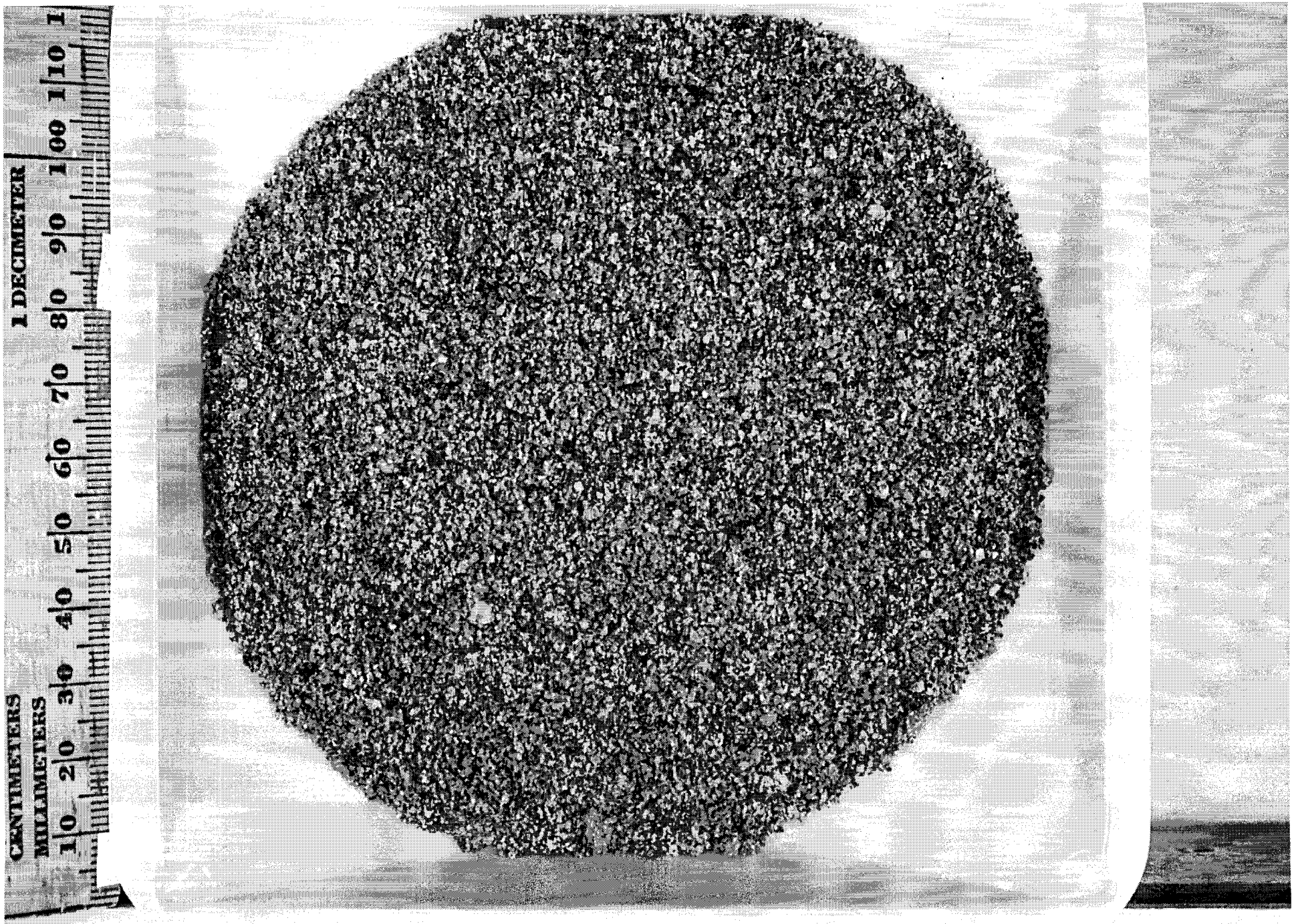
C7514 B22TN8 102.5-102.5 ft Grab Sample

Depth from Chain-of-Custody



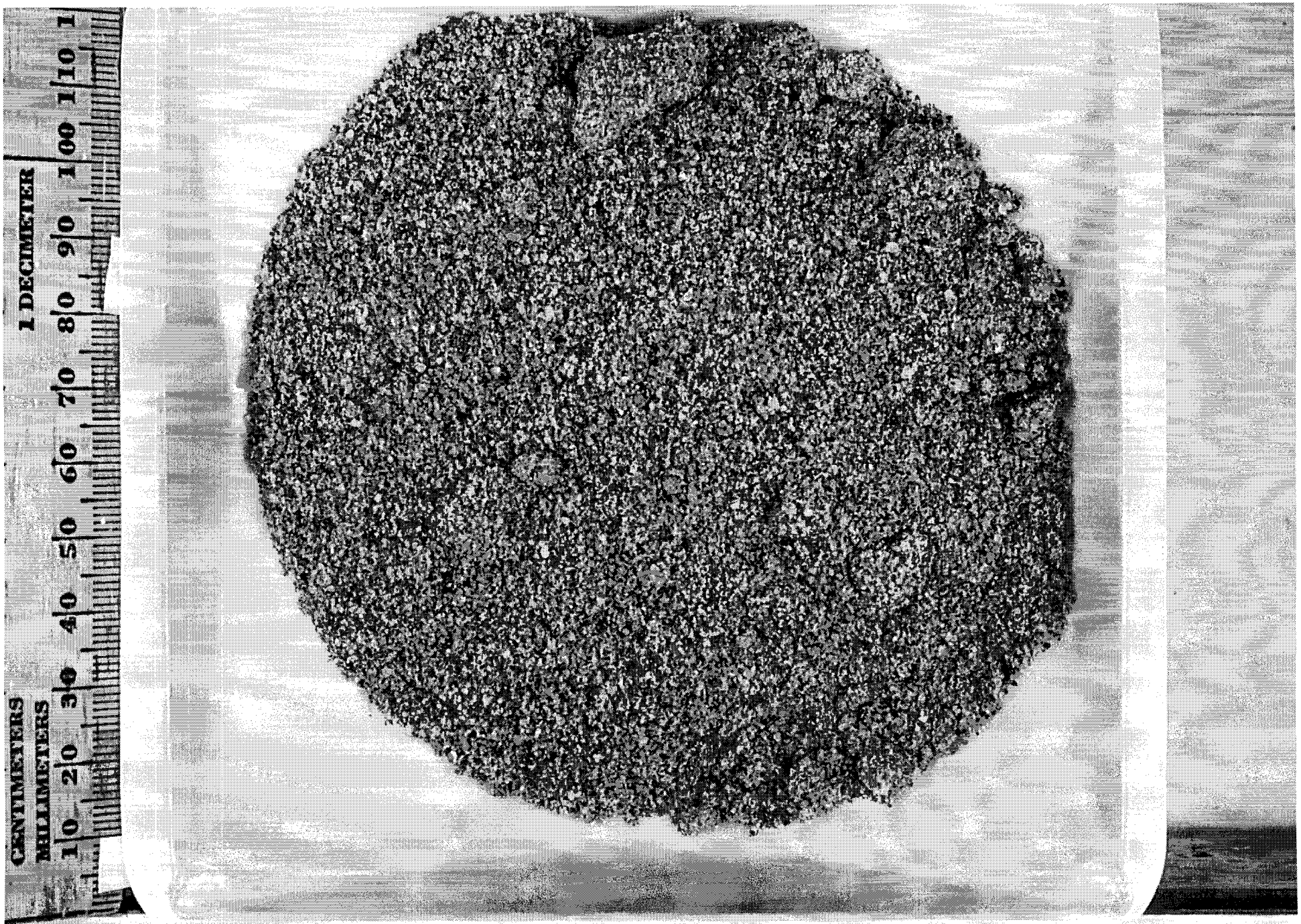
C7514 B22TN9 105-105 ft Grab Sample

Depth from Chain-of-Custody



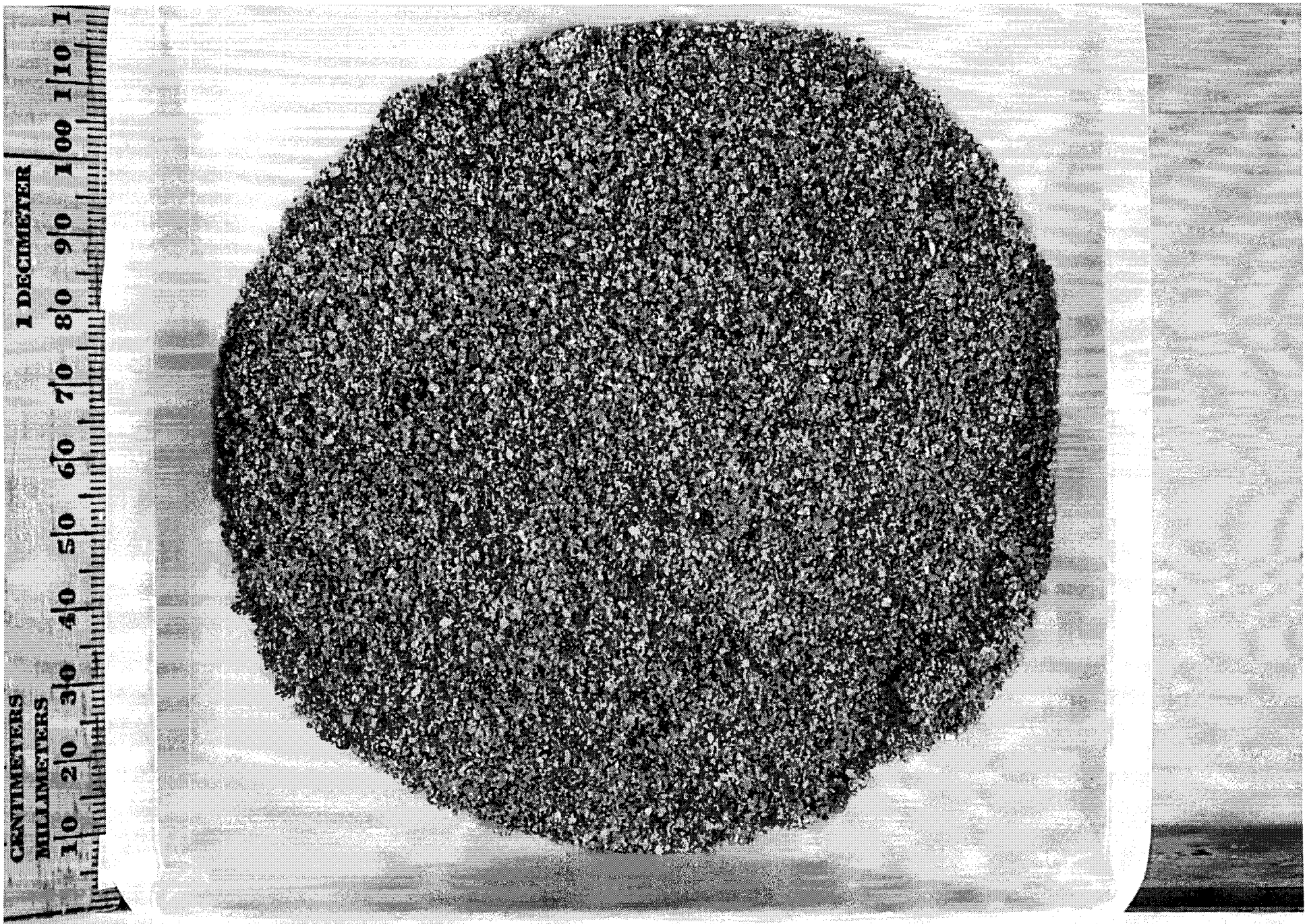
C7514 B22TP0 107.5-107 ft Grab Sample

Depth from Chain-of-Custody



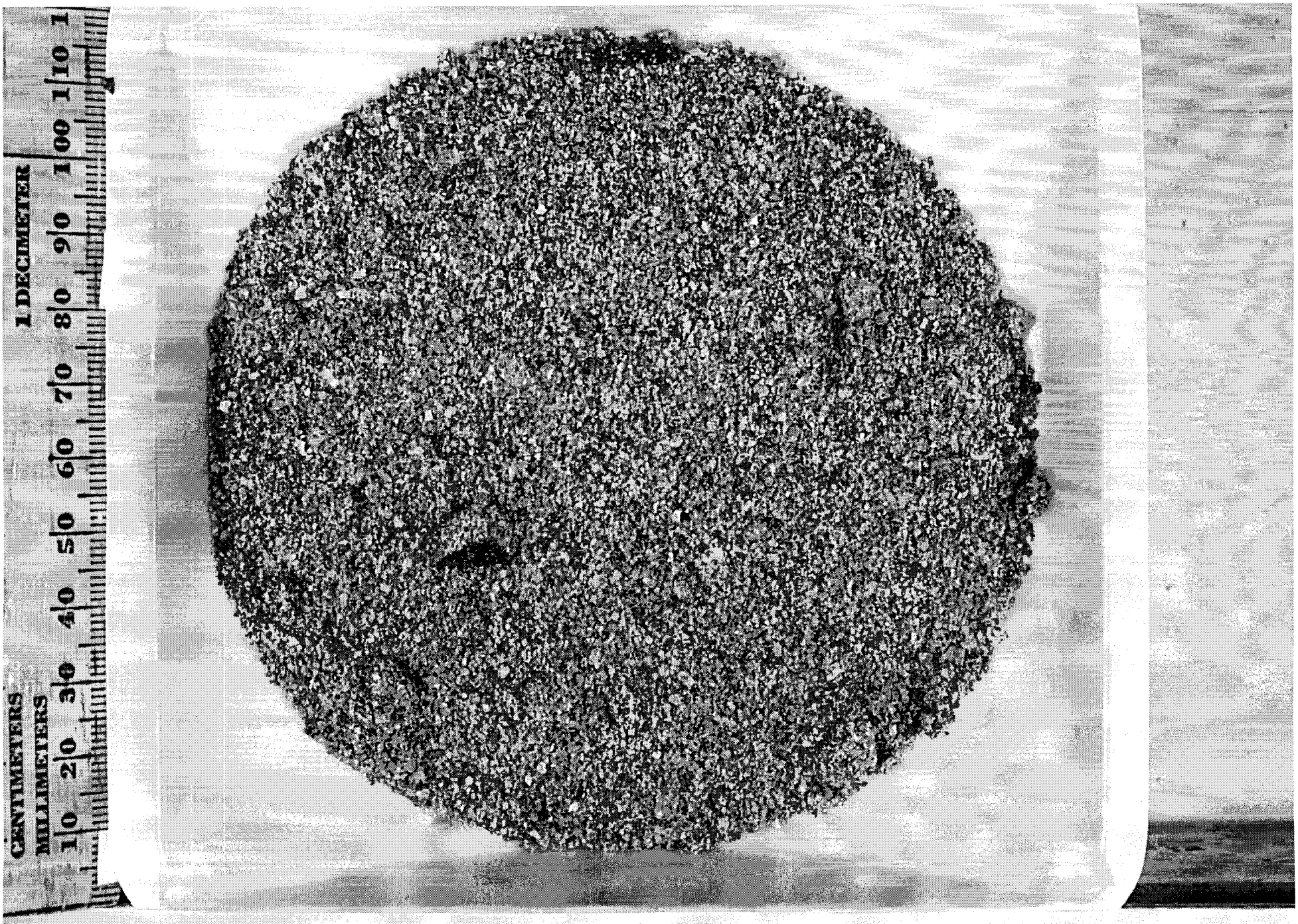
C7514 B22TP1 110-110 ft Grab Sample

Depth from Chain-of-Custody



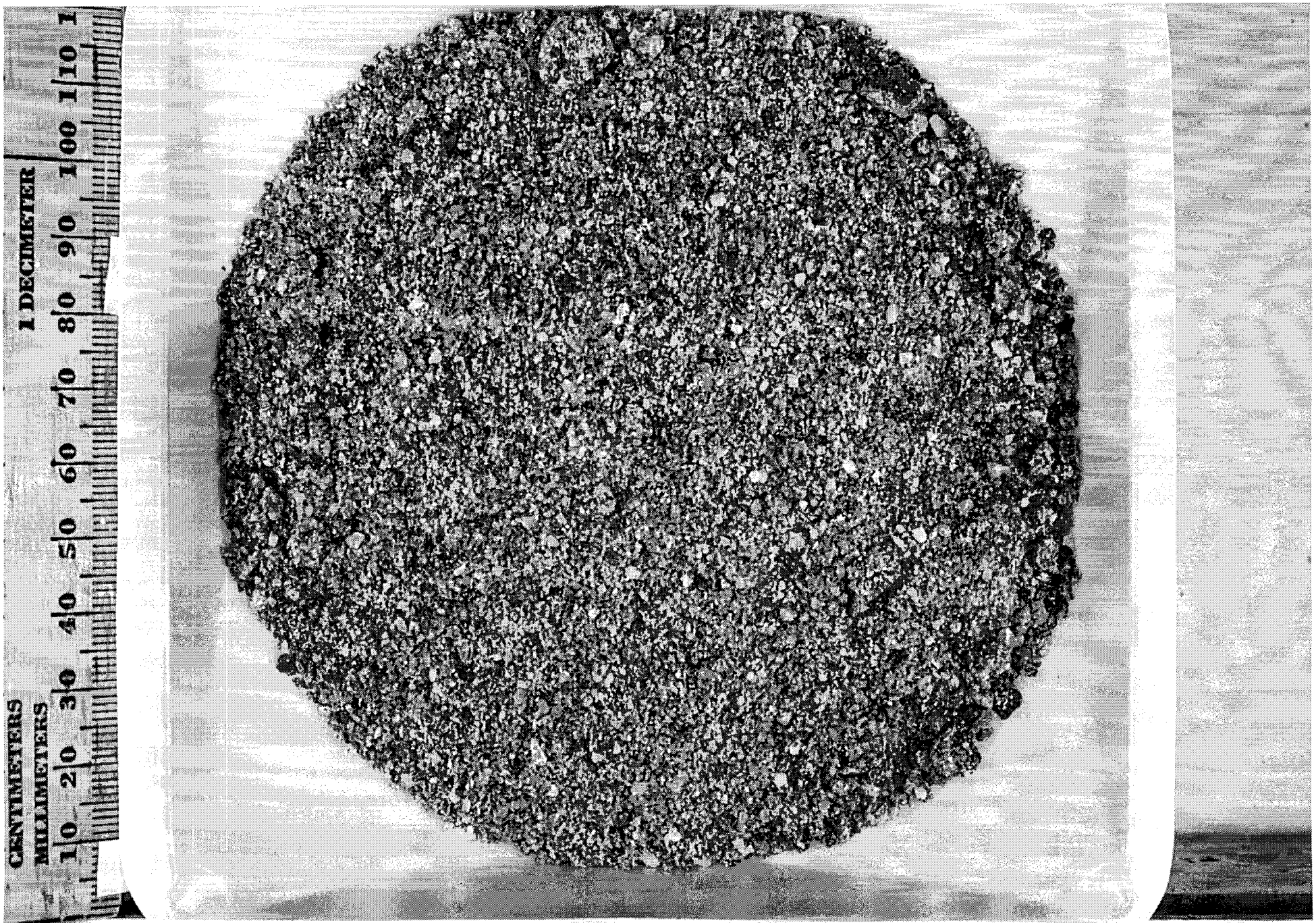
C7514 B22TP2 112.5-112.5 ft Grab Sample

Depth from Chain-of-Custody



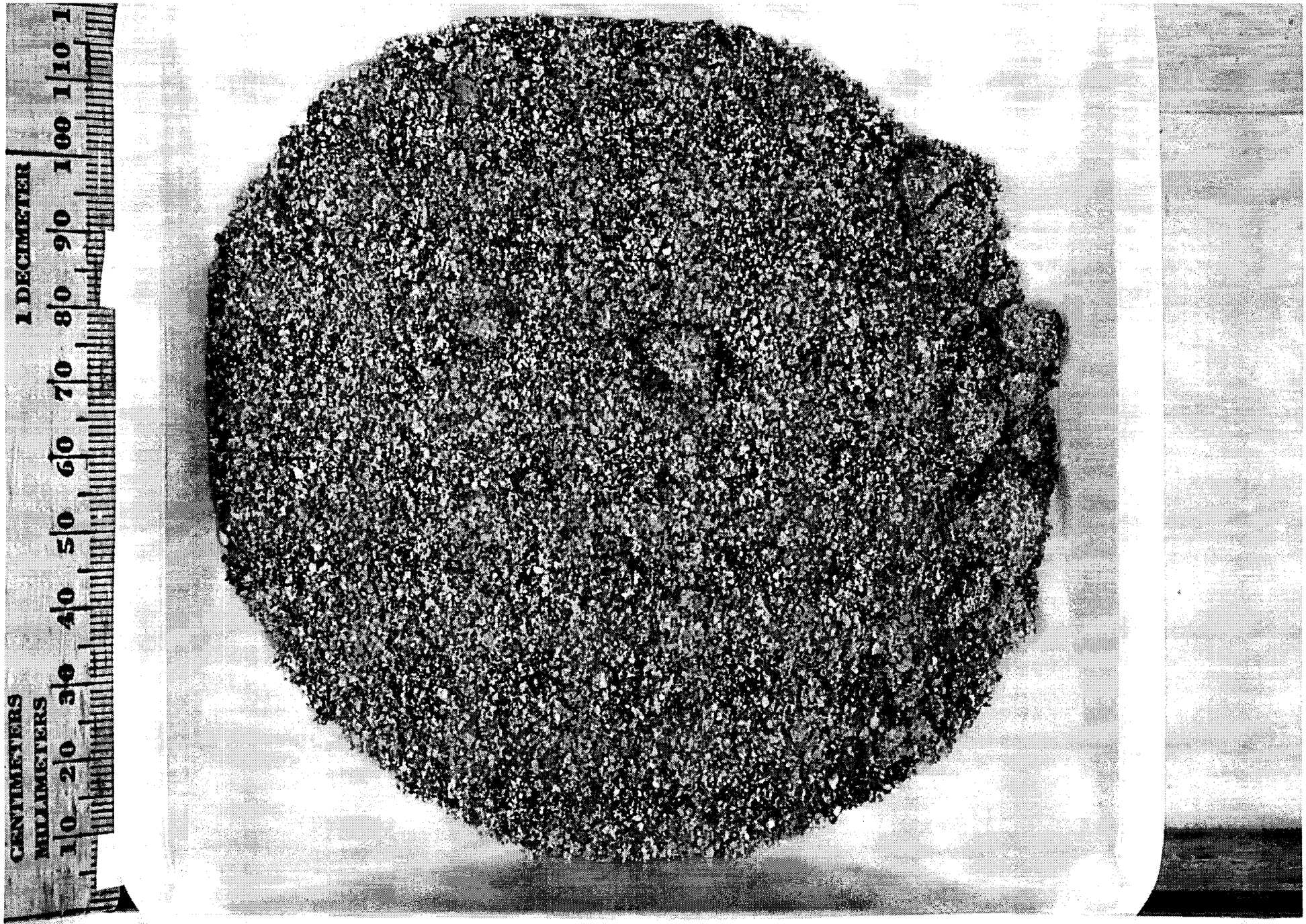
C7514 B22TP3 115-115 ft Grab Sample

Depth from Chain-of-Custody



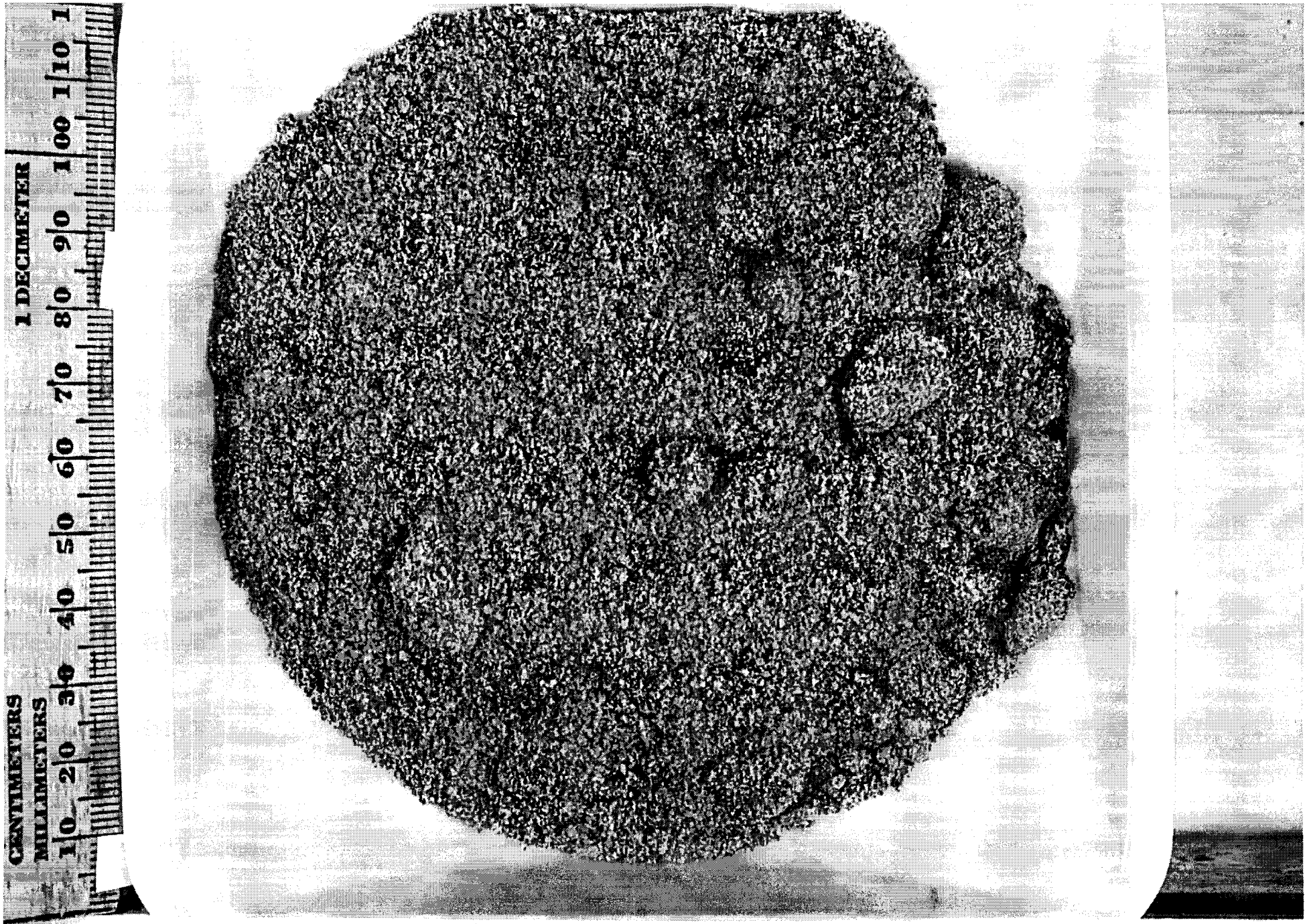
C7514 B22TP4 117.5-117.5 ft Grab Sample

Depth from Chain-of-Custody



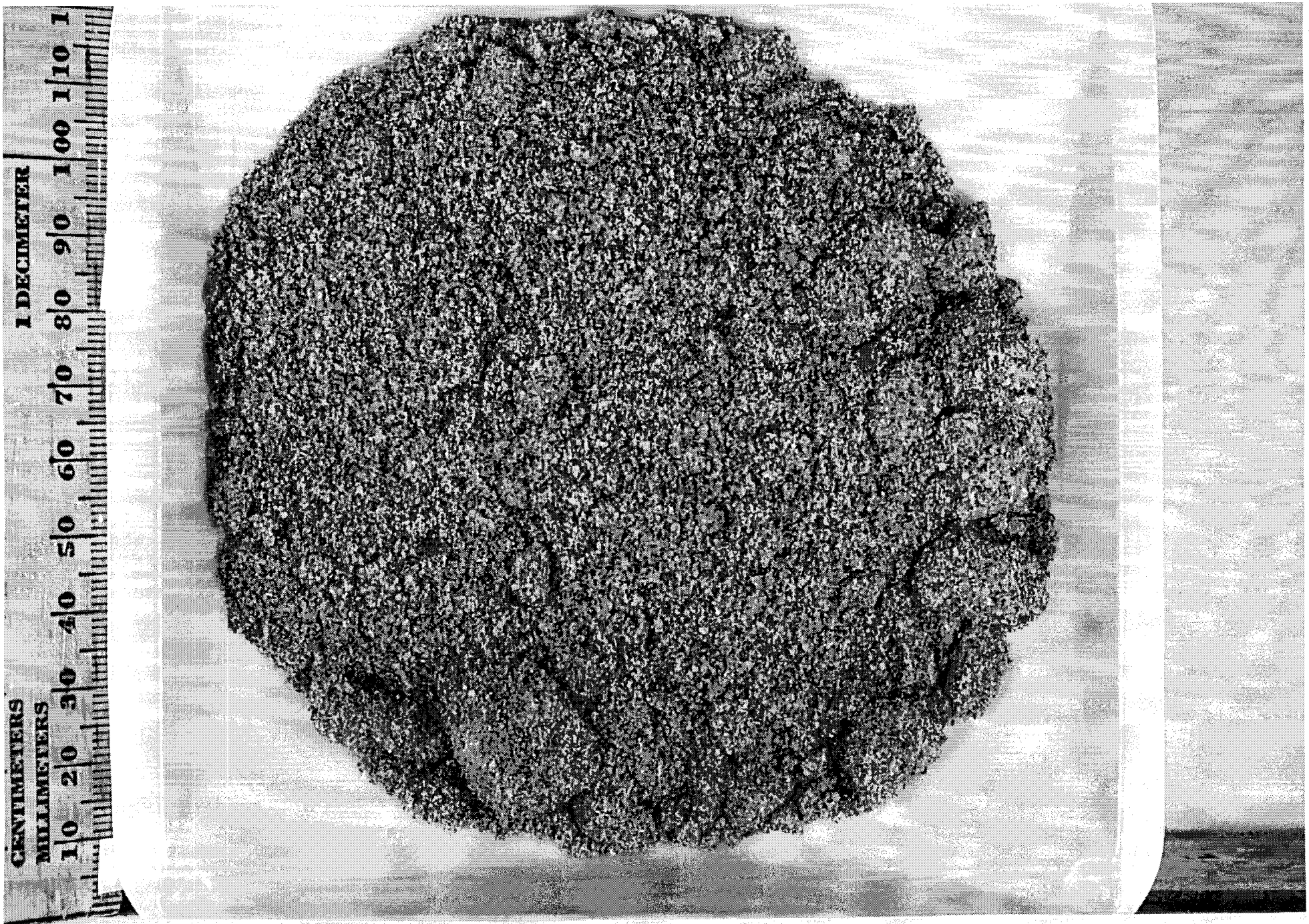
C7514 B22TP5 120-120 ft Grab Sample

Depth from Chain-of-Custody



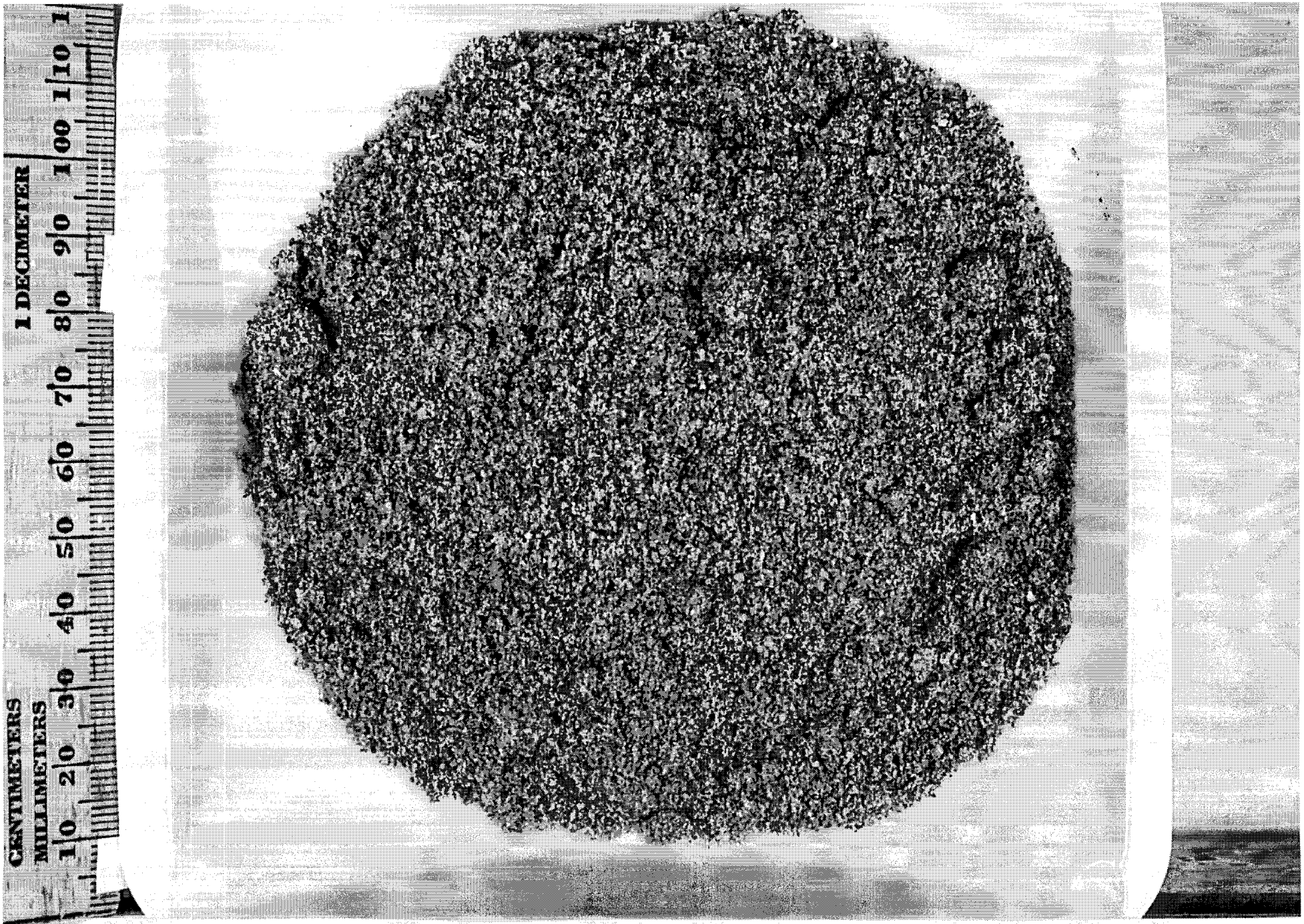
C7514 B22TP6 122.5-122.5 ft Grab Sample

Depth from Chain-of-Custody



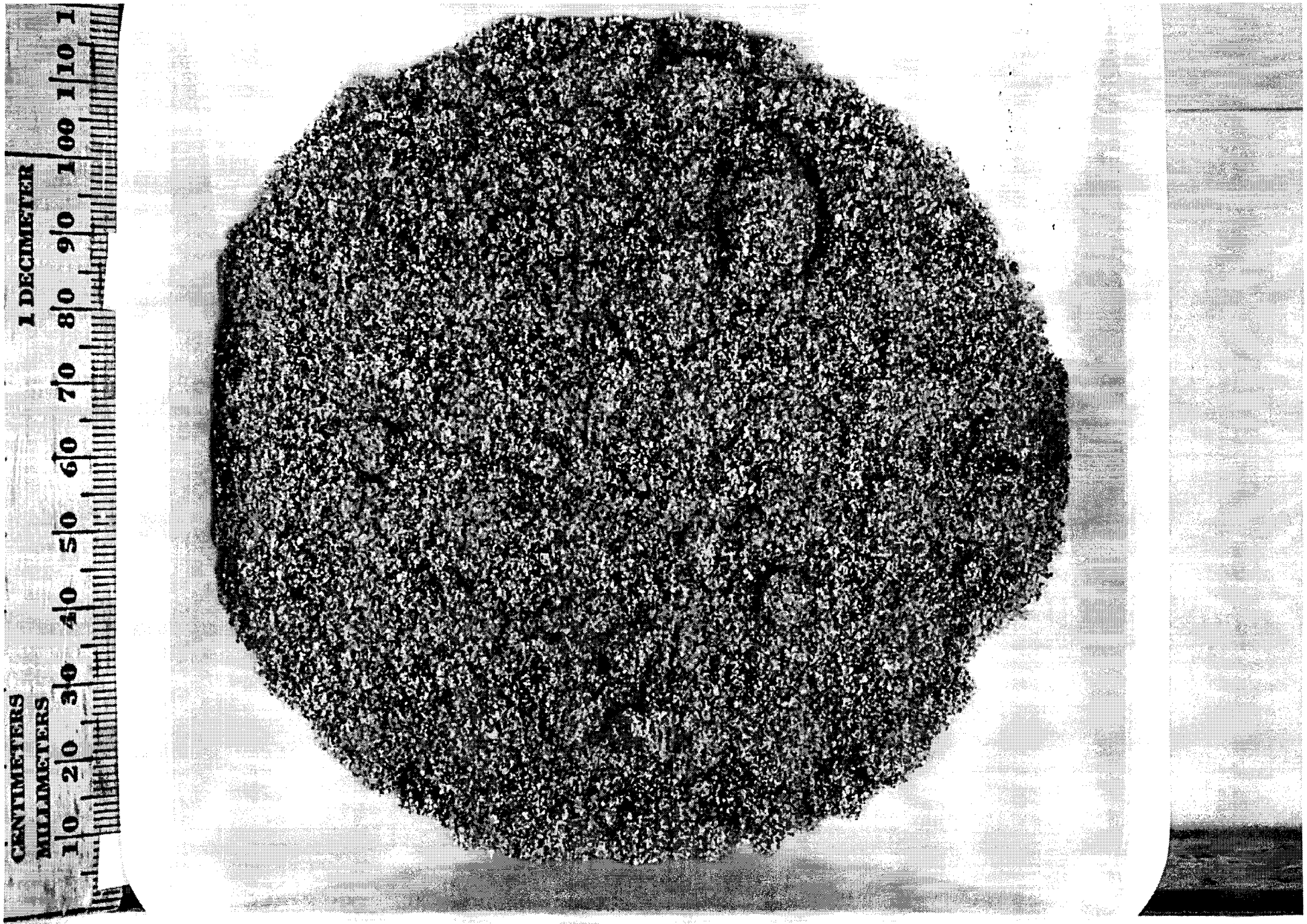
C7514 B22TP7 125-125 ft Grab Sample

Depth from Chain-of-Custody



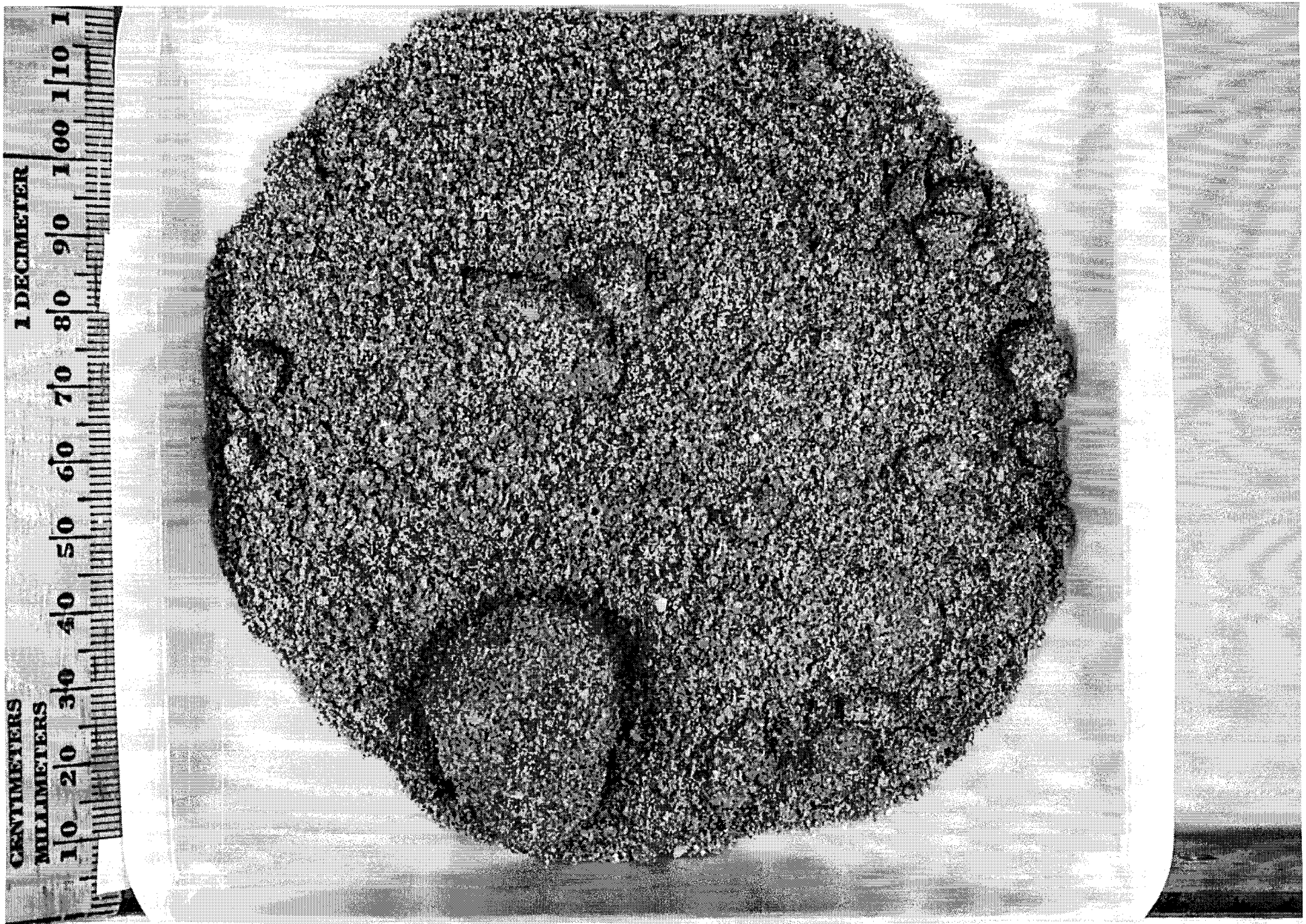
C7514 B22TP8 127-127 ft Grab Sample

Depth from Chain-of-Custody



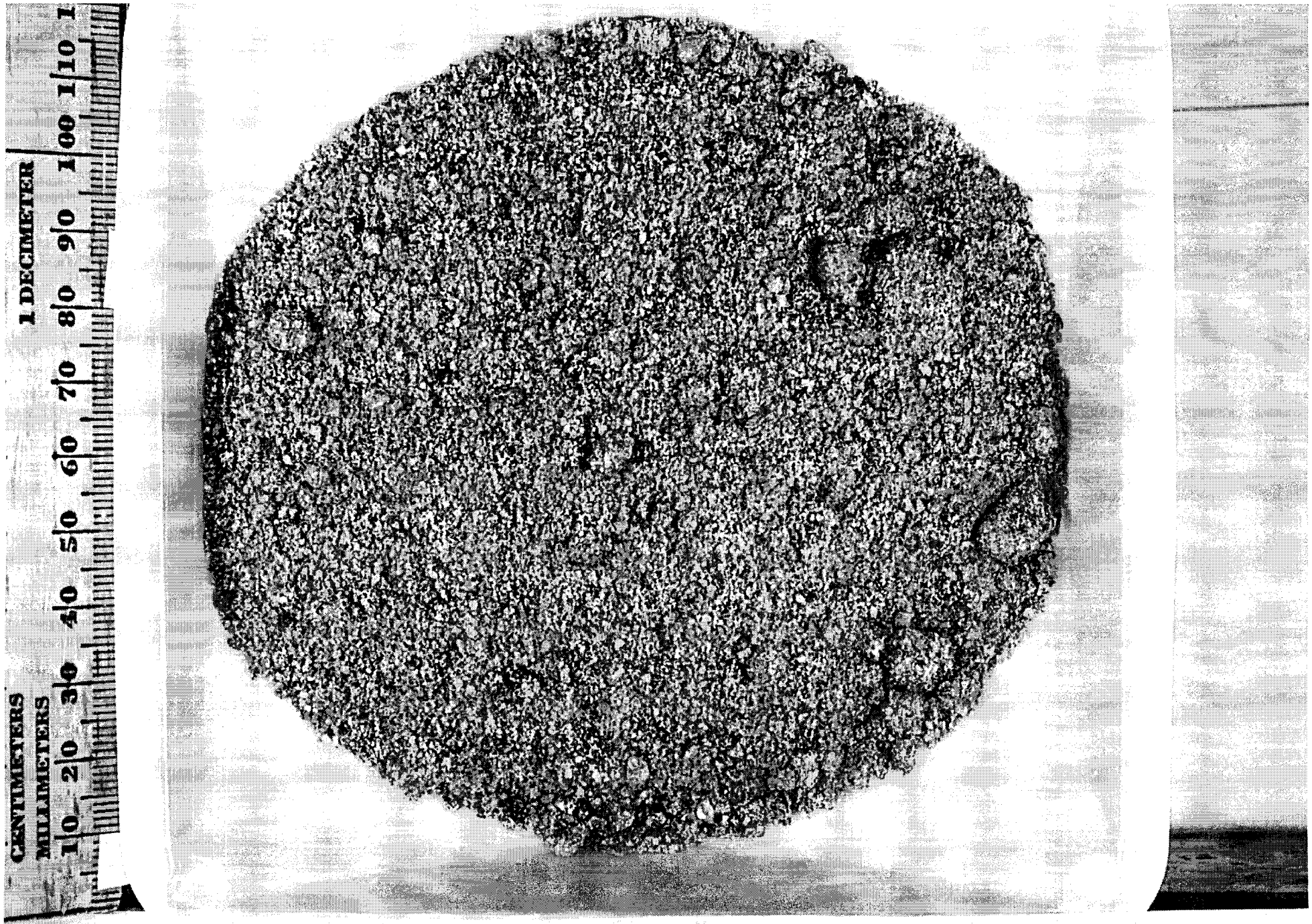
C7514 B22TP9 130-130 ft Grab Sample

Depth from Chain-of-Custody



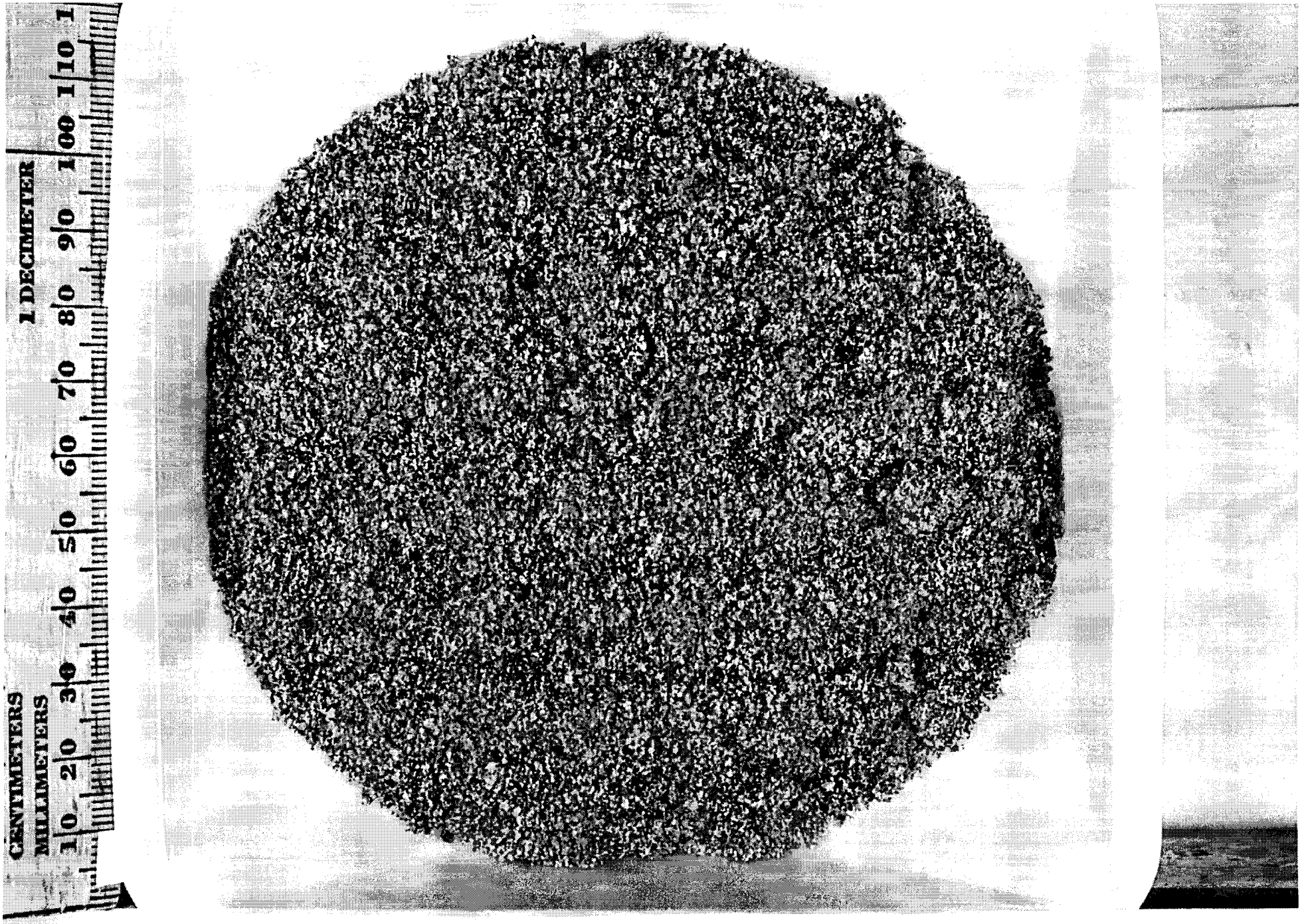
C7514 B22TRO 132.5-132.5 ft Grab Sample

Depth from Chain-of-Custody



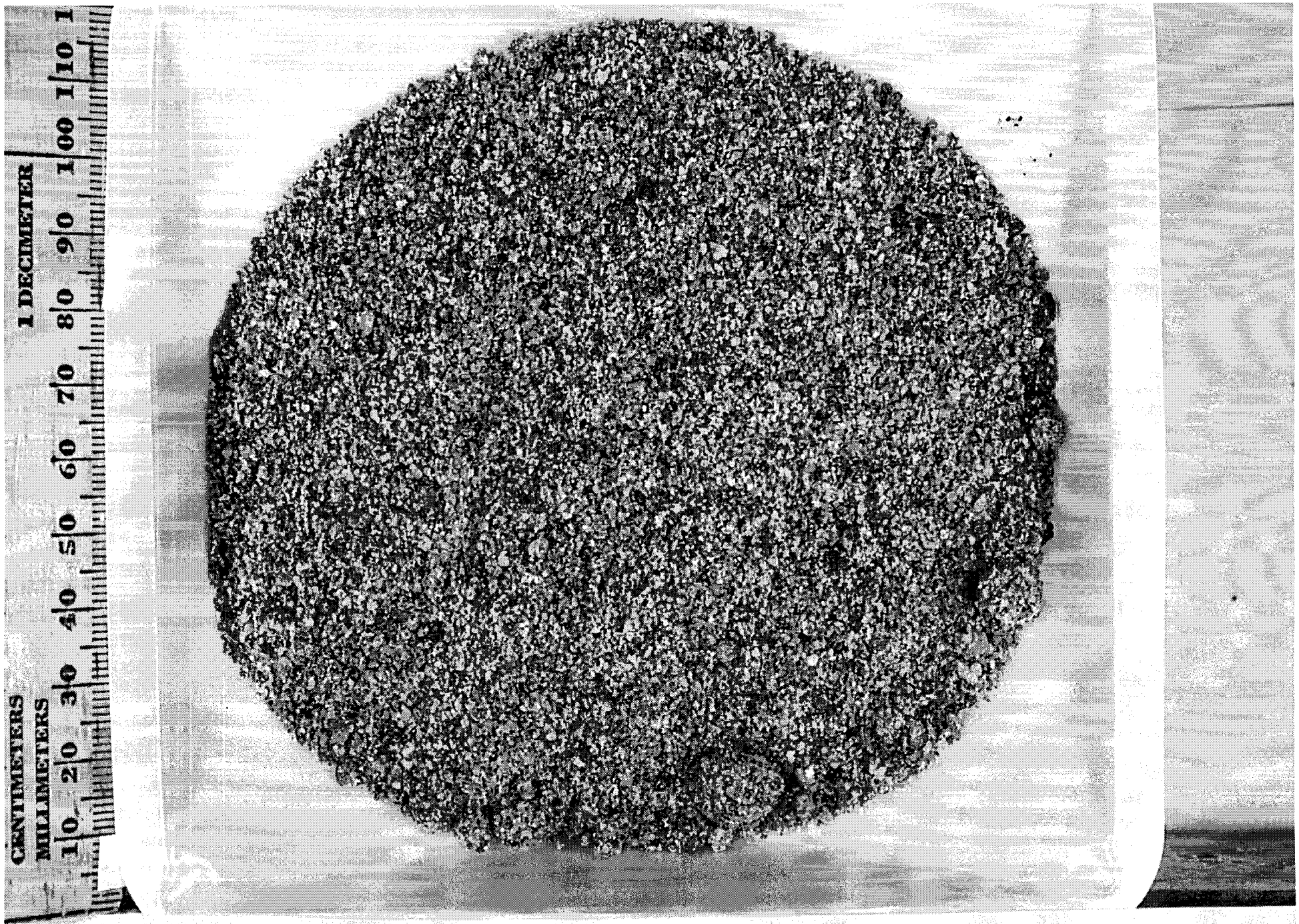
