



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

August 5, 2010

Certified Mail

Mr. Alec Osenbach
Heart of America Northwest
1314 NE 56th Street Suite 100
Seattle, Washington 98105

Dear Mr. Osenbach:

FREEDOM OF INFORMATION ACT REQUEST (FOI 2010-01599)

You requested, pursuant to the Freedom of Information Act (FOIA), the following information:

1. Documents and records relating to the potential duration of storage for soil excavated since 2009 from the Environmental Restoration Disposal Facility (ERDF) at the U.S. Department of Energy (DOE), Richland Operations Office (RL) Hanford Site.
2. Documents and records relating to the cost of storage for soil excavated from ERDF.
3. Documents and records relating to the planned uses for soil excavated from ERDF including documents and records relating to the potential use of soil excavated from ERDF for use as a cap of the nearby U.S. Ecology Washington, Inc., site.
4. Correspondence between RL and the State of Washington Department of Ecology concerning the use of storage of soil excavated from ERDF site (including the length of time such soil may be stored, costs, etc.).
5. Correspondence between DOE and the State of Washington Department of Health concerning the use of storage of soil excavated from ERDF (including the length of time such soil may be stored, costs, etc.).
6. Correspondence between DOE and the U.S. Ecology Washington, Inc., or any of its contractors or agents concerning the use or storage of soil excavated from ERDF.
7. Records relating to consideration of releases documented in investigation of releases from the U.S. Ecology Washington, Inc., landfill conducted under the authority of the State of Washington Department of Ecology or Health, including remedies for such releases.

We provided you with a partial response on July 20, 2010. This is our final response. We have conducted a thorough search and no documents were located for items 1, 2, and 7. This search was conducted by those within the agency who are most familiar with the subject matter of this request, in locations where documents would most likely be found. Specifically we searched the files of Washington Closure Hanford (WCH), DOE's Assistant Manager for River Corridor, River Corridor Closure Project, Procurement Division, and the Site Infrastructure, Services and Information Management Division.

Enclosed are documents responsive to items 3 (Enclosure I), 4 (Enclosure II), 5 (Enclosure III) and 6 (Enclosure IV) of your request. This office has made certain deletions pursuant to Exemption 5 of the FOIA. Exemption 5 shields from mandatory disclosure documents which are "inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency." 5 U.S.C. § 552(b)(5); 10 C.F.R. § 1004.10(b)(5). There are three traditional privileges that fall under this definition of exclusion: the attorney-client privilege, the attorney work-product privilege, and the executive "deliberative process" or "pre-decisional" privilege. For the deletions made, we are invoking the deliberative process privilege, attorney-client privilege and the attorney work product privilege.

Exemption 5 incorporates the deliberative process privilege that protects advice, recommendations, and opinions that are part of the process by which agency decisions and policies are formulated. The factors that are weighed to determine whether documents are protected by the deliberative process privilege include: (1) whether the documents are "deliberative" (i.e., whether it reflects the give-and-take of a consultative process); (2) whether the documents are so candid or personal in nature that public disclosure would stifle honest and frank communication in the future; and (3) whether the documents are recommendatory of what will become a final document.

The withheld information from the documents describes proposed strategies between government and contractor employees to enhance internal coordination in accomplishing activities involving ERDF. The documents contain: (1) negotiation positions; (2) issues and impacts associated with each, including technical, legal, applicable requirements and complex-wide policy issues; and (3) budget cost.

Material determined to be exempt from mandatory disclosure may be released if disclosure is determined to be in the public interest. We have determined the public interest is best served by non-disclosure because disclosure of this information would harm the government's ability to effectively administer ERDF activities. In addition, as the withheld information consists of proposed recommendations and strategies deliberative in nature the information is predecisional and exempt from disclosure.

Information withheld under the attorney client privilege and attorney work product privilege summarized communications between RL attorneys and their clients and was based upon expressed opinions on legal and policy matters. We have determined the information is protected from disclosure pursuant to the attorney-client and deliberative process privileges. However, material determined to be exempt from mandatory disclosure may be released if disclosure is determined to be in the public interest. We have determined the public interest is best served by non-disclosure because disclosure of this information would harm the government by tending to inhibit free pre-decisional discussion of policy issues as well as candid attorney-client discussion of legal matters.

Mr. Alex Osenbach

-3-

August 5, 2010

All releasable information in the documents has been segregated and is being provided to you. The undersigned individual is responsible for this determination. You have the right to appeal to the Office of Hearings and Appeals, as provided in 10 CFR 1004.8, for any information denied to you in this letter or for the adequacy of our search. Any such appeal shall be made in writing to the following address: Director, Office of Hearings and Appeals (HG-1), U.S. Department of Energy, L'Enfant Plaza Building, 1000 Independence Avenue SW, Washington, D.C. 20585-1615, and shall be filed within 30 days after receipt of this letter. Should you choose to appeal, please provide this office with a copy of your letter.

Lastly, you requested a waiver of fees for your request. I have reviewed the information that you provided in your letter to support the request for a fee waiver and have determined that the information satisfies the criteria considered for a waiver of fees. A waiver, therefore, is appropriate for fees that may be incurred because the subject of the request relates to a government activity, and the information about the activity could lead to greater understanding above the matter by the public.

If you have any questions regarding your request, please contact me at our address above or on (509) 376-6288.