C7514 B22TR1 136-136 ft Grab Sample

Depth from Chain-of-Custody



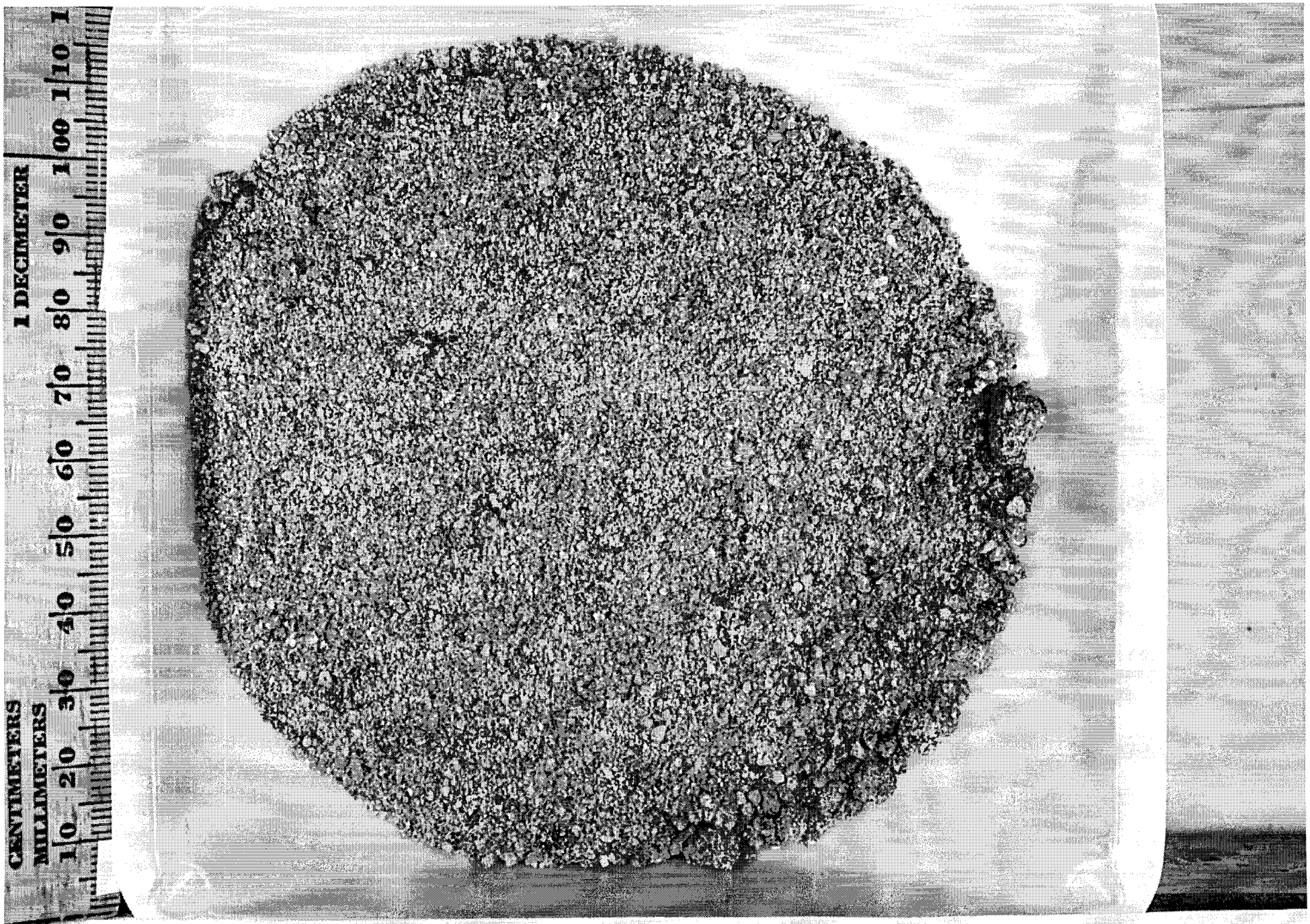
C7514 B22TR2 137.5-137.5 ft Grab Sample

Depth from Chain-of-Custody



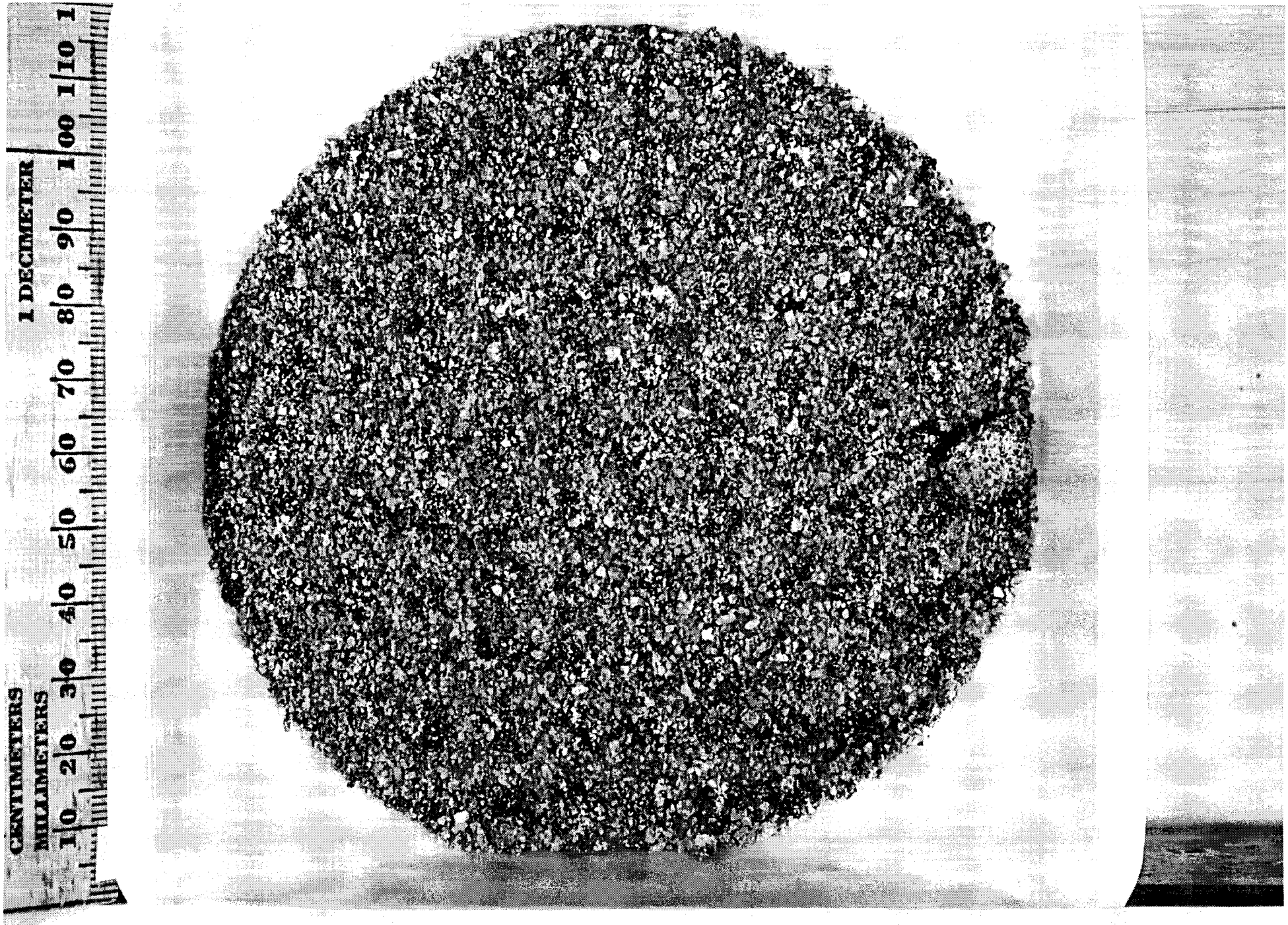
C7514 B22TR3 140.4-140.4 ft Grab Sample

Depth from Chain-of-Custody



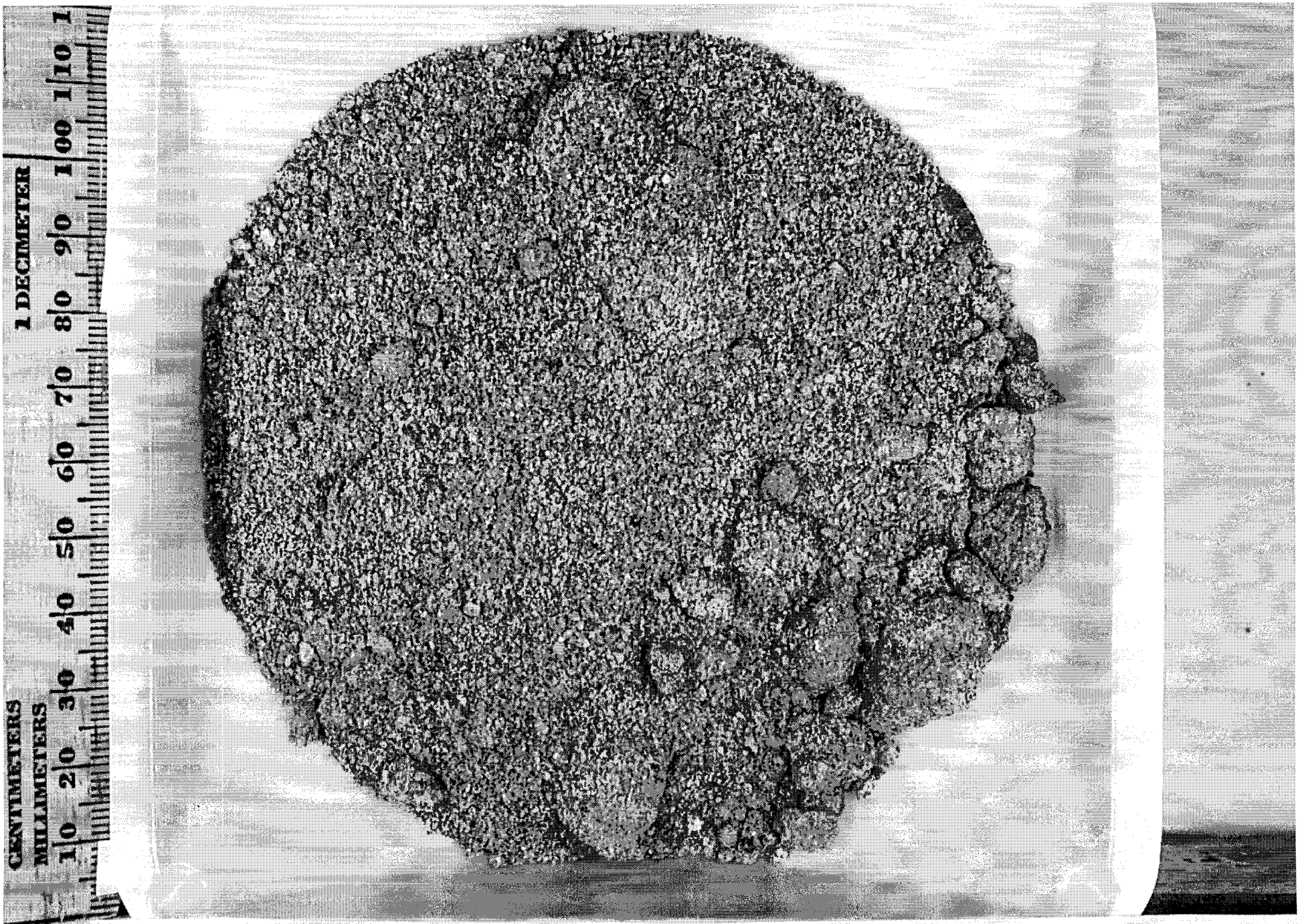
C7514 B22TR4 142.5-142.5 ft Grab Sample

Depth from Chain-of-Custody



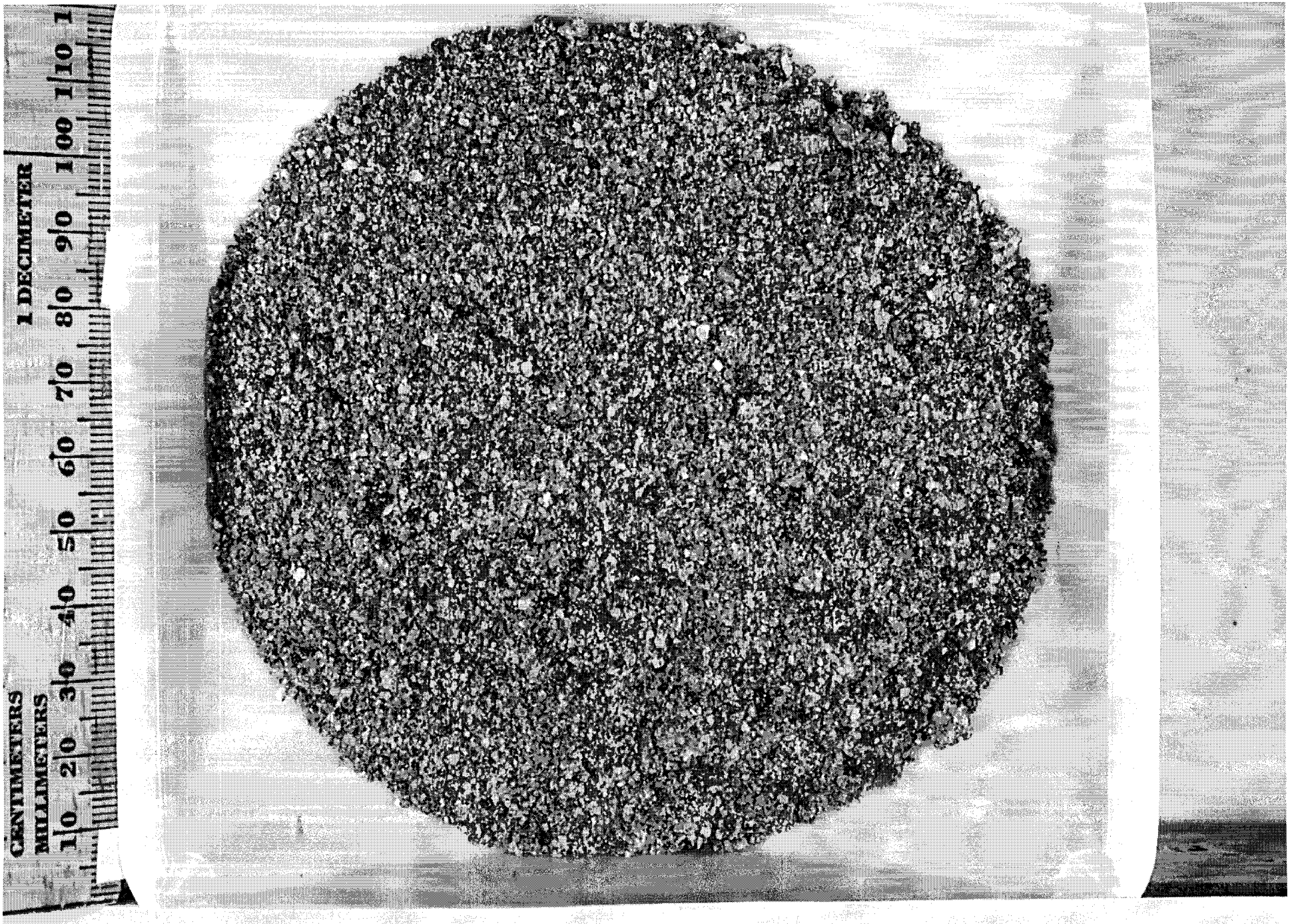
C7514 B22TR5 144-144 ft Grab Sample

Depth from Chain-of-Custody



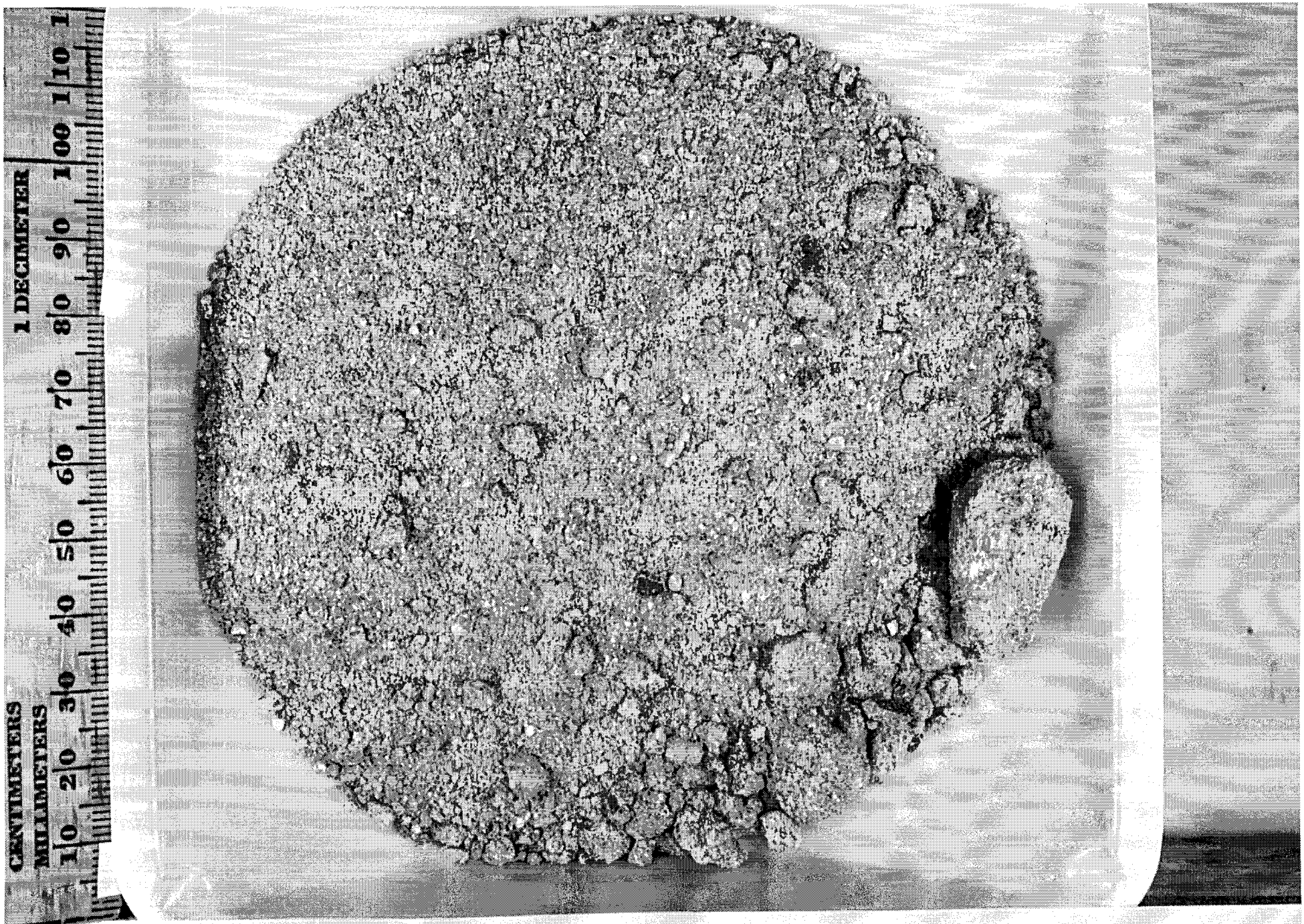
C7514 B22TR6 147.5-147.5 ft Grab Sample

Depth from Chain-of-Custody



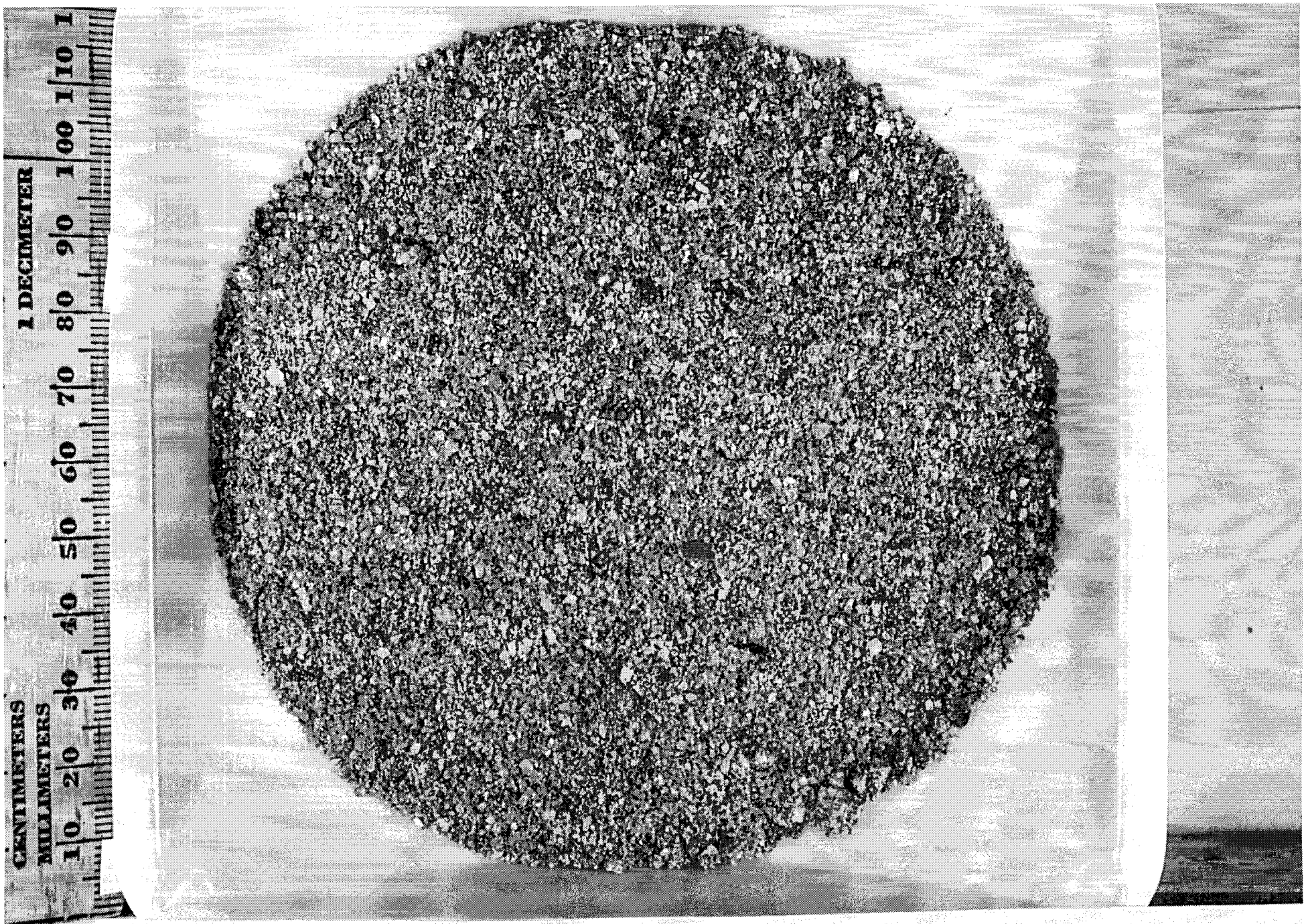
C7514 B22TR7 149.9-149.9 ft Grab Sample

Depth from Chain-of-Custody



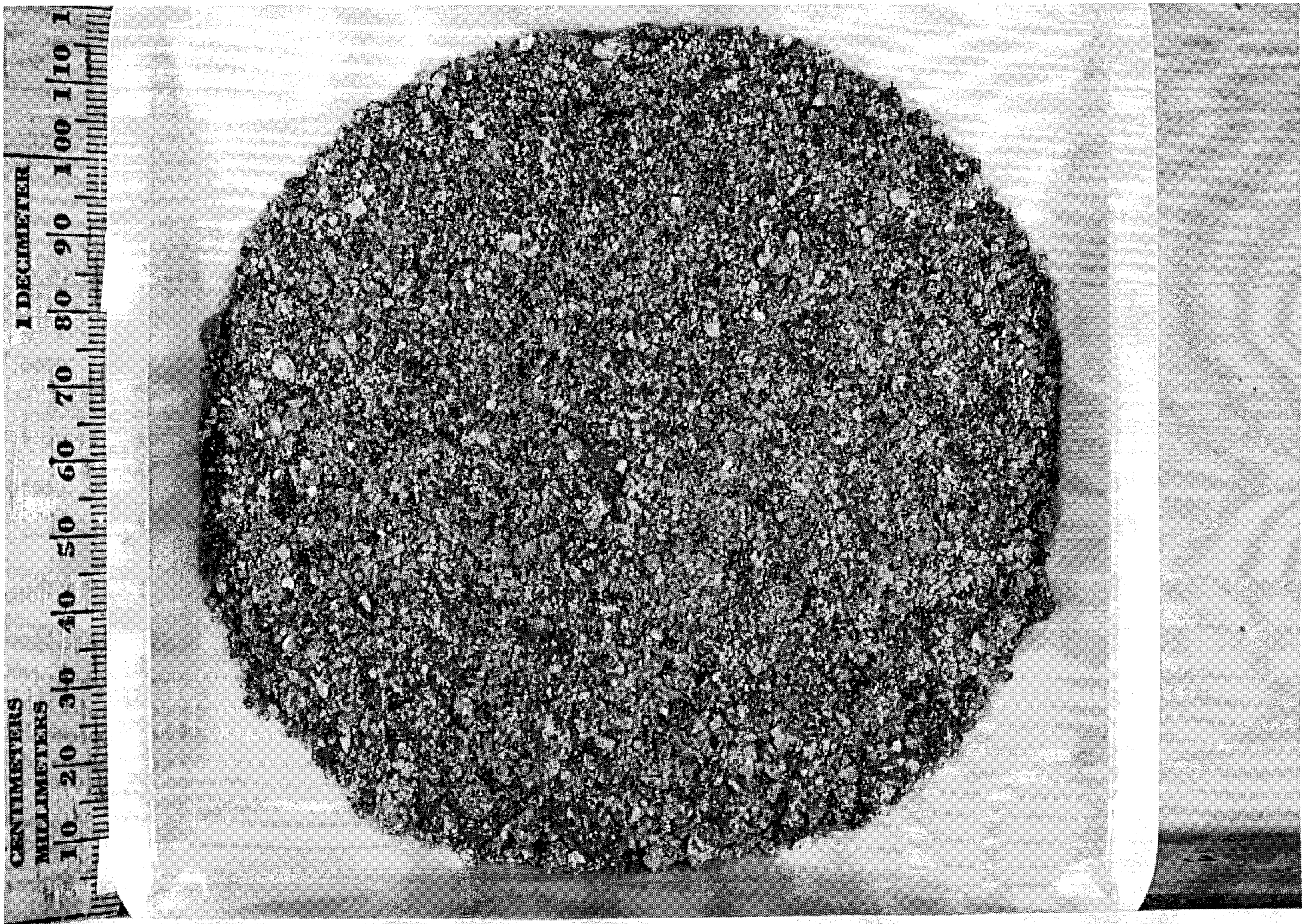
C7514 B22TR8 152.5-152.5 ft Grab Sample

Depth from Chain-of-Custody



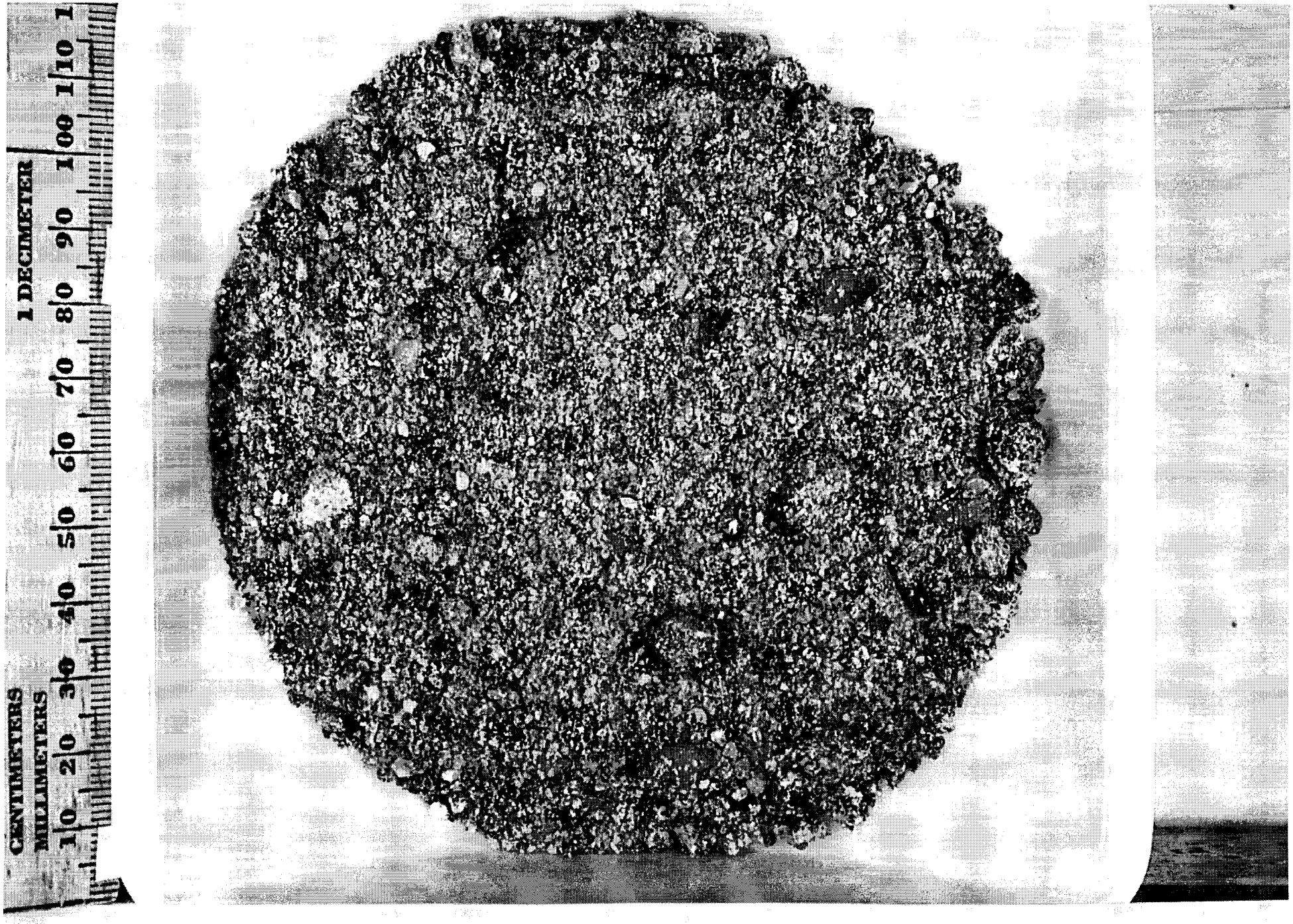
C7514 B22TR9 155-155 ft Grab Sample

Depth from Chain-of-Custody



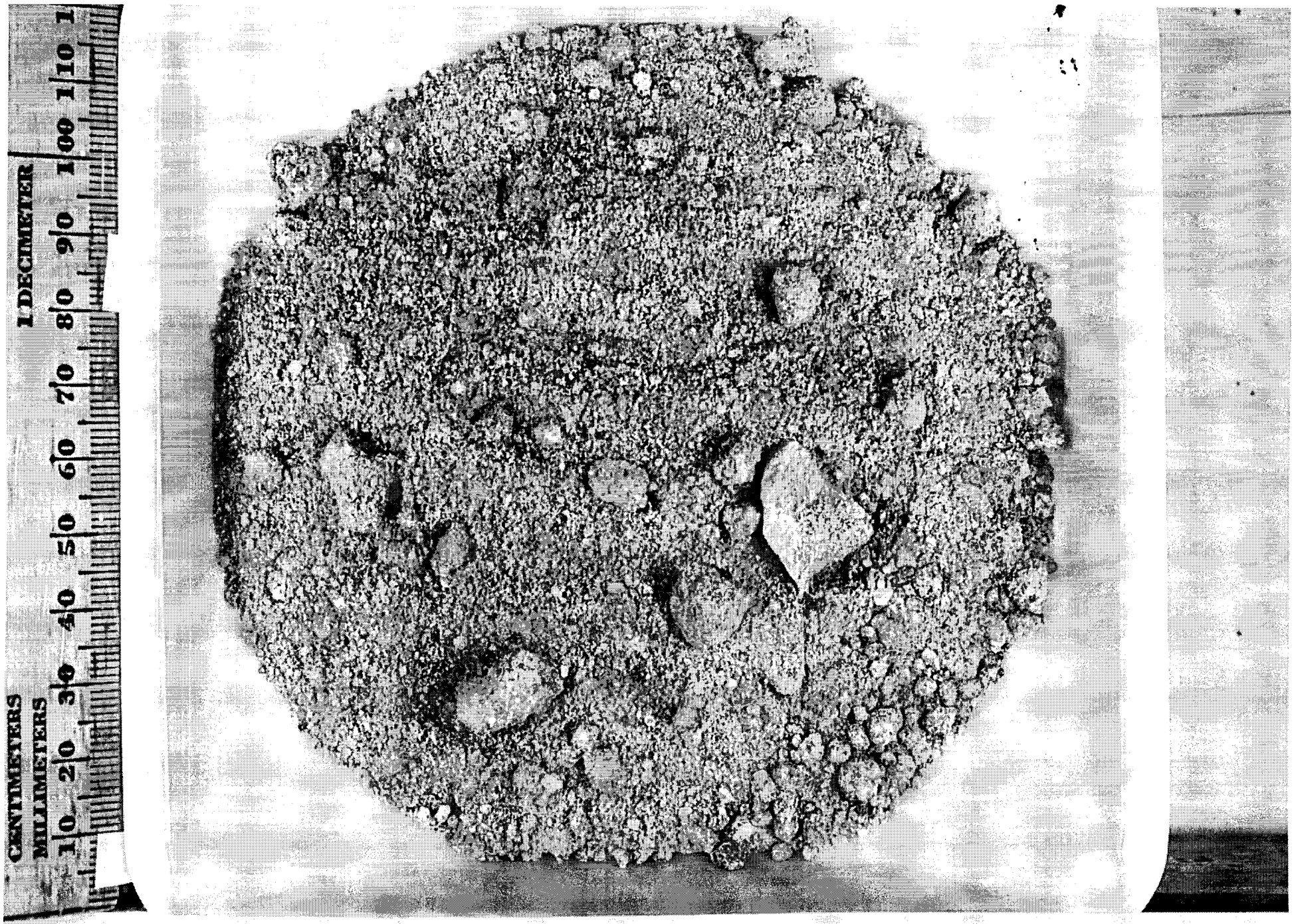
C7514 B22TT0 157.5-157.5 ft Grab Sample

Depth from Chain-of-Custody



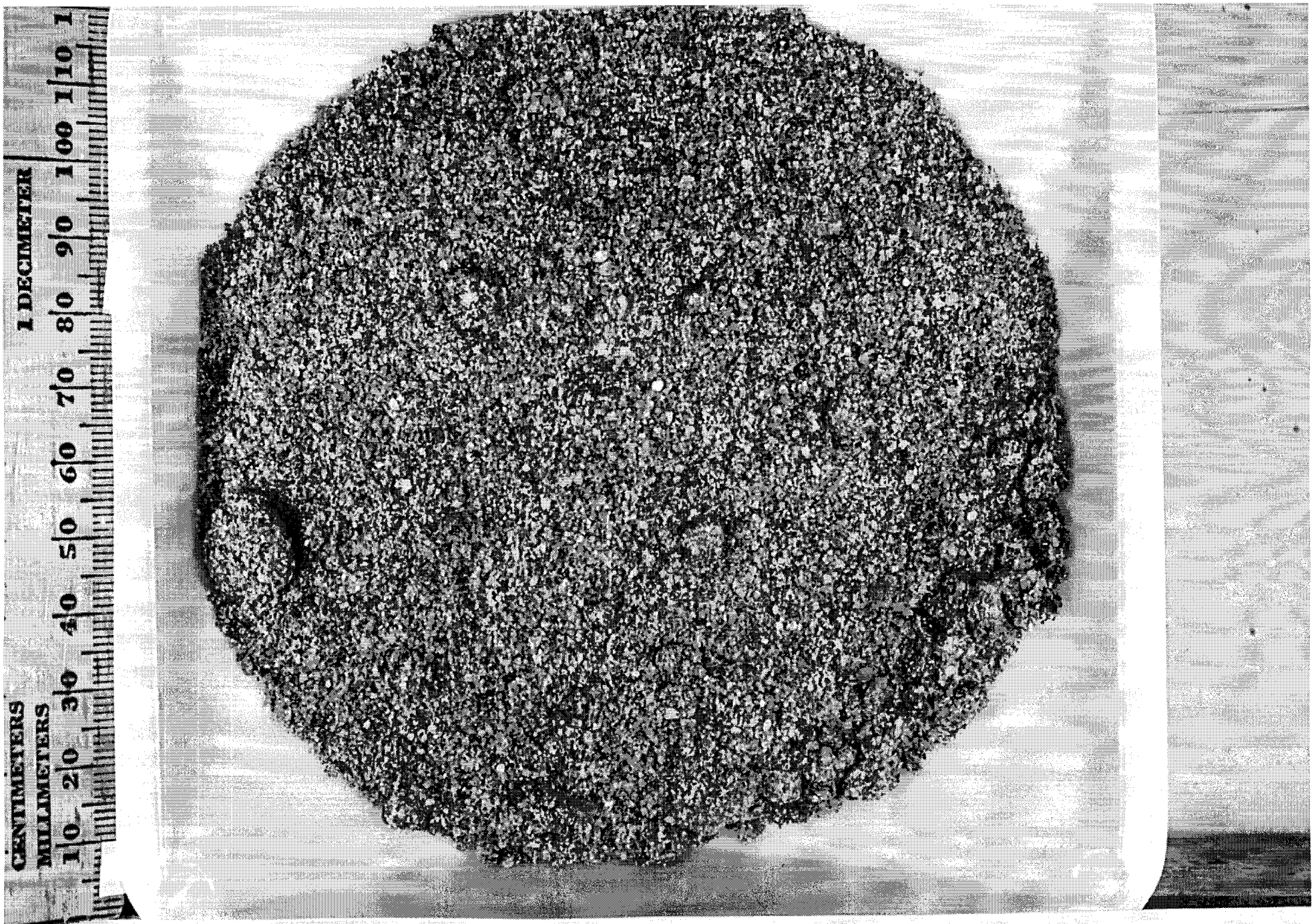
C7514 B22TT1 160.3-160.3 ft Grab Sample

Depth from Chain-of-Custody



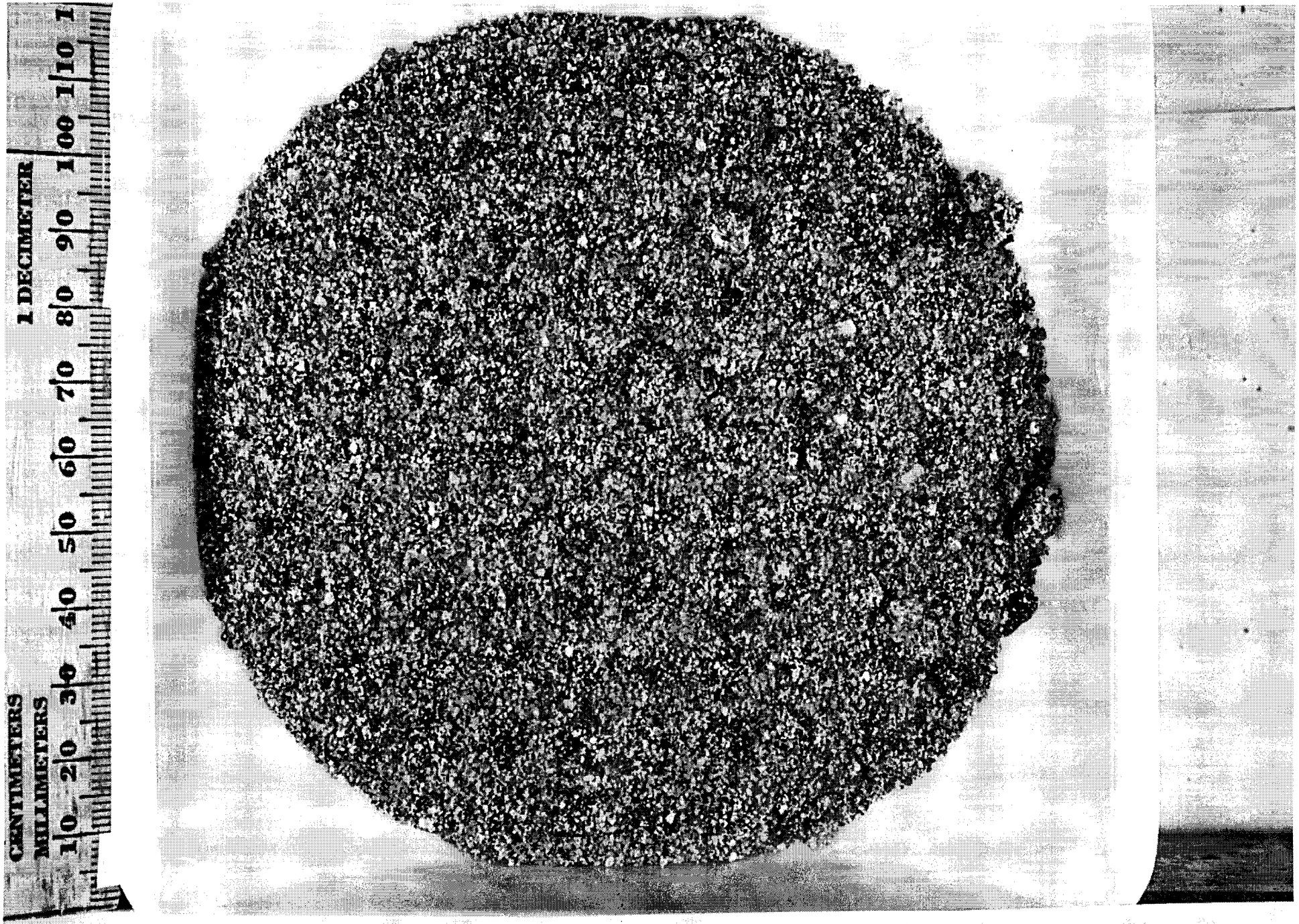
C7514 B22TT2 162.5-162.5 ft Grab Sample

Depth from Chain-of-Custody



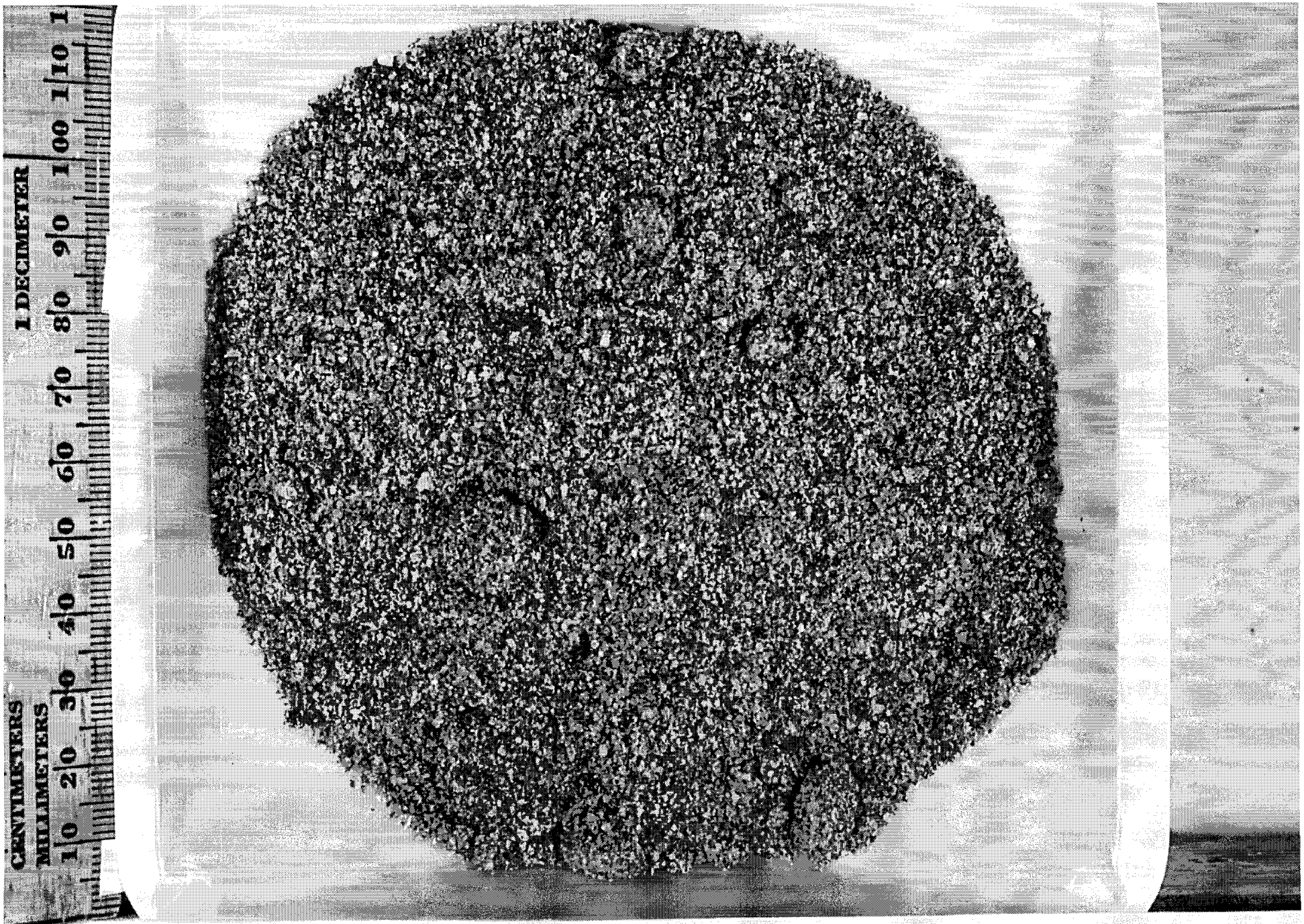
C7514 B22TT3 165-165 ft Grab Sample

Depth from Chain-of-Custody



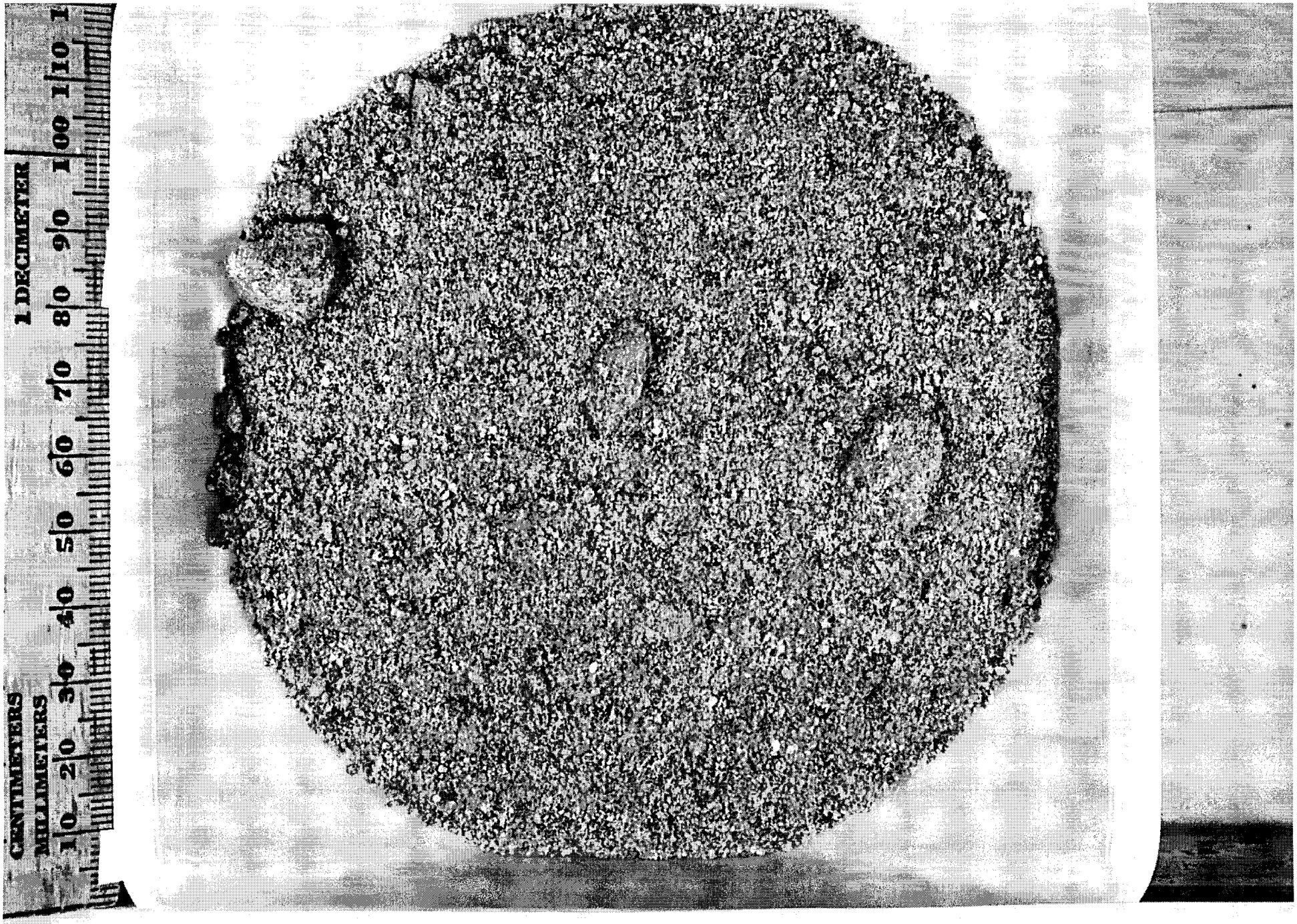
C7514 B22TT4 167.5-167.5 ft Grab Sample

Depth from Chain-of-Custody



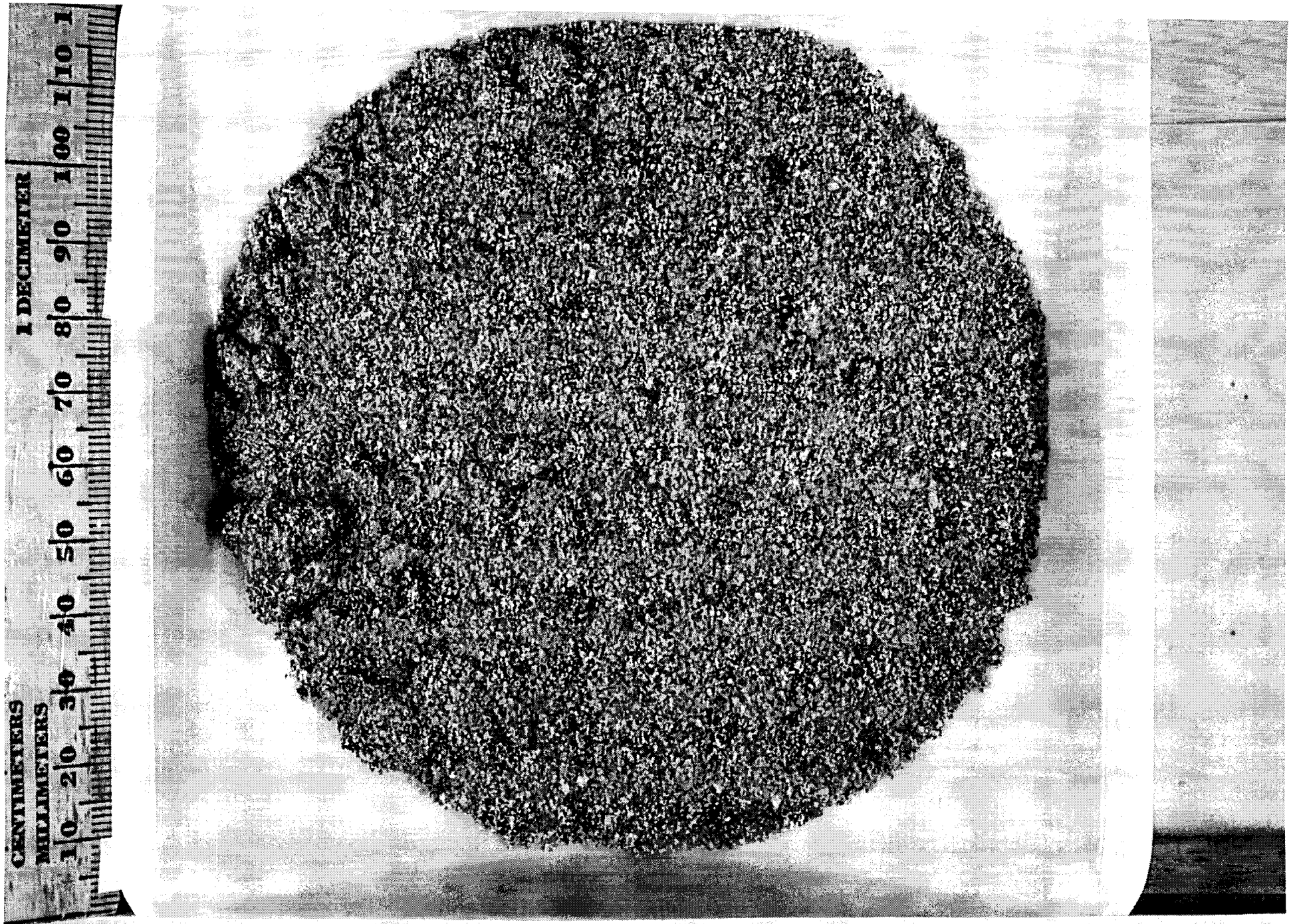
C7514 B22TT5 170-170 ft Grab Sample

Depth from Chain-of-Custody



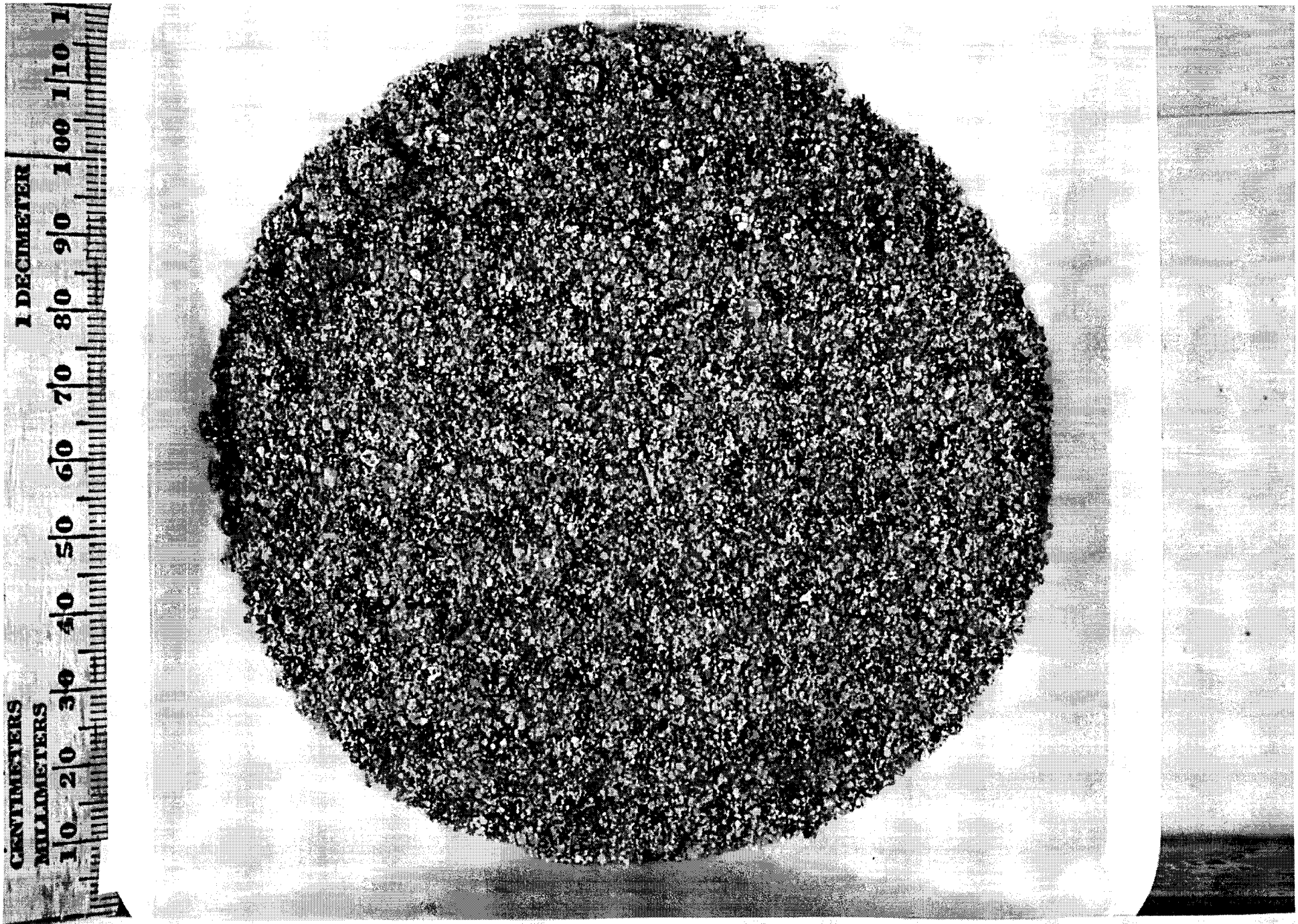
C7514 B22TT6 172.5-172.5 ft Grab Sample

Depth from Chain-of-Custody



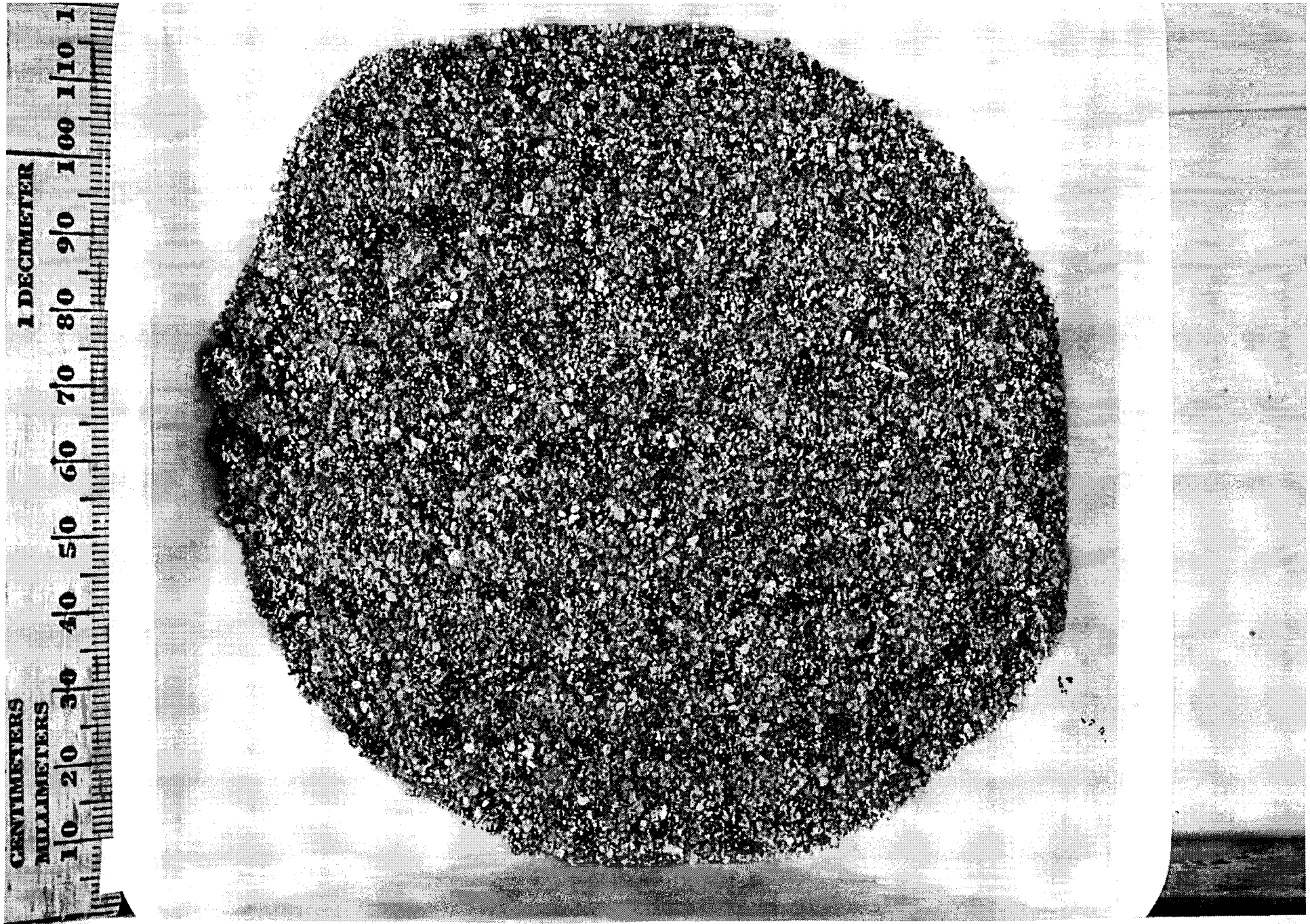
C7514 B22TT7 175-175 ft Grab Sample

Depth from Chain-of-Custody



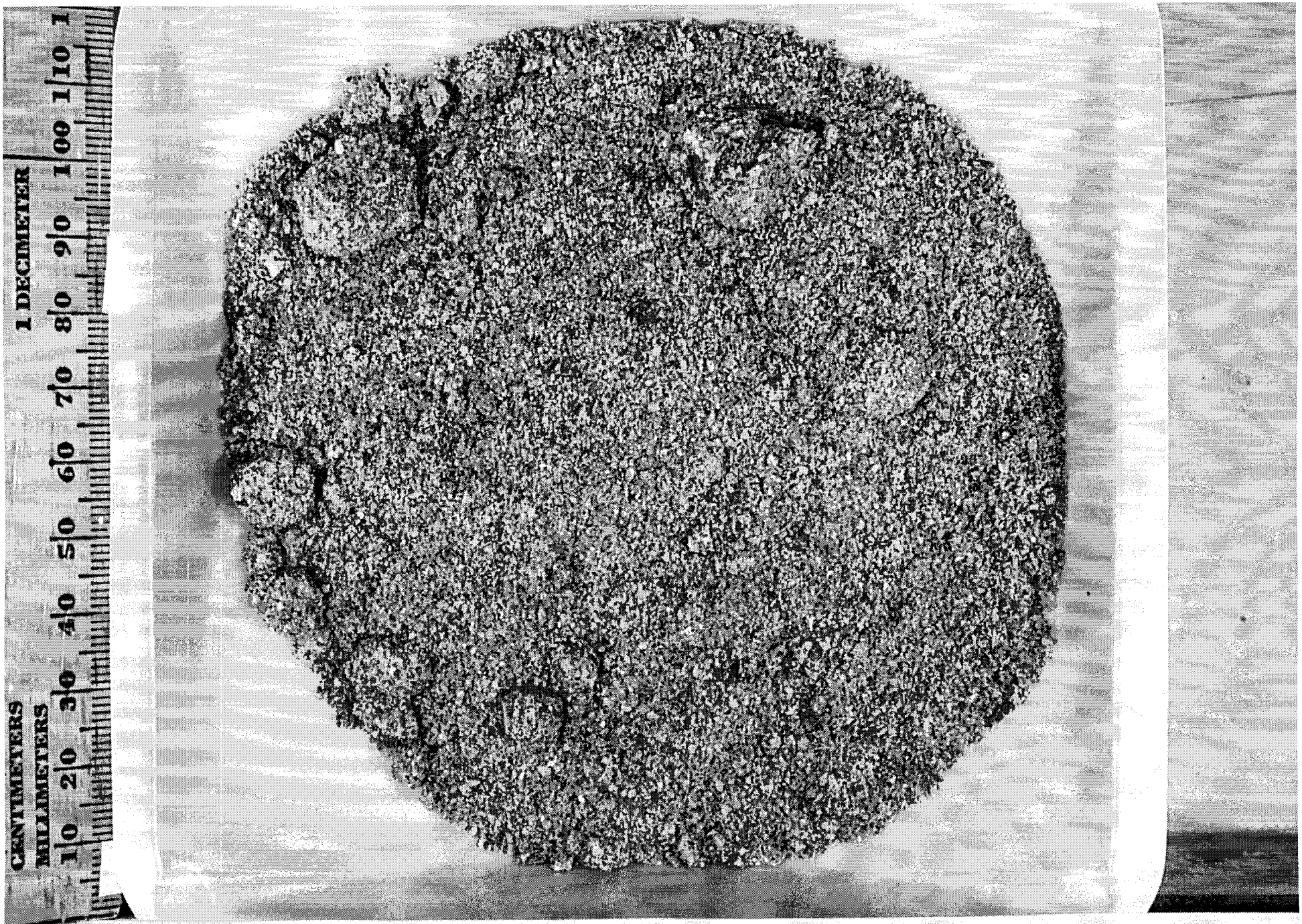
C7514 B22TT8 177.5-177.5 ft Grab Sample

Depth from Chain-of-Custody



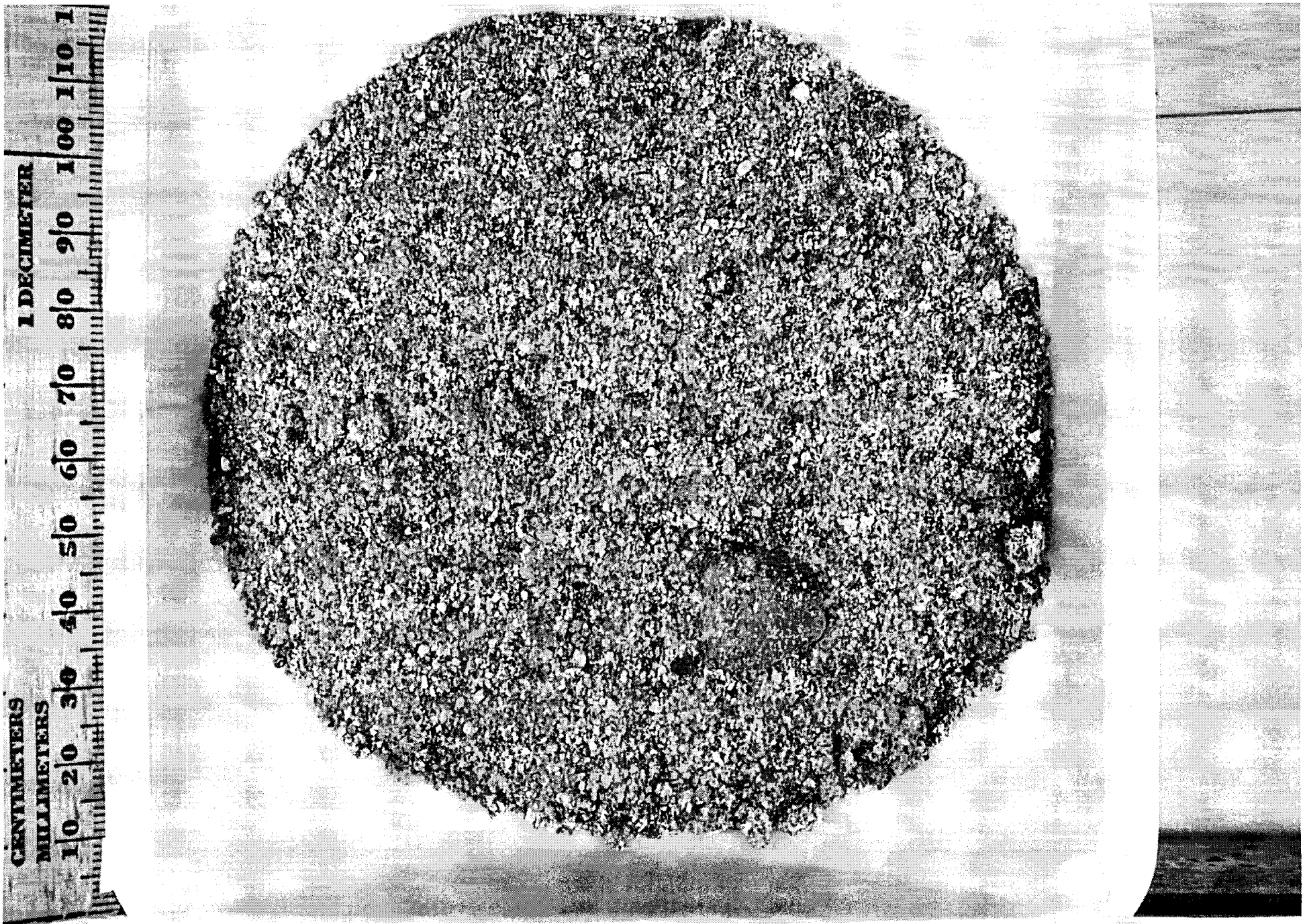
C7514 B22TT9 180-180 ft Grab Sample

Depth from Chain-of-Custody



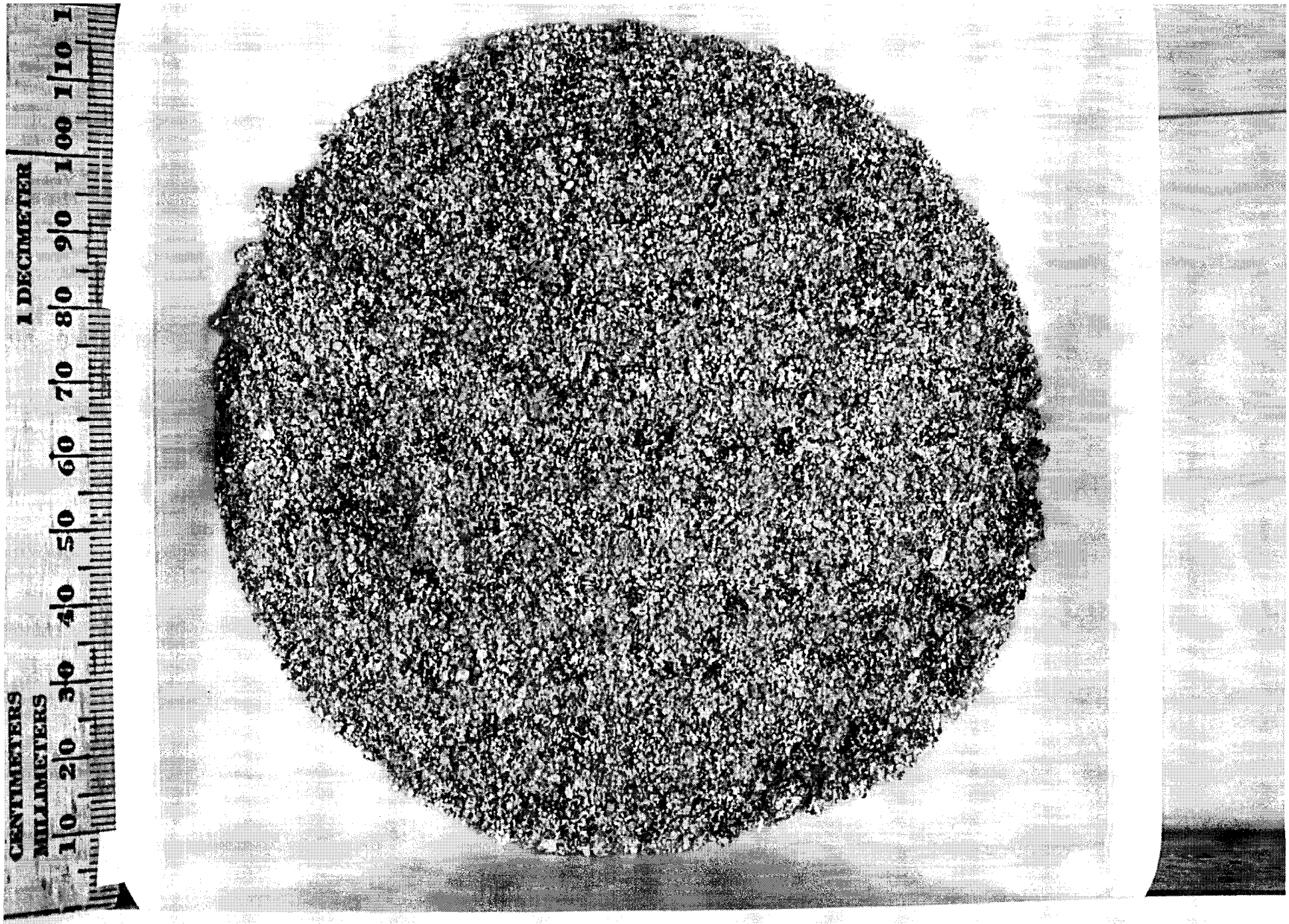
C7514 B22TV0 182.5-182.5 ft Grab Sample

Depth from Chain-of-Custody



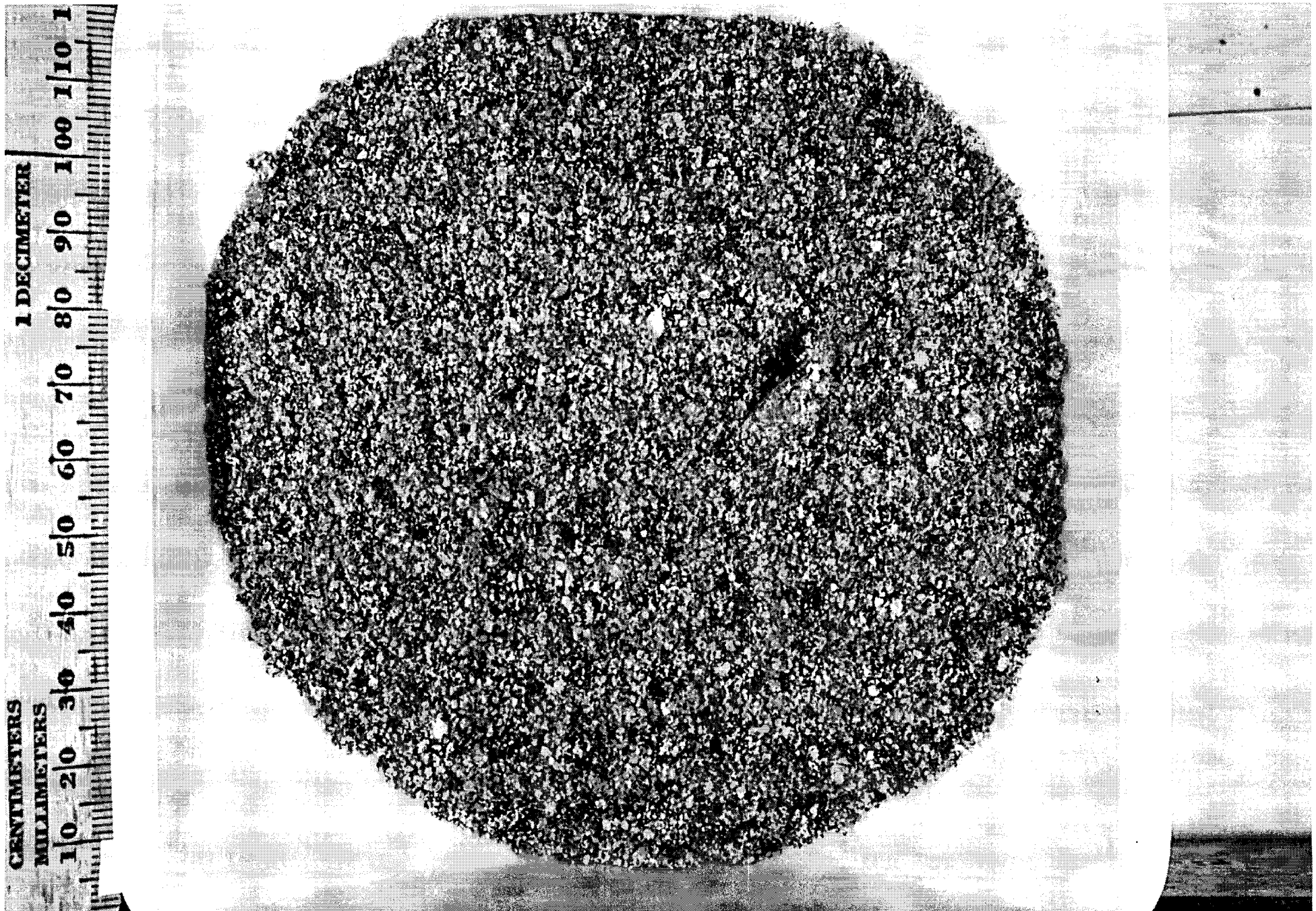
C7514 B22TV1 185-185 ft Grab Sample

Depth from Chain-of-Custody



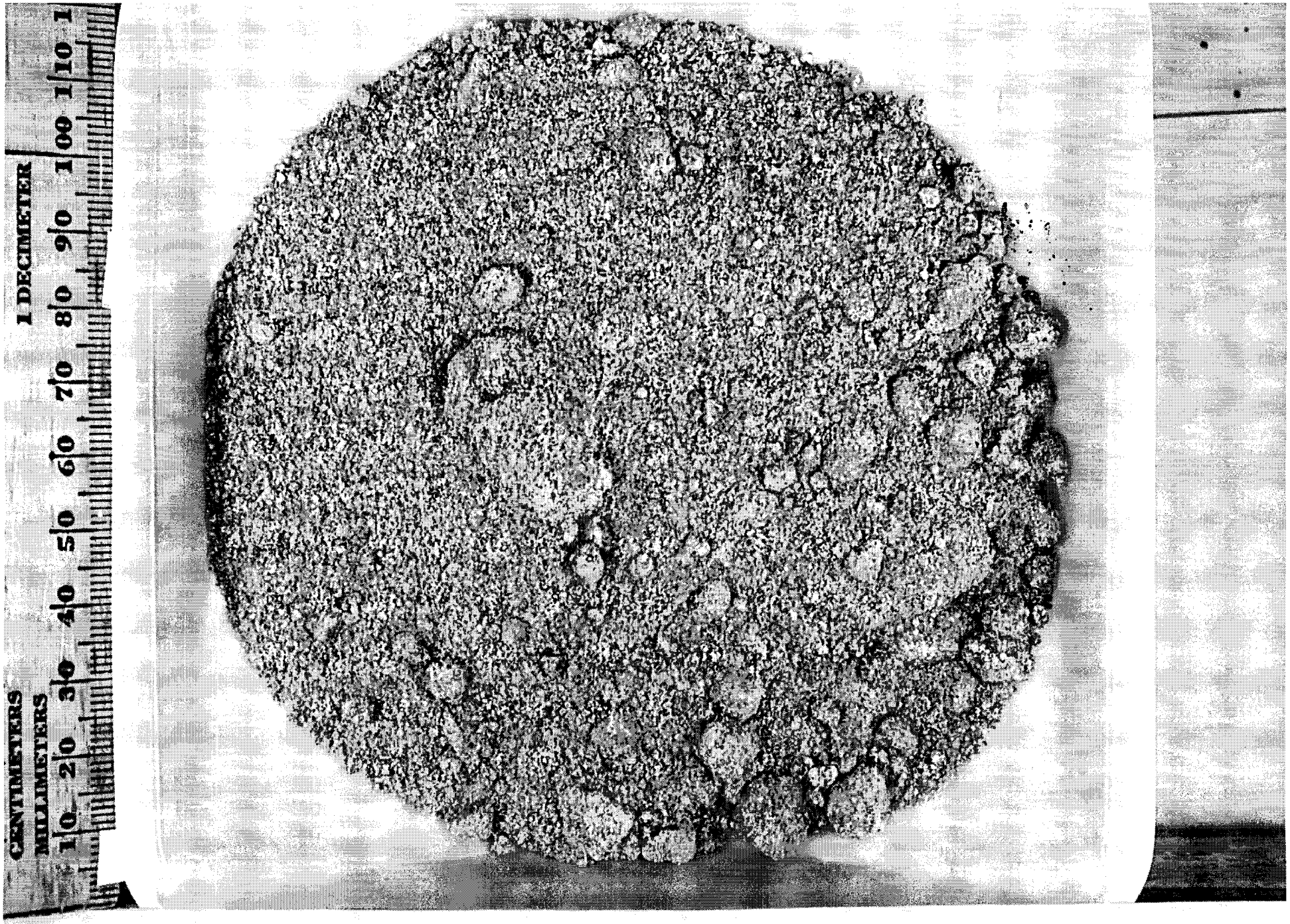
C7514 B22TV2 187.5-187.5 ft Grab Sample

Depth from Chain-of-Custody



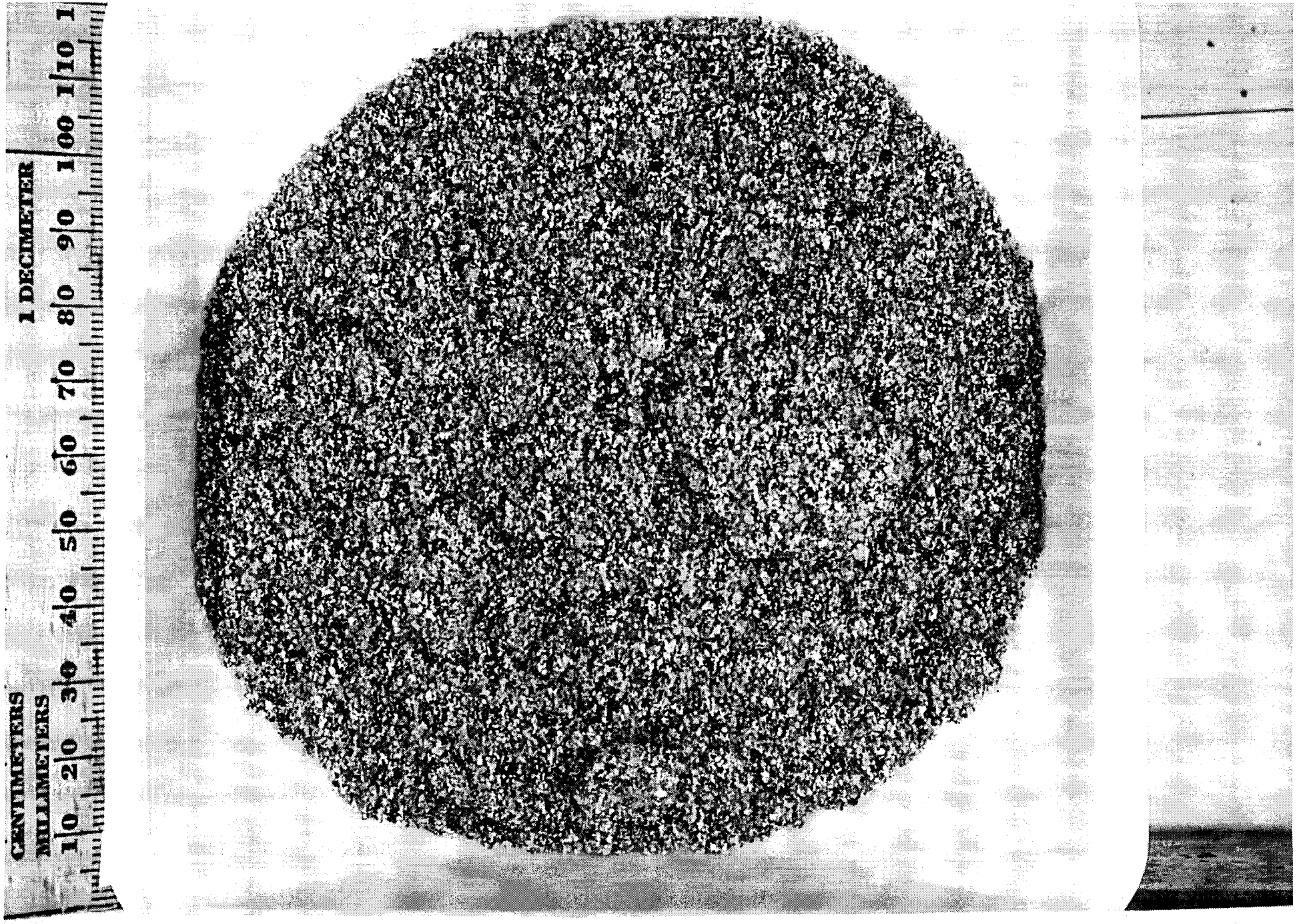
C7514 B22TV3 190-190 ft Grab Sample

Depth from Chain-of-Custody



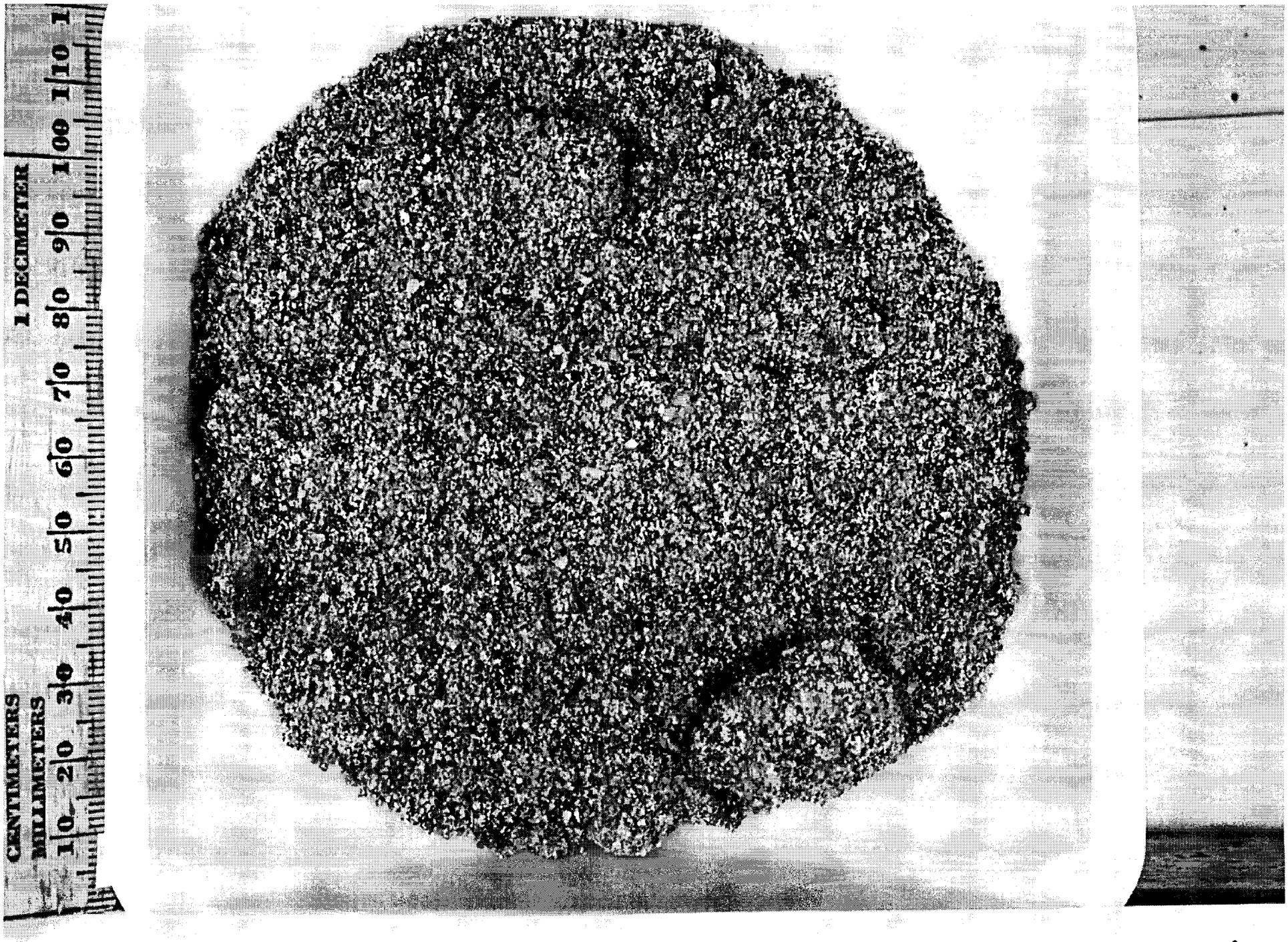
C7514 B22TV4 192.5-192.5 ft Grab Sample

Depth from Chain-of-Custody



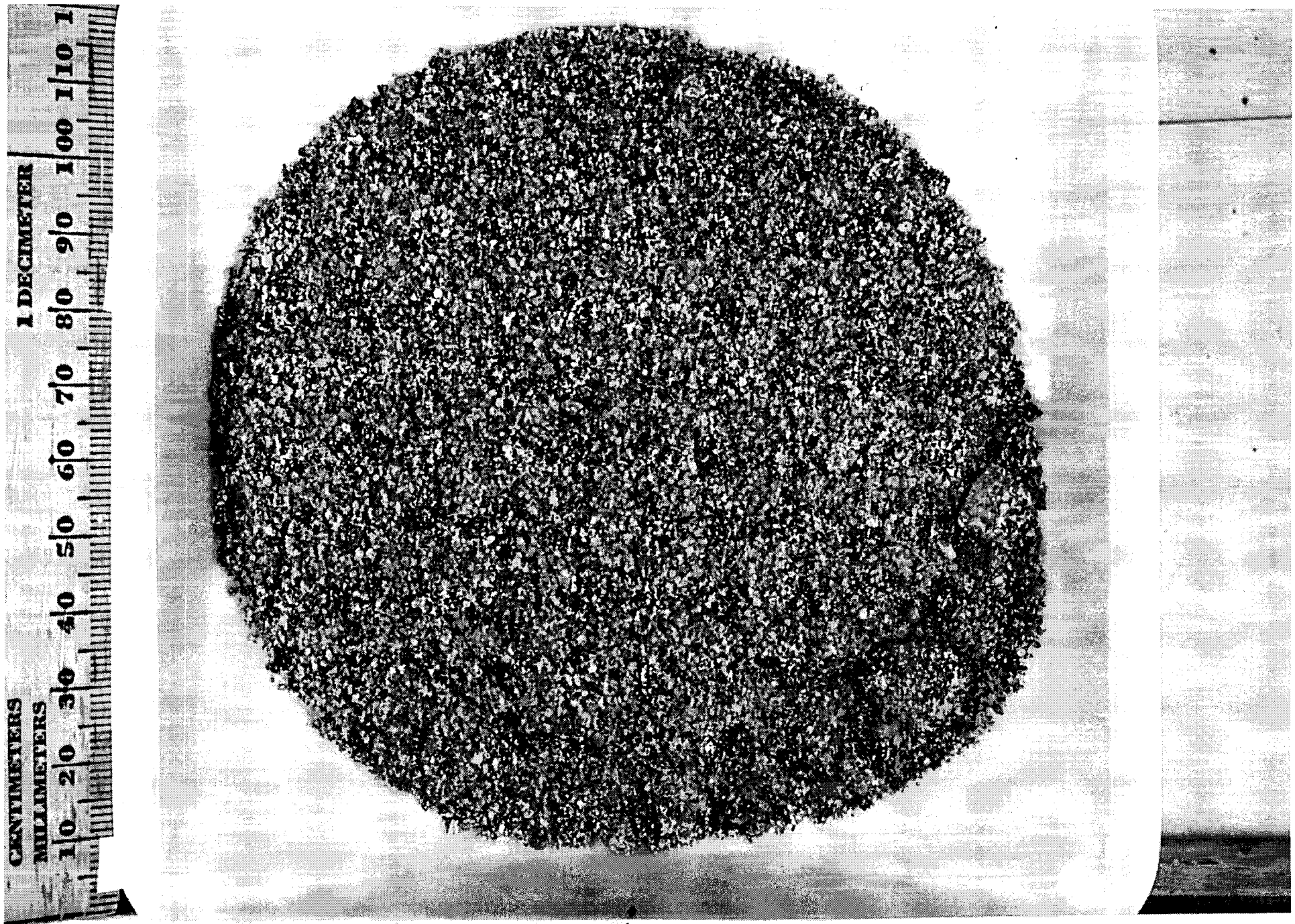
C7514 B22TV5 195-195 ft Grab Sample

Depth from Chain-of-Custody



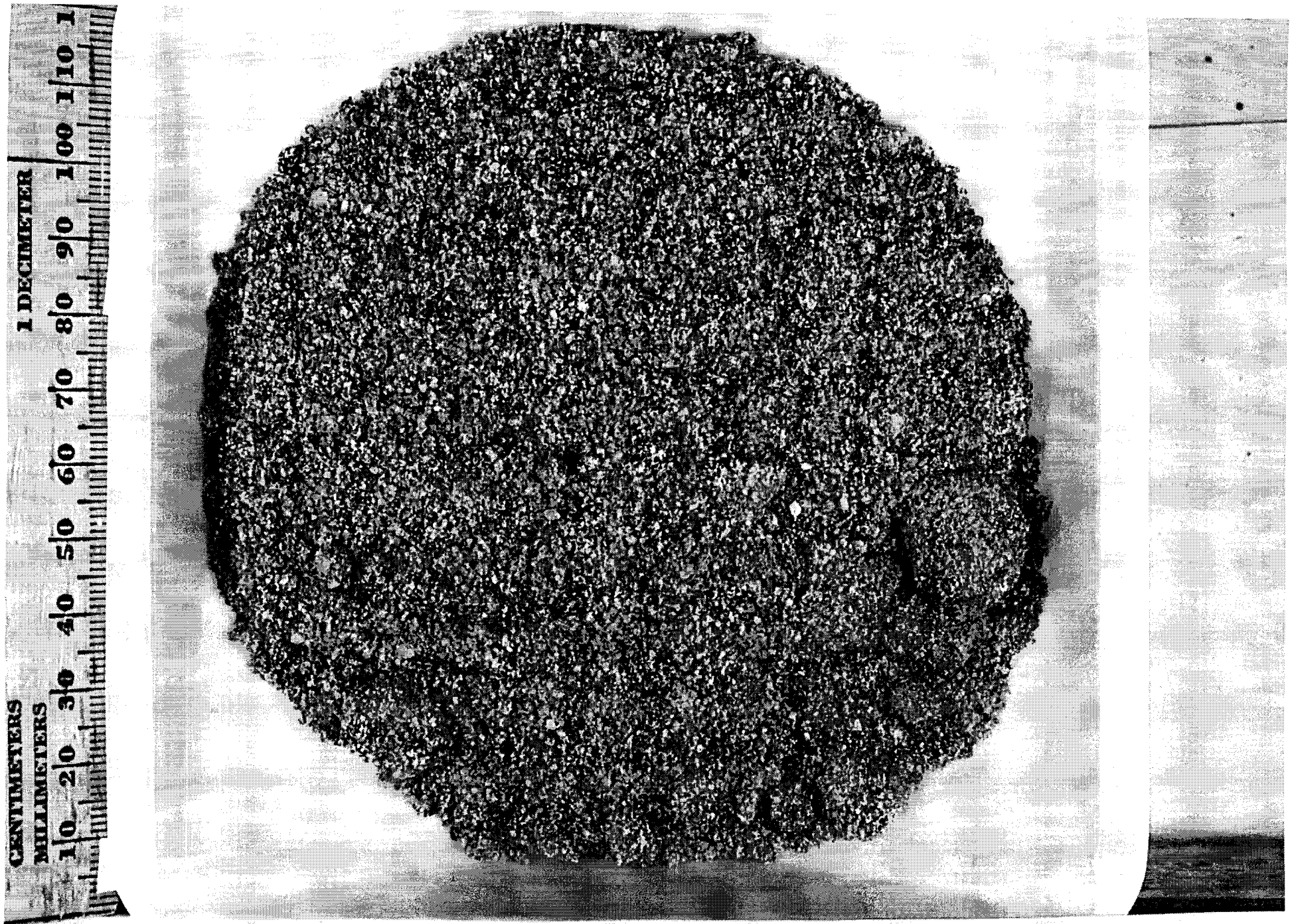
C7514 B22TV6 197.5-197.5 ft Grab Sample

Depth from Chain-of-Custody



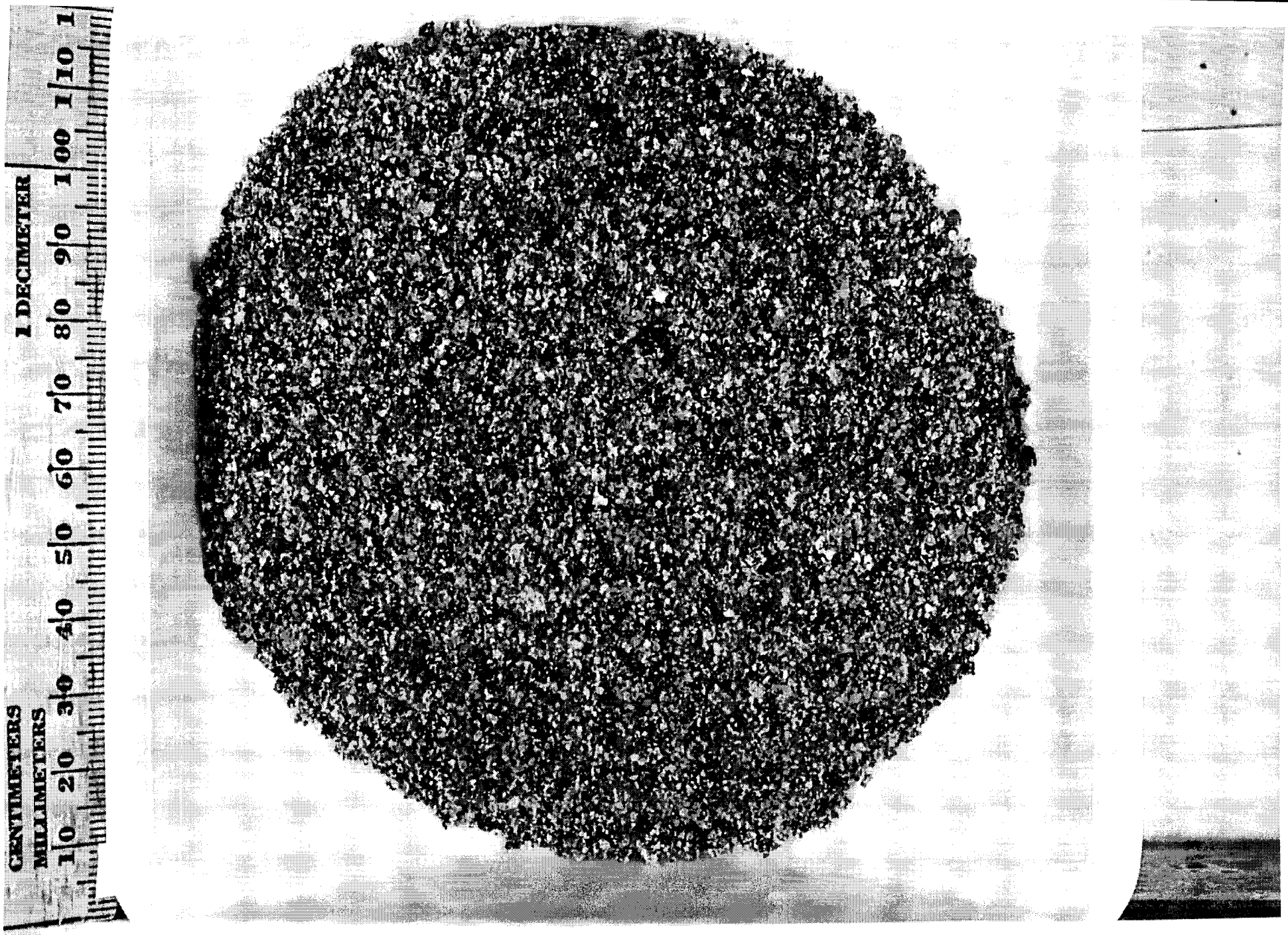
C7514 B22TV7 200-200 ft Grab Sample