Sincerely,

-Original Signed By0

Dorothy Riehle³
Freedom of Information Act Officer
Office of Communications
and External Affairs

OCE:DCR

Enclosures

Enclosure I

French, Mark

From: Robertson, Owen Jr
Sent: Tuesday, July 15, 2008 8:36 AM
To: Wilcox, Debra; French, Mark S; Hathaway, H B (Boyd)
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data
Attachments: SF-01 Proctor.xls; SF-01 Class.xls

Deb,

Soil data usually refers to the sand, silt, and clay content. I requested from WCH a listing of the data send to Michelle Mandis (see below). It consisted of soil classification and compaction data collected by the Construction Quality Assurance (CQA) contractor, Envirotech, last March (see attachments), and boring and test pit logs from the initial construction of Cells 1&2.

The soil data collected by the CQA contractor (b)(5)

(b)(5)

I hope this helps.

Thanks,
Owen

From: Wilcox, Debra
Sent: Monday, July 14, 2008 4:31 PM
To: French, Mark S; Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data

(b)(5)

Deb Wilcox
Office of Chief Counsel
(509) 376-3285
(509) 531-2629 (cell)

THIS EMAIL MESSAGE INCLUDES ATTORNEY WORK PRODUCT INFORMATION AND IS PRIVILEGED. DO NOT FURTHER DISTRIBUTE WITHOUT PERMISSION OF THE SENDER.

b5
(Attorney
Client
Work Product)

From: French, Mark S
Sent: Monday, July 14, 2008 4:27 PM
To: Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Wilcox, Debra
Subject: FW: Use of ERDF Soil Data

(b)(5)

Mark S. French
Federal Project Director
373-9863

From: Mandis, Michelle (ECY) [mailto:MICH461@ecy.wa.gov]
Sent: Monday, July 14, 2008 3:52 PM
To: French, Mark S
Cc: Skinnerland, E R (Ron); Singleton, Deborah; Ollero, Jennifer (ECY); Robertson, Owen Jr
Subject: Use of ERDF Soil Data

Mark~

Ron requested that I touch base and verify that it was acceptable with USDOE to forward ERDF soils data to US Ecology personnel so that they may send it to their sub-contractor. Mr. Thom Kisenwether (373-9173) from Washington Closure sent me the data from 18 borings and several test pits.

Thanks,

Michelle

Modified Proctor (ASTM D 1557)

Client: **WCH**
 Address: **ERDF**



2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether	Sample ID: SF-01
Project: S66X528A00	Sample Des: Test Pad Sub
Project Location: ERDF Cells 7-8	Sampling Date: 3/12/2008
Tested By: MF Date: 3/21/2008	Sampled By: MF
Reviewed By: JV Date: 3/21/2008	Date Received: 3/12/2008
Comments: <u>North Berm Brown Sand Mixed with Black Sand</u>	

DENSITY DATA (grams)

Mold + Wet Soil	12.98	13.16	13.28	12.81	13.29
Mold Wt.	8.71	8.71	8.71	8.71	8.71
Wet Soil	4.28	4.46	4.58	4.11	4.58
lbs/cu. ft. (wet)	128.3	133.7	137.3	123.2	137.5
lbs/cu. ft. (dry)	118.1	121.0	122.4	115.1	121.8

MOISTURE DATA (grams)

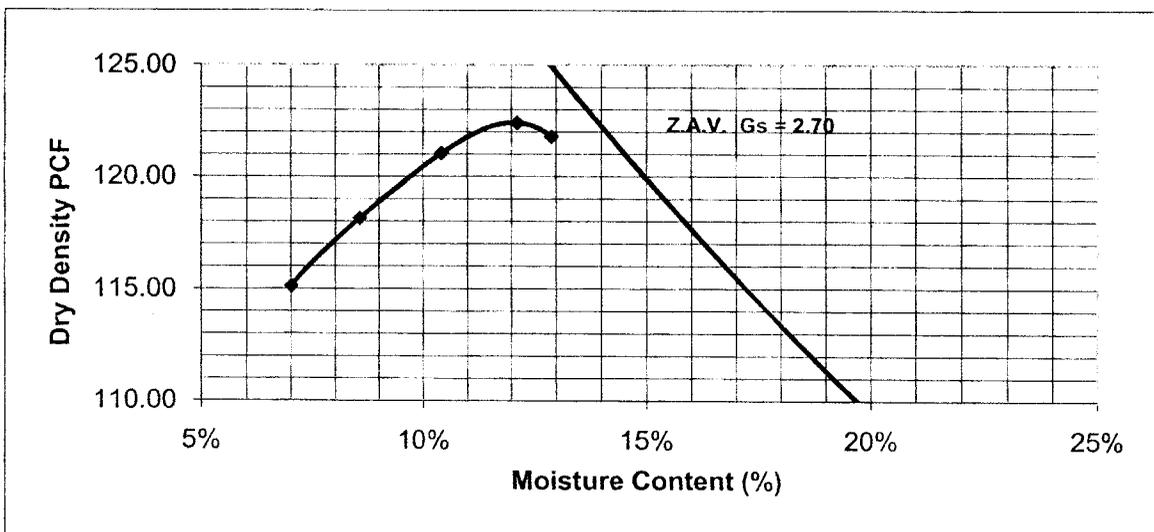
Tin No.	XIII	VI	XII	ES	E2
Wet Soil + Tin	680.73	677.92	720.96	695.10	711.30
Dry Soil + Tin	641.34	630.39	662.56	665.72	658.22
Tin Wt.	181.20	174.26	181.17	246.48	246.70
Dry Soil	460.14	456.13	481.39	419.24	411.52
% Moisture	8.6%	10.4%	12.1%	7.0%	12.9%
% Saturation	54.2%	71.8%	87.0%	40.8%	90.8%

MAXIMUM DRY DENSITY (PCF)

122.4

OPTIMUM MOISTURE CONTENT (%)