Depth from Chain-of-Custody



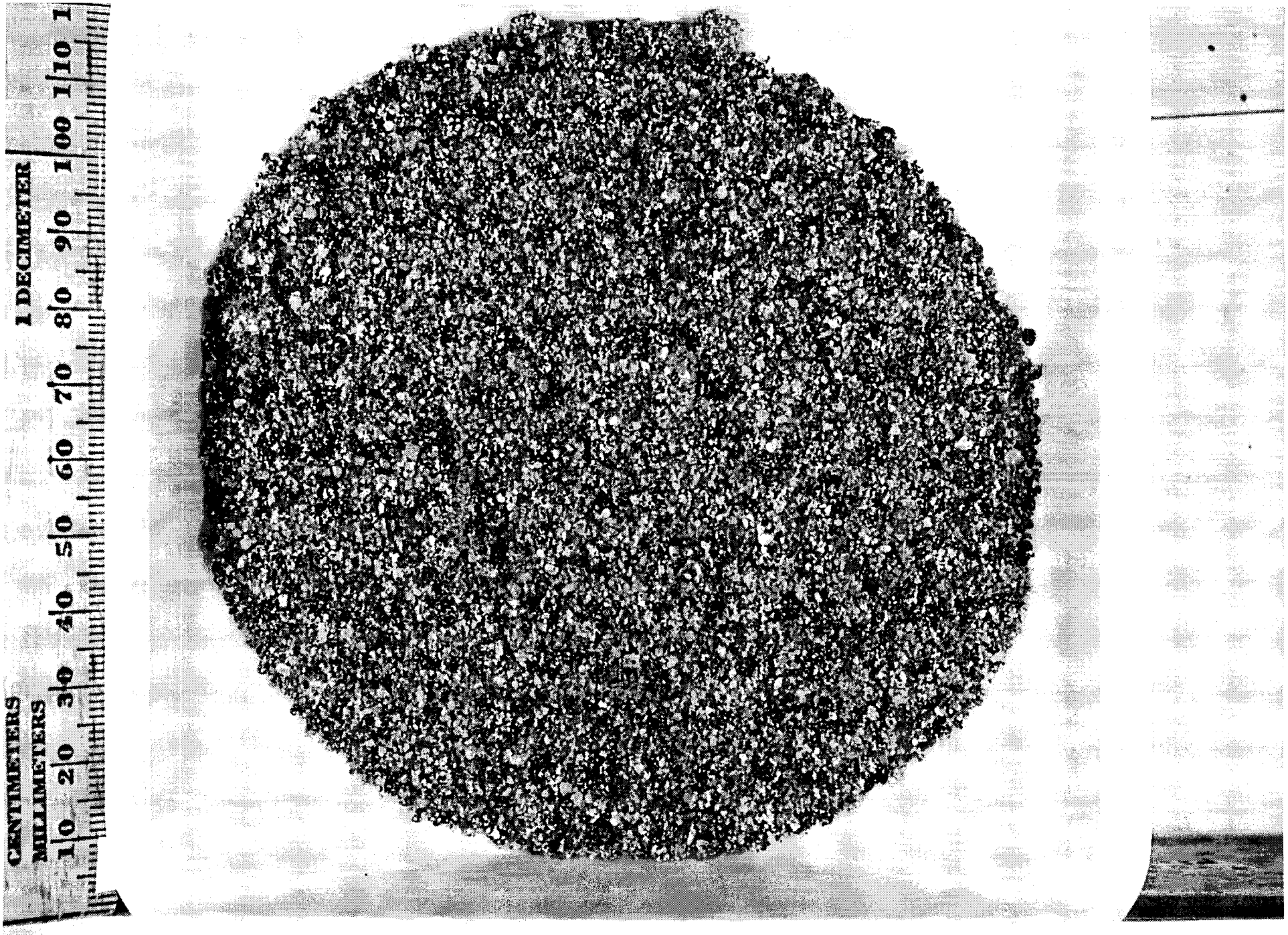
C7514 B22TV8 202.5-202.5 ft Grab Sample

Depth from Chain-of-Custody



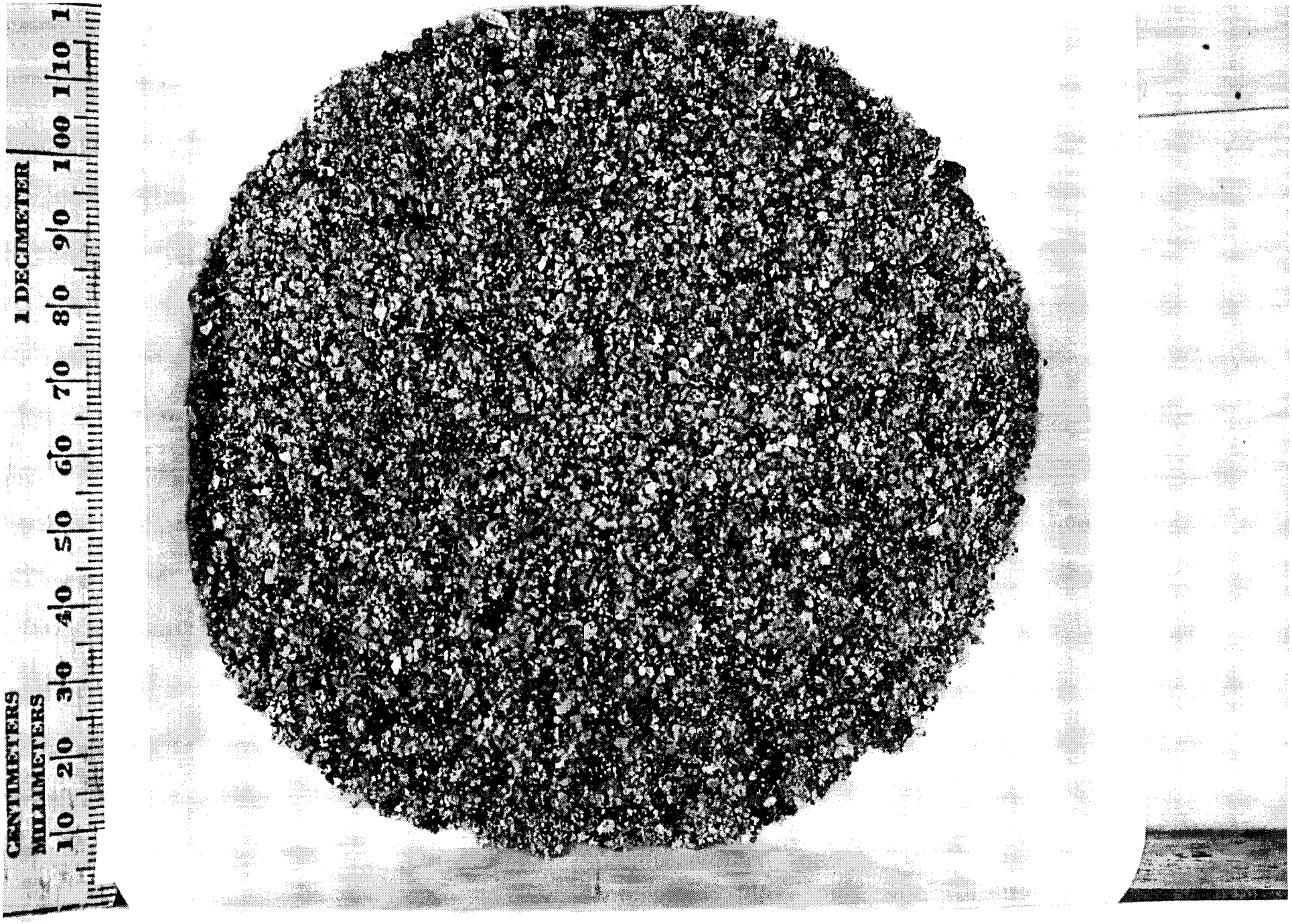
C7514 B22TV9 205-205 ft Grab Sample

Depth from Chain-of-Custody



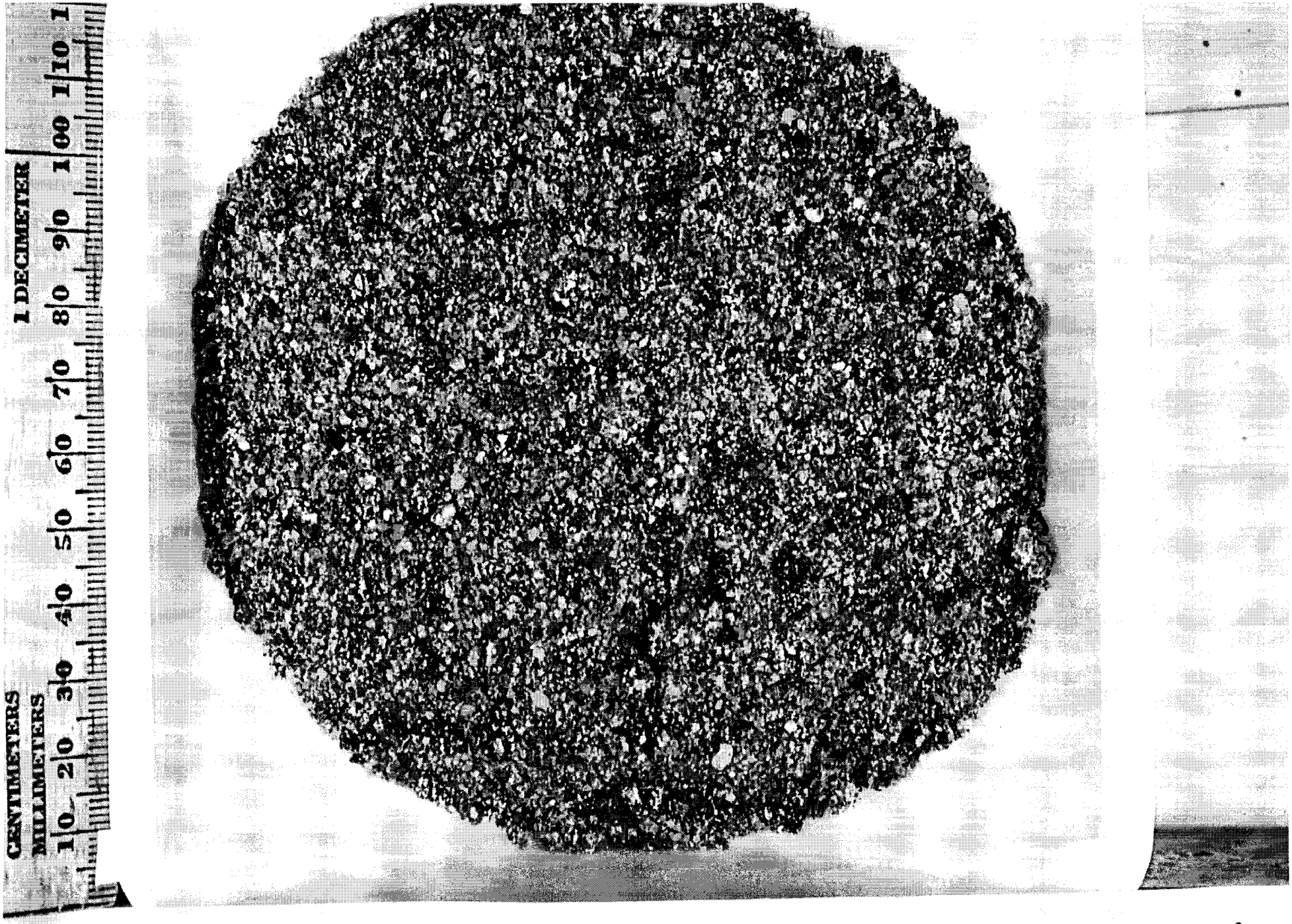
C7514 B22TW0 207.5-207.5 ft Grab Sample

Depth from Chain-of-Custody



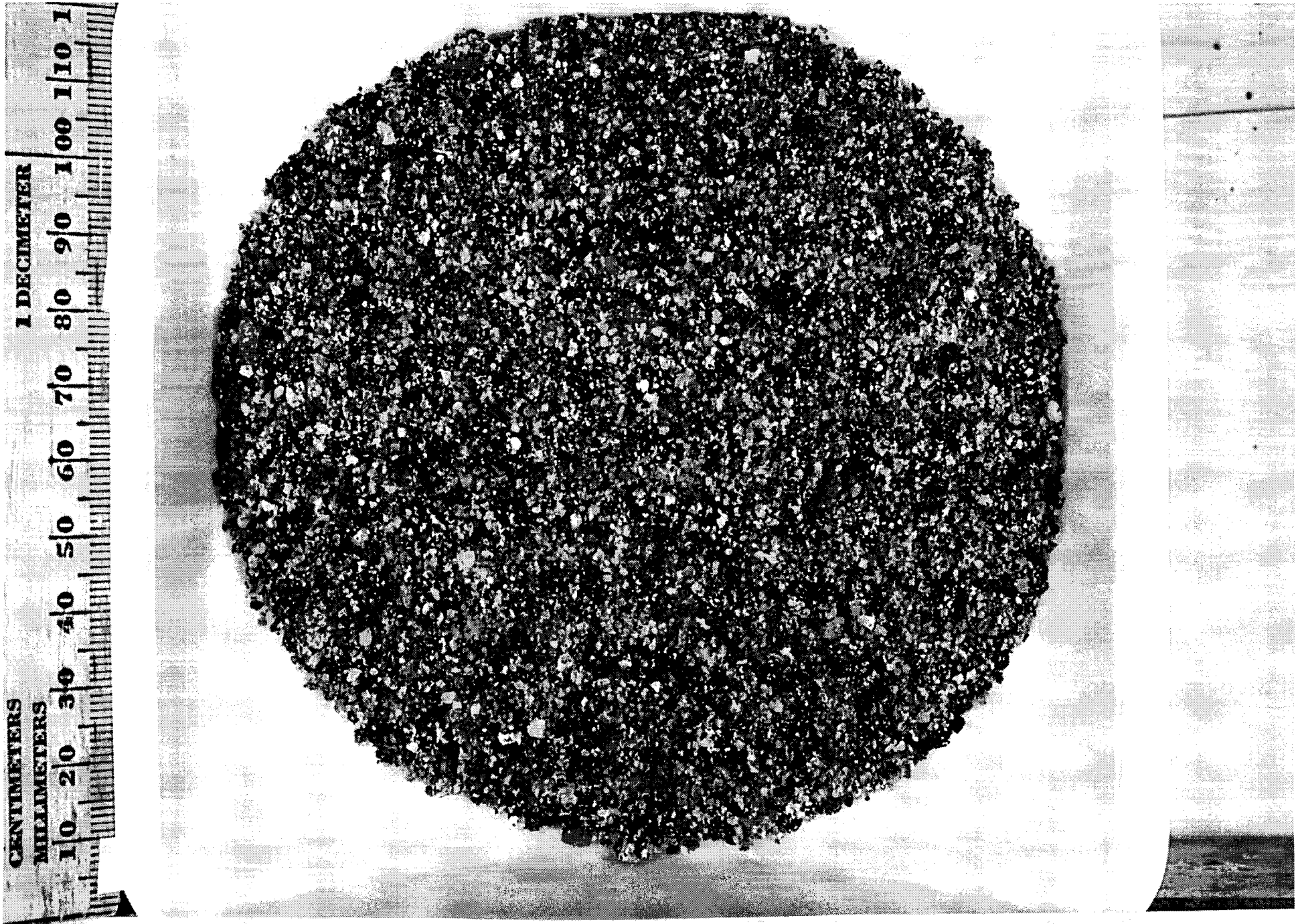
C7514 B22TW1 210-210 ft Grab Sample

Depth from Chain-of-Custody



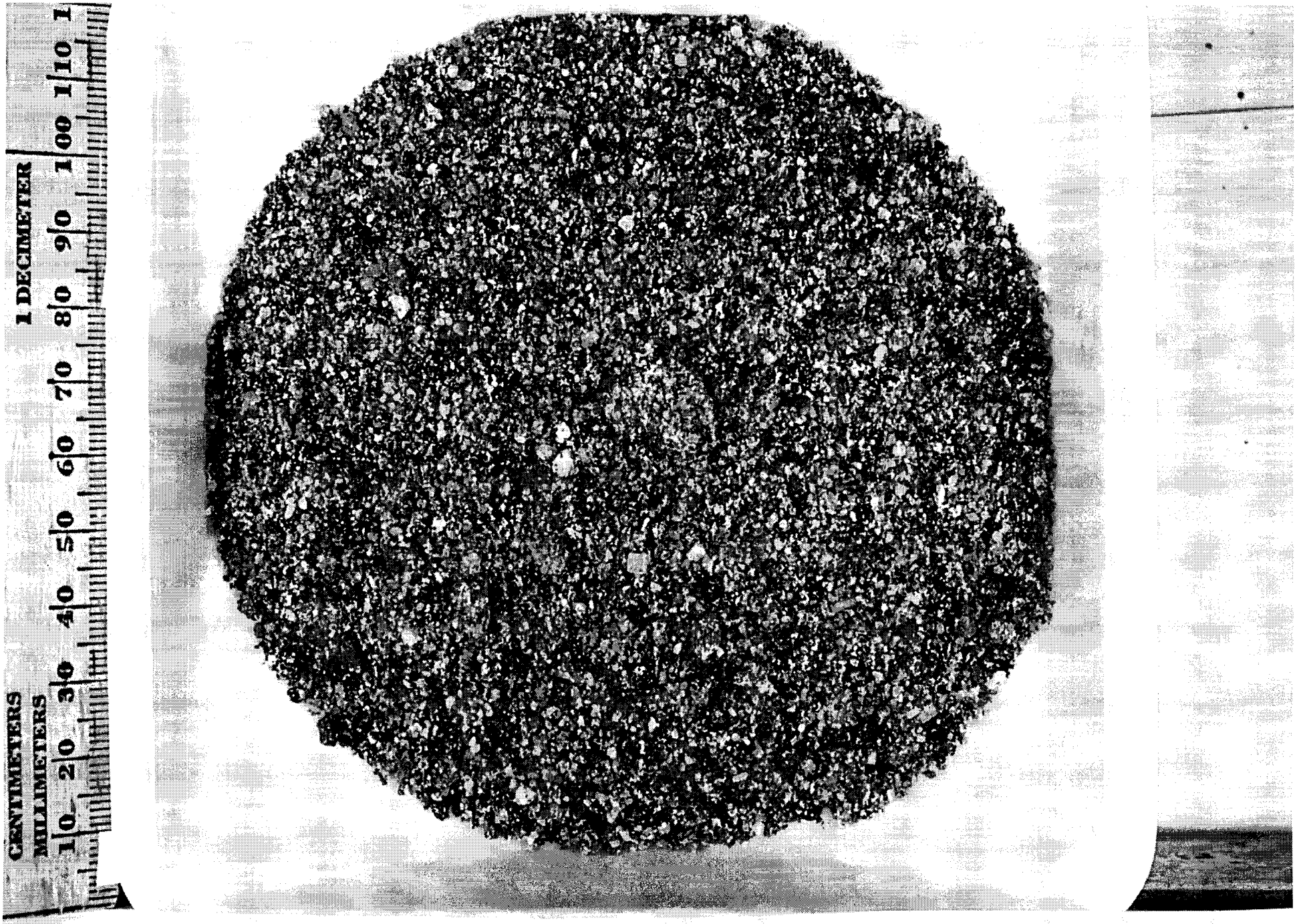
C7514 B22TW2 212.5-212.5 ft Grab Sample

Depth from Chain-of-Custody



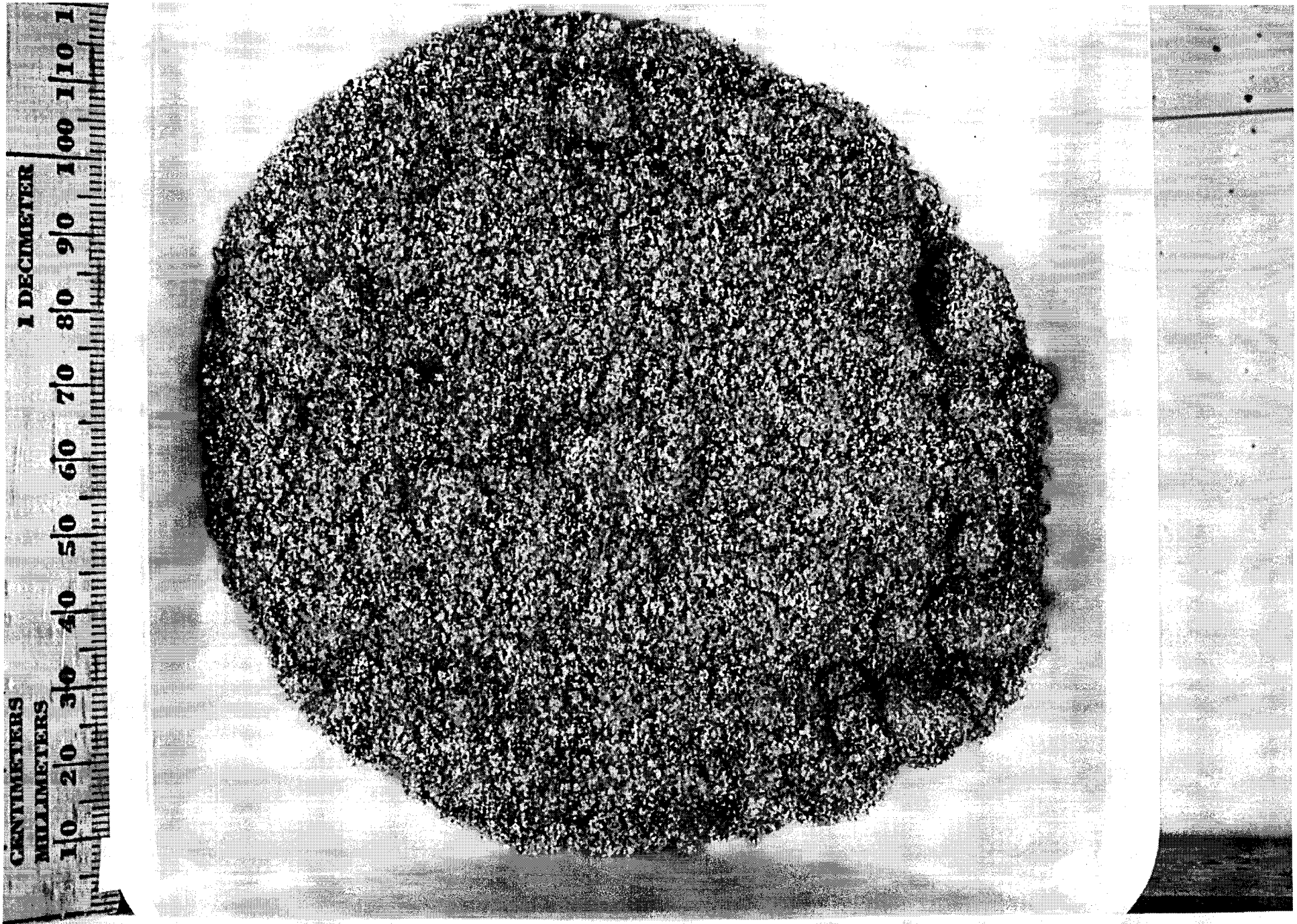
C7514 B22TW3 215-215 ft Grab Sample

Depth from Chain-of-Custody



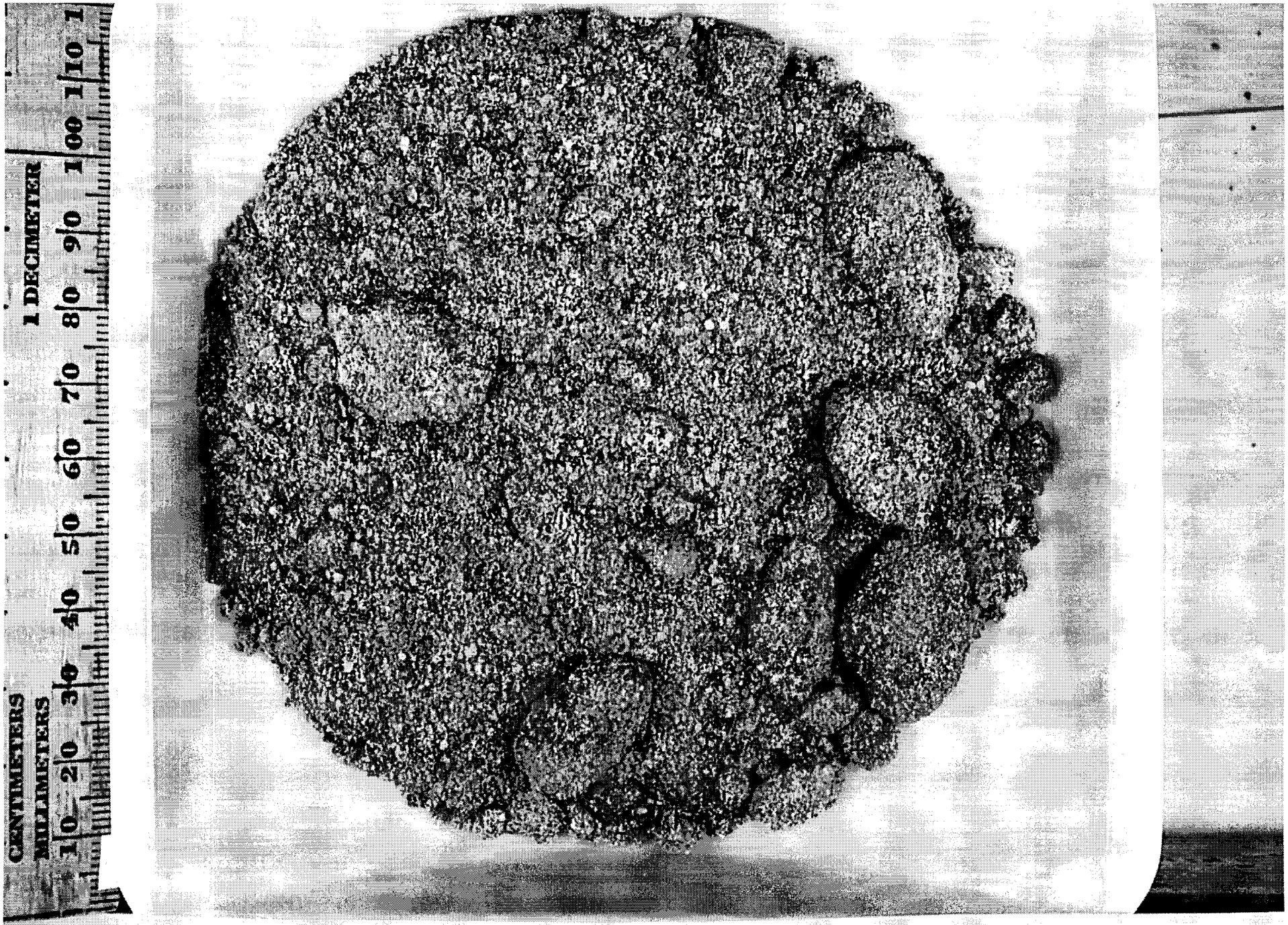
C7514 B22TW4 217.5-217.5 ft Grab Sample

Depth from Chain-of-Custody



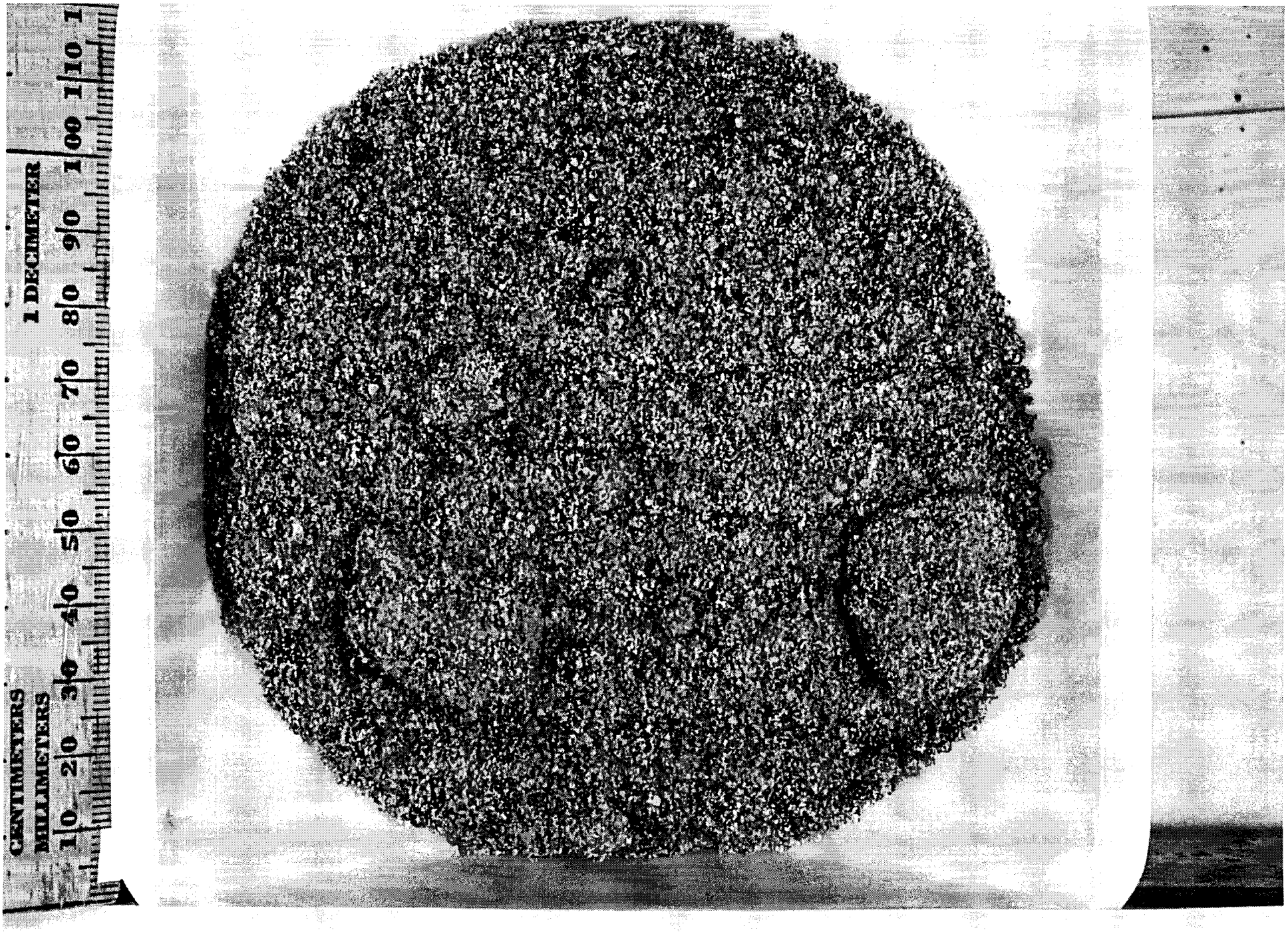
C7514 B22TW5 220-220 ft Grab Sample

Depth from Chain-of-Custody



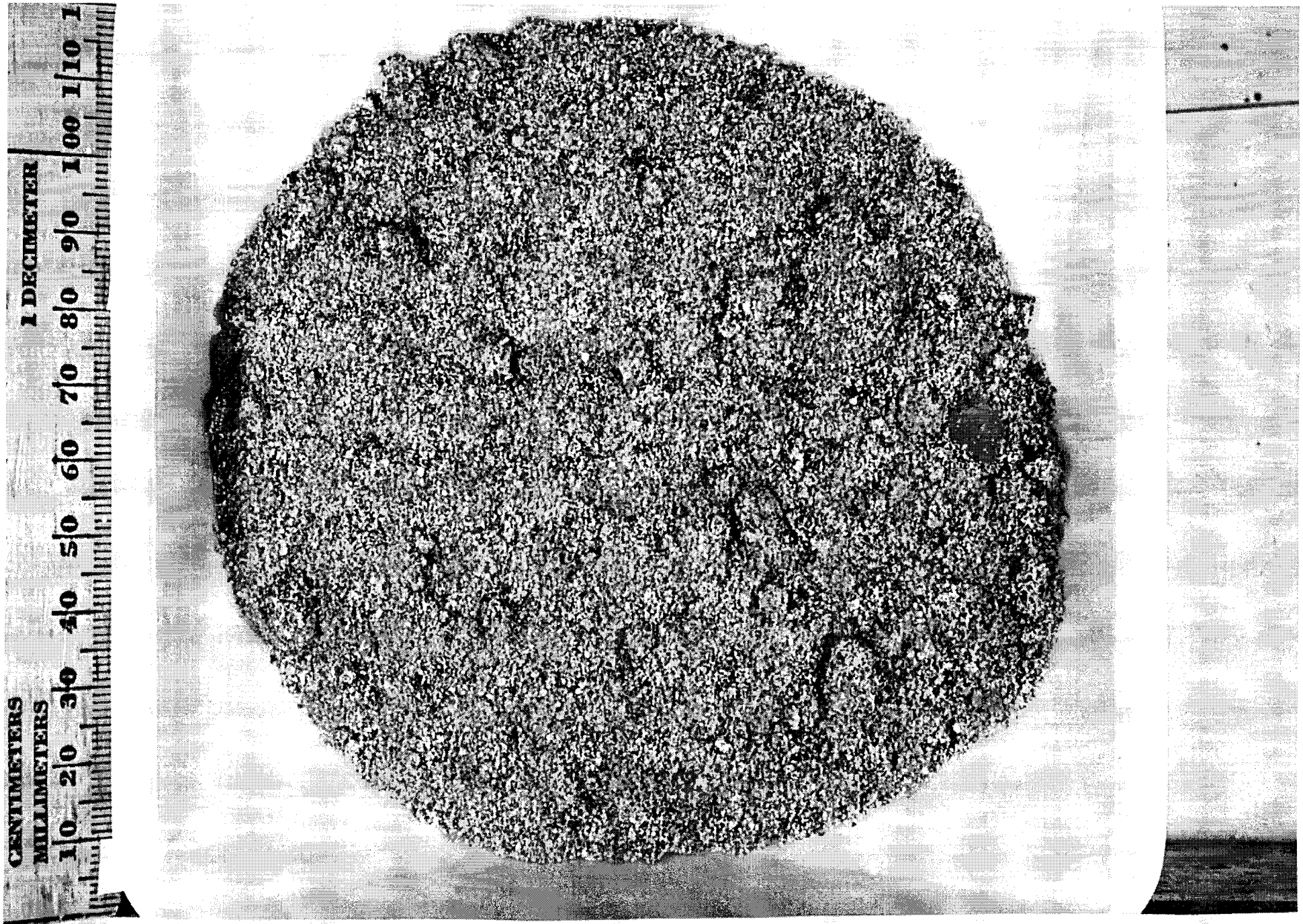
C7514 B22TW6 222.5-222.5 ft Grab Sample

Depth from Chain-of-Custody



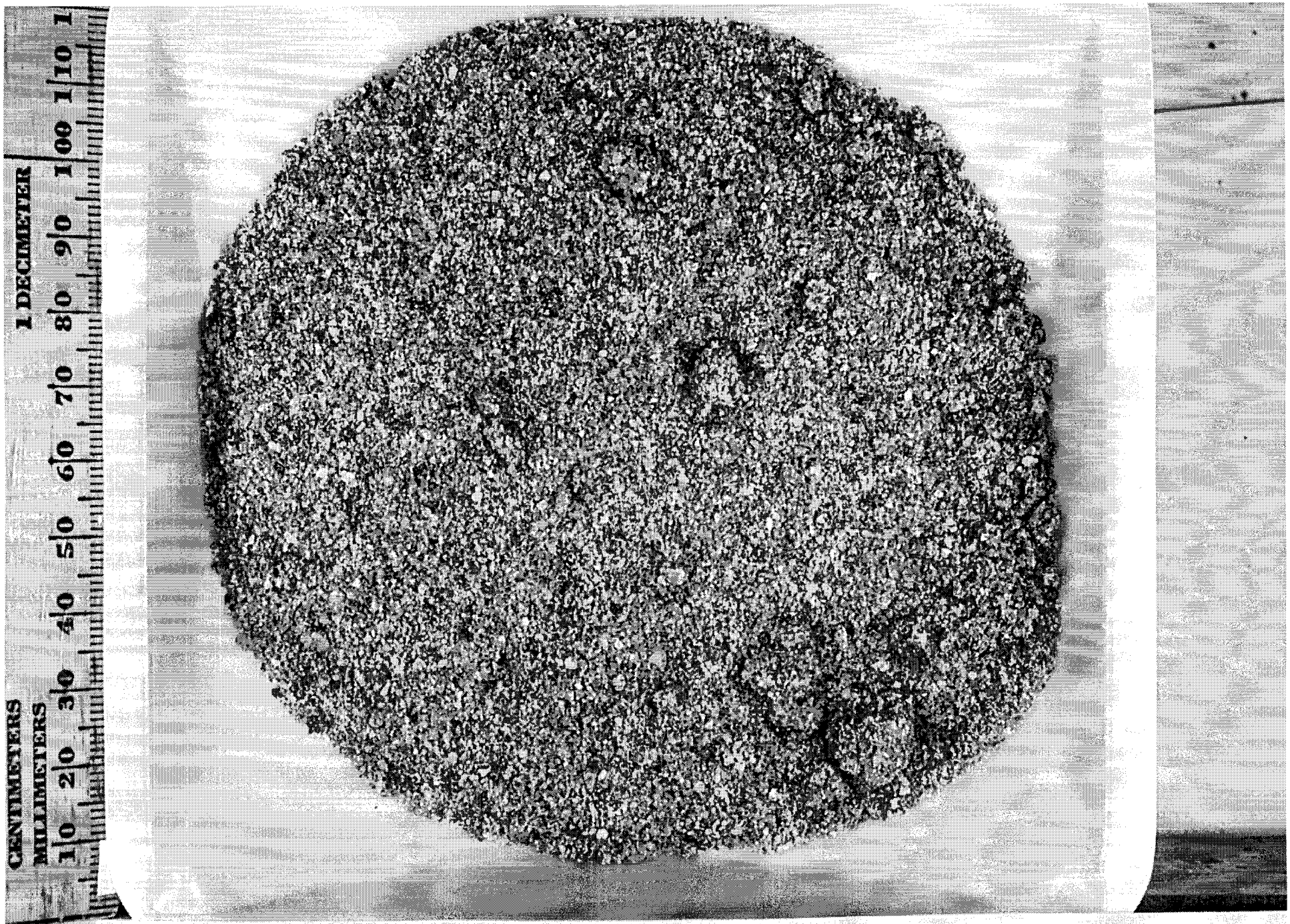
C7514 B22TW7 225-225 ft Grab Sample

Depth from Chain-of-Custody



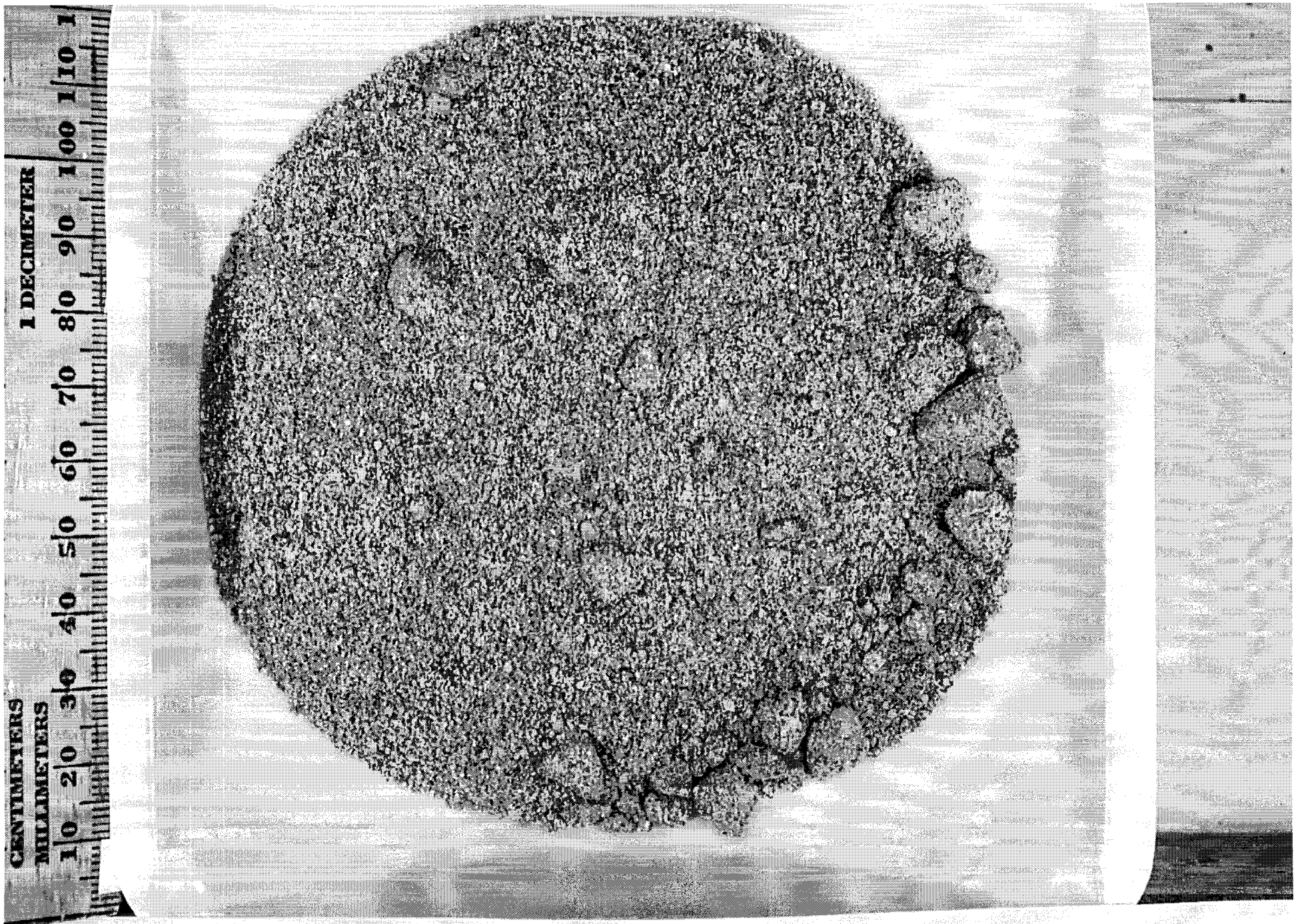
C7514 B22TW8 227-227 ft Grab Sample

Depth from Chain-of-Custody



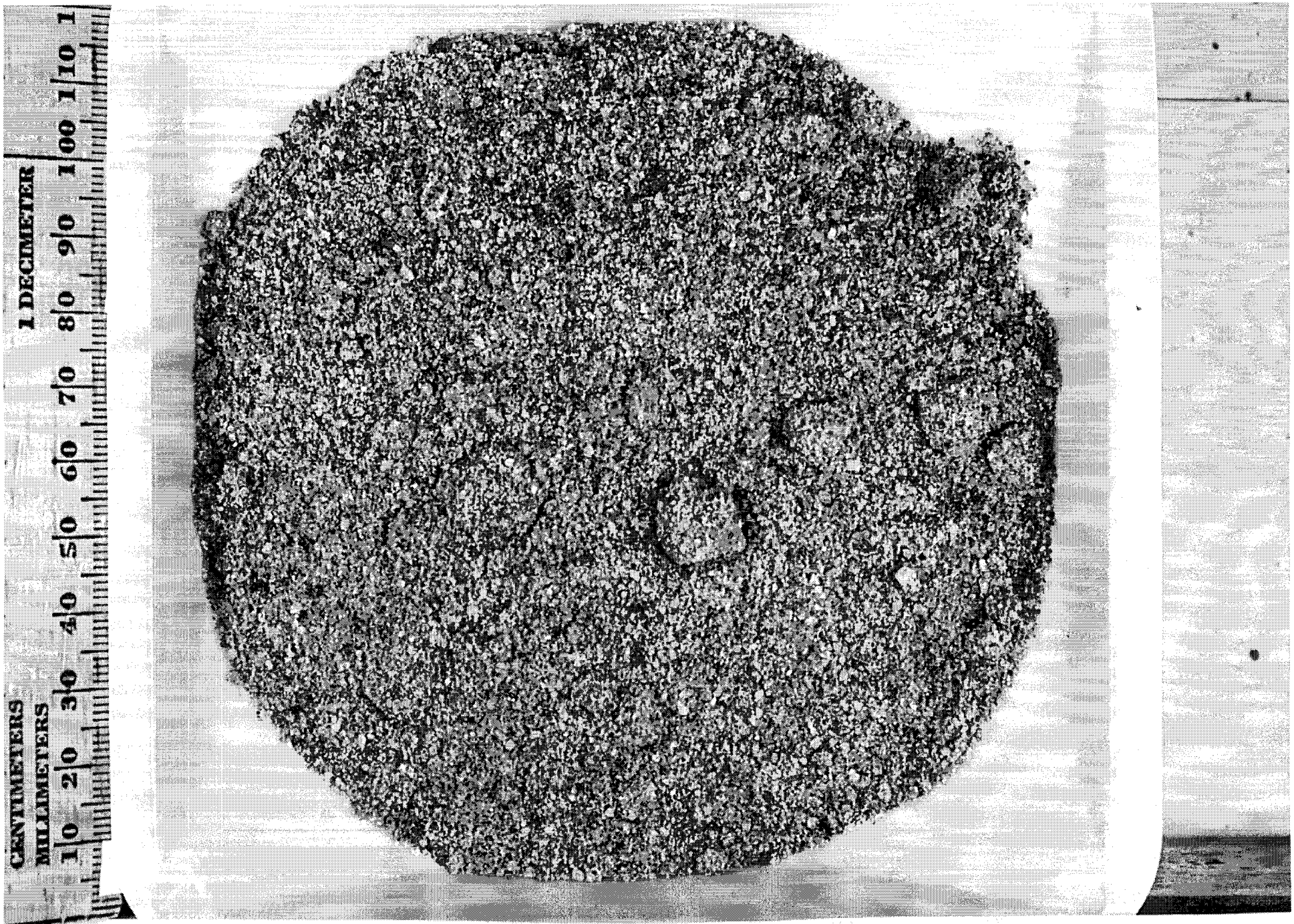
C7514 B22TW9 230-230 ft Grab Sample

Depth from Chain-of-Custody



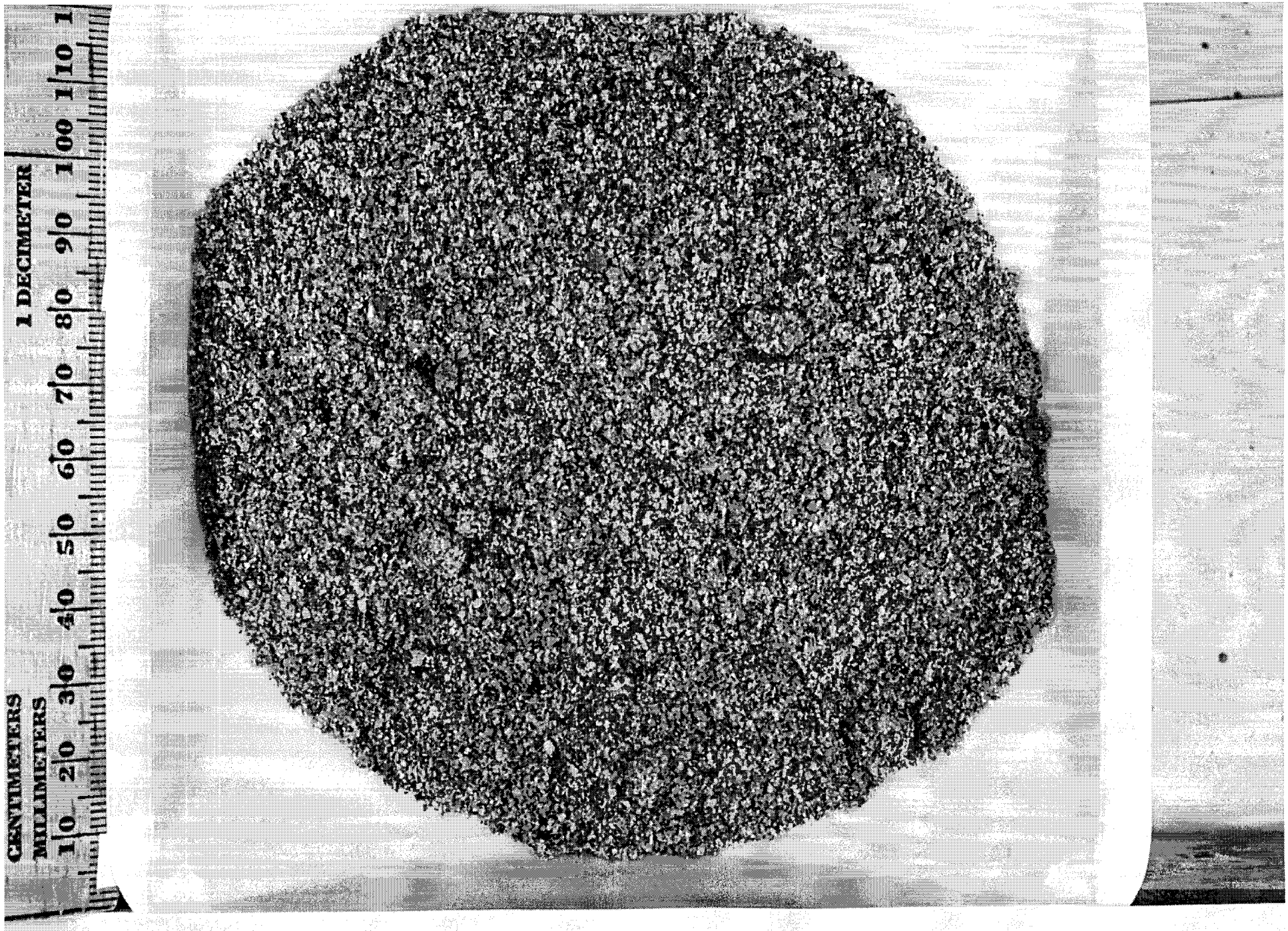
C7514 B22TX0 232.6-232.6 ft Grab Sample

Depth from Chain-of-Custody



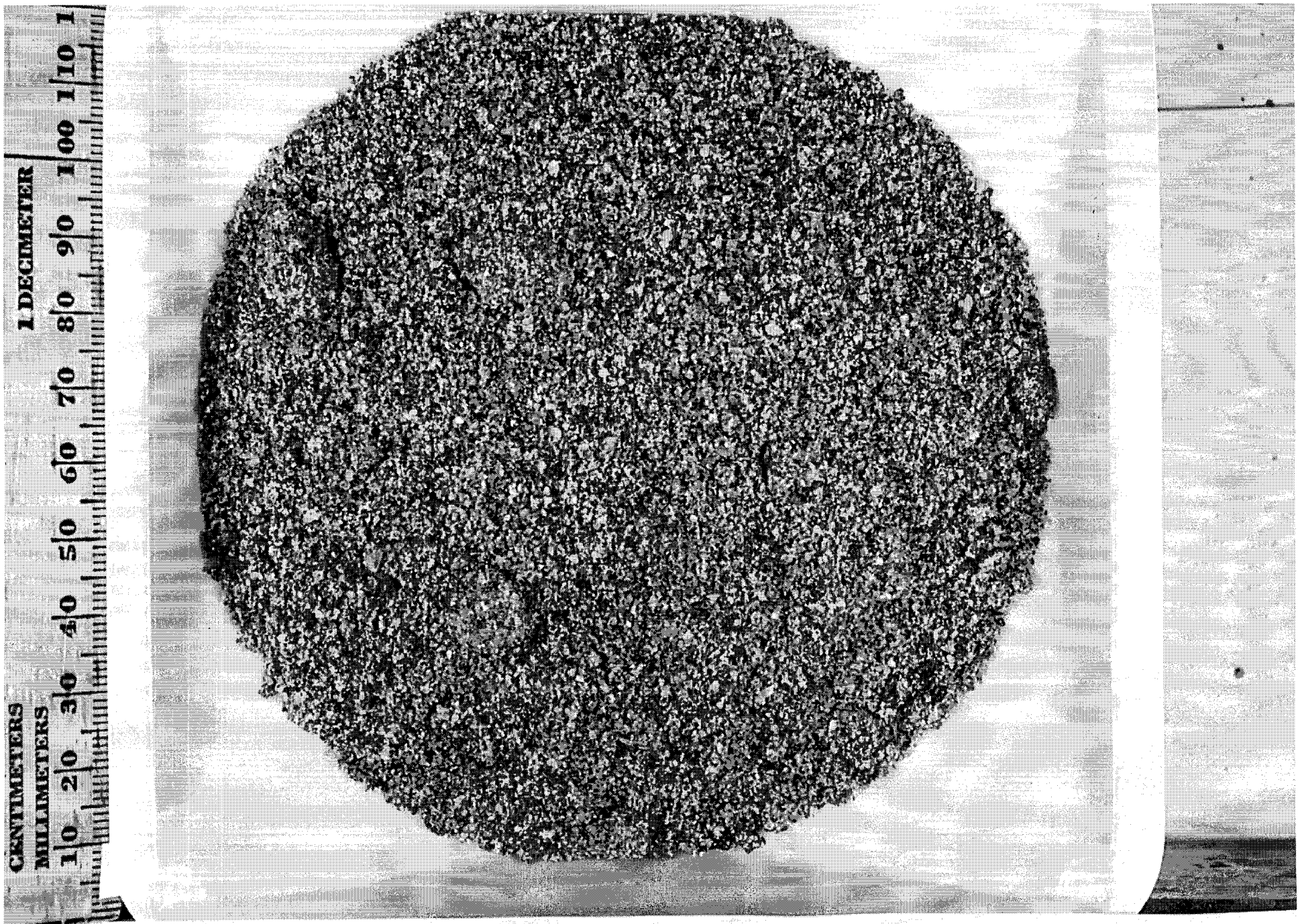
C7514 B22TX1 235.5-235.5 ft Grab Sample

Depth from Chain-of-Custody



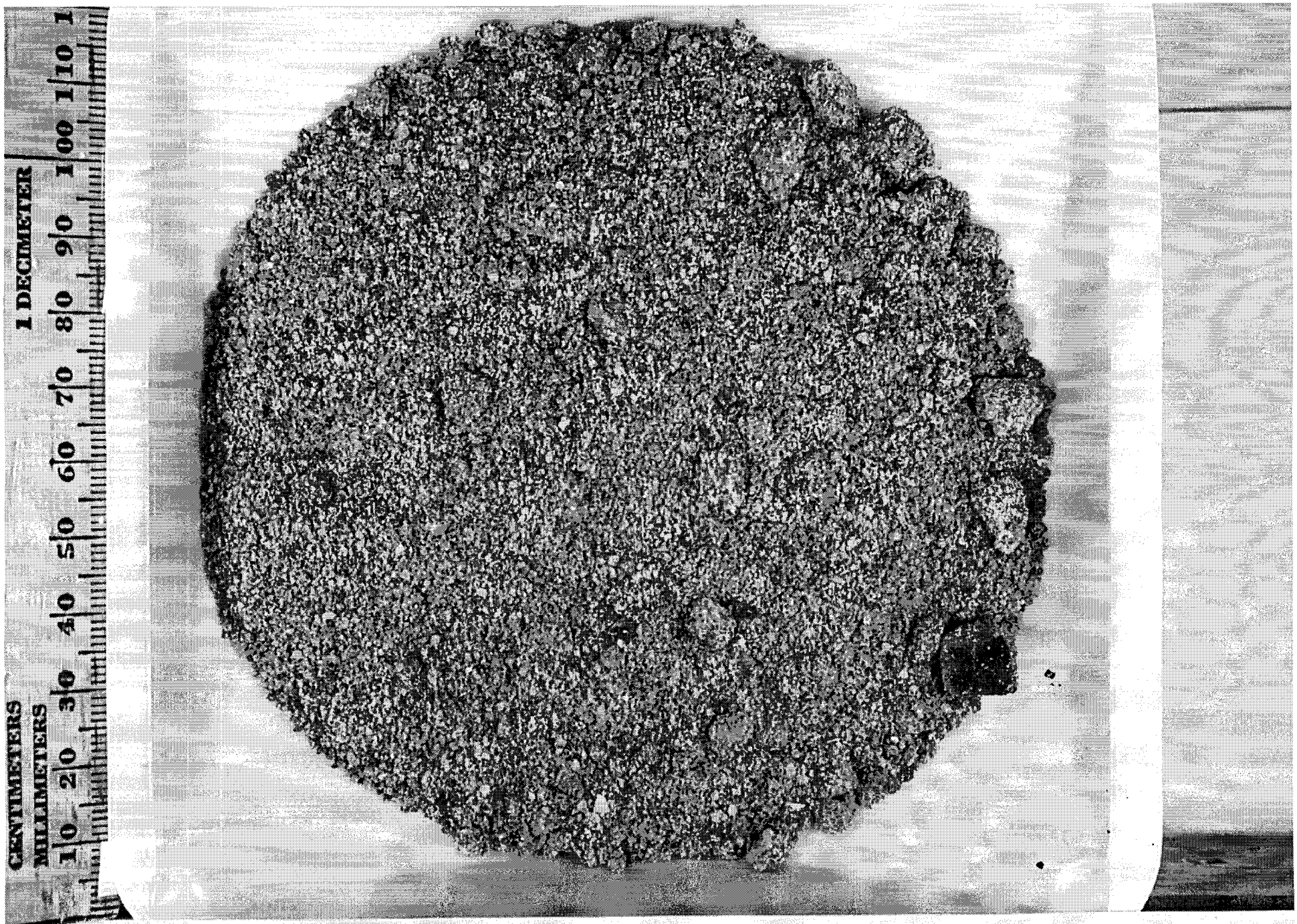
C7514 B22TX2 237.5-237.5 ft Grab Sample

Depth from Chain-of-Custody



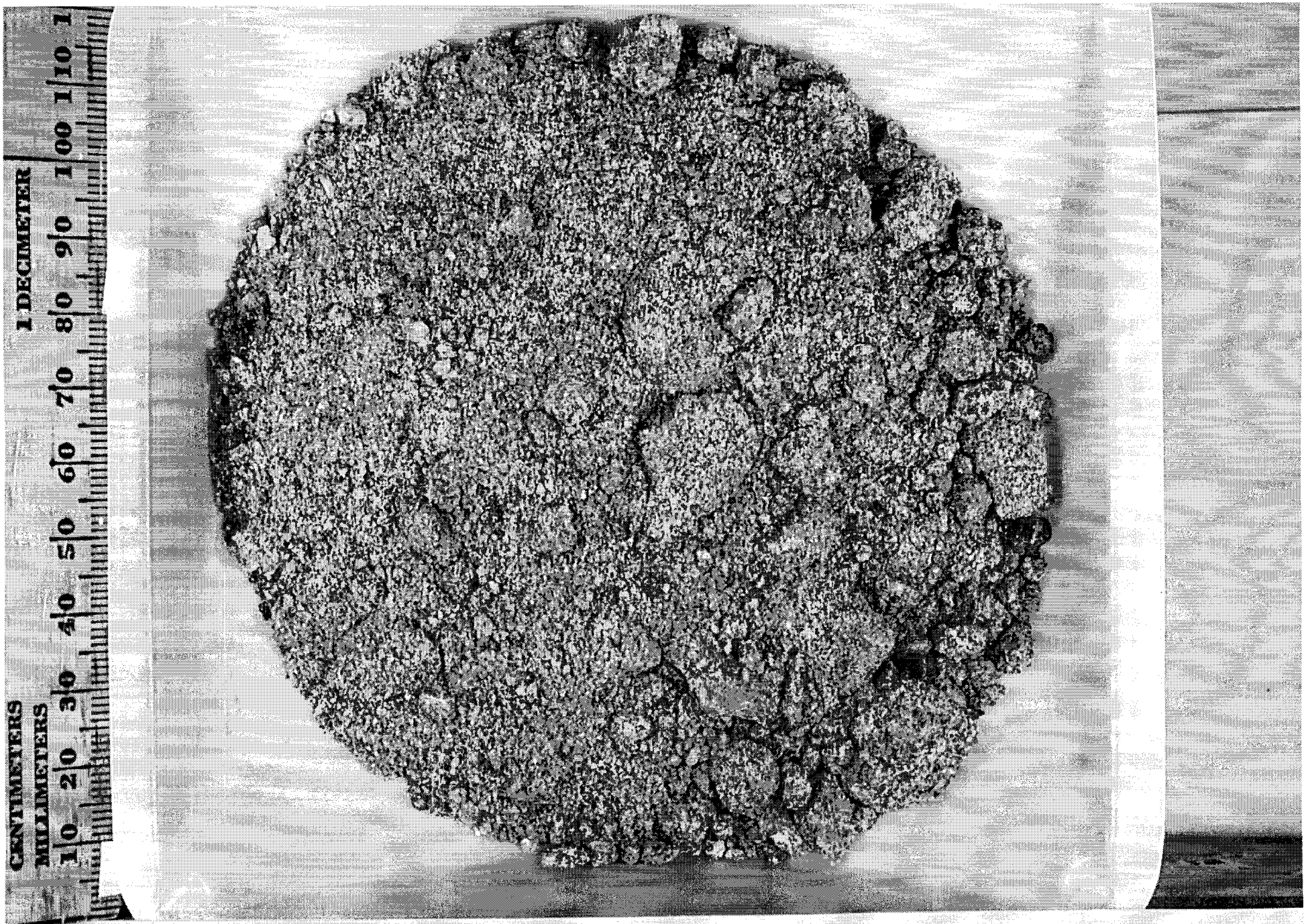
C7514 B22TX3 240-240 ft Grab Sample

Depth from Chain-of-Custody



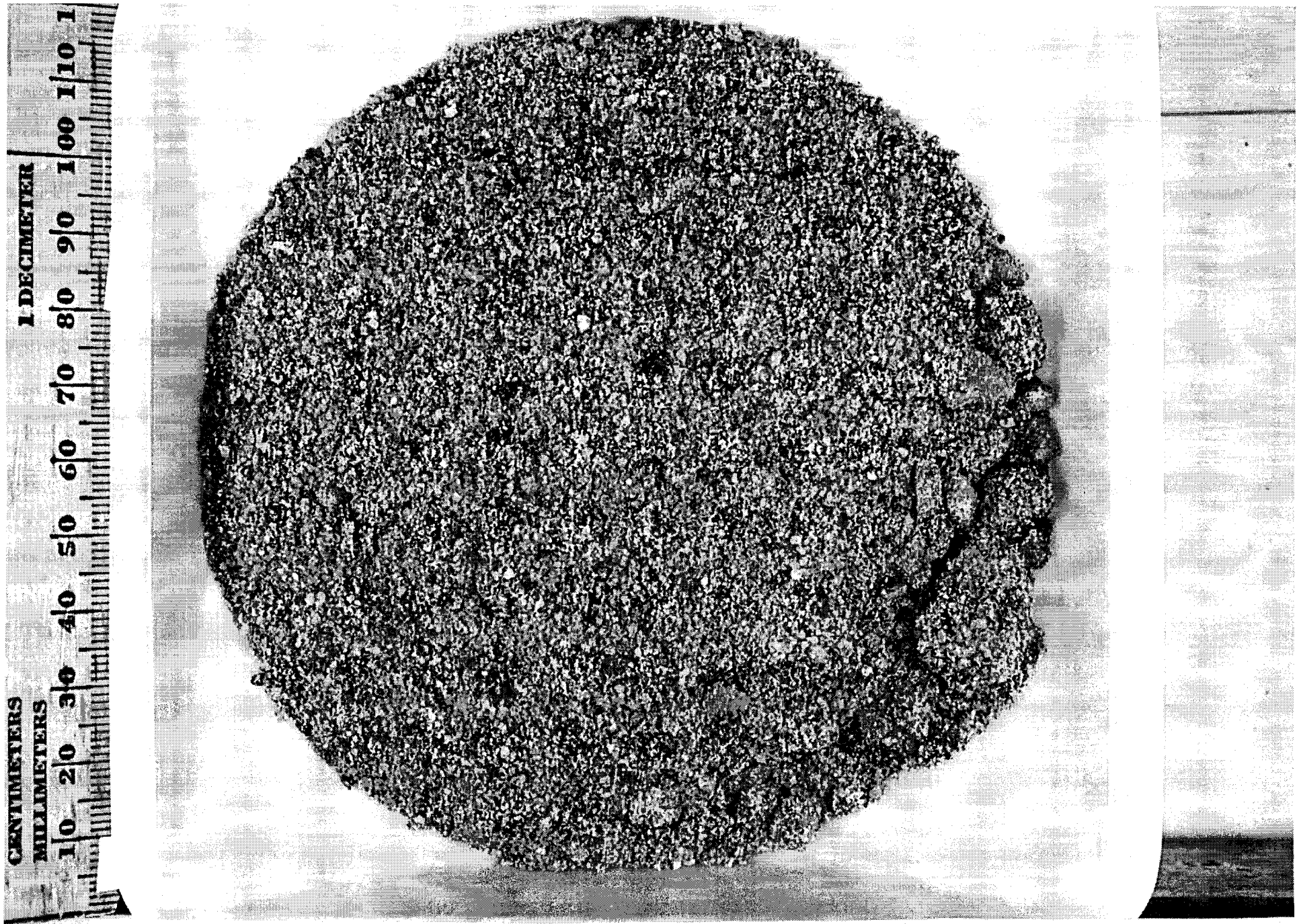
C7514 B22TX4 242.5-242.5 ft Grab Sample

Depth from Chain-of-Custody



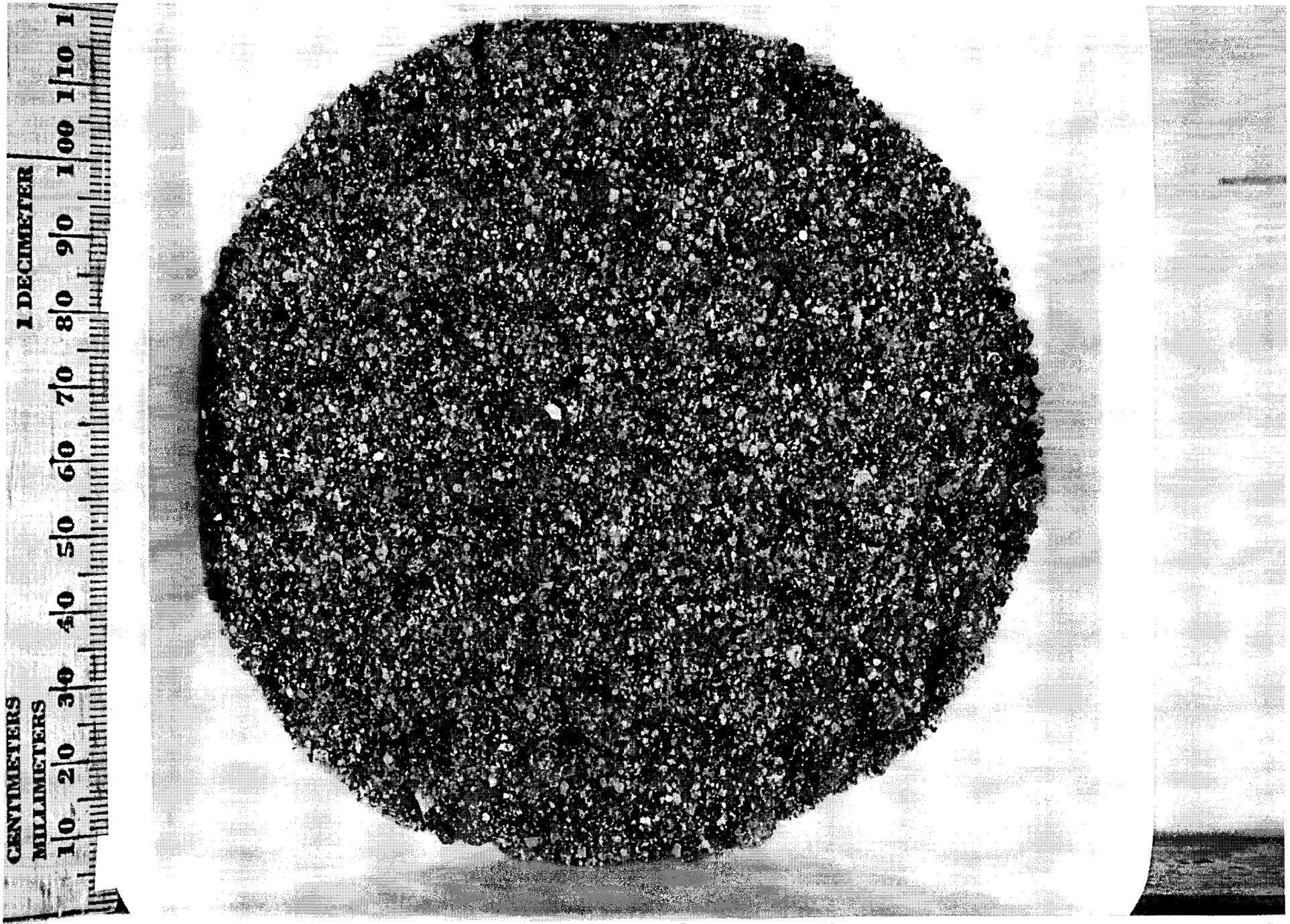
C7514 B22TX5 245-245 ft Grab Sample

Depth from Chain-of-Custody



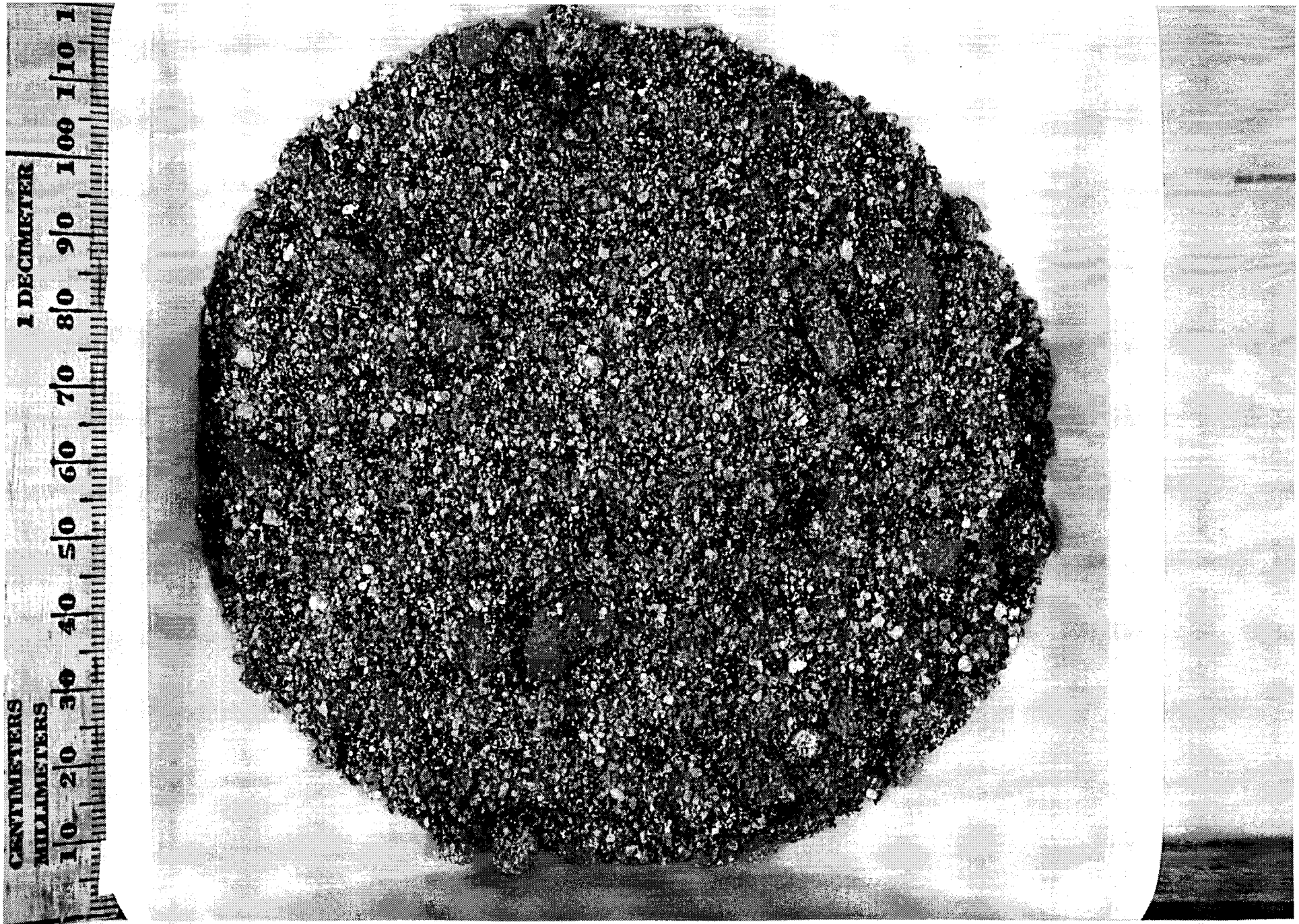
C7514 B22TX6 245-247.5 ft Grab Sample

Depth from Chain-of-Custody



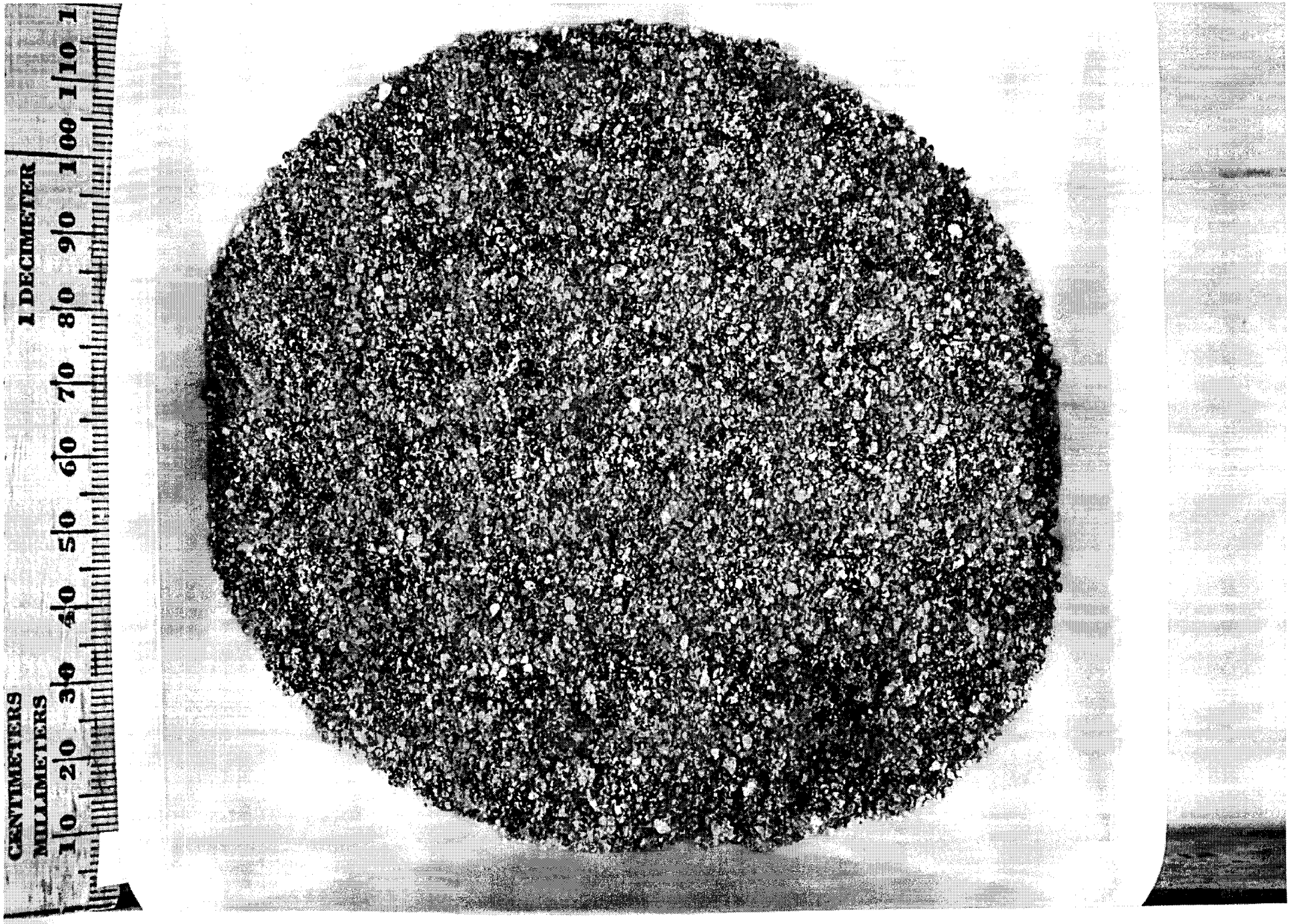
C7514 B22TX7 247.4-249.9 ft Grab Sample

Depth from Chain-of-Custody



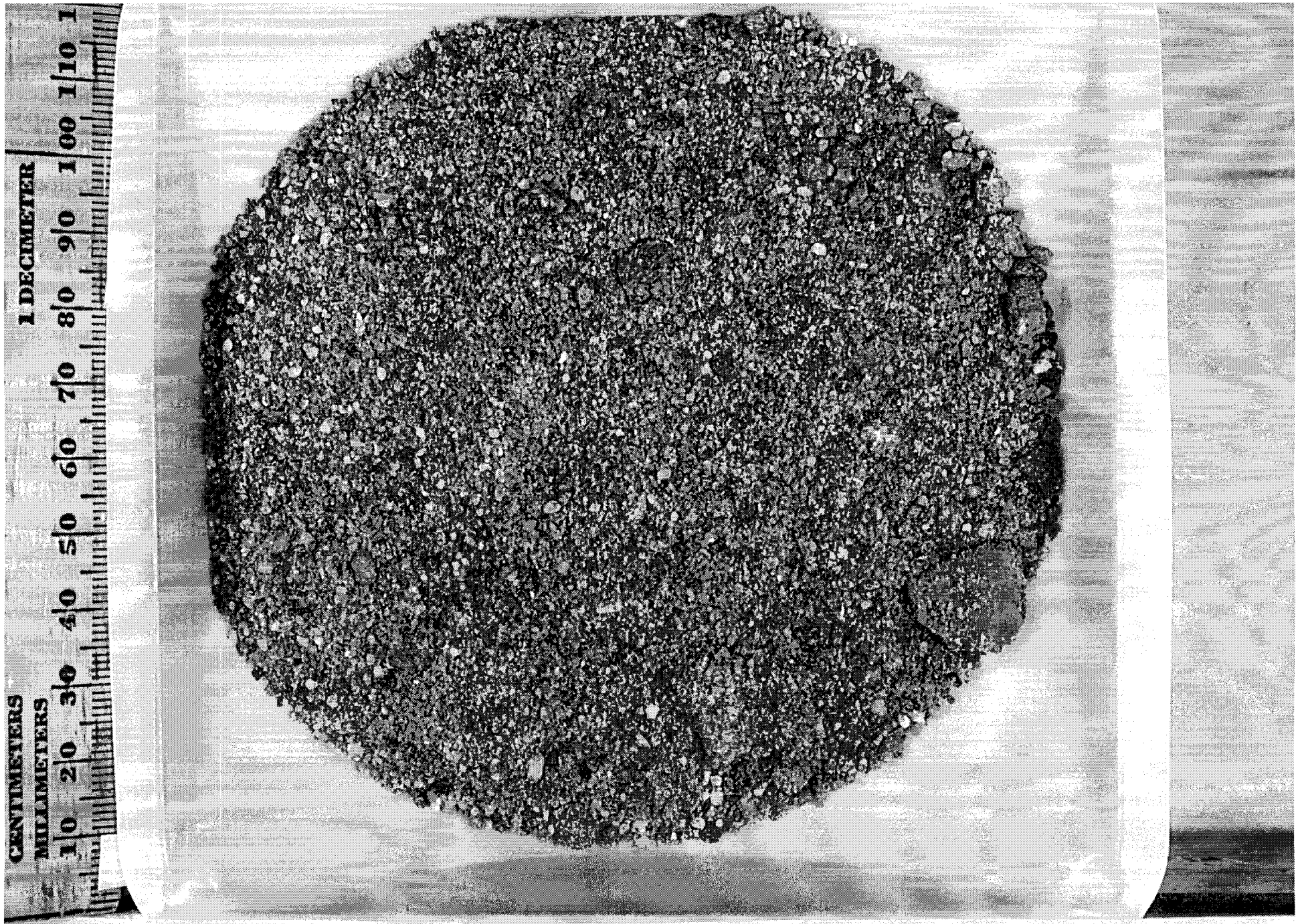
C7514 B22TX8 252.5-252.5 ft Grab Sample

Depth from Chain-of-Custody



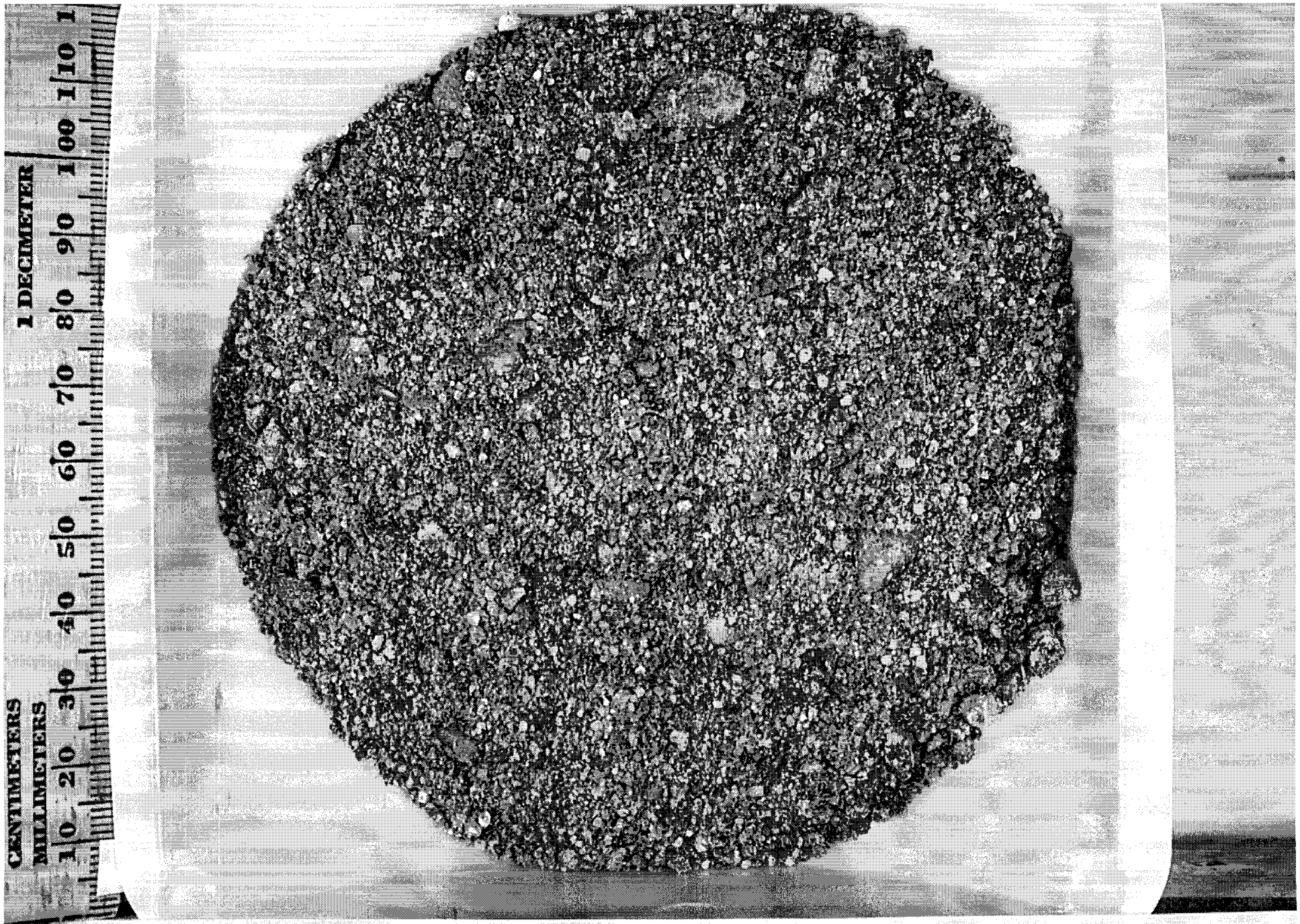
C7514 B22TX9 255-255 ft Grab Sample

Depth from Chain-of-Custody



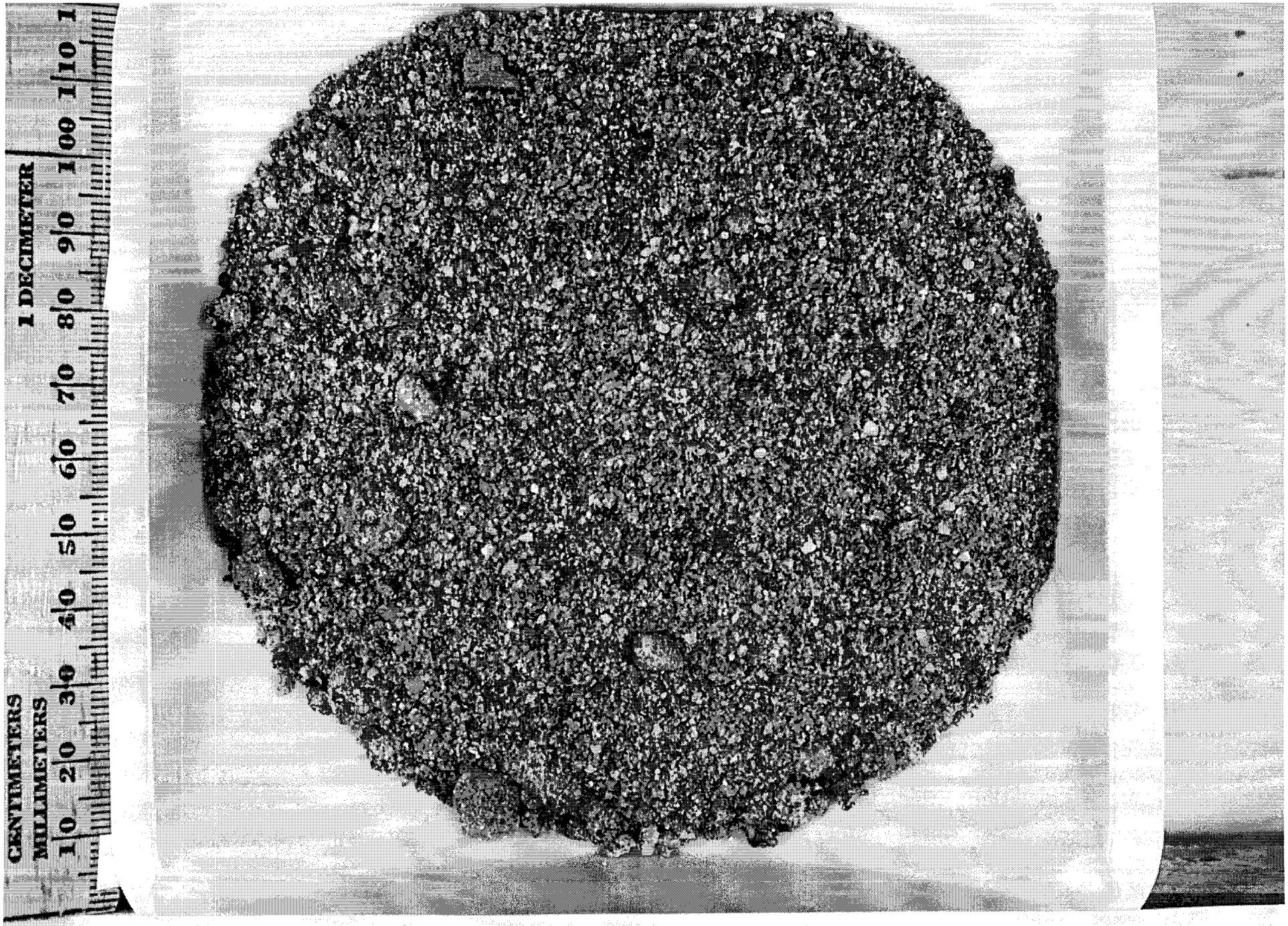
C7514 B22TY0 257.5-257.5 ft Grab Sample

Depth from Chain-of-Custody



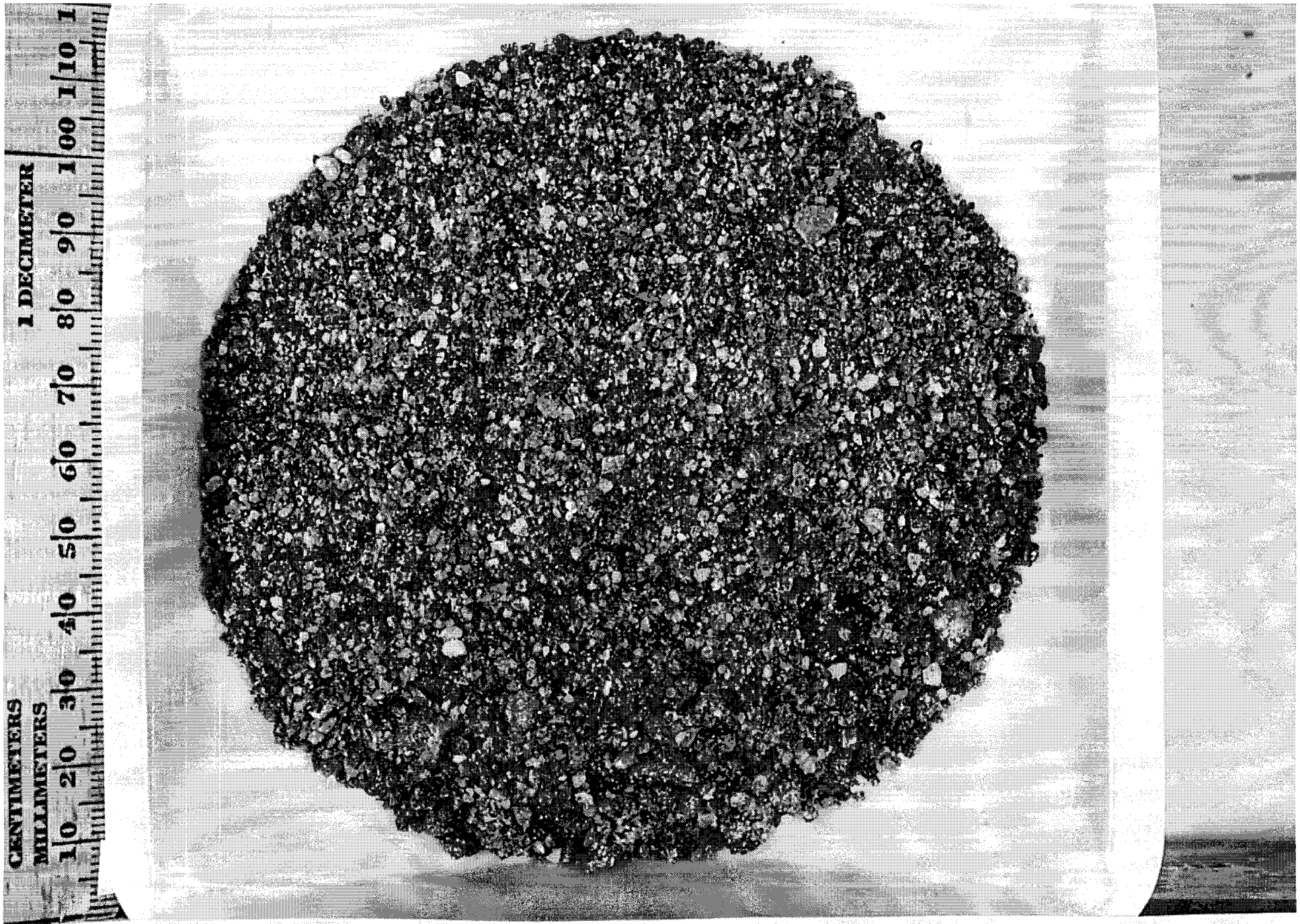
C7514 B22TY1 257.5-260 ft Grab Sample

Depth from Chain-of-Custody



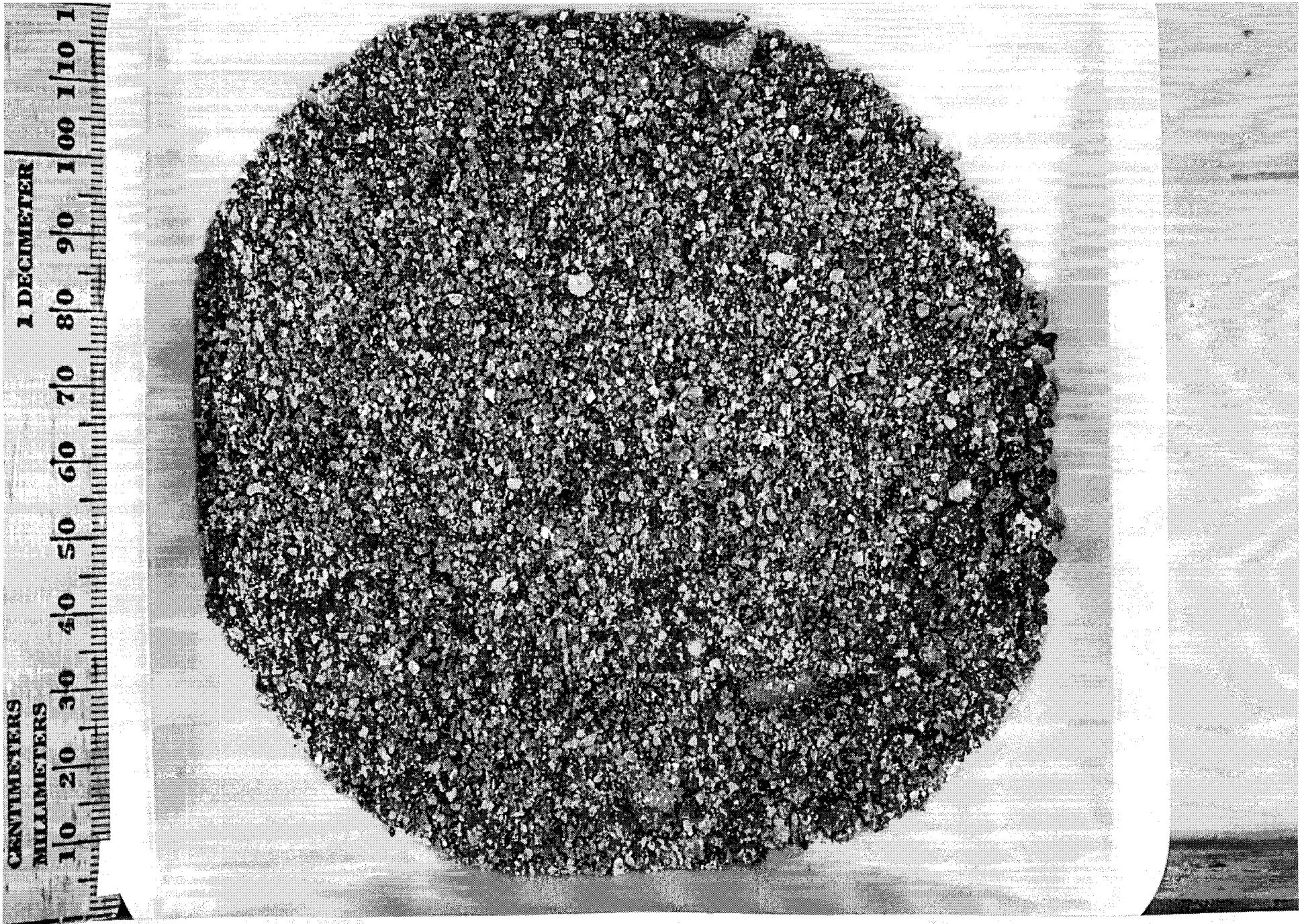
C7514 B22TY2 262.4-262.4 ft Grab Sample

Depth from Chain-of-Custody



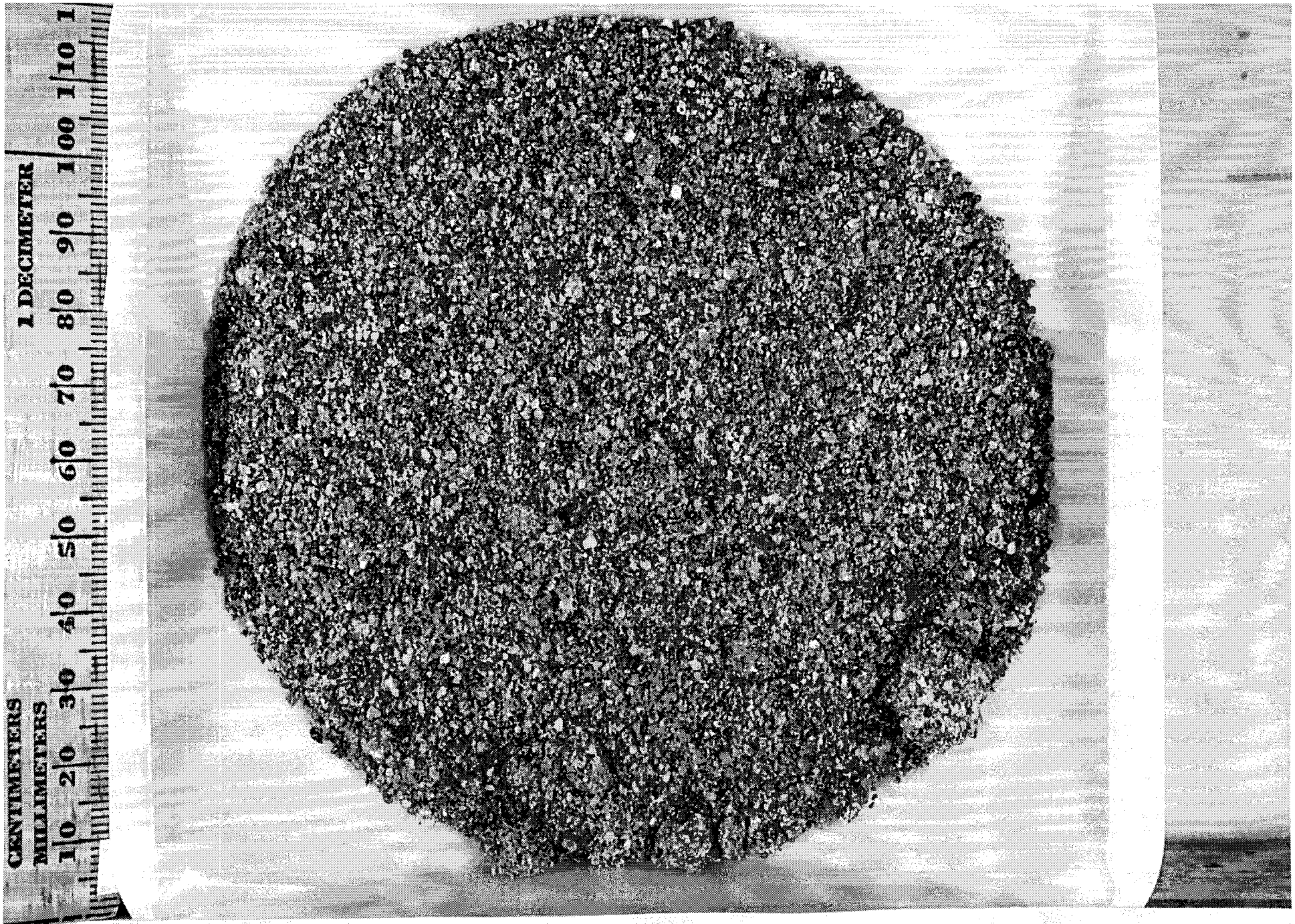
C7514 B22TY3 265-265 ft Grab Sample

Depth from Chain-of-Custody



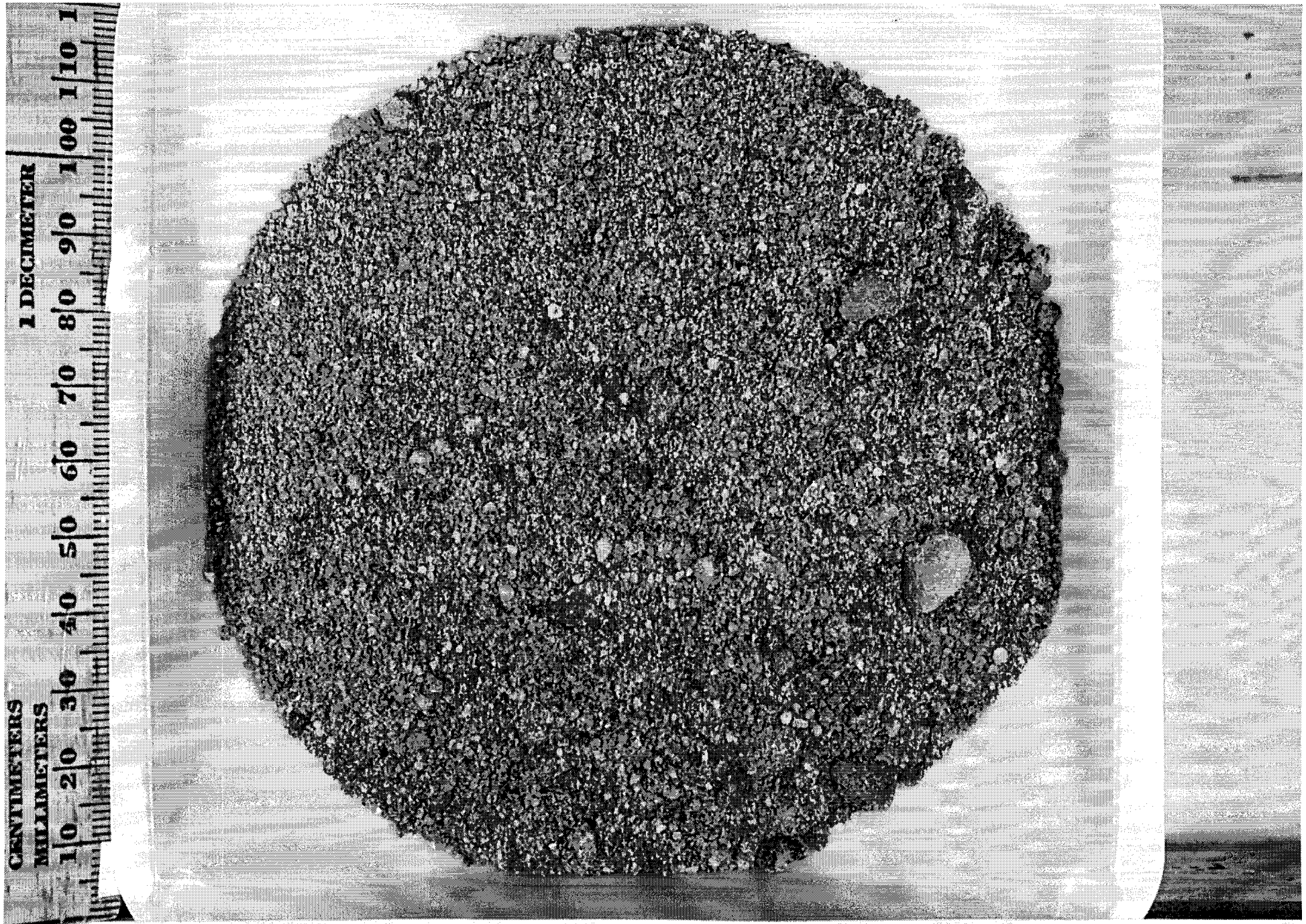