12.1%



Envirotech

Date

SOIL CLASSIFICATION (ASTM D-2487)



2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Client: WCH
Address: ERDF

Sample Information

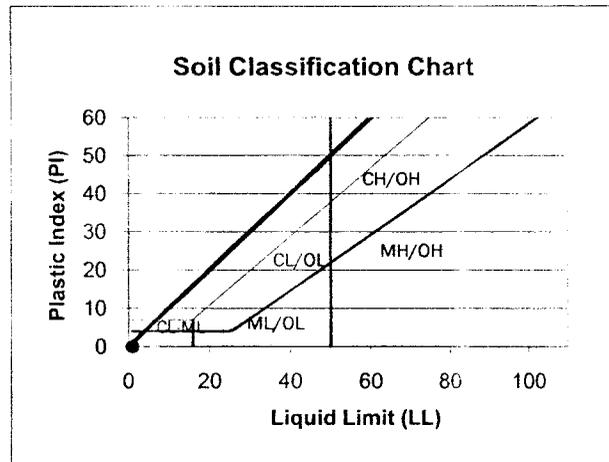
Contact Name: Tom Kisenwether	Sample ID: SF-01
Project: S66X528A00	Sample Des: Test Pad Sub. Brw and Blk sand
Project Location: ERDF Cells 7-8	Sampling Date: 3/12/2008
Tested By: MF Date: 3/20/2008	Sampled By: MF
Reviewed By: JV Date: 3/21/2008	Date Received: 3/12/2008

Natural Moisture Content

Natural Moisture	N/A
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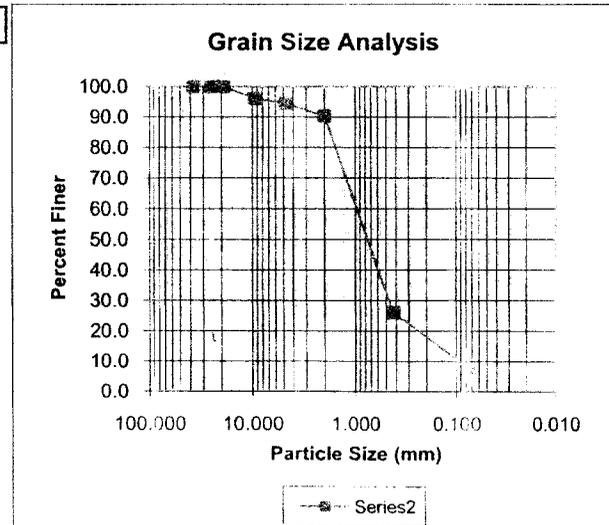
Atterberg Limits Test Results (ASTM D-4318)

Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	



Particle Size Analysis (ASTM D-422) 200 Wash Sieve Analysis (ASTM D-1140)

Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	100.0	
3/8 "	9.500	96.0	
No. 4	4.750	94.4	
No. 10	2.000	90.2	
No. 40	0.425	26.1	
No. 200	0.075	7.3	



Cu	10.56
Cc	2.47

Unified Soil Classification (ASTM D-2487)

SW: Well Graded Sand

Deviations from ASTM: None

Envirotech

Date

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 9:55 AM
To: Mercado, Renato S
Subject: FW: Soils to support DOH Cap at US Ecology
Attachments: FW: ERDF Soil to Washington State/US Ecology

From: Hathaway, H B (Boyd)
Sent: Monday, July 21, 2008 1:08 PM
To: Franco, Jose R (Joe)
Cc: Payne, James D; Hathaway, H B (Boyd); Mercado, Renato S; Veitenheimer, S J (Steve); Frey, Jeffrey A; Flynn, Karen L
Subject: RE: Soils to support DOH Cap at US Ecology

Joe,

Per your request, here is the information you requested. I tried to be comprehensive. Much of what we do interfaces with other Subject Matter Experts/site requirements. I listed the point-of-contacts below for other processes that we depend on prior to Property taking action. These folks were on your original message below and should be providing you with information on their processes.

Attached is my email I sent earlier. (b)(5)

(b)(5)

(b)(5)

The same form and process outlined below can be used for both items #1 and #2 below.

(1) RL Program(s) provides Rene Mercado with justification that the soil at ERDF is excess to the needs of the government - RL Managements responsibility.

(2) Soil meets the requirements for radiological release per DOE Order 5400.1B - Wayne Glines responsibility and process.

(3) Ecological review process is completed - Dana Ward responsibility and process. For ERDF, the project file would note that an ecological review was considered, but not required since the soil being removed is spoils for operations and would not have additional impact to habitat. Schedule duration for this activity is none. However, for a new pit, time would be needed for a formal ecological review.

(4) Cultural review process is completed - Annabelle Rodriquez responsibility and process.

(5) NEPA process is completed and documented - Woody Russell responsibility and process.

(6) Rene will need to (b)(5)

(b)(5)

(7) The excess form (SF-122) would need to be completed by the State and return for Rene's and my signature. Requested information for the form includes units, quantity and estimated value of the dirt. A copy of the form can be obtained at [http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/\\$file/sf122.pdf](http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/$file/sf122.pdf)

(8) Once the State signs and returns the form and items 1-4 above are completed, we should be able to return the approved form/agreement via letter to State in 5-working days.