C7514 B22TY4 267.5-267.5 ft Grab Sample

Depth from Chain-of-Custody



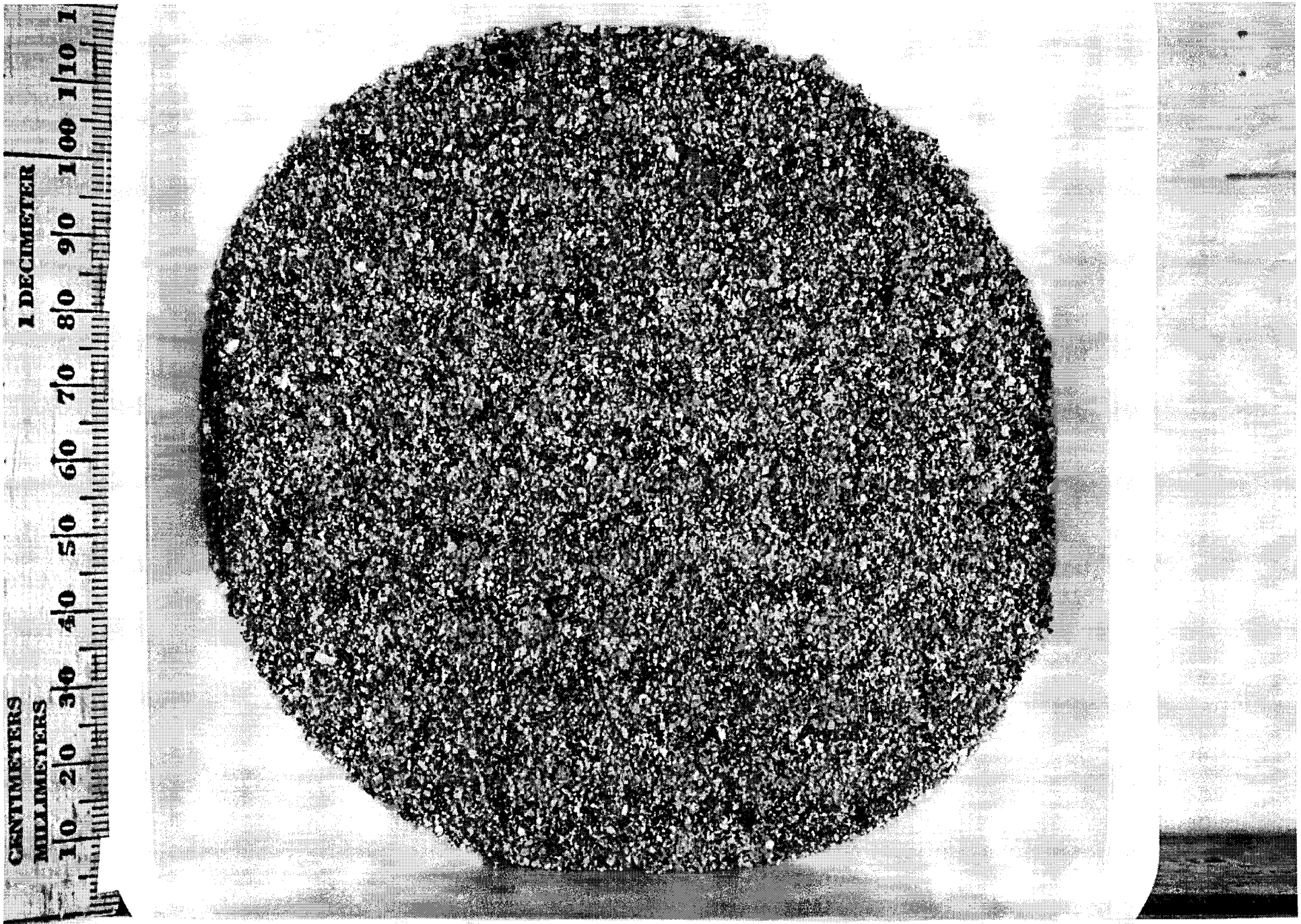
C7514 B22TY5 270-270 ft Grab Sample

Depth from Chain-of-Custody



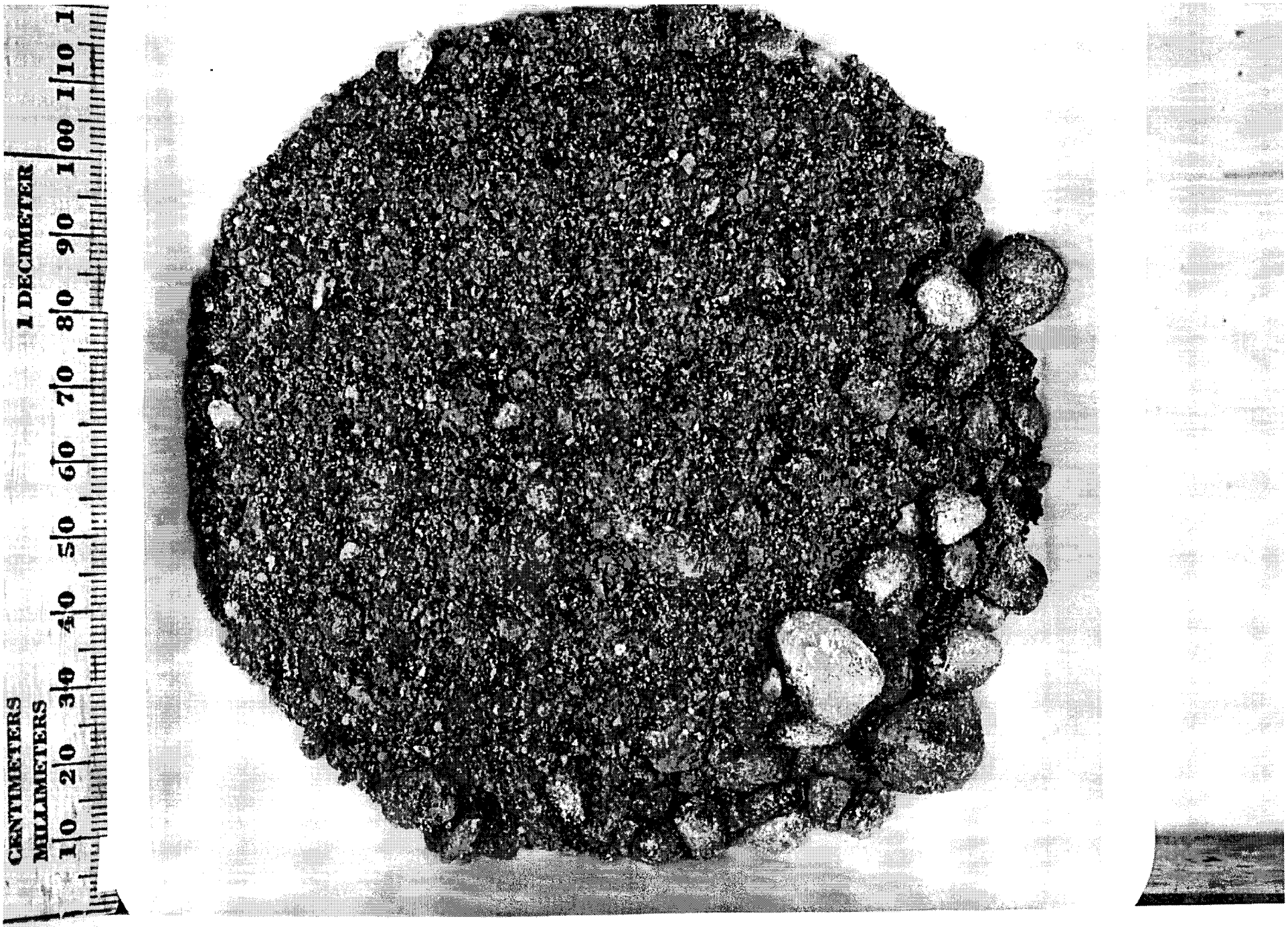
C7514 B22TY6 273.5-273.5 ft Grab Sample

Depth from Chain-of-Custody



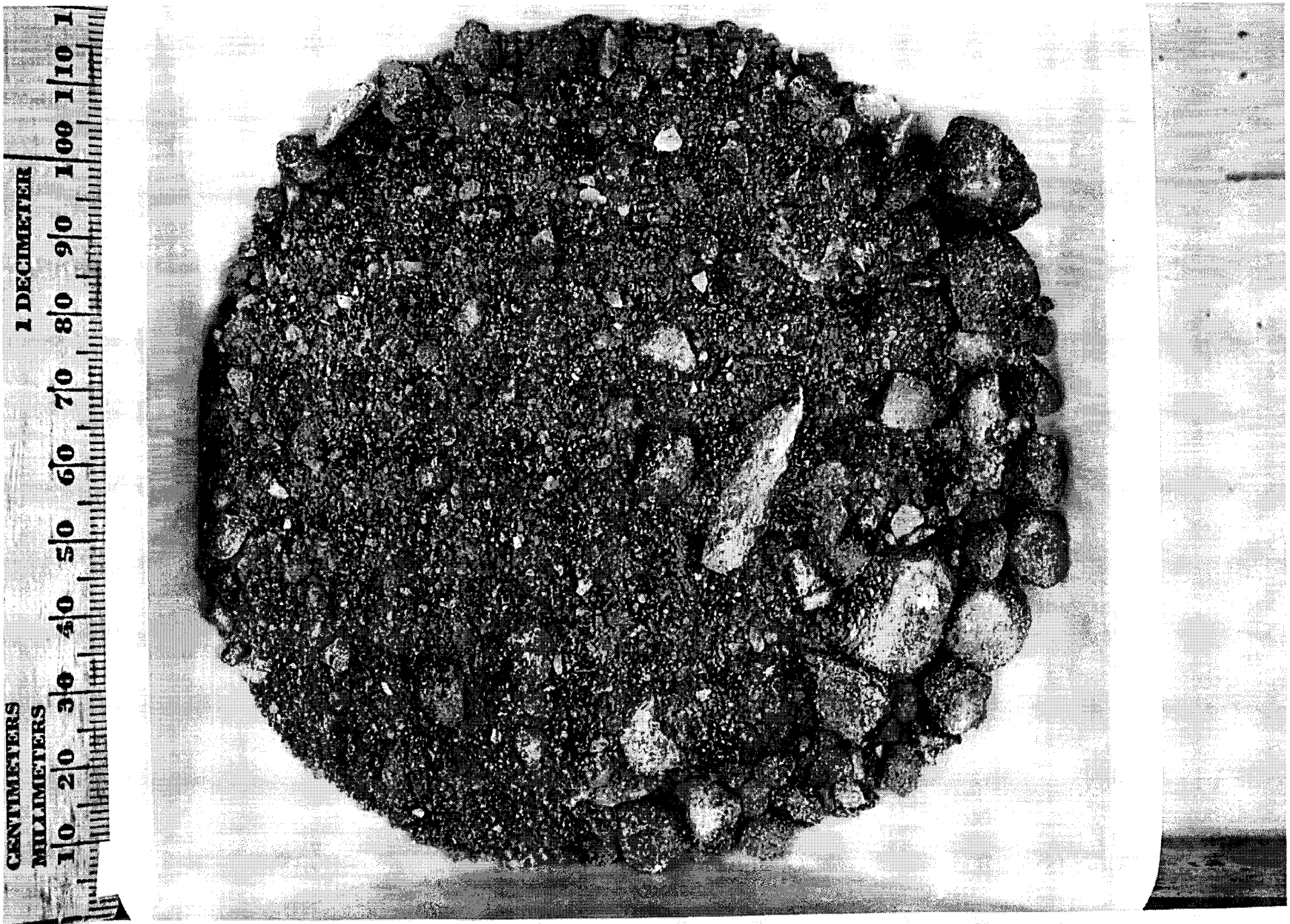
C7514 B22TY7 275-275 ft Grab Sample

Depth from Chain-of-Custody



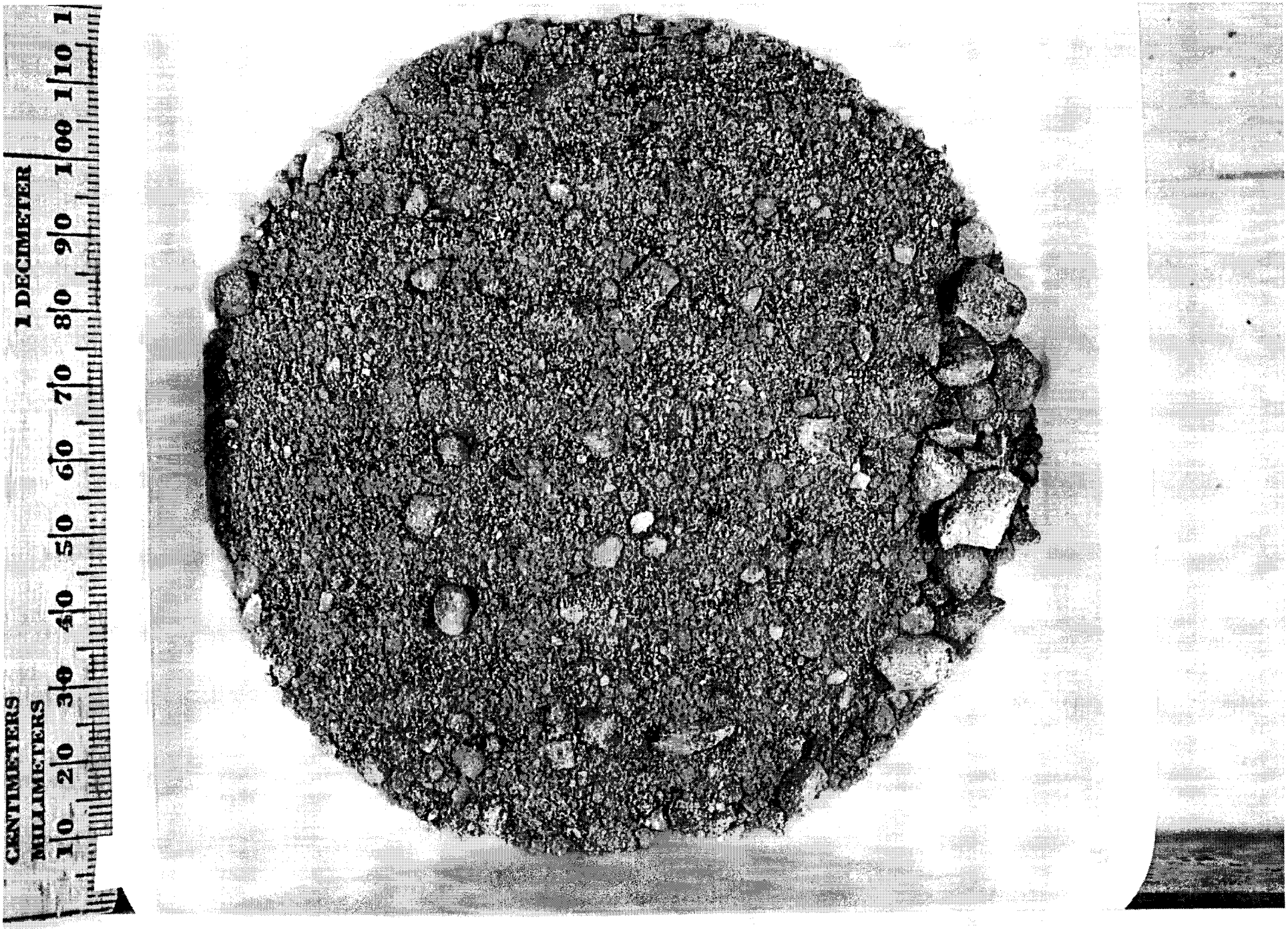
C7514 B22TY8 277.5-277.5 ft Grab Sample

Depth from Chain-of-Custody



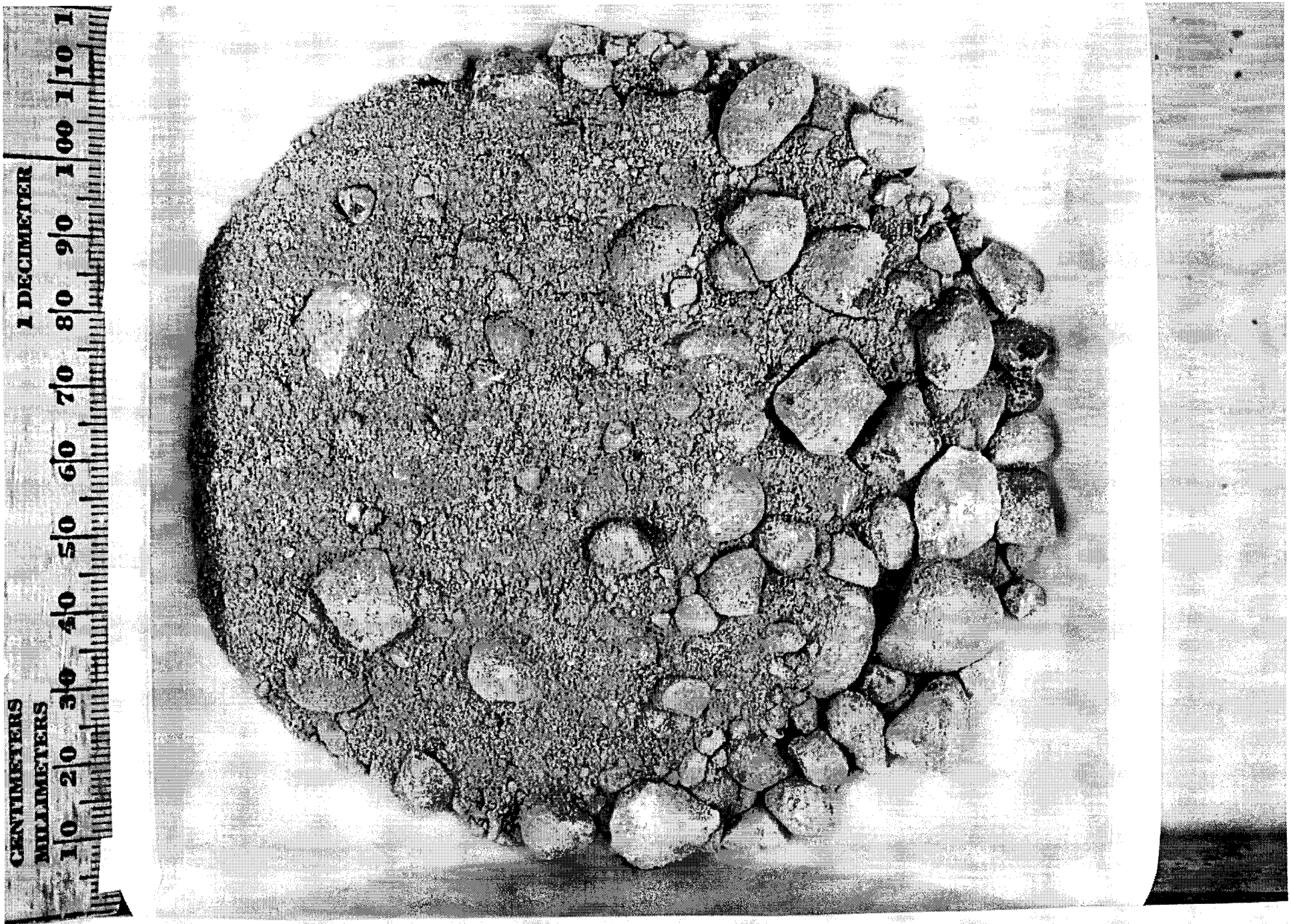
C7514 B22TY9 280-280 ft Grab Sample

Depth from Chain-of-Custody



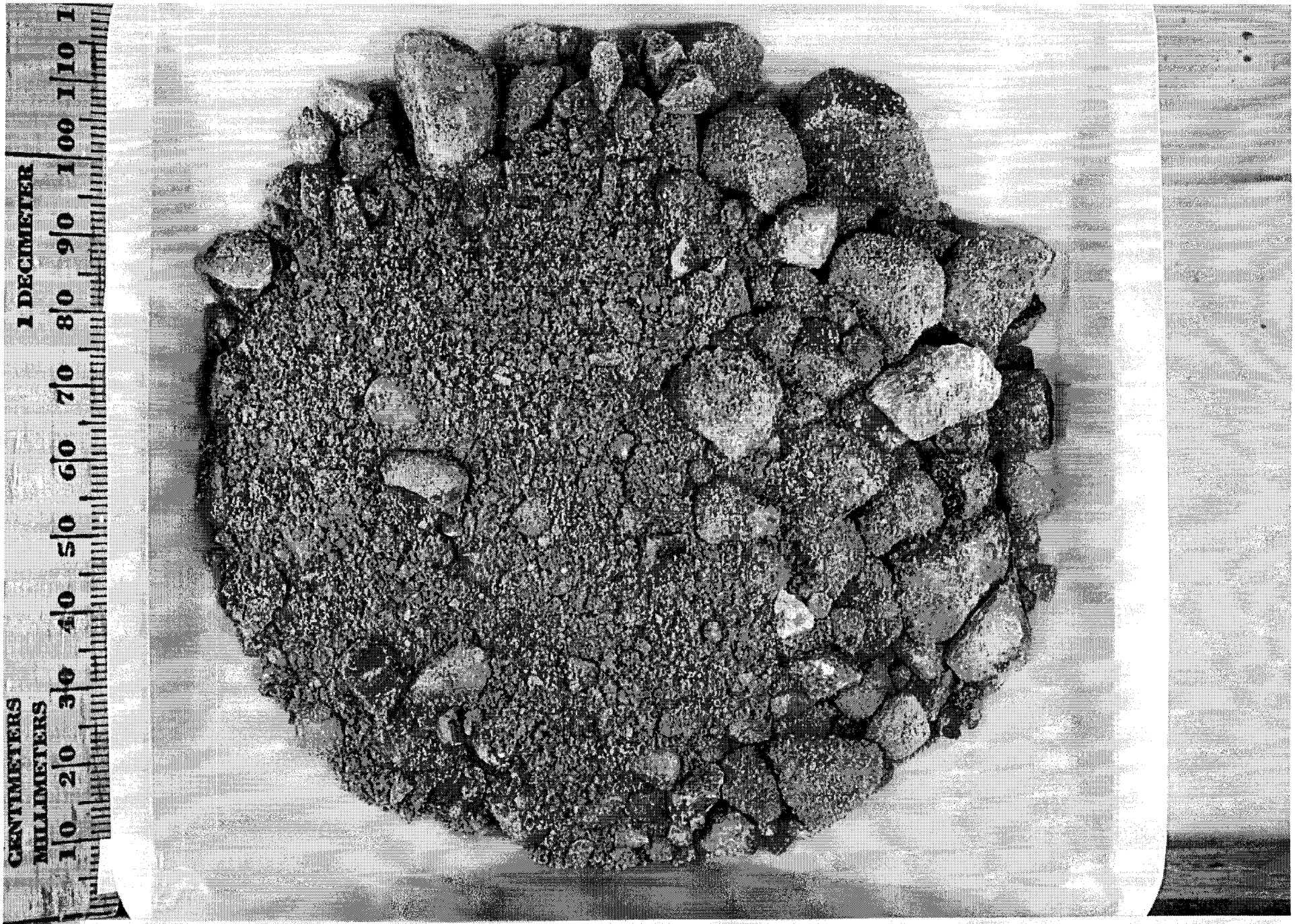
C7514 B22V00 284-284 ft Grab Sample

Depth from Chain-of-Custody



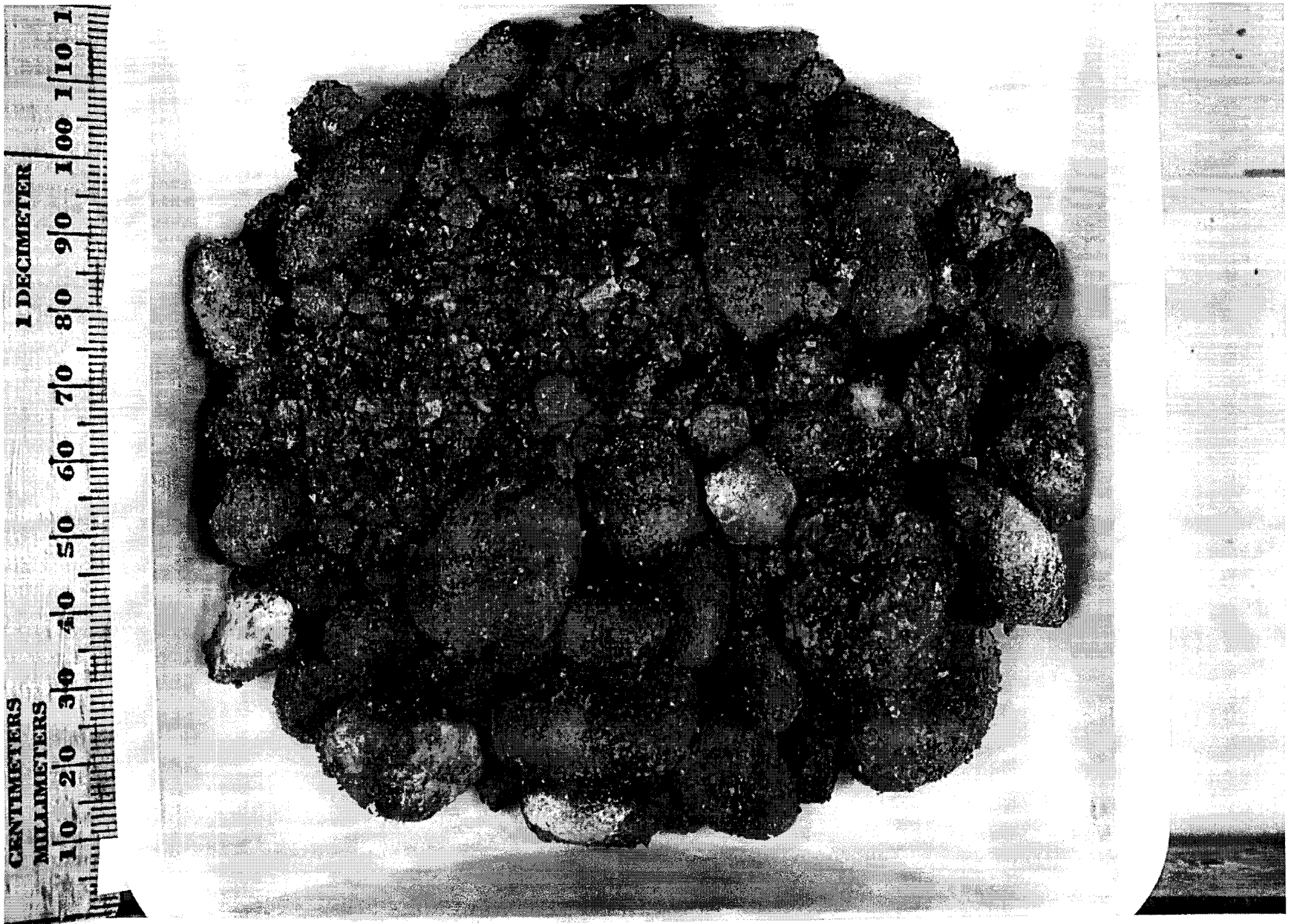
C7514 B22V01 285.5-285.5 ft Grab Sample

Depth from Chain-of-Custody



C7514 B22V02 287.5-287.5 ft Grab Sample

Depth from Chain-of-Custody

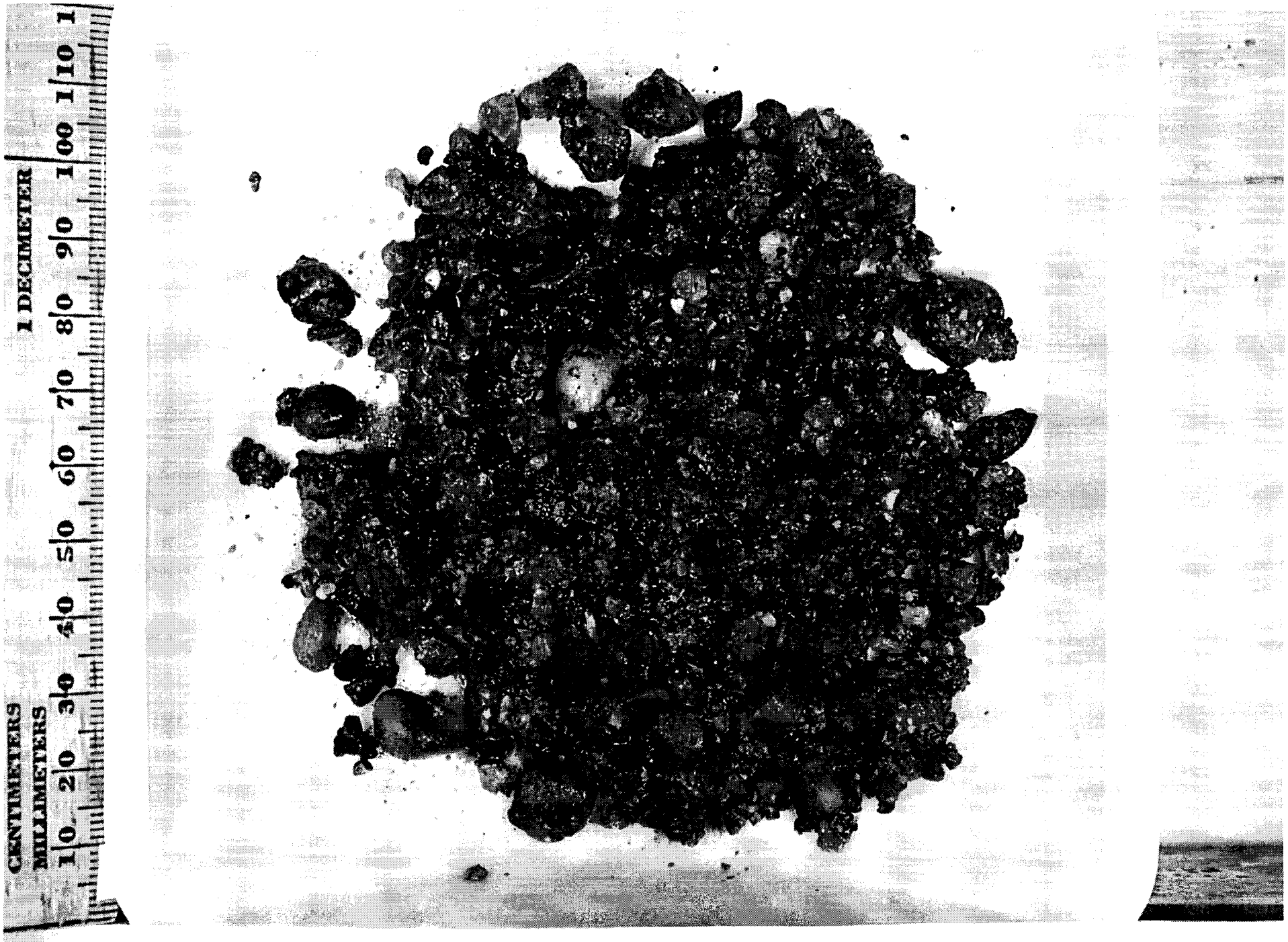


C7514 B22V03 290.5-290.5 ft Grab Sample

Depth from Chain-of-Custody

C7514 B232Y9 292.6-292.6 ft Grab Sample

Depth from Chain-of-Custody



C7514 B23300 295.1-295.1 ft Grab Sample

Depth from Chain-of-Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-003

COLLECTOR King, Reed	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-002	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5 PS15	**ACTUAL SAMPLE DEPTH** 0 - 2 1/2	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V95

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TJ8	SOIL	11-9-09	0839

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Eikenberry/[illegible]	11-9-09 1515	NO413 SSU-R2	11/9/09 1515
SSU-R2	11-12-09 0850	Calvin Yazzie	11-12-09 0850
Calvin Yazzie	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDL = FSL [illegible]

A-6003-518(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-003** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	**45 Days / 45 Days**
C7514 (299-E24-25); I-002	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** 85/5	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-451-5	2.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-004** |

COLLECTOR
Romo, Kruger

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-003

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GCS - 094

FIELD LOGBOOK NO.
HNF-N- 491-5

ACTUAL SAMPLE DEPTH
2.5 to 5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V95

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TJ9	SOIL	11-9-09	0944	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kruger	11-9-09 1915	MO443 SSU-R2	11/9/9-1415
SSU-R2	11-12-09 0850	Calvin Harris	11-12-09 0850
Calvin Harris	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-004

COLLECTOR Kruse, Reino	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-003	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 25' to 5'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-006

COLLECTOR Rome Kinser

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); I-004

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY

ICE CHEST NO. 5W5-094

FIELD LOGBOOK NO. HNF-N-491.5 PS 15

ACTUAL SAMPLE DEPTH 5. 7.5

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V95

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content (D2216)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TK0	SOIL	11-5-05	0955	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	1415	M0413 SSU-R2	11/9/9-1415
SSU-R2	11-12-09 0900	[illegible]	11-12-09 0900
[illegible]	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-006** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Reno, Kinder	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	**45 Days / 45 Days**
C7514 (299-E24-25); I-004	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 451-4 P15	**ACTUAL SAMPLE DEPTH** 5.-75.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-007

COLLECTOR Romo, Kaler	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-005	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 15	**ACTUAL SAMPLE DEPTH** 7.5 to 10'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V96

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TK1	SOIL	11-9-09	1020

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkins Schmitt	11-9-09 1515	M0413 SSU-R2 NOV	1145
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-007** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N
Kulick, Romo	DYEKMAN, DL	373-2530	DYEKMAN, DL	**DATA TURNAROUND**
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**
C7514 (299-E24-25); I-005	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS15	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**
	HNF-N-451-5	7.5 to 10'	302117ES10	GOVERNMENT VEHICLE
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**	
Environmental Sciences Laboratory	N/A		N/A	

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A 6003 618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-009** | **PAGE 1 OF 2**

COLLECTOR
K. Kruse Reino

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-007

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS 094

FIELD LOGBOOK NO.
HNF-N-491-5 pg 15

ACTUAL SAMPLE DEPTH
7.5 to 12.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V96

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEL ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**
B22TK2	SOIL	11-9-09	1125

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
S. Kruse / [illegible]	11-9-09 1515	MW 413 SSU-R2	NOV 2009 1515
SSU-R2	11-12-09 0900	[illegible]	11-12-09 0900
[illegible]	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-009** |

COLLECTOR Kruse, Zone	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-007	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PSK	**ACTUAL SAMPLE DEPTH** 9.8 to 12.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-010

COLLECTOR: Kruck Rome

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT COORDINATOR: DYEKMAN, DL

PRICE CODE: 8N

DATA TURNAROUND: 45 Days / 45 Days

SAMPLING LOCATION: C7514 (299-E24-25); I-008

PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.: F10-024

AIR QUALITY: [ ]

ICE CHEST NO.: GWS-094

FIELD LOGBOOK NO.: HNF-N-491-5 Pg 13

ACTUAL SAMPLE DEPTH: 12.5 to 15'

COA: 302117ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: Environmental Sciences Laboratory

OFFSITE PROPERTY NO.: N/A

BILL OF LADING/AIR BILL NO.: N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V97

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1l	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TK3	SOIL	11-9-09	1236	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kruck / [signature]	11-9-09 1515	M0413 SSU-R2	11/09 1515
SSU-R2	11-12-09 0900	[signature]	11-12-09 0900
[signature]	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

CDC # FS1.090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-010 **PAGE 2 OF 2**

COLLECTOR Kruz, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-008	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 15	**ACTUAL SAMPLE DEPTH** 12.5 to 15	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-012

COLLECTOR Kruger Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-009	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS -09	**FIELD LOGBOOK NO.** HNF-N-491.5 8515	**ACTUAL SAMPLE DEPTH** 15.0' - 17.5'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V97

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TK4	SOIL	11-9-09	1258

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kern/ 11-9-09	1515	MOA13 SSU-R2V	11-9-09 / 1515
SSU-R2	11-12-09 0851		11-12-09 0851
	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A 6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-012 **PAGE 2 OF 2**

COLLECTOR Kern, Roma	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-009	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 85/15	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-013

COLLECTOR Kitson, Reeves

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-F24-25); I-010

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY

ICE CHEST NO. GWS-094

FIELD LOGBOOK NO. HNF-N-491-5 PS 15

ACTUAL SAMPLE DEPTH 17.5 to 20'

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V98

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - 02216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TK5	SOIL	11-5-09	1320

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkins/[illegible]	11-5-09 1515	LN-443 SSU-R2 NOV 2009	1515
SSU-R2	11-12-09 0900	[illegible]	11-17-09 0900
[illegible]	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY TITLE DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD DISPOSED BY DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-013 **PAGE 2 OF 2**

COLLECTOR Kher Romc	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
SAMPLING LOCATION C7514 (299-E24-25); I-010	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 PG	**ACTUAL SAMPLE DEPTH** 17.5 to 20'	**COA** 302117ES10
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8N

AIR QUALITY ☐

METHOD OF SHIPMENT GOVERNMENT VEHICLE

DATA TURNAROUND 45 Days / 45 Days

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-016

COLLECTOR
Kevin Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

SAMPLING LOCATION
C7514 (299-E24-25); I-012

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
GWS-054

FIELD LOGBOOK NO.
HNF-N-491-5 pg 15

ACTUAL SAMPLE DEPTH
20 to 22.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V99

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TK6	SOIL	11-9-09	1353

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	11-9-09 1515	M0413 SSU-R2	2009 1515
SSU-R2	11-12-09 0900	[signature]	11-12-09 0900
[signature]	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-016** | **PAGE 2 OF 2**

COLLECTOR Kruiz, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-012	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 89	**ACTUAL SAMPLE DEPTH** 20 to 22.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A 6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-018

COLLECTOR
Kauer, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-013

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-0911

FIELD LOGBOOK NO.
HNF-N-491-5 PG 15

ACTUAL SAMPLE DEPTH
22.5 to 23'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V99

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B22TK7	SOIL	11-9-09	1408	✓	✓					

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Ed Romo	11-9-09 1515	Mo 412 SSU-R2	NOV 9 2009 1515
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-018** |

COLLECTOR Kauel Romero	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-013	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491.5 15/15	**ACTUAL SAMPLE DEPTH** 22.5 to 25'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
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ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-019

COLLECTOR Kruse, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-014	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 15	**ACTUAL SAMPLE DEPTH** 25 to 27.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TK8	SOIL	11-5-09	1436

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
El Kruse	11-5-09 1515	MO 413 SSU-R2	2009 1515
SSU-R2	11-12-09 0900	Calvin Tagin	11-12-09 0900
Calvin Tagin	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CDC # F 21 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-019** |

COLLECTOR Kuick, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-014	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 P. 15	**ACTUAL SAMPLE DEPTH** 23 to 27.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-021

COLLECTOR
KAUGE, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-015

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS-094

FIELD LOGBOOK NO.
HNF-N-491-5 Pg 15

ACTUAL SAMPLE DEPTH
27.5 to 30

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TK9	SOIL	11-9-09	1448	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaugue	11-9-09 1515	MO#3 SSU-R2	1515
SSU-R2	11-12-09 0900	Calvin Yarn	11-12-09 0900
Calvin Yarn	11-12-09 1242	[signature]	11/12/09 1242

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-021** | **PAGE 2 OF 2**

COLLECTOR Kauk, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-2S); I-015	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 pg 75	**ACTUAL SAMPLE DEPTH** 27.5-to 30'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-015

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-011	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** I
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 15	**ACTUAL SAMPLE DEPTH** 20, 22.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V98

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V60	SOIL	11-9-09	1338

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Kauer	11-9-09 1515	SSU-R2	1515
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242		11/12/09 1242

NOV 09 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-015

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); 1-011	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 8915	**ACTUAL SAMPLE DEPTH** 205 to 20	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25' and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-022

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days	**SAMPLING LOCATION** C7514 (299-E24-25); I-017	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 14	**ACTUAL SAMPLE DEPTH** 33.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V53

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**
B22TL0	SOIL	11-10-09	0808

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-10-09 1440	M0413 SSU R-2	11/10/09 1440
SSU-R2	11-12-09 0900		11-12-09 0900
	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-022** | **PAGE 2 OF 2**

COLLECTOR Kuhn, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-017	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-4915 R9/6	**ACTUAL SAMPLE DEPTH** 33.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-023

COLLECTOR
KAUR, ROMO

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-018

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
SML-313

FIELD LOGBOOK NO.
HNF-N-491-5 pg 16

ACTUAL SAMPLE DEPTH
33.5 to 36

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TL1	SOIL	11-10-09	0819	✓	✓						

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaur / Edward Kaur	11-10-09 1440	BLD R1041B SSUR	11/10/09-1440
SSU-R2	11-12-09 0920	Calvin Farris	11-12-09 0920
Calvin Farris	11-12-09 1242	[illegible]	11/12/09 1242

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-023

COLLECTOR Kaur, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-018	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 16	**ACTUAL SAMPLE DEPTH** 33.5 to 36	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A (Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-025

COLLECTOR
KAUCK, ROMO

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-019

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
SMC-313

FIELD LOGBOOK NO.
HNF-N-491-5 PG 16

ACTUAL SAMPLE DEPTH
36-38.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TL2	SOIL	11-10-09	0904	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. KAUCK	11-10-09 1440	NO 431 SSUR 2	11/10/9 1440
SSU-R2	11-12-09 0900		
			11-12-09 0900
	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

COC # FSL 090008

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-025** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kauck, Romo	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** [ ]	45 Days / 45 Days
C7514 (299 E24-25); 1-019	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N- 491.5	36 to 38.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-026

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-020	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SMC-313	**FIELD LOGBOOK NO.** HNF-N-491-5 PSIL	**ACTUAL SAMPLE DEPTH** 38.5 to 40'	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TL3	SOIL	11-10-09	0911	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Edward Kauer	11-10-09 1440	N0413 SSU R-2	11/10/09 1440
SSU-R2	(11-12-09 0900)	Calvin Tarra	11-12-09 0900
Calvin Tarra	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-026 **PAGE 2 OF 2**

COLLECTOR Rawlin, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
SAMPLING LOCATION C7514 (299-E24-25); I-020	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491.5 B16	**ACTUAL SAMPLE DEPTH** 38.5' to 40'	**COA** 302117ES10
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8N

AIR QUALITY ☐

DATA TURNAROUND 45 Days / 45 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-030

COLLECTOR Kauer, Rone	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-022	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SMa-313	**FIELD LOGBOOK NO.** HNF-N-491-5 8416	**ACTUAL SAMPLE DEPTH** 39.8 to 42.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TL4	SOIL	11-10-09	0836	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kauer / [illegible]	11-10-09 1440	NO 413 SSU R2	11/10/09-1440
SSU-R2	11-12-09 0900	[illegible] Farrar	11-12-09 0900
[illegible] Farrar	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ Original

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-030** |

COLLECTOR Kruse, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-022	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 85 (6	**ACTUAL SAMPLE DEPTH** 39.8 to 42.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-031

COLLECTOR Kalm	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-023	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. Smu-323	**FIELD LOGBOOK NO.** HNF-N-491-5 RS/6	**ACTUAL SAMPLE DEPTH** 45	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216,

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TL5	SOIL	11-10-09	0950	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kitner / [signature]	11-10-09 1440	MO 413 SSU R2	11/10/9-1440
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-031** | **PAGE 2 OF 2**

COLLECTOR Karen Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-023	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 RS/16	**ACTUAL SAMPLE DEPTH** 45' to 45' 7-10-24	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium 238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-032

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-024	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SMC-313	**FIELD LOGBOOK NO.** HNF-N-591-5 PS16	**ACTUAL SAMPLE DEPTH** 45 to 47.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TL6	SOIL	11-10-09	1030	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-10-09 1440	MO 413 SSU R2	11/10/09-1440
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R2	11-12-09 0900	[signature]	11-12-09 0900
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	11-12-09 1242	[signature]	11/12/09 1242
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-032

COLLECTOR Kevin Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-024	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 16	**ACTUAL SAMPLE DEPTH** 45 to 47.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-028

COLLECTOR: Kauer, Romo

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT COORDINATOR: DYEKMAN, DL

PRICE CODE: 8N

DATA TURNAROUND: 45 Days / 45 Days

SAMPLING LOCATION: C7514 (299-E24-25); I-021

PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.: F10-024

AIR QUALITY: ☐

ICE CHEST NO.: SML-313

FIELD LOGBOOK NO.: HNF-N-491-5 pg 16

ACTUAL SAMPLE DEPTH: 39.8-42.3

COA: 302117ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: Environmental Sciences Laboratory

OFFSITE PROPERTY NO.: N/A

BILL OF LADING/AIR BILL NO.: N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB2

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SLL ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V61	SOIL	11-10-09	0928 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Ed Kauer	11-10-09 1440	NO413 SSUR	11/10/09 1440
SSU-R2 SSU-R2	11-12-09 0900	[illegible]	11-12-09 0900
[illegible]	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

SDG # ESL090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-028** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAUGR, RoMO	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-021	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 PS16	39.8 to 42.3	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-035

COLLECTOR KAUER, ROMO	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-026	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. SMC-313	**FIELD LOGBOOK NO.** HNF-N-491-5 85/6	**ACTUAL SAMPLE DEPTH** 49.7 to 52.2	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22V85~~ B22V86 11/10/9

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22V62	SOIL	11-10-09	1052	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-10-09 1325	NO 443 SSU R1	11/10/9 1325
SSU-R1	11-12-09 0900	Calvin Yarin	11-12-09 0920
Calvin Yarin	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-035** |

COLLECTOR Kelse, Rene	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-026	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 16	**ACTUAL SAMPLE DEPTH** 49.7 to 52.2	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-045

COLLECTOR Kaya, Reno	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days	**SAMPLING LOCATION** C7514 (299-E24-25); 1-032	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-066	**FIELD LOGBOOK NO.** HNF-N-441-5 pg 17	**ACTUAL SAMPLE DEPTH** 60 to 62.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TM2	SOIL	11-11-09	0808	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kostal / Edward Kostal	11-11-09 1345	NO 413 SSU R2	11/9-1345
SSU-R2	11-12-09 0900	Calvin Tom	11-12-09 0900
Calvin Tom	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-045** |

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-032	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** I	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 17	**ACTUAL SAMPLE DEPTH** 60 to 62.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-046

COLLECTOR
Kauk, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); 1-033

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO. PG17
HNF-N-491-5

ACTUAL SAMPLE DEPTH
66'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216.

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TM3	SOIL	11-11-09	0834

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauk / [signature]	11-11-09 1345	N0413 SSUR 2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Tarin	11-12-09 0900
Calvin Tarin	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A 6003 618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-046** |

COLLECTOR Kuhn, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-033	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 (5)	**ACTUAL SAMPLE DEPTH** 66'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-047

COLLECTOR Kruger, Rance	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-034	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-066	**FIELD LOGBOOK NO.** HNF-N-491-5 PS17	**ACTUAL SAMPLE DEPTH** 66-67'	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content : D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TM4	SOIL	11-11-09	0900	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Krause	11-11-09 1345	N0443 SSU R-2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Tarin	11-12-09 0900
Calvin Tarin	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-047** |

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-034	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** I	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** B3 17 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 66 to 67'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP 5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine 129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-034** | **PAGE 1 OF 2**

COLLECTOR
Kraus, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-025

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
SMC-33

FIELD LOGBOOK NO.
HNF-N-491-5 84/6

ACTUAL SAMPLE DEPTH
47.5 to 50

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**							
B22TL7	SOIL	11-10-09	1038	✓	✓					

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
Elkins/Ed Olson	11-10-09 1440	MO 413 SSU R2	11/12/09-1440
SSU-R2	11-12-09 0900	Calvin Yarn	11-12-09 0900
Calvin Yarn	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

SDG# ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-034** | **PAGE 2 OF 2**

COLLECTOR Kruse, Reino	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-025	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 16	**ACTUAL SAMPLE DEPTH** 47.5 to 50'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-037

COLLECTOR Kauer, Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-027	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 89/6	**ACTUAL SAMPLE DEPTH** 52.5 to 55	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B22TL8	SOIL	11-10-09	1304	✓	✓					

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-10-09 1440	MC 443 SSU R2	11/10/09-1440
SSU-R2	11-12-09 0900	Calvin Yarzon	11-12-09 0900
Calvin Yarzon	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-037** |

COLLECTOR Kaiser, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-027	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 14	**ACTUAL SAMPLE DEPTH** 52.5 to 55	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium 99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-038

COLLECTOR Karen Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); 1-028	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 16	**ACTUAL SAMPLE DEPTH** 50 to 52.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B22TL9	SOIL	11-10-09	~~1258~~ 1248	✓	✓				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	11-10-09 1440	M0413 SSUR2	11/10/09-1440
SSU-R2	11-12-09 0900	Calvin Yarrio	11-12-09 0900
Calvin Yarrio	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-038** | **PAGE 2 OF 2**

COLLECTOR Kauk, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-028	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS16	**ACTUAL SAMPLE DEPTH** 50 to 52.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE (Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-040** | **PAGE 1 OF 2**

COLLECTOR Kanek, Ronald	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION C7514 (299-E24-25); I-029	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 16	**ACTUAL SAMPLE DEPTH** 55 to 57.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**SHIPPED TO** Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB6

PRESERVATION	Cool--4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B22TM0	SOIL	11-10-09	1325	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
Ed Kanek / Edward Pham	11-10-09 1440	MW 413 SSU R2	11/10/09 1440
SSU-R2	11-12-09 0900	Calvin Yard	11-12-09 0900
Calvin Yard	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-040** |

COLLECTOR Kauer, Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-029	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 CS/K	**ACTUAL SAMPLE DEPTH** 55 to 57.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299 E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-041

COLLECTOR
Kauer Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-030

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
SML-313

FIELD LOGBOOK NO. Pg 16
HNF-N-491-5

ACTUAL SAMPLE DEPTH
57.5 - 60.0

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEL ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TM1	SOIL	11-10-09	1350	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/[signature]	11-10-09 1440	NO 413 SSUR 2	11/10/9-1440
SSU-R2	11-12-09 0500	[signature]	11-12-09 0500
[signature]	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-041** |

COLLECTOR Kausz, Rene	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-030	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-4991-5 8/6	**ACTUAL SAMPLE DEPTH** 57.5 to 60	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-049

COLLECTOR KAUER, ROMO	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days	**SAMPLING LOCATION** C7514 (299-E24-25); I-035	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. 6WS-066	**FIELD LOGBOOK NO.** PS17 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 70.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TM5	SOIL	11-11-09	0915	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkhan [signature]	11-11-09 1345	NO413 SSUR 2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Yarrin	11-12-09 0900
Calvin Yarrin	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG# ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-049** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kause, Rome	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	**45 Days / 45 Days**
C7514 (299-E24-25); I-035	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** P31)	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5	70.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-050** |

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-036	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-086	**FIELD LOGBOOK NO.** HNF-N-491-5 Ps 17	**ACTUAL SAMPLE DEPTH** 72.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC0

PRESERVATION	Cool-4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B22TM6	SOIL	11-11-09	0950	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
Ed Kauer	11-11-09 1345	MO413 SSUR2	11/11/9-1345
	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242		11/14/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-050** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KALSZ, Romo	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-036	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** Ps, 7	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491.5	72.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE (Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ Unused

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-052

COLLECTOR
Kauer, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); 1-037

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS 066

FIELD LOGBOOK NO. PS17
HNF-N-491-5

ACTUAL SAMPLE DEPTH
75

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TM7	SOIL	11-11-09	1000	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-11-09 1315	No 413 SSGR 2	11/11/9-1345
SSG-R2	11-12-09 0900	Calvin Farin	11-12-09 0900
Calvin Farin	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-052

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
SAMPLING LOCATION C7514 (299-E24-25); I 037	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 (PS)	**ACTUAL SAMPLE DEPTH** 75	**COA** 302117ES10
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8N

AIR QUALITY

DATA TURNAROUND 45 Days / 45 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-054

COLLECTOR
Kauer, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-038

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO. PS12
HNF-N-491-5

ACTUAL SAMPLE DEPTH
77.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC2

PRESERVATION	Cool--4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TM8	SOIL	11-11-09	1016	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-11-09 1345	NO 413 SSUR 2	11/11/9-1345
SSU-R2	11-12-09 0900		11-12-09 0900
	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-054** | **PAGE 2 OF 2**

COLLECTOR Krause, Rand	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-038	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 17 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 77.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-055

COLLECTOR
Kavik Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-039

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS - 06

FIELD LOGBOOK NO. PS 17
HNF-N-491-5

ACTUAL SAMPLE DEPTH
80'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TM9	SOIL	11-11-09	10 34	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kavik	11-11-09 1345	N0413 SSU-R2	11/11/9 1345
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R2	11-12-09 0900	Calvin Tarin	11-12-09 0900
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Calvin Tarin	11-12-09 1242	[illegible]	11/12/09 1242
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-055** | **PAGE 2 OF 2**

COLLECTOR Nacin, Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-039	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 12 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 80'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ [illegible]

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-059

COLLECTOR Kauer, Mckler	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-041	**PROJECT DESIGNATION** 700-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-066	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 17	**ACTUAL SAMPLE DEPTH** 82.6	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5100.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216,

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TN0	SOIL	11-11-09	1200	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer 11-11-09	1345	No 413 SSU R2	11/11/09 1345
SSU-R2 11-12-09	0900	Calvin Tarpley	11-12-09 0900
Calvin Tarpley 11-12-09	1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG# ESL090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-059** |

COLLECTOR Kauss, McKee	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-041	**PROJECT DESIGNATION** 200-PW-2 OU Characterizat on Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS17	**ACTUAL SAMPLE DEPTH** 82.6	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-060

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kraus, Mckee	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-042	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 17	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
GWS-266	HNF-N-491-5	85'	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TN1	SOIL	11-11-09	1209	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kraus, Ed [illegible]	11-11-09 1345	MO 413 SSUR 2	11/11/09 1345
SSU-R2	11-12-09 0900	Carling Tayrd	11-12-09 0900
Carling Tayrd	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-060** |

COLLECTOR Kruse, Mokler	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-042	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 85	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-061

COLLECTOR
Kauer, Mokler

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); T-043

PROJECT DESIGNATION
200 PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO. PS 17
HNF-N-491-5

ACTUAL SAMPLE DEPTH
88.0

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC4

PRESERVATION	Cool-4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B22TN2	SOIL	11-11-09	1240	✓	✓					

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-11-09 1345	NS413 SSUR 2	11/11/9-1345
SSU-R21-12-09	0500	Carlos Yarin	11-12-09 0800
Carlos Yarin	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-061** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAUSR, MOKLER	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-043	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** B17	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5	88.0	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-063** | **PAGE 1 OF 2**

COLLECTOR Frank McKler	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-044	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. GWS-066	**FIELD LOGBOOK NO.** PS HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 90.4	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIF TO: B22VC4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B22TN3	SOIL	11-11-09	1252	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
Ed Kinn/Ed Kinn	11-11-09 1345	N0413 SSUR2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Tang	11-12-09 0900
Calvin Tang	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

[ ] UR[illegible]

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-063** |

COLLECTOR Kruse, McKee	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-044	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 1	**ACTUAL SAMPLE DEPTH** 204	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-043

COLLECTOR
Kavin Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); 1-031

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO. PS17
HNF-N-491-5

ACTUAL SAMPLE DEPTH
60.2 to 62.7

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VB7

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V63	SOIL	11-11-09	0757 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Knox / [signature]	11-11-09 1345	N0443 SSUR2	11/11/9 1345
SSU-R2	11-12-09 0900	[signature]	11-12-09 0900
[signature]	11-12-09 1242	[signature]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-043** |

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-031	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS17 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 60.2 to 62.7	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-230

COLLECTOR
Kaur, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); 1-035A

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO. 8517
HNF-N-491-5

ACTUAL SAMPLE DEPTH
70.1 to 72.6

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V94

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22V91	SOIL	11-11-09	0930	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-11-09 1345	NA43 SSUR 2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242		11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-230

COLLECTOR KAVER, ROMO	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); 1-035A	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS17 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 70.1 to 70.6	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-057

COLLECTOR
Kauk, Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-040

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-066

FIELD LOGBOOK NO.
HNF-N-491-5 85.7

ACTUAL SAMPLE DEPTH
EC.1 to 82.6

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
Dt=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC3

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V84	SOIL	11-11-09	1046 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauk, Ed Kauk	11-11-09 1345	MO43 SSU R2	11/11/9-1345
SSU-R2	11-12-09 0900	Calvin Farris	11-12-09 0900
Calvin Farris	11-12-09 1242	[illegible]	11/12/09 1242

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY TITLE DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD DISPOSED BY DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-057

COLLECTOR
Kause, Rome

SAMPLING LOCATION
C7514 (299-E24-25); I-040

ICE CHEST NO.

SHIPPED TO
Environmental Sciences Laboratory

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

FIELD LOGBOOK NO. PS 17
HNF-N-461-5

ACTUAL SAMPLE DEPTH
80.1 to 82.6

OFFSITE PROPERTY NO.
N/A

PROJECT COORDINATOR
DYEKMAN, DL

SAF NO.
F10-024

COA
302117ES10

BILL OF LADING/AIR BILL NO.
N/A

PRICE CODE 8N

AIR QUALITY ☐

DATA TURNAROUND
45 Days / 45 Days

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200 BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-064

COLLECTOR
[illegible]

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-046

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
GWS - 021

FIELD LOGBOOK NO.
HNF-N-481-5

ACTUAL SAMPLE DEPTH
90 to 92.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V54

PRESERVATION	Cool-4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TN4	SOIL	11-12-09	0830

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kenoe [illegible]	11-12-09 1125	MO 413 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009 8:00	DW Brotherton	NOV 16 2009 8:00
DW Brotherton	NOV 16 2009 15:30	[illegible]	NOV 16 2009 15:30

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

SDG# ESL090008

WO#0911013

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-064** | **PAGE 2 OF 2**

COLLECTOR Kitchen, Kevin	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-046	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO. GWS - 021	**FIELD LOGBOOK NO.** 23/19 HNF-N-451-5	**ACTUAL SAMPLE DEPTH** 90 to 92.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-065 **PAGE 1 OF 2**

COLLECTOR Kevin Reynolds	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-047	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. 6WS-021	**FIELD LOGBOOK NO.** HNF-N-451-5 PS18	**ACTUAL SAMPLE DEPTH** 74.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DI=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**
B22TN5	SOIL	11-12-09	12:47

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible] 11-12-09	1125	MO 413 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	13:30 NOV 16 2009	[illegible]	13:30 NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION **RECEIVED BY** **TITLE** **DATE/TIME**

FINAL SAMPLE DISPOSITION **DISPOSAL METHOD** **DISPOSED BY** **DATE/TIME**

A 6003 618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-065** | **PAGE 2 OF 2**

COLLECTOR Kitus, Rand	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-047	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** HNF-N-291-5 P118	**ACTUAL SAMPLE DEPTH** 94.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-067

COLLECTOR
Kevin Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-048

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-021

FIELD LOGBOOK NO. PS 18
11NF-N-491.5

ACTUAL SAMPLE DEPTH
97.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TN6	SOIL	11-12-09	0956	✓	✓								

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Kevin Romo	11-12-09 1125	MO 413 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009 0800	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009 13:30		NOV 16 2009 13:30

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-067** |

COLLECTOR Kohler, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-048	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	45 Days / 45 Days
ICE CHEST NO. GWS-081	**FIELD LOGBOOK NO.** Pg 18 1/NF-N-481-5	**ACTUAL SAMPLE DEPTH** 97.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-068

COLLECTOR
Kauer, Rome

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-049

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-021

FIELD LOGBOOK NO. A 18
HNF-N-491-5

ACTUAL SAMPLE DEPTH
100.6

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TN7	SOIL	11-12-09	0937	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [illegible] 11-12-09	1125	MO 413 SSHR-2	11/12/09 1125
SSU-R2	NOV 16 2009 0830	DW Brotherton [illegible]	NOV 16 2009 0830
DW Brotherton [illegible]	NOV 16 2009 13:30	[illegible] 13:30	NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-068** |

COLLECTOR Kwe Remo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I 049	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** Pg 18 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 100.6	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-070

COLLECTOR Kurt Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-050	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** PS 18 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 100 to 103.1	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC6

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22V65	SOIL	11-12-09	0953	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer 11-12-09	1125	MO 413 SSU-R2 11/12/09	1125
SSU-R2	NOV 16 2009 0800	DW Brotherton	NOV 16 2009 0800
DW Brotherton	NOV 16 2009 13:30	Igor Kufmyakov	NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-070** |

COLLECTOR Kautz, Rene	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-050	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** Pg 18 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 100 to 103.1	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW '200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-071

COLLECTOR
Kate Romo

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-051

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
GWS-021

FIELD LOGBOOK NO. PS18
HNF-N-491-5

ACTUAL SAMPLE DEPTH
102.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TN8	SOIL	11-12-09	1000	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaul	11-12-09 1125	MO 413 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	13:30 NOV 16 2009		13:30 NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-071** |

COLLECTOR Kevin Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-051	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 102.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-073

COLLECTOR
Kirsl

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-052

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS - 021

FIELD LOGBOOK NO. 1518
HNF-N-491-5

ACTUAL SAMPLE DEPTH
105

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TN9	SOIL	11-12-09	1008	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	11-12-09 1125	HNO 415 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009	[illegible]	NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-073

COLLECTOR Kauer, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-052	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** PS 18 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 105	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-074

COLLECTOR Kruse, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-053	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS - 021	**FIELD LOGBOOK NO.** HNF-N-451-5 PS 18	**ACTUAL SAMPLE DEPTH** 107.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TP0	SOIL	11-12-09	1016

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kruse / [signature]	11-12-09 1123	NO 413 SSU-R2	11/12/09 1125
SSU-R2	NOV 16 2009	DW Brotherton [signature]	NOV 16 2009 0800
DW Brotherton [signature]	1330 NOV 16 2009	[signature]	1330 NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG# FSL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-074

COLLECTOR Kurn, Reno	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-053	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** HNF-N-491.5	**ACTUAL SAMPLE DEPTH** 107.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24 25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-076

COLLECTOR
Kaus, Romo

SAMPLING LOCATION
C7514 (299-E24-25); I-054

ICE CHEST NO.
GWS-021

SHIPPED TO
Environmental Sciences Laboratory

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

FIELD LOGBOOK NO.
HNF-N-491-5 P318

ACTUAL SAMPLE DEPTH
110

OFFSITE PROPERTY NO.
N/A

PROJECT COORDINATOR
DYEKMAN, DL

SAF NO.
F10-024

COA
302117ES10

BILL OF LADING/AIR BILL NO.
N/A

PRICE CODE 8N

AIR QUALITY ☐

DATA TURNAROUND
45 Days / 45 Days

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TP1	SOIL	11-12-09	1030	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kraus	11-12-09 11:25	SSU-R2	11/12/09 11:25
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009 13:30		NOV 16 2009 13:30

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-076** |

COLLECTOR Kincer, Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-054	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS-021	**FIELD LOGBOOK NO.** HNF-N-491-5 PS/8	**ACTUAL SAMPLE DEPTH** 110	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-077

COLLECTOR Kirsch, Rome	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-055	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO. GWS - 094	**FIELD LOGBOOK NO.** HNF-N-491-5 PS18	**ACTUAL SAMPLE DEPTH** 110.6 to 113.1	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC9

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V66	SOIL	11-12-09	1205

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kirsch / Edward Kirsch	11-12-09 1525	410.413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009 08:52	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009		NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-077** |

COLLECTOR Kevin Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-055	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-451-5 Ps 18	**ACTUAL SAMPLE DEPTH** 110.6 to 113.1	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-079 **PAGE 1 OF 2**

COLLECTOR
Kraus, Rene

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-056

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS - 094

FIELD LOGBOOK NO. PS 18
HNF-N-481-5

ACTUAL SAMPLE DEPTH
112.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VC9

PRESERVATION			Cool~4C	None							
TYPE OF CONTAINER			G/P	Moisture Resistant Cont							
NO. OF CONTAINER(S)			1	1							
VOLUME			1L	200g							
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;							
SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**								
B22TP2	SOIL	11-12-09	1213	✓	✓						

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kraus Ellen Olson 11-12-09	1525	MO 413 SSU-R2 11/12/09	1525
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009	Lar Lufgalio 13:30	NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

08:00

ORIGINAL

LABORATORY SECTION **RECEIVED BY** **TITLE** **DATE/TIME**

FINAL SAMPLE DISPOSITION **DISPOSAL METHOD** **DISPOSED BY** **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-079** | **PAGE 2 OF 2**

COLLECTOR Kacy, Rose	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-056	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** PS 18 HNF-IN-491-5	**ACTUAL SAMPLE DEPTH** 112.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-080** | **PAGE 1 OF 2**

COLLECTOR Kruse, Renee	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-057	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** 15318 HNI-N-491.5	**ACTUAL SAMPLE DEPTH** 115	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B22TP3	SOIL	11-12-09	1220	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kovach Ed Kovach 11-12-09	1525	MO 413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009		NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-080** |

COLLECTOR Kruse - Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I 057	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO. 6WS-094	**FIELD LOGBOOK NO.** HNF-N-451.5 Pi 18	**ACTUAL SAMPLE DEPTH** 115	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-082

COLLECTOR
Kirver, Rome

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-058

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-094

FIELD LOGBOOK NO. 318
INF N-491-5

ACTUAL SAMPLE DEPTH 117.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TP4	SOIL	11-12-09	1230	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kirver, Rome	11-12-09 1525	MO 413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009 13:30	Igor Lutsyakov	NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-082** |

COLLECTOR Kirun, Romo	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-058	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** | |	**45 Days / 45 Days**
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** PS 18 HNF-N-481-5	**ACTUAL SAMPLE DEPTH** 117.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-083

COLLECTOR: Kruger, Rome

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT COORDINATOR: DYEKMAN, DL

PRICE CODE: 8N

DATA TURNAROUND: 45 Days / 45 Days

SAMPLING LOCATION: C7514 (299-E24-25); I-059

PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.: F10-024

AIR QUALITY: [ ]

ICE CHEST NO.: GWS-094

FIELD LOGBOOK NO.: HNF-N-491-5

ACTUAL SAMPLE DEPTH: 12c

COA: 302117ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: Environmental Sciences Laboratory

OFFSITE PROPERTY NO.: N/A

BILL OF LADING/AIR BILL NO.: N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TP5	SOIL	11-12-09	1306	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Eil Kuzelka	11/12/09 1525	MO 413 SSU-R2	11/12/09 1525
SSU-R2	01/20	DW Brotherton	08:00 NOV 16 2009
DW Brotherton	NOV 16 2009		
			NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-083** |

COLLECTOR Kauer Reac	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-059	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	45 Days / 45 Days
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** PS HNF-N-481.5	**ACTUAL SAMPLE DEPTH** 12 c'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-085

COLLECTOR Kirc E-2	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-060	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** 15318	**ACTUAL SAMPLE DEPTH** HNF-N-491-5 120'-123'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD1

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V67	SOIL	11-12-09	1320

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkins E-2	11-12-09 1525	HO 413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009 13:30	Lopez Kutzelos	13:30 NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG# ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-085** |

COLLECTOR Kruse	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-060	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	45 Days / 45 Days
ICE CHEST NO. 6WS-094	**FIELD LOGBOOK NO.** 15 HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 120-123	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-086

COLLECTOR
Kuhl EC

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY [ ]

SAMPLING LOCATION
C7514 (299-E24-25); I-061

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
6WS-0941

FIELD LOGBOOK NO.
HNF-N-491-5

ACTUAL SAMPLE DEPTH
122.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TP6	SOIL	11-12-09	1322	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kuhl	11-12-09 1525	MO 413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009 0820	DW Brotherton	NOV 16 2009 8:30
DW Brotherton	NOV 16 2009 13:30		
			NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-086** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KATLEC	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	**45 Days / 45 Days**
C7514 (299-E24-25); I-061	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
6WS-094	HNF-N-491-5	122.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
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ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-088

COLLECTOR Kurvit	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-062	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 125'	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**SHIPPED TO** Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TP7	SOIL	11-12-09	1335	✓	✓						

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Ei Kurvit	DATE/TIME 11-12-09 1525	RECEIVED BY/STORED IN MO 413 SSU-R2	DATE/TIME 11/12/09 1525
RELINQUISHED BY/REMOVED FROM SSU-R2	DATE/TIME NOV 16 2009 08:00	RECEIVED BY/STORED IN DW Brotherton	DATE/TIME NOV 16 2009 08:00
RELINQUISHED BY/REMOVED FROM DW Brotherton	DATE/TIME NOV 16 2009 13:30	RECEIVED BY/STORED IN Joe Lu Angelis	DATE/TIME NOV 16 2009 13:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-088** |

COLLECTOR Kizzie	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-062	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 125	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
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ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-089

COLLECTOR Kizer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-063	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-481-5 PS18	**ACTUAL SAMPLE DEPTH** 127	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
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WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216,

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TP8	SOIL	11-12-09	1342	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kizer	11-12-09 1525	MO413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009 0820	DW Brotherton	NOV 16 2009 0820
DW Brotherton	NOV 16 2009 13:30	Lyn Kutzyalow	NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-089** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KBLOC	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-063	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS18	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
GWS-094	HNF-N-451-5	127	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate on, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-091

COLLECTOR Kuhl & C	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-064	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. 6WS - 094	**FIELD LOGBOOK NO.** HNF-N-481-5	**ACTUAL SAMPLE DEPTH** 130'	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TP9	SOIL	11-12-09	1438	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	11-12-09 1525	00413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009 08:20
DW Brotherton	NOV 16 2009 13:30	[illegible]	NOV 16 2009 13:20

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-091** |

COLLECTOR KAUEC	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-064	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. 6WS-094	**FIELD LOGBOOK NO.** HNF-N-491-5 P118	**ACTUAL SAMPLE DEPTH** 130'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-092

COLLECTOR RAGU	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-065	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. 6WS-094	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 127.4 to 131.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD4

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V68	SOIL	11-2-09	1452

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	1525	MO 413 SSU-R2	11/12/09 1525
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009 8:20
DW Brotherton	NOV 16 2009 13:30	[illegible]	NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-092

COLLECTOR [illegible]	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-065	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. GWS-094	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 129.4 to 131.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-094** | **PAGE 1 OF 2**

COLLECTOR
Kruger

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-066

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5

ACTUAL SAMPLE DEPTH
~~HNF-N~~ 132.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**
B22TR0	SOIL	11-13-09	0747

CHAIN OF POSSESSION | **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Eric Kruger	11-13-09 1122	MO-413 SSU-R2	11-13-09 1122
SSU-R2	08:00	DW Brotherton	08:00
DW Brotherton	13:30		13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-094** | **PAGE 2 OF 2**

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-066	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 132.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-095

COLLECTOR Kirk Ez	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-067	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GW S-021	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 136	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasab'e per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR1	SOIL	11-13-09	0824

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Eric Kirk Ezell	11-13-09 1122	MO-413-R2	11-13-09 1122
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R2	0800	DW Brotherton	0800
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DW Brotherton	13:30		13:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG # FS1.090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-095** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kauer	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-067	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 p318	136	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-097

COLLECTOR
Kalen

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-068

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5

ACTUAL SAMPLE DEPTH
15/4 137.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD5

PRESERVATION	Cool~4C	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	
VOLUME	1L	200g	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TR2	SOIL	11-13-09	0911	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kowalczyk	11-13-09 1122	MO-413-R2	11-13-09 1122
SSU-R2	0850	DW Brotherton	0850
DW Brotherton	13:30	Igor Kutyakov	13:30

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-097** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kauke	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-068	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-591-5 B/S	137'	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-098

COLLECTOR KUCR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-069	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-951-5	**ACTUAL SAMPLE DEPTH** 180.8	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR3	SOIL	11-13-09	0930

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kucr	11-13-09 1122	MO-413-R2	11-13-09 1122
SSU-R2	0810	DW Brotherton	0810
DW Brotherton	13:30		

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-098** |

COLLECTOR Kaiser	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-069	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-851-5	85/5 **ACTUAL SAMPLE DEPTH**	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-100

COLLECTOR Kirk	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-071	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO. GWS -021	**FIELD LOGBOOK NO.** HNF-N-591-5	**ACTUAL SAMPLE DEPTH** 142.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR4	SOIL	11-13-05	1011

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	11-13-05 1122	MO-413-R2 [signature]	11-13-05 1122
SSU-R2		DW Brotherton	0830
DW Brotherton [signature]	13:30	[signature]	13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-100** |

COLLECTOR Kytec	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-071	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS	**ACTUAL SAMPLE DEPTH** 142.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-102

COLLECTOR
Kauer

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-072

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
GWS-021

FIELD LOGBOOK NO.
HNF-N-591-5 pg 19

ACTUAL SAMPLE DEPTH
194

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SLE ITLM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR5	SOIL	11-13-09	1021

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-13-09 1122	MO-413-R2	11-13-09 1122
BSU-R2		DW Brotherton	08:00
DW Brotherton	13:30	Igor Kutyakov	13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-102** |

COLLECTOR KAUZ	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-072	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-581-5	**ACTUAL SAMPLE DEPTH** 144	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKJ applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-103

COLLECTOR KAUEL	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); 1-073	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY			
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-481.5 pg 19	**ACTUAL SAMPLE DEPTH** 147.5'	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TR6	SOIL	11-13-09	1202	✓	L						

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KAUEL	11-13-09 1445	MD413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	13:30 NOV 16 2009		13:30 NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-103** | **PAGE 2 OF 2**

COLLECTOR KAUSZ	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-073	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-851,5	**ACTUAL SAMPLE DEPTH** 13 14 / 7, 5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-104

COLLECTOR Kilcer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); 1-074	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-491-5 PS19	**ACTUAL SAMPLE DEPTH** 149.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TR7	SOIL	11-13-09	1228	✓	✓							

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kilcer	11-13-09 1445	MO 413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009		NOV 16 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-104** |

COLLECTOR KALK	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-074	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-581-5	**ACTUAL SAMPLE DEPTH** 149.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-105

COLLECTOR: KAUER	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7514 (299-E24-25); 1-075	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	SAF NO.: F10-024	AIR QUALITY:
ICE CHEST NO.: SLICK - 1	FIELD LOGBOOK NO.: HNF-N-581-5 PS 19	ACTUAL SAMPLE DEPTH: 149.9 to 152.4	COA: 302117ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22V69~~ B22VD8 KS 11/12/09

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V69	SOIL	11-13-09	1244

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-13-09 1445	M0413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	13:30 NOV 16 2009	Igor Kutyakov	13:30 NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG # ESL090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-105** |

COLLECTOR KAUSER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-075	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-881-5 PS 19	**ACTUAL SAMPLE DEPTH** 148.9 to 152.4	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-107

COLLECTOR Kause	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-076	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-491.5 PZ14	**ACTUAL SAMPLE DEPTH** 152.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content : D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR8	SOIL	11-13-09	1254

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kause	11-13-09 1445	MO 413 SSU R2	11-13-09 1445 08:00
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009 13:30		NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-107** |

COLLECTOR Kause	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-076	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. Stick - 1	**FIELD LOGBOOK NO.** HNF-N- 891-5	**ACTUAL SAMPLE DEPTH** 152.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-108

COLLECTOR
KALER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-F24-25); I-077

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
SLICK - 1

FIELD LOGBOOK NO.
HNF-N-591-5 15

ACTUAL SAMPLE DEPTH
155

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION	Cool--4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216,

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD8

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TR9	SOIL	11-13-09	1307

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaler Edward Kaler	11-13-09 1445	MC413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	NOV 16 2009		

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A 6003 618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-108** |

COLLECTOR KALSE	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); 1-077	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-551-5 PS,9	**ACTUAL SAMPLE DEPTH** 155	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-109

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-078	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. SLICK-1	**FIELD LOGBOOK NO.** HNF-N-581-5 19	**ACTUAL SAMPLE DEPTH** 157.5'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TT0	SOIL	11-13-09	1344

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Edward [illegible]	11-13-09 1445	M0413	11-13-09 1445
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009 13:30	[illegible]	NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-109** |

COLLECTOR KAUSE	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-078	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-591-5 3/5	**ACTUAL SAMPLE DEPTH** 157.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Antimony, Aluminum, Iron, Potassium, Calcium, Nickel, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-111** | **PAGE 1 OF 2**

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); 1-079

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
SLICK - 1

FIELD LOGBOOK NO.
HNF-N-581-5 B/19

ACTUAL SAMPLE DEPTH
16C.3

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
W!=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216,

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TT1	SOIL	11-13-09	1403	✓	✓						

CHAIN OF POSSESSION | **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaufer Edward Kaufer	11-13-09 1445	MO413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009
DW Brotherton	13:30		NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-111** |

COLLECTOR KAUSER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); 1-079	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. SLCK - 1	**FIELD LOGBOOK NO.** HNF-N-591-5 pg 75	**ACTUAL SAMPLE DEPTH** 160.3	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-112

COLLECTOR Kal Er	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-080	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SLICK - 1	**FIELD LOGBOOK NO.** HNF-N-551-5 pg 13	**ACTUAL SAMPLE DEPTH** 160.3 to 162.8	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VD9

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V70	SOIL	11-13-09	1420

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kruger	11-13-09 1445	M0413 SSU R2	11-13-09 1445
SSU-R2	NOV 16 2009 08:00	DW Brotherton	NOV 16 2009 08:00
DW Brotherton	NOV 16 2009		NOV 16 2009 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-112** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-080	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. SCICK-1	**FIELD LOGBOOK NO.** HNF-N-581-5 CS 15	**ACTUAL SAMPLE DEPTH** 160.3 to 162.8	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-113

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-081	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO. SCICK - 1	**FIELD LOGBOOK NO.** PS HNF-N-581-3-18	**ACTUAL SAMPLE DEPTH** 162.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - 02216;

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22VF0~~ B22VD9 GAF per KKS 11/12/09

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TT2	SOIL	11-13-09	1430

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E.J. Kauer	11-13-09 1445	MO 413 SSU R2	11-13-09 1445 0100
SSU-R2	NOV 16 2009	DW Brotherton	NOV 16 2009
DW Brotherton	13:30 NOV 16 2009		13:30 NOV 16 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-113** |

COLLECTOR Kruse	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-081	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO. CLICK-1	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 162.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-115

COLLECTOR
KAUSR

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-082

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5 pg 20

ACTUAL SAMPLE DEPTH
165'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TT3	SOIL	11-16-09	0734

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauser	11-16-09 1112	MC413 SSU-R2	11-16-09 1112
MC413 SSU-R2	11-16-09 1115	Ed Kauser	11-16-09 1115
Ed Kauser	11-16-09 13:30	Roger McAngelis	13:30 11-16-09

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION RECEIVED BY

TITLE **DATE/TIME**

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY **DATE/TIME**

SDR # ESL090002

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-024-115	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kauer	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-082	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 Pg 20	165'	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-117** | **PAGE 1 OF 2**

COLLECTOR
KAUSER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-083

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5 1520

ACTUAL SAMPLE DEPTH
167.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**								
B22TT4	SOIL	11-16-09	0820	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauser	11-16-09 1112	MO 413 SSU-R2	11-16-09 1112
MO 413 - SSU-R2	11-16-09 1115	Ed Kauser	11-16-09 1115
Ed Kauser	11-16-09 13:30	[illegible]	13:30 11-16-09

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-117** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-083	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 20	**ACTUAL SAMPLE DEPTH** 167.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-118

COLLECTOR Kaiser	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-084	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS20	**ACTUAL SAMPLE DEPTH** 170'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22VP2~~ E22VP1
KS 11/12/09

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**
B22TT5	SOIL	11-16-09	0835

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaiser/Ed Kaiser	11-16-09 1112	MC 413 SSU-R2	11-16-09 1112
MC 413 SSU-R2	11-16-09 1115	Ed Kaiser/Ed Kaiser	11-16-09 1115
Ed Kaiser/Ed Kaiser	11-16-09 13:30	[illegible]	13:30 11-16-09

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-118** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAUSL	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-084	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 PS20	170'	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-120

COLLECTOR KAUER,	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
SAMPLING LOCATION C7514 (299-E24-25); I-085	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS20	**ACTUAL SAMPLE DEPTH** 170.5 to 173	**COA** 302117ES10
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8N

AIR QUALITY [ ]

DATA TURNAROUND 45 Days / 45 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF3

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V71	SOIL	11-16-09	0855

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Edward Kauer	11-16-09 1112	MO 413 SSU-R2	11-16-09 1112
MO 413 SSU-R2	11-16-09 1115	Ed Kauer, Edward Kauer	11-16-09 1115
Ed Kauer, Edward Kauer	11-16-09 13:30	Jaqa Kuhnyalko	13:30 11-16-09

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-120** |

COLLECTOR Kruger	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-085	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-481-5 1120	**ACTUAL SAMPLE DEPTH** 170.5 to 173	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKJ applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-122

COLLECTOR
KALSZ

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-086

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5 PS20

ACTUAL SAMPLE DEPTH
172.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DI=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TT6	SOIL	11-16-09	0917	✓	✓								

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kalsz	11-16-09 1112	MC 413 SSU-R2	11-16-09 1112
MC-413 SSU-R2	11-16-09 1115	Ed Kalsz	11-16-09 1115
Ed Kalsz	11-16-09 13:30	Igor Lutsyalov	13:30 11-16-09

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY

DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-122** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-086	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 172.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
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ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-123

COLLECTOR
Kirker

SAMPLING LOCATION
C7514 (299-E24-25); I-087

ICE CHEST NO.