Please call if you have questions or need clarification.

b5
(deliberative process)

H. Boyd Hathaway, Realty Officer
U.S. Department of Energy
P.O. Box 550; MS A3-04
825 Jadwin Avenue
Richland, Washington 99352
Ph:509-376-7340 Cell:509-531-7881 Fax:509-376-1466

From: Franco, Jose R (Joe)
Sent: Wednesday, July 16, 2008 1:21 PM
To: Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: Soils to support DOH Cap at US Ecology

Hello Everyone

(b)(5)

As you know we are working with the Washington Department of Health and Ecology on soils needed for the landfill US Ecology is running. I have a commitment to provide a response to a letter by the August 4th timeframe so I would need your information by July 25th if possible. Please send me and Jim Payne your information as Jim is going to try to put it in a schedule format for me.

What I would like help from you on is the following:

I need a (b)(5)

(b)(5)

1) (b)(5)

2)

(b)(5)

Any questions shoot me and email or call 376-6628 or 376-4343.
Some examples of what I expect are :

- Identification of scope - 3 to 5 days project completion of Form Cultural resources request review
- Form Cultural resources request review - 3 to 5 days
- Decision to perform a full cultural review - 60 - 90 days
- SHPO and Tribes 30 day review

Joe Franco

(b5
deliberative process
and
attorney-client)

Hathaway, H B (Boyd)

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7/21/08

(b5
deliberative
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Any questions shoot me and email or call 376-6628 or 376-4343.

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- SHPO and Tribes 30 day review

7/21/08

(b5
deliberative process
and
Attorney Client)

Joe Franco
AMRC

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 10:00 AM
To: Mercado, Renato S
Subject: FW: ERDF Soil to Washington State/US Ecology

From: Russell, Woody
Sent: Monday, July 07, 2008 8:34 AM
To: Hathaway, H B (Boyd); Franco, Jose R (Joe); Smith, Douglas C (Chris)
Cc: Wilcox, Debra; Dudley, John R; Myers, John D; Williamson, Barbara D; Mercado, Renato S; Glines, Wayne M; Guercia, Rudolph F (Rudy); Veitenheimer, S J (Steve); Frey, Jeffrey A; Flynn, Karen L
Subject: RE: ERDF Soil to Washington State/US Ecology

Boyd,

(b)(5)

Woody Russell
DOE-RL/ORP NEPA Compliance Officer
U.S. Department of Energy
P.O. Box 450, MSIN H6-60
Richland, WA 99352
Ph: 509-373-5227 Cell: 509-438-6762
Woody_Russell@orp.doe.gov

From: Hathaway, H B (Boyd)
Sent: Tuesday, July 01, 2008 9:41 AM
To: Franco, Jose R (Joe); Smith, Douglas C (Chris)
Cc: Hathaway, H B (Boyd); Russell, Woody; Wilcox, Debra; Dudley, John R; Myers, John D; Williamson, Barbara D; Mercado, Renato S; Glines, Wayne M; Guercia, Rudolph F (Rudy); Veitenheimer, S J (Steve); Frey, Jeffrey A; Flynn, Karen L
Subject: ERDF Soil to Washington State/US Ecology

(b)(5)

Requirements:

- Dug up dirt would be treated as federal personal property.
- DOE Order 5400.5 Radiological Release of Property is required. Wayne Glines has a release process for personal property. He too considers dirt to be personal property. The release requirements would be less restrictive if controls were put in place to ensure the soil remained onsite and not transported offsite. Otherwise stringent and costly radiological reviews would be required to release the soil. This stringent requirement could be exempted only if a guarantee could be made that soil would remain onsite.

(b5
Attorney Client
and
Work product)

- The recipient of the soil would be to the State of Washington (WA). This is consistent with the contractual relationship via lease with the State for their barrel site. U.S. Ecology is the states subcontractor.
- RL Program (AMRC) is responsible to send Rene Mercado an email that the dirt has been excessed and is environmentally clean for release (Wayne Glines process for radiological release).
- Rene Mercado is the sites Organization Property Manager Officer (OPMO) and can donate the dirt to State US Ecology using the SF-122 Form (Transfer Order Excess Personal Property). His authority is the Atomic Energy Act for this. Rene can add "terms and conditions" to the GSA SF-122 Form, such requiring the soil to remain onsite and providing indemnity to the government.
- WA Ecology Property Officer would need to complete and sign to the GSA SF-122 Form (Transfer Order Excess Personal Property) agreeing to its terms and conditions. WA Ecology would submit the completed form to Rene Mercado for signature and release of the property. Requested information for the form includes units, quantity and estimated value of the dirt. A copy of the form can be obtained at [http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/\\$file/sf122.pdf](http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/$file/sf122.pdf)
- NEPA documentation needs to be completed.
- Rene would provide the approved SF-122 Form back to the WA for their records.
- WA Ecology/US Ecology (receiver of donation) is responsible for shipment of donated property.

There were concerns regarding the following:

- Radiological release of soil. See second bullet above. Controls are needed to ensure soil would stay onsite during transportation from ERDF by the state's contractor. Terms and conditions can be placed on the donation form, so that soil would remain onsite and not transported off the Hanford Site. Other onsite monitoring activities may be required to guarantee that soil is not transported offsite.
- Indemnity of DOE's liability if any soil is "illegally" transported offsite by the state's contractor. Adding terms and conditions to the SF 122 form could provide the necessary indemnity to hold the government harmless for all activities by the state's contractor.

Please call if you have questions.

Thanks You.

*H. Boyd Hathaway, Realty Officer
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Hathaway, H B (Boyd)

From: Hathaway, H B (Boyd)
Sent: Tuesday, July 08, 2008 9:17 AM
To: French, Mark S
Subject: FW: ERDF Soil to Washington State/US Ecology

FYI

*H. Boyd Hathaway, Realty Officer
U.S. Department of Energy
P.O. Box 550; MS A3-04
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(b)(5)

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- RL Program (AMRC) is responsible to send Rene Mercado an email that the dirt has been excessed and is environmentally clean for release (Wayne Glines process for radiological release).
- Rene Mercado is the sites Organization Property Manager Officer (OPMO) and can donate the dirt to State US Ecology using the SF-122 Form (Transfer Order Excess Personal Property). His authority is the Atomic Energy Act for this. Rene can add "terms and conditions" to the GSA SF-122 Form, such requiring the soil to remain onsite and providing indemnity to the government.
- WA Ecology Property Officer would need to complete and sign to the GSA SF-122 Form (Transfer Order Excess Personal Property) agreeing to its terms and conditions. WA Ecology would submit the completed form to Rene Mercado for signature and release of the property. Requested information for the form includes units, quantity and estimated value of the dirt. A copy of the form can be obtained at [http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/\\$file/sf122.pdf](http://contacts.gsa.gov/webforms.nsf/0/DACB98B18C9F8C1F85256A3E0064652D/$file/sf122.pdf)
- NEPA documentation needs to be completed.
- Rene would provide the approved SF-122 Form back to the WA for their records.
- WA Ecology/US Ecology (receiver of donation) is responsible for shipment of donated property.

There were concerns regarding the following:

- Radiological release of soil. See second bullet above. Controls are needed to ensure soil would stay onsite during transportation from ERDF by the state's contractor. Terms and conditions can be placed on the donation form, so that soil would remain onsite and not transported off the Hanford Site. Other onsite monitoring activities may be required to guarantee that soil is not transported offsite.
- Indemnity of DOE's liability if any soil is "illegally" transported offsite by the state's contractor. Adding terms and conditions to the SF 122 form could provide the necessary indemnity to hold the government harmless for all activities by the state's contractor.

Please call if you have questions.

Thanks You.

H. Boyd Hathaway, Realty Officer

U.S. Department of Energy

P.O. Box 550; MS A3-04

825 Jadwin Avenue

Richland, Washington 99352

Ph:509-376-7340 Cell:509-531-7881 Fax:509-376-1466

Riehle, Dorothy

From: Rodriguez, Annabelle L
Sent: Thursday, October 02, 2008 4:02 PM
To: Franco, Jose R (Joe); Robertson, Owen Jr
Cc: Rodriguez, Annabelle L
Subject: FW: Soils to support DOH Cap at US Ecology
Attachments: ERDF NPCE.pdf; CRR DOE Flow Chrt.xls

Joe,
See comment #1 below and the attached PDF file. The cultural review (No Potential to Cause Effect) done in 2007 should still be good for this project.

Annabelle

From: Rodriguez, Annabelle L
Sent: Monday, July 21, 2008 11:39 AM
To: Franco, Jose R (Joe); Payne, James D
Cc: Russell, Woody; Rodriguez, Annabelle L; Wilcox, Debra
Subject: FW: Soils to support DOH Cap at US Ecology

Hi Joe,
See my responses below. If you need other information please call me.
Annabelle

1) A cultural resource review (CRR) was done in September 2007 for the expansion of ERDF cells 7,8,9,10 (see attached CRR). This CRR is called a "No Potential to Cause Effect". This means it took place in a previously disturbed area and was not located near any archaeological sites. The cultural and biological clearance for this was approximately 10 working days. Based on this review, I do not believe we would have to do another for DOH to truck the soil from ERDF to US Ecology.

2) A new borrow pit may require, at a minimum, a NEPA Environmental Assessment (confirmed by Woody Russell, NEPA Compliance Officer). A full CRR will most likely result from this. I am attaching a Flow chart that will give you an idea of the timeline (a minimum of 90 days should be planned for). If an area is selected that could potentially affect archaeological sites, a Memorandum of Agreement will need to be entered into (between DOE and the Washington State Department of Archaeology and Historic Preservation, and possibly Tribes) this would add additional time to the schedule.

Some things to consider if #2 is selected: Projects/ US Ecology should present this to the Tribes as **early in the planning stages** as possible. Working with Tribes early on an acceptable location would be a tremendous benefit.

Tribes have concerns when the subject of using/expanding existing borrow pits comes up.

From: Franco, Jose R (Joe)
Sent: Wednesday, July 16, 2008 1:21 PM
To: Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: Soils to support DOH Cap at US Ecology

Hello Everyone

(b)(5)

As you know we are working with the Washington Department of Health and Ecology on soils needed for the landfill US Ecology is running. I have a commitment to provide a response to a letter by the August 4th timeframe so I would need your information by July 25th if possible. Please send me and Jim Payne your information as Jim is going to try to put it in a schedule format for me.

What I would like help from you on is the following:

I need a (b)(5)

- 1) (b)(5)
- 2)

(b)(5)