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

FIELD LOGBOOK NO.
HNF-N-481-5 PS

ACTUAL SAMPLE DEPTH
175'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TT7	SOIL	11-16-09	04:25 DWS 11/16/09

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kirker	11-16-09 1112	MO 413 SSU-R2	11-16-09 1112
MO 413 SSU-R2	11-16-09 1115	Ed Kirker	11-16-09 1115
Ed Kirker	11-16-09 13:30	[illegible]	1330 11-16-09

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY

TITLE **DATE/TIME**

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-123** |

COLLECTOR KALSE	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-087	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-481-5 13	**ACTUAL SAMPLE DEPTH** 175'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25' and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-124

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

SAMPLING LOCATION
C7514 (299-E24-25); I-088

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N- 491-5 PS 20

ACTUAL SAMPLE DEPTH
177.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TT8	SOIL	11-16-09	1005	✓	✓								

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-16-09 1112	MO-413 SSU-R2	11-16-09 1112
MO-413-SSU-R2	11-16-09 1115	Ed Kauer	11-16-09 1115
Ed Kauer	11-16-09 13:30	[illegible]	13:30 11-16-09

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-124** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAUER	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-088	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** Ps 20	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	DIE-N- 491	177.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW 2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround t mes and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-126

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-089	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491 P320	**ACTUAL SAMPLE DEPTH** 180'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B22TT9	SOIL	11-16-09	1022	✓	✓					

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-16-09 1112	MO 413 SSU-R2	11-16-09 1112
MO-413 SSU-R2	11-16-09 1115	Ed Kauer / [signature]	11-16-09 1115
Ed Kauer / [signature]	11-16-09 13:30	[signature]	13:30 11-16-09

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-126** |

COLLECTOR KAUSL	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-089	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-481-5 PS 20	**ACTUAL SAMPLE DEPTH** 180	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) (Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver) 6010M_ICP_ASTM_AE (Add-On) (Lead, Thallium, Selenium) 6010M_METALS_ICP_WE (TAL) (Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver) 6010M_METALS_ICP_WE (Add-On) (Lead, Thallium, Selenium) 6020M_ICPMS_ASTM_AE (TAL) (Chromium, Cadmium) 6020M_ICPMS_ASTM_AE (Add-On) (Arsenic) 6020M_METALS_ICPMS_WE (TAL) (Chromium, Cadmium) 6020M_METALS_ICPMS_WE (Add-On) (Arsenic) 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE (Uranium-238, Technetium-99) RADISO_ICPMS_WE (Iodine-129, Uranium-238, Technetium-99) I-129 by ICPMS (Iodine-129) GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE (Gross beta, Gross alpha) ALPHA_BETA_WE (Gross beta, Gross alpha) IC Anions - 9056_WE (Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate) Cyanide (Total) - 335.2 (Cyanide) pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A (Total organic carbon, Total Inorganic Carbon, Total carbon) 2320_ALKALINITY (Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate)

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-127

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-090

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5-20

ACTUAL SAMPLE DEPTH
180.3 to 182.8

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SF=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF5

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V72	SOIL	11-16-09	1034

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11-16-09 1112	MO 413 SSO-R2	11-16-09 1112
MO 413 - SSO-R2	11-16-09 1115	Ed Kauer	11-16-09 1115
Ed Kauer	11-16-09 13:30	Igor Kutyakov	11-16-09 13:30

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-127** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAC SR	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** [ ]	45 Days / 45 Days
C7514 (299-E24-25); I-090	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N- 491-5 20	180.3 to 182.8	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-129

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-091

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5 20 PS

ACTUAL SAMPLE DEPTH
182.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TV0	SOIL	11-16-09	1045	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-16-09 1112	MO-413 550-R2	11-16-09 1112
MO-413 550-R2	11-16-09 1115	Ed Kauer [signature]	11-16-09 1115
Ed Kauer / [signature]	11-16-09 13:30	[signature]	11-16-09 13:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-129** |

COLLECTOR KALSR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-091	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-481-5 20	**ACTUAL SAMPLE DEPTH** 182.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-130

COLLECTOR
ISAL E2

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-092

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-491-5-20 P3

ACTUAL SAMPLE DEPTH
185

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TV1	SOIL	11-16-09	1055	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	11-16-09 1112	MC-413 SSU-R2	11-16-09 1112
MC-413 SSU-R2	11-16-09 1115	Ed Kauer [signature]	11-16-09 1115
Ed Kauer [signature]	11-16-09 13:30	[signature]	13:30 11-16-09
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-130** |

COLLECTOR Kaye	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-092	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 185	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-132

COLLECTOR KAUSR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-093	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. 6WS-091	**FIELD LOGBOOK NO.** HNF-N-481-5 PS	**ACTUAL SAMPLE DEPTH** 187.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TV2	SOIL	11-16-09	1220

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E.K. KAUSR	11-16-09 1500	MC-413-SSU-R2	11-16-09 1500
SSU-R2	NOV 18 2009	DW Brotherton	NOV 18 2009 08:00
DW Brotherton	NOV 18 2009 08:00		NOV 18 2009 11:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

SDG# FSL09000 8

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-132** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); 1-093	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5-20	**ACTUAL SAMPLE DEPTH**	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-133

COLLECTOR Kaur	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-094	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. 6WS-091	**FIELD LOGBOOK NO.** HNF-N-491-5-20 PS	**ACTUAL SAMPLE DEPTH** 190	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TV3	SOIL	11-16-09	1240	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkinac Ekinac	11-16-09 / 1500	530-413 550-R2	11-16-09 / 1500
SSU-R2	NOV 18 2009 0900	DW Brotherton	NOV 18 2009 09:00
DW Brotherton	NOV 18 2009 11:30		NOV 18 2009 11:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-133** |

COLLECTOR KALLC	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-094	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 20	**ACTUAL SAMPLE DEPTH** 190	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-137** | **PAGE 1 OF 2**

COLLECTOR KAUSE	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-096	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 20	**ACTUAL SAMPLE DEPTH** 192.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22VK5~~ B22VF7 KS 11/12/09

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**									
B22TV4	SOIL	11-16-09	1322	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robert Kause	11-16-09/1500	MO-417-SSU-R2	11-16-09/1500
SSU-R2	NOV 18 2009 08:00	DW Brotherton	NOV 18 2009 08:00
DW Brotherton	NOV 18 2009 11:30	for Lutzgahus	NOV 18 2009 11:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-137** |

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-096	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-481-5	**ACTUAL SAMPLE DEPTH** 192.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-138

COLLECTOR Kauer

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); 1-097

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY ☐

ICE CHEST NO. GWS - 091

FIELD LOGBOOK NO. HNF-N-491-5 pg 20

ACTUAL SAMPLE DEPTH 195.0'

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22VK5~~ B22VF7 KS 11/12/09

PRESERVATION	Cool~4C	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	
VOLUME	1L	200g	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TV5	SOIL	11-16-09	1330	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kauer	11-16-09 / 1500	SSU-R2	11-16-09 / 1500
SSU-R2	NOV 18 2009 08:00	DW Brothers	NOV 18 2009 08:00
DW Brothers	11:30 NOV 18 2009		11:30 NOV 18 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-138** |

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-097	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-W-491-5 pg 20	**ACTUAL SAMPLE DEPTH** 195.0	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-139

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-098	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** 11NF-N-491-5 P920	**ACTUAL SAMPLE DEPTH** 197.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX* A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TV6	SOIL	11-16-09	~~1404~~ 1404	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Edkauer	11-16-09 1500	MC-413 SSU-R2	11-16-09 1500
SSU-R2	NOV 18 2009 08:00	DW Brotherton	NOV 18 2009 08:00
DW Brotherton	NOV 18 2009 11:30		NOV 18 2009 11:30

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-139** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kaler	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	**45 Days / 45 Days**
C7514 (299-E24-25); I-098	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 PS20	197.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-141

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days	**AIR QUALITY** ☐	**SAMPLING LOCATION** C7514 (299-E24-25); I-099
PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**ICE CHEST NO.** GWS-091	**FIELD LOGBOOK NO.** HNF N-491-5 Pg 20
ACTUAL SAMPLE DEPTH 200	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**SHIPPED TO** Environmental Sciences Laboratory
OFFSITE PROPERTY NO. N/A	**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TV7	SOIL	11-16-09	1418	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
El Kauer / [signature]	11-16-09 / 1500	MC-413 SSU-R2	11-16-09 / 1500
SSU-R2	NOV 18 2009 0805	DW Brotherton [signature]	NOV 18 2009 0810
DW Brotherton [signature]	NOV 18 2009 1130	[signature] 11-30	NOV 18 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-141** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-099	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 20	**ACTUAL SAMPLE DEPTH** 200	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-142

COLLECTOR KRAUSE	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-100	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 20	**ACTUAL SAMPLE DEPTH** 200.6 to 203.1	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**SHIPPED TO** Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF9

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V74	SOIL	11-16-09	1432

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Krause / [illegible]	11-16-09/1500	Mc-413 SSU-R2	11-16-09/1500
RELINQUISHED BY/REMOVED FROM SSU-R2	DATE/TIME NOV 18 2009 08:00	RECEIVED BY/STORED IN DW Brotherton	DATE/TIME NOV 18 2009 08:00
RELINQUISHED BY/REMOVED FROM DW Brotherton	DATE/TIME NOV 18 2009 11:30	RECEIVED BY/STORED IN [illegible] 11:30	DATE/TIME NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-142** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Kauer	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	45 Days / 45 Days
C7514 (299-E24-25); I-100	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 20	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5	200.6 to 203.1	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-144

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-101

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
SML-315

FIELD LOGBOOK NO.
HNF-N-491-5 P 21

ACTUAL SAMPLE DEPTH
202.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VF9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216:

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TV8	SOIL	11-18-09	0714	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [illegible]	11-18-09 11:30	[illegible]	11:30 NOV 18 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-144

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-101	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-521	**ACTUAL SAMPLE DEPTH** 202.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-145

COLLECTOR: KAGE	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7514 (299-E24-25); I-102	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	SAF NO.: F10-024	AIR QUALITY: ☐
ICE CHEST NO.: SMC 315	FIELD LOGBOOK NO.: HNF-N-491-5 PS 21	ACTUAL SAMPLE DEPTH: 205'	COA: 302117ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TV9	SOIL	11-18-09	07:27	✓	✓						

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	11-18-09 11:30	[signature] 11:30	NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-61B(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-145** | **PAGE 2 OF 2**

COLLECTOR KAUR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-102	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5-21 B	**ACTUAL SAMPLE DEPTH** 205	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-147

COLLECTOR KAUSK	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-103	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. SML 315	**FIELD LOGBOOK NO.** HNF-N-491-5 21	**ACTUAL SAMPLE DEPTH** 207.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TW0	SOIL	11-18-09	0800	✓	✓						

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed KALER / [signature]	11-18-09 11:30	[signature] 11:30	NOV 18 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-147** |

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-103	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 21	**ACTUAL SAMPLE DEPTH** 207.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-148

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-F24-25); I-104

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
SML-315

FIELD LOGBOOK NO. PS
HNF-N-491-521

ACTUAL SAMPLE DEPTH
210'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22VH1~~
B22VH0
KS 11/12/09

PRESERVATION	Cool~4C	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	
VOLUME	1L	200g	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW1	SOIL	11-18-09	0820	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/Ed Schlegel	11-18-09 11:30	Igor Kutyakov	11:30 NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY

DATE/TIME

SDG# ES1 000008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-148

COLLECTOR Kaus	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-104	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5-21 PS	**ACTUAL SAMPLE DEPTH** 210'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-150

COLLECTOR
KAUGR

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY [ ]

SAMPLING LOCATION
C7514 (299-E24-25); I-105

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
SML 315

FIELD LOGBOOK NO.
HNF-N- 491-5 PS 21

ACTUAL SAMPLE DEPTH
210.2 to 212.7

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH2

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V75	SOIL	11-18-09	0832 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaugr / [signature]	11-18-09 11:30	Igor Kutyakov	11:30 NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD — DISPOSED BY — DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-150** |

COLLECTOR KAISER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-105	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-521	**ACTUAL SAMPLE DEPTH,** 210.2 to 212.7	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-152

COLLECTOR
KALSR

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

SAMPLING LOCATION
C7514 (299-E24-25); I-106

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
SML-315

FIELD LOGBOOK NO.
HNF-N-491-521 PS

ACTUAL SAMPLE DEPTH
212.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH2

PRESERVATION	Cool~4C	None									
TYPE OF CONTAINER	G/P	Moisture Resistant Cont									
NO. OF CONTAINER(S)	1	1									
VOLUME	1L	200g									
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;									

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TW2	SOIL	11-18-09	0850	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	11/30 NOV 18 2009		11/30 NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-024-152	PAGE 2 OF 2
COLLECTOR KALER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-106	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 21	**ACTUAL SAMPLE DEPTH**	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-153

COLLECTOR Kizer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-107	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY			
ICE CHEST NO. SML-315	**FIELD LOGBOOK NO.** HNF-N-491-5 Ps 21	**ACTUAL SAMPLE DEPTH** 215	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TW3	SOIL	11-18-05	0900	✓	✓							

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Erkauz/	11:30 11-18-09	Igor Nakayama	11:30 NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-153** | **PAGE 2 OF 2**

COLLECTOR KAUSC	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-107	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 21	**ACTUAL SAMPLE DEPTH** 215	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-154

COLLECTOR KRAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-108	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SML 315	**FIELD LOGBOOK NO.** HNF-N-491-5 21	**ACTUAL SAMPLE DEPTH** 217.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW4	SOIL	11-18-08	0934	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Krauer/Ed Krauer	11:30 11-18-08	Igor Yurkyalio	11:30 NOV 18 2008

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-154

COLLECTOR Kauke	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-108	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-521 PS	**ACTUAL SAMPLE DEPTH** 217.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-156

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-109	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. SMC 315	**FIELD LOGBOOK NO.** HNF-N-491-5 PS 21	**ACTUAL SAMPLE DEPTH** 220	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW5	SOIL	11-18-05	0950	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed KAUER / [signature]	11:30 11-18-05	[signature]	11:30 NOV 1 8 2005
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-156** |

COLLECTOR ITAC 82	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-109	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 21 PS	**ACTUAL SAMPLE DEPTH** 220	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-157

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-110	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. SML 315	**FIELD LOGBOOK NO.** HNF-N-491-5 B21	**ACTUAL SAMPLE DEPTH** 220 to 222.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH4

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V76	SOIL	11-18-09	1007

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Ed Kauer	DATE/TIME 11:30 11-18-09	RECEIVED BY/STORED IN	DATE/TIME 11:30 NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-157** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-110	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 21 B	**ACTUAL SAMPLE DEPTH** 220 to 222.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-159

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-111

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
SML 315

FIELD LOGBOOK NO.
HNF-N-491-5 P5 21

ACTUAL SAMPLE DEPTH
222.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW6	SOIL	11-18-09	1018	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/Ed Kauer 11:30	11-18-09	Inge Kuntzmann 11:30	NOV 18 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-159** |

COLLECTOR KALSR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-111	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-521	**ACTUAL SAMPLE DEPTH** 222.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-160

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-112

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY

ICE CHEST NO.
3ML 315

FIELD LOGBOOK NO.
HNF-N-491-5 PS 21

ACTUAL SAMPLE DEPTH
225'

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TW7	SOIL	11-18-09	1034

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer Edward Kauer	11-18-09 11:30	Igor Kutyakov	11:30 NOV 18 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-160 PAGE 2 OF 2

COMPANY CONTACT DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
FIELD LOGBOOK NO. HNF-N-491-5 21	**ACTUAL SAMPLE DEPTH** 225'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
OFFSITE PROPERTY NO. N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

..24-25); I-112

..CHEST NO.

SHIPPED TO
Environmental Sciences Laboratory

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-162

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N
DATA TURNAROUND: 45 Days / 45 Days				
SAMPLING LOCATION: C7514 (299-E24-25); I-113	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024	AIR QUALITY:
ICE CHEST NO.: GWS-115	FIELD LOGBOOK NO.: HNF-N-491-5 Ps	ACTUAL SAMPLE DEPTH: 227	COA: 302117ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW8	SOIL	11/20/09	0812	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM: J Helms / Lubel Helms 11/20/09	1500	MO-413 SSU-R2	11-20-09 1500
RELINQUISHED BY/REMOVED FROM: SSU-R2	8:30 NOV 23 2009	RECEIVED BY/STORED IN: DW Brothers	8:30 NOV 23 2009
RELINQUISHED BY/REMOVED FROM: DW Brothers	11:40 NOV 23 2009	RECEIVED BY/STORED IN: [illegible]	11:40 NOV 23 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG # ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-162** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-113	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS - 11S	**FIELD LOGBOOK NO.** HNF-N- 491-5	**ACTUAL SAMPLE DEPTH** 227	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-163

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7514 (299-E24-25); I-114	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024	AIR QUALITY: | |	
ICE CHEST NO.: GWS - 115	FIELD LOGBOOK NO.: HNF-N-491-5	ACTUAL SAMPLE DEPTH: 230	COA: 302117ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITLM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TW9	SOIL	11/20/09	0841	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms / Jabal Helms	11/20/09 1500	MO 413 SSU-R2	11-20-09 1500
SSU-R2	NOV 2 3 2009 0830	DW Brotherton	NOV 2 3 2009 0830
DW Brotherton	NOV 2 3 2009 11:40	Igor Kuryatiev	NOV 2 3 2009 11:40

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-163** | **PAGE 2 OF 2**

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-114	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS - 115	**FIELD LOGBOOK NO.** HNF-N- 491-5	**ACTUAL SAMPLE DEPTH** 230	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A 6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-16S

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7514 (299-E24-25); I-115	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-115	FIELD LOGBOOK NO.: HNF-N-491-5 PS	ACTUAL SAMPLE DEPTH: 230.1-232.6	COA: 302117ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH7

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V77	SOIL	11/20/09	0905 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms/J Helms	11/20/09 1500	MO 413 SSU-R2	11-20-09 1500
SSU-R2	11/20/09 1500	DW Brotherton	NOV 23 2009 08:30
DW Brotherton	11:40 NOV 23 2009		NOV 23 2009 11:40

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG# ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-165** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-115	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** PS UNF-N-491.5	**ACTUAL SAMPLE DEPTH**	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-167

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N
SAMPLING LOCATION: C7514 (299-E24-25); 1-116	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024	AIR QUALITY: ☐
ICE CHEST NO.: GWS-115	FIELD LOGBOOK NO.: HNF-N-491-5 Ps	ACTUAL SAMPLE DEPTH: 232.6	COA: 302117ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX0	SOIL	11/20/09	0920	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Atkins / Lubol Nolum	11/20/09 1500	M0413 SSU-R2	11-20-09 1500
SSU-R2	NOV 23 2009 08:30	DW Brotherton	NOV 23 2009 09:30
DW Brotherton	NOV 23 2009 11:40	Igor Lutsyakov	NOV 23 2009 11:40

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-167** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-116	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 232.6	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-168

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N
SAMPLING LOCATION: C7514 (299-E24-25); I-117	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024	AIR QUALITY:
ICE CHEST NO.: GWS-115	FIELD LOGBOOK NO.: HNF-N-491-5	ACTUAL SAMPLE DEPTH: 235.5	COA: 302117ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH7

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX1	SOIL	11/20/09	0950	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms / [illegible] Helms	11/20/09 1500	MO-413 SSU-R2	11-20-09 1500
SSU-R2	NOV 23 2009 08:30	DW Brotherton	NOV 23 2009 08:30
DW Brotherton	NOV 23 2009 11:40	[illegible]	NOV 23 2009 11:40

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-168** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-117	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO. 6WS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 PS	**ACTUAL SAMPLE DEPTH** 235.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-169

COLLECTOR Bates

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); I-118

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY ☐

ICE CHEST NO. 6WS - 091

FIELD LOGBOOK NO. HNF-N- 491-5

ACTUAL SAMPLE DEPTH 237.5

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX2	SOIL	11/20/09	1030	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Holms/ Isabel Holms 11/20/09	1500	MO413 554-R2 11-20-09	1500
SSU-R2	NOV 2 3 2009 08:30	DW Brotherton	NOV 2 3 2009 08:30
DW Brotherton	NOV 2 3 2009 11:40		NOV 2 3 2009 11:40

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-169** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-118	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS - 091	**FIELD LOGBOOK NO.** HNF-N-491-5	**ACTUAL SAMPLE DEPTH** 237.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-171** |

COLLECTOR Bates

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); I-119

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY ☐

ICE CHEST NO. GWS - 091

FIELD LOGBOOK NO. HNF-N- 491-5

ACTUAL SAMPLE DEPTH 240

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH8

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX3	SOIL	11/20/09	1040	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms/ Jabal Helms	11/20/09 1500	MO 413 SSU-R2	11-20-09 1500
SSU-R2	NOV 2 3 2009 0850	DW Brotherton	NOV 2 3 2009 0830
DW Brotherton	NOV 2 3 2009	for Lutzyalko	NOV 2 3 2009 11:40

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-171** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-119	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** PS UNF-N-491-5	**ACTUAL SAMPLE DEPTH** 240	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-172

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7514 (299-E24-25); I-120	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	SAF NO.: F10-024	AIR QUALITY: ☐
ICE CHEST NO.: GWS - 091	FIELD LOGBOOK NO.: HNF-N-491-5	ACTUAL SAMPLE DEPTH: 240-242.5	COA: 302117ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH9

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V78	SOIL	11/20/09	1103 ✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms / J Helms	11/20/09 1500	MO-413 554-R2	11-20-09 1500
SSU-R2	NOV 23 2009	DW Brotherton	NOV 23 2009
DW Brotherton	11.40 NOV 23 2009	[illegible]	11.40 NOV 23 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003 618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-172** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-120	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** HNF-N-491-5 PS	**ACTUAL SAMPLE DEPTH** 240-242.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-174

COLLECTOR: Bates	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7514 (299-E24-25); I-121	PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		SAF NO.: F10-024
AIR QUALITY: [ ]			
ICE CHEST NO.: GWS-091	FIELD LOGBOOK NO.: HNF-N-591-5	ACTUAL SAMPLE DEPTH: 242.5	COA: 302117ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VH9

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B22TX4	SOIL	11/20/09	1323	✓	✓						

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms / Jubal Helms	11/20/09 1500	MO-413 554-R2	11-20-09 1500
BSC-R2	08:30	DW Brothers	NOV 2 3 2009
DW Brothers	NOV 2 3 2009		

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG# ESL 090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-174** | **PAGE 2 OF 2**

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
SAMPLING LOCATION C7514 (299-E24-25); I-121	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO. GWS - 091	**FIELD LOGBOOK NO.** PS HNF-N 491-5	**ACTUAL SAMPLE DEPTH** 242.5	**COA** 302117ES10
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 8N

AIR QUALITY ☐

DATA TURNAROUND 45 Days / 45 Days

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-175

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); 1-123	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** HNF-N- 491-5 P3	**ACTUAL SAMPLE DEPTH** 243	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V56

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216,

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX5	SOIL	11/20/09	1436	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Helms / J Helms	11/20/09 1500	MO-413 SSU-R2	11-20-09 1500
SSU-R2	NOV 2 3 2009	DW Brotherton	NOV 2 3 2009
DW Brotherton	NOV 2 3 2009		

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-175** |

COLLECTOR Bates	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-123	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. GWS-091	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg	**ACTUAL SAMPLE DEPTH** 245	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

☐ ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-176

COLLECTOR Kruse	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-124	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 23	**ACTUAL SAMPLE DEPTH** 245.4 to 247	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ0

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V79	SOIL	11-23-09	0751

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Kruse/[illegible]	11-23-09 11:40	[illegible]	11.23.09 11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-176** |

COLLECTOR Kraus-2	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-124	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 pg 23	**ACTUAL SAMPLE DEPTH** 245 to 247.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-178

COLLECTOR
KAUSH

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-125

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
6ML-313

FIELD LOGBOOK NO.
HNF-N-491-5 pg 22

ACTUAL SAMPLE DEPTH
245 to 247.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ0

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TX6	SOIL	11-23-09	0751	✓	✓								

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature] 11-23-09	11:40	[signature] 11.23.09	11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD — DISPOSED BY — DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-178** |

COLLECTOR Krause	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-125	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 245 to 247.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-179

COLLECTOR KALER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-126	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-523 p5	**ACTUAL SAMPLE DEPTH** 247.4 to 248.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ1

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V80	SOIL	11-23-09	1001

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Edkauer, Edkauer 11-23-09	11.40	Lgr LaAngelus 11.23.09	11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-179** |

COLLECTOR Kaur	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-126	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 27	**ACTUAL SAMPLE DEPTH** 247.4 to 249.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-181

COLLECTOR
KALSN

SAMPLING LOCATION
C7514 (299-E24-25); I-127

ICE CHEST NO.
SML 313

SHIPPED TO
Environmental Sciences Laboratory

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

FIELD LOGBOOK NO.
HNF-N-491-5 P323

ACTUAL SAMPLE DEPTH
247.4 to 249.5

OFFSITE PROPERTY NO.
N/A

PROJECT COORDINATOR
DYEKMAN, DL

SAF NO.
F10-024

COA
302117ES10

BILL OF LADING/AIR BILL NO.
N/A

PRICE CODE 8N

AIR QUALITY [ ]

DATA TURNAROUND
45 Days / 45 Days

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ1

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX7	SOIL	11-23-05	1001	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Knox	11-23-05 11:40	[illegible]	11-23-05 11:40

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD — DISPOSED BY — DATE/TIME

A-6003-618(01/05)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-024-181	PAGE 2 OF 2
COLLECTOR KAUR	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-127	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 pg 23	**ACTUAL SAMPLE DEPTH** 247.4 to 249.9	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-182

COLLECTOR Kacer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION C7514 (299-E24-25); I-128	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 23	**ACTUAL SAMPLE DEPTH** 252 to 252.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ2

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V81	SOIL	11-23-09	1031

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kacer / [signature] 11-23-09	11:40	[signature] 11.23.09	11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-024-182	PAGE 2 OF 2
COLLECTOR Kacee	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-128	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 P323	**ACTUAL SAMPLE DEPTH** 256 to 252.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-184

COLLECTOR Knox	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-129	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. SML-313	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 252.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ2

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX8	SOIL	11-23-09	1031	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature] 11-23-09	11:40	[signature] 11.23.09.	11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-184** | **PAGE 2 OF 2**

COLLECTOR Kirk	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-129	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 252.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-185

COLLECTOR: Kauer

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT COORDINATOR: DYEKMAN, DL

PRICE CODE: 8N

DATA TURNAROUND: 45 Days / 45 Days

SAMPLING LOCATION: C7514 (299-E24-25); I-131

PROJECT DESIGNATION: 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.: F10-024

AIR QUALITY: ☐

ICE CHEST NO.: GWS-115

FIELD LOGBOOK NO.: HNF-N-591-23 B

ACTUAL SAMPLE DEPTH: 25370

COA: 302117ES10

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: Environmental Sciences Laboratory

OFFSITE PROPERTY NO.: N/A

BILL OF LADING/AIR BILL NO.: N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V57

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TX9	SOIL	11-23-09	1222	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SS Kauer	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009 0900	CHPRC	NOV 30 2009 0900
DE Parchen	NOV 30 2009 11:15		NOV 30 2009 11:15
CHPRC			

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION — DISPOSAL METHOD — DISPOSED BY — DATE/TIME

SDG # ESL090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-185** |

COLLECTOR KAUK	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-131	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY**	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 23	**ACTUAL SAMPLE DEPTH** 255.0	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-186

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-132	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS 115	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 255.4 to 257.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V33

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V82	SOIL	11-23-05	1244

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Ed Kauer / Ed Kauer 11-23-05	DATE/TIME 1512	RECEIVED BY/STORED IN MO-413-R2 11-23-05	DATE/TIME 1512
RELINQUISHED BY/REMOVED FROM MO-413-R2	DATE/TIME NOV 30 2009	RECEIVED BY/STORED IN CHPRC	DATE/TIME NOV 30 2009
RELINQUISHED BY/REMOVED FROM DE Fletcher CHPRC 11.15	DATE/TIME NOV 30 2009	RECEIVED BY/STORED IN 11.15	DATE/TIME NOV 30 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-186** |

COLLECTOR Kauke	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-132	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 25.5-4 to 25.75	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-188

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION C7514 (299-E24-25); 1-133	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 27	**ACTUAL SAMPLE DEPTH** 252.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE	**SHIPPED TO** Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ3

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D7216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TY0	SOIL	11-23-09	1244	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/[illegible]	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Parchen CHPRC	NOV 30 2009
DE Parchen CHPRC	NOV 30 2009 11:15	[illegible]	NOV 30 2009 11:15

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-188** |

COLLECTOR KAUK	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-133	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 P327	**ACTUAL SAMPLE DEPTH** 257.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-189

COLLECTOR
Kauer

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY [ ]

SAMPLING LOCATION
C7514 (299-E24-25); I-134

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
GWS 115

FIELD LOGBOOK NO.
HNF-N-491-5 Pg 23

ACTUAL SAMPLE DEPTH
257.5 to 260

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ4

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V83	SOIL	11-23-09	1343

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, [signature]	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Patcher CHPRC [signature]	NOV 30 2009
DE Patcher CHPRC [signature]	11/15 NOV 30 2009	[signature]	11/15 NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-189** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
KAUSE	DYEKMAN, DL	373-2530	DYEKMAN, DL	**AIR QUALITY** ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7514 (299-E24-25); I-134	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 P323	237.5 to 260	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-191

COLLECTOR KKUK

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); 1-135

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO. HNF-N-491-5 Pg 23

ACTUAL SAMPLE DEPTH 257.5 to 260

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ4

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2716;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22TY1	SOIL	11-23-09	1343	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaun, Ed Dykman	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Parcher CHPRC	NOV 30 2009
DE Parcher CHPRC	NOV 30 2009	Igor Kutyakov	NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-191** | **PAGE 2 OF 2**

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days	**AIR QUALITY** ☐	**SAMPLING LOCATION** C7514 (299-E24-25); I-135	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 257.5 to 260	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI appiles to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-192

COLLECTOR
Kauer

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-136

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.
GWS-115

FIELD LOGBOOK NO.
HNF-N-491-5 Pg 23

ACTUAL SAMPLE DEPTH
258.9 to 262.4

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ5

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V84	SOIL	11-23-09	1413

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, [illegible] 11-23-09	1512	SSU-R2 11-23-09	1512
MO-413-R2	NOV 30 2009 0900	DE Parcher CHPRC	NOV 30 2009 0900
DE Parcher CHPRC 11:15	NOV 30 2009	[illegible] 11:15	NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-192** |

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-136	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 P123	**ACTUAL SAMPLE DEPTH** 25-5.5 to 26.4	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-194

COLLECTOR
Knox

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

SAMPLING LOCATION
C7514 (299-E24-25); I-137

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

ICE CHEST NO.
GW05 - 115

FIELD LOGBOOK NO.
HNF-N-491-5 Pg

ACTUAL SAMPLE DEPTH
262.4

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22TY2	SOIL	11-23-09	1413	✓	✓								

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaye	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Fletcher CHPRC	NOV 30 2009
DE Fletcher CHPRC	11:15 NOV 30 2009		11:15 NOV 30 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-194** | **PAGE 2 OF 2**

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-137	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 P923	**ACTUAL SAMPLE DEPTH** 262.4	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Flucride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-195

COLLECTOR Kauer

COMPANY CONTACT DYEKMAN, DL

TELEPHONE NO. 373-2530

PROJECT COORDINATOR DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND 45 Days / 45 Days

SAMPLING LOCATION C7514 (299-E24-25); I-138

PROJECT DESIGNATION 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO. F10-024

AIR QUALITY ☐

ICE CHEST NO. GWS-115

FIELD LOGBOOK NO. HNF-N-491-5 P923

ACTUAL SAMPLE DEPTH 26.5

COA 302117ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

SHIPPED TO Environmental Sciences Laboratory

OFFSITE PROPERTY NO. N/A

BILL OF LADING/AIR BILL NO. N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ5

PRESERVATION	Cool--4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TY3	SOIL	11-23-09	1450

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
El Kauer/[illegible]	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Parchen CHPRC	NOV 30 2009
DE Parchen CHPRC	11:15 NOV 30 2009	[illegible]	11:15 NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY

DATE/TIME

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-195** |

COLLECTOR KAUSK	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-138	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 265'	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-196

COLLECTOR Kauer	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-139	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. QWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 23	**ACTUAL SAMPLE DEPTH** 267.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22TY4	SOIL	11-23-09	1457

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Elkauer/Ed Dyekman	11-23-09 1512	MO-413-R2	11-23-09 1512
MO-413-R2	NOV 30 2009	DE Parchen / CHPRC	NOV 30 2009 09:00
CHPRC	11:15 NOV 30 2009	[illegible]	11:15 NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☒ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A 6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-196** |

COLLECTOR Kaus	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-139	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 pg 23	**ACTUAL SAMPLE DEPTH** 267.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-197

COLLECTOR B CROW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-140	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-125	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 24	**ACTUAL SAMPLE DEPTH** 270	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ5

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TY5	SOIL	11-24-09	0845	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robert Romo Robert Romo RLR	11-24-09		
Robert Romo Robert Romo	11-24-09 1100	MO-413 554-R2	11-24-09 1100
MO-413-R2	NOV 30 2009	DE Parchen CHPRC	NOV 30 2009
DE Parchen CHPRC	11:15 NOV 30 2009		11:15 NOV 30 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-197** |

COLLECTOR B Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-140	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 29	**ACTUAL SAMPLE DEPTH** 270	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-198

COLLECTOR
B Crow

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-141

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY [ ]

ICE CHEST NO.
GWS 125

FIELD LOGBOOK NO.
HNF-N-491-5 Pg 24

ACTUAL SAMPLE DEPTH
271-273.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V36

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V85	SOIL	11-24-09	0913

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robert Romo	11-24-09		
Robert Romo	11-24-09 1100	MO-413 334-R2	11-24-09 1100
MO-413-R2	NOV 30 2009	DE Parcher CHPRC	NOV 30 2009
DE Parcher CHPRC	11/15 NOV 30 2009		11/15 NOV 30 2009

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-198** |

COLLECTOR B Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-141	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 471-5 Pg 24	**ACTUAL SAMPLE DEPTH** 271-273.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-200

COLLECTOR Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-142	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS -125	**FIELD LOGBOOK NO.** HNF-N 491-5 PG 24	**ACTUAL SAMPLE DEPTH** 273.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TY6	SOIL	11-24-09	0913	✓	✓

CHAIN OF POSSESSION RR 11-24-09

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robert C Romo Robert Romo	11-24-09 1100	MO-413 554-R2	11-24-09 1100
MO-413-R2	NOV 30 2009	CHPRC DE Parchen	NOV 30 2009
DE Parchen CHPRC	11/15 NOV 30 2009		

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG # ESL090008

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-200** |

COLLECTOR CRow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7514 (299-E24-25); I-142	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 491-5 Pg 24	**ACTUAL SAMPLE DEPTH** 273.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-201

COLLECTOR Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-143	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY [ ]			
ICE CHEST NO. GWS - 125	**FIELD LOGBOOK NO.** HNF-N-491-5 Pg 24	**ACTUAL SAMPLE DEPTH** 2.75	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TY7	SOIL	11-24-09	1006	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Romo / Rob Romo	11-24-09 1100	MO-413 554-R2	11-24-09 1100
MO-413-R2	NOV 30 2009	DE Parcher CHPRC	NOV 30 2009
DE Parcher CHPRC	11.15 NOV 30 2009	[illegible]	11.15 NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-201** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-143	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N- 491-5 PG 24	275	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-202

COLLECTOR CROW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C7514 (299-E24-25); I-144	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]
ICE CHEST NO. GWS 115	**FIELD LOGBOOK NO.** HNF-N-491-5 P324	**ACTUAL SAMPLE DEPTH** 277.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ6

PRESERVATION	Cool--4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TY8	SOIL	11-24-09	1235	V	V

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RobRomo RobRomo 11-24-09	1615	MO-413 SS4-R2 11-24-09	1615
MO-413-R2	NOV 30 2009	CHPRC	NOV 30 2009
DE Patchen CHPRC 11.15	NOV 30 2009	11.15	NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-202** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
Crow	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-144	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N 471-5 P324	277.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-203

COLLECTOR Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-145	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 P324	**ACTUAL SAMPLE DEPTH** 280	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22VJ6

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22TY9	SOIL	11-24-09	1317	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Romo Rob Romo	11-24-09 1615	MO-413 554-R2	11-24-09 1615
MO-413-R2	NOV 30 2009	DE Parchen CHPRC	NOV 30 2009
DE Parchen CHPRC	11.15 NOV 30 2009		11.15 NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-203** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	
C7514 (299-E24-25); 1-145	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N 491-5 PG 24	280	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-204** |

COLLECTOR Crow	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N
SAMPLING LOCATION C7514 (299-E24-25); I-146	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 24	**ACTUAL SAMPLE DEPTH** 281.5 - 284	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

DATA TURNAROUND 45 Days / 45 Days

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V37

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V86	SOIL	11-24-09	1345 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Romo Robert Romo	11-24-09 1615	MO-413 SSL-R2	11-24-09 1615
MO-413-R2	NOV 30 2009	SE Parsons CHPRC	NOV 30 2009
SE Parsons CHPRC	NOV 30 2009 11:15		NOV 30 2009

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-204** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-146	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 Pg 24	281.5 - 284	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-206

COLLECTOR CROW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-147	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY**
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-491-5 PG 24	**ACTUAL SAMPLE DEPTH** 2 84	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SF=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V37

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22V00	SOIL	11-24-09	1345	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Romo Rob Romo	11-24-09 1615	MO-413 554-R2	11-24-09 1615
MO-413-R2	NOV 30 2009 0900	CHPRC	NOV 30 2009 0900
CHPRC	NOV 30 2009 11:15		NOV 30 2009 11:15

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-206** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-147	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N- 491-5 PG 24	284	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-207

COLLECTOR CROW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I 149	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param	**SAF NO.** F10-024	**AIR QUALITY** ☐
ICE CHEST NO. GWS-115	**FIELD LOGBOOK NO.** HNF-N-481-5 24	**ACTUAL SAMPLE DEPTH** 285.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V58

PRESERVATION	Cool~4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V01	SOIL	11-24-09	1432

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Romo	11-24-09 1615	MO-413 SSL-R2	11-24-09 1615
MO-413-R2	NOV 30 2009 0900	CHPRC	NOV 30 2009 0900
CHPRC	11-15 NOV 30 2009		11-15 NOV 30 2009
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-207** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / 45 Days
C7514 (299-E24-25); I-149	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-524	285.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate Ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

A-6003-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-208

COLLECTOR
Hauer

SAMPLING LOCATION
C7514 (299-E24-25); I-150

ICE CHEST NO.
GWS-115

SHIPPED TO
Environmental Sciences Laboratory

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

AIR QUALITY ☐

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

FIELD LOGBOOK NO.
HNF-N-491-5 25

ACTUAL SAMPLE DEPTH
285-287.5

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22V87~~
B22VJ8 KS 11/17/09

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22V87	SOIL	11-30-09	0900	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Rob Rowe Rob Rowe	11:15 11-30-09	[illegible signature] 11-30-09	11:15
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-208** |

COLLECTOR KAUER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); I-150	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 25	**ACTUAL SAMPLE DEPTH** 285- 287.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-210

COLLECTOR
KAUER

COMPANY CONTACT
DYEKMAN, DL

TELEPHONE NO.
373-2530

PROJECT COORDINATOR
DYEKMAN, DL

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
C7514 (299-E24-25); I-151

PROJECT DESIGNATION
200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param

SAF NO.
F10-024

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO. PS
HNF-N-491-5 25

ACTUAL SAMPLE DEPTH
297.5 FT

COA
302117ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Environmental Sciences Laboratory

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: ~~B22V87~~
B22VJ8
KS 11/17/09

PRESERVATION	Cool~4C	None		
TYPE OF CONTAINER	G/P	Moisture Resistant Cont		
NO. OF CONTAINER(S)	1	1		
VOLUME	1L	200g		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;		

SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B22V02	SOIL	11-30-09	0800	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
Robert C Rao	11:15 11-30-09	[illegible]	11-30-09 11:15
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

☐ ORIGINAL

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-210** |

COLLECTOR KAGER	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7514 (299-E24-25); 1-151	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024	**AIR QUALITY** [ ]	
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS HNF-N-491-525	**ACTUAL SAMPLE DEPTH** 287.5	**COA** 302117ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.□** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.□□** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-211

COLLECTOR CMW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-152	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5-25 105	**ACTUAL SAMPLE DEPTH** 289-290.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V39

PRESERVATION	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	2
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22V88	SOIL	11-30-09	0909 ✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robrance Robrance	11:15 11-30-09	[illegible]	11-30-09 11:15

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-211** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
CROW	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-152	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.** B	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-5 25	288 - 290.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.☐** ESL shall submit all data deliverables according to SOW "200-LW-2 and 200-BP-5 Operable Units/Contaminant and Transport Property Analysis and Report for Vadose Zone Sediments at Borehole C7514/Well 299-E24-25" and shall adhere to all S&GRP standard protocol.☐☐** The ESL laboratory shall meet prior requested and confirmed turnaround times and RDLs specified in the SOW and this SAF. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met.
(1)Density; CATIONEXCH_TR; Particle Size (Dry Sieve) - D422; Particle Size (Hydrometer) - D422; KD - Batch;

ORIGINAL

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-024-213

COLLECTOR CROW	**COMPANY CONTACT** DYEKMAN, DL	**TELEPHONE NO.** 373-2530	**PROJECT COORDINATOR** DYEKMAN, DL
PRICE CODE 8N	**DATA TURNAROUND** 45 Days / 45 Days		
SAMPLING LOCATION C7514 (299-E24-25); I-153	**PROJECT DESIGNATION** 200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		**SAF NO.** F10-024
AIR QUALITY ☐			
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-491-5 25	**ACTUAL SAMPLE DEPTH** 290.5	**COA** 302117ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B22V39

PRESERVATION	Cool-4C	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Moisture Content - D2216;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22V03	SOIL	11-30-09	0909	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Robert Robertson	11:15 11-30-09	[illegible]	11-30-09 11:15
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ORIGINAL

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

CH2MHill Plateau Remediation Company | **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** | **F10-024-213** |

COLLECTOR	**COMPANY CONTACT**	**TELEPHONE NO.**	**PROJECT COORDINATOR**	**PRICE CODE** 8N	**DATA TURNAROUND**
	DYEKMAN, DL	373-2530	DYEKMAN, DL		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	**45 Days / 45 Days**
C7514 (299-E24-25); I-153	200-PW-2 OU Characterization Vadose Zone - Geochemical Modeling Param		F10-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-491-525	290.5	302117ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

SPECIAL INSTRUCTIONS

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(1)6010M_ICP_ASTM_AE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_ICP_ASTM_AE (Add-On) {Lead, Thallium, Selenium} 6010M_METALS_ICP_WE (TAL) {Sodium, Aluminum, Iron, Potassium, Antimony, Nickel, Calcium, Magnesium, Silver} 6010M_METALS_ICP_WE (Add-On) {Lead, Thallium, Selenium} 6020M_ICPMS_ASTM_AE (TAL) {Chromium, Cadmium} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic} 6020M_METALS_ICPMS_WE (TAL) {Chromium, Cadmium} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic} 6020M_HG_ICPMS_AE; 6020M_HG_ICPMS_WE; Chromium Hex - 7196; RADISO_ICPMS_ASTM_AE {Uranium-238, Technetium-99} RADISO_ICPMS_WE {Iodine-129, Uranium-238, Technetium-99} I-129 by ICPMS {Iodine-129} GAMMA_GS; URANIUM ISOTOPIC RATIOS; ALPHA_BETA_AE {Gross beta, Gross alpha} ALPHA_BETA_WE {Gross beta, Gross alpha} IC Anions - 9056_WE {Nitrate, Chloride, Phosphate, Fluoride, Nitrite, Sulfate} Cyanide (Total) - 335.2 {Cyanide} pH (Water) - 9045_WE; Conductivity - 9050_WE; TOC - ASTME1915A {Total organic carbon, Total Inorganic Carbon, Total carbon} 2320_ALKALINITY {Carbonate ion, Bicarbonate, Alkalinity, Calcium Carbonate}

ORIGINAL