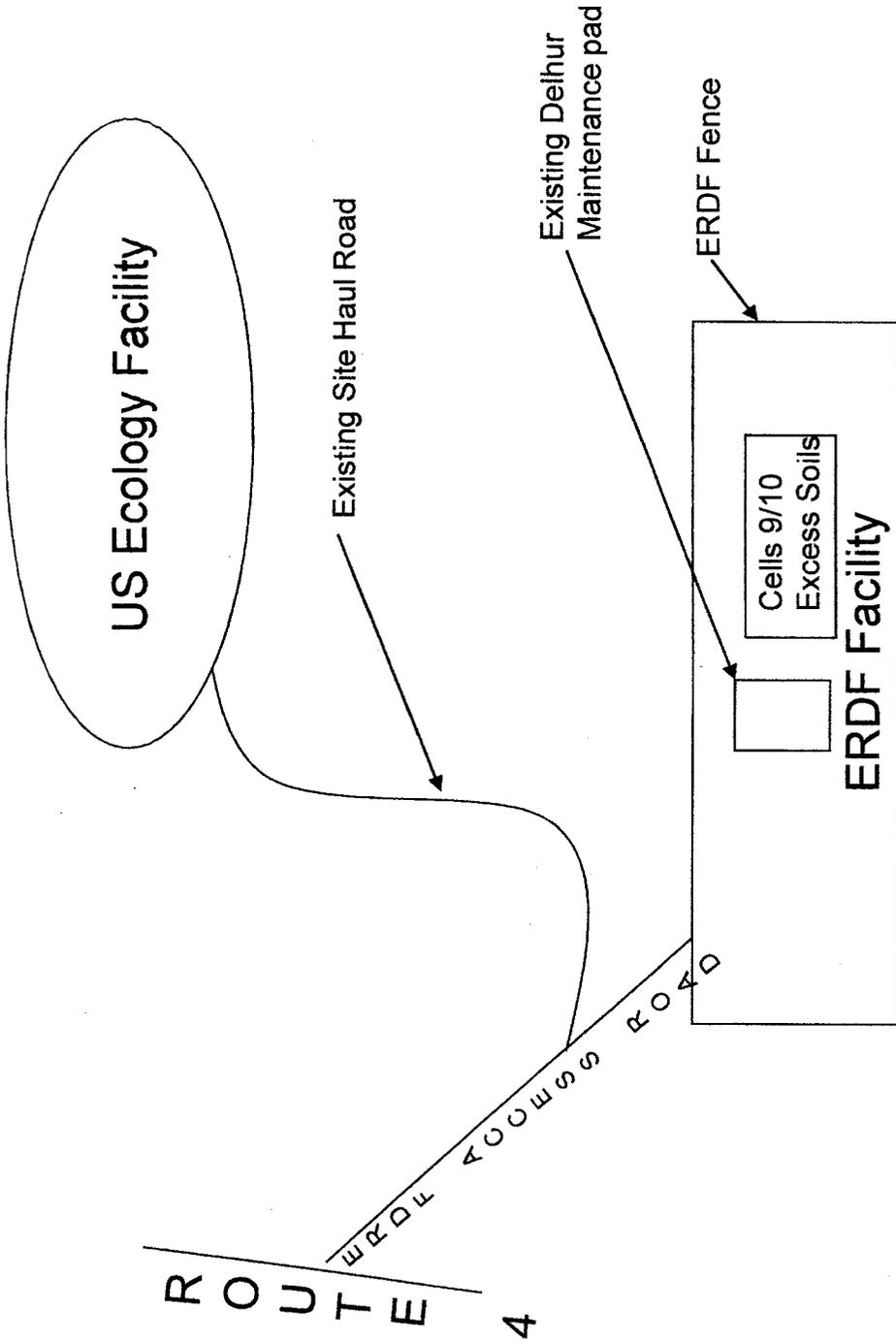
Any questions shoot me and email or call 376-6628 or 376-4343.
Some examples of what I expect are :

- Identification of scope - 3 to 5 days project completion of Form Cultural resources request review
- Form Cultural resources request review - 3 to 5 days
- Decision to perform a full cultural review - 60 - 90 days
- SHPO and Tribes 30 day review

Joe Franco
AMRC

The Famous, the Infamous, the Lame - in your browser. [Get the TMZ Toolbar Now!](#)

(b5
deliberative process
and
attorney-client)



NOTES:

Work performed inside blue boundaries (including roads) must be performed in accordance with the Subcontract Agreement Documents.

Work control and incident reporting inside blue boundary (inside ERDF fence) will be the responsibility of WCH.

Work performed inside black boundary shall be performed in accordance with US Ecology requirements.

Work control and incident reporting outside blue boundary (outside the ERDF fence) will be the responsibility of US Ecology.

Rodriguez, Annabelle L

From: Rodriguez, Annabelle L
Sent: Tuesday, September 04, 2007 7:32 AM
To: Marceau, Thomas E
Cc: Gano, Kenneth A (Ken); Sharpe, Jim J; Weiss, Elizabeth M; Rodriguez, Annabelle L
Subject: FW: ERDF Expansion: Construction of Cells 7, 8, 9, and 10 (NPE # 2007-600-007a)

Attachments: review of cultural resources.doc

Based on the information provided, I have determined the proposed activity has no potential to cause effects on historic properties.

You may notify the projects they may proceed.

Annabelle Rodriguez
U.S. DOE
Cultural and Historic Resource Program

From: Marceau, Thomas E [mailto:TEMARCEA@wch-rcc.com]
Sent: Tuesday, September 04, 2007 6:38 AM
To: Rodriguez, Annabelle L
Cc: Gano, Kenneth A (Ken); Sharpe, Jim J; Weiss, Elizabeth M
Subject: ERDF Expansion: Construction of Cells 7, 8, 9, and 10 (NPE # 2007-600-007a)

Do you concur that this project is the type of activity that has no potential to cause effects on historic properties?

Project: ERDF Expansion: Construction of Cells 7, 8, 9, and 10 (NPE # 2007-600-007a)

Activity: Clear, grub, and construct ERDF Cells 7 through 10 and support areas

The project plans to clear, grub, and construct four new disposal cells at ERDF (see *Hanford Site Atlas*, page 129). All blading and grubbing will be accomplished using mechanical equipment. All activities will take place within the ERDF boundary fence. The project area has been surveyed previously for cultural resources. Cultural resource inventories completed in and around the project area include: HCRC # 92-600-030, 93-200-001, 93-600-005, 93-600-038, and 94-600-040. These inventories recorded no sites in the project area, and non are expected. Given this location and the absence of sites, we believe that this project is not the type with the potential to cause effects to historic properties.

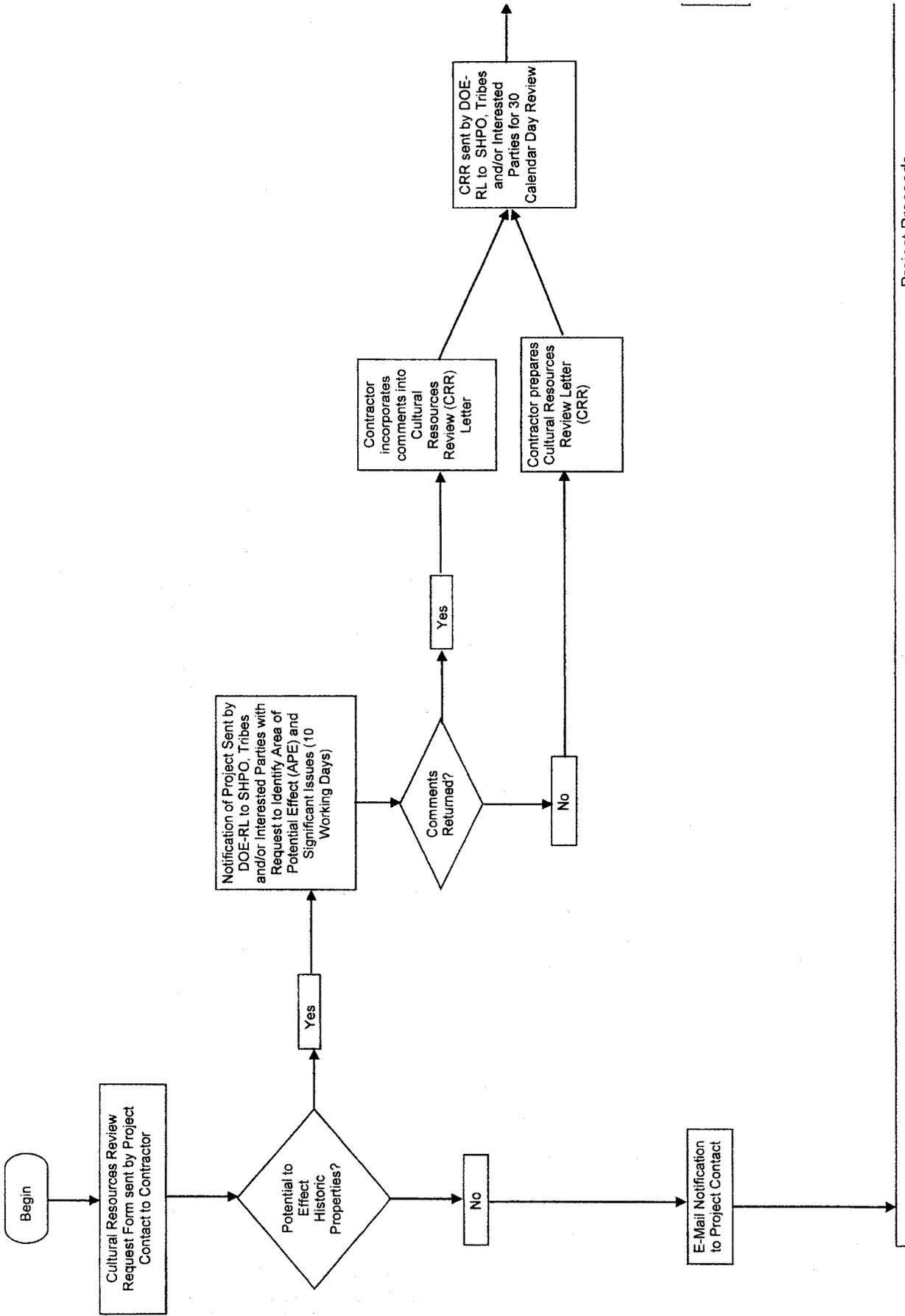
[NOTE: This request supersedes NPE # 2007-600-007 dated November 30, 2006 and approved by RL on December 5, 2006. That request cleared construction for ERDF Cells 7 and 8 but was placed on hold until plans for Cells 9 and 10 were developed.]

Thank you,

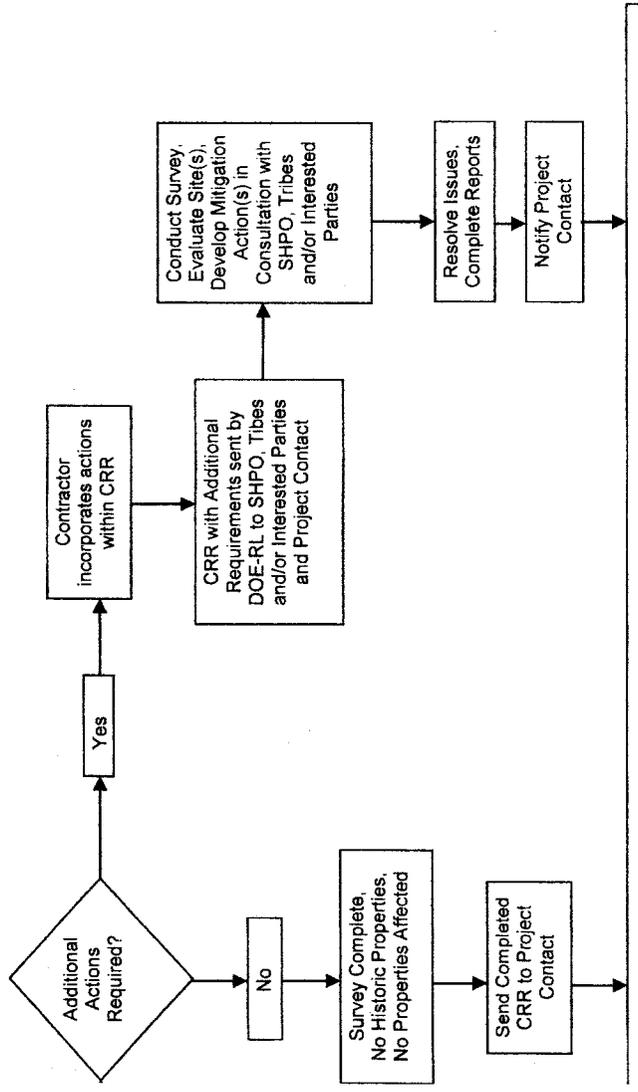
Tom Marceau
WCH Cultural Resources Supervisor



review of cultural
resources.d...



Document found in this format - Best Available Copy



**Document found in this format -
Best Available Copy**

QUESTIONS FOR ERDF SOILS MEETING, MARCH 27, 2009

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3.

4.

(b)(5)

(b5
Attorney Client
Priv
Attorney work product
and
deliberative)

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 9:58 AM
To: Mercado, Renato S
Subject: FW: Soils to support DOH Cap at US Ecology

From: Leary, Kevin D
Sent: Friday, July 25, 2008 11:20 AM
To: Robertson, Owen Jr; Franco, Jose R (Joe); Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Glines, Wayne M; Wilcox, Debra; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C; Holten, Richard A
Subject: RE: Soils to support DOH Cap at US Ecology

(b)(5)

(b)(5) (b)(5) In addition, we have even had limited discussions on this topic with a few WA Dept. of Ecology personnel (b)(5)

(b)(5)

(b)(5)

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(b)(5)

Kevin D. Leary-U-Plant Zone Closure/IS-1 Technical Lead

U.S. Dept. of Energy-Richland

(b5
deliberative
process
and
Attorney-Client

Certified Professional Soil Scientist/Hydrogeologist/Hydrologist

(509)-373-7285 (p) (509)-372-1926 (fax)

E-Mail: kevin_d_leary@rl.gov

"The only thing necessary for the triumph of evil is for good men to do nothing." --Sir Edmund Burke

"If you do the same thing over and over again, you cannot ever expect a different outcome." --Albert Einstein

From: Robertson, Owen Jr
Sent: Monday, July 21, 2008 1:44 PM
To: Franco, Jose R (Joe); Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: RE: Soils to support DOH Cap at US Ecology

Joe,

The only soil available to DOH that would represent a cost savings to DOE is the soil pile that will require removal before we can begin construction of cells 9&10. This soil is from a previous excavation and has already been through a Cultural Resource review and other NEPA coverage under the ERDF ROD and its Amendments.

The actual excavation of Cells 9&10 will require a ROD Amendment and, as with previous Amendments, an update to the Mitigation Action Plan will be required. If US Ecology removed this soil, it could save DOE \$2 million or more in the construction of these cells. There is no benefit that I know of to use an alternate site to supply this soil.

The preparation of the ROD Amendment is scheduled to start in October 2008 and be completed in July 2009. Construction of Cells 9&10 is scheduled to begin in January 2011 and be completed in 2012.

One other comment, an ERDF soil balance for cells 1-10 shows us with an excess of 1,058,987 cubic yards.

Thanks,
Owen

From: Franco, Jose R (Joe)
Sent: Wednesday, July 16, 2008 1:21 PM
To: Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: Soils to support DOH Cap at US Ecology

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(b5 attorney client
and
deliberative)

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I need a (b)(5)

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1) (b)(5)

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(b)(5)

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- SHPO and Tribes 30 day review

Joe Franco
AMRC

(b5
Attorney Client
and
deliberative)

French, Mark

From: Leary, Kevin D
Sent: Friday, July 25, 2008 11:20 AM
To: Robertson, Owen Jr; Franco, Jose R (Joe); Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Glines, Wayne M; Wilcox, Debra; Veitenheimer, S J (Steve)
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(b)(5)

(b)(5)

- (b)(5)
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-
-

(b)(5)

Kevin D. Leary-U-Plant Zone Closure/IS-1 Technical Lead

U.S. Dept. of Energy-Richland

Certified Professional Soil Scientist/Hydrogeologist/Hydrologist

(509)-373-7285 (p) (509)-372-1926 (fax)

E-Mail: kevin_d_leary@ri.gov

(b5
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Sent: Wednesday, July 16, 2008 1:21 PM

To: Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)

Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C

Subject: Soils to support DOH Cap at US Ecology

Hello Everyone

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As you know we are working with the Washington Department of Health and Ecology on soils needed for the landfill US Ecology is running. I have a commitment to provide a response to a letter by the August 4th timeframe so I would need your information by July 25th if possible. Please send me and Jim Payne your information as Jim is going to try to put it in a schedule format for me.

What I would like help from you on is the following:

I need a list (b)(5)

(b)(5)

(b)(5)
deliberative
and
Attorney Client

1) (b)(5)

2)

(b)(5)

Any questions shoot me and email or call 376-6628 or 376-4343.

Some examples of what I expect are :

- Identification of scope - 3 to 5 days project completion of Form Cultural resources request review
- Form Cultural resources request review - 3 to 5 days
- Decision to perform a full cultural review - 60 - 90 days
- SHPO and Tribes 30 day review

Joe Franco
AMRC

(b5
deliberative
and
Attorney-Client)

French, Mark

From: Leary, Kevin D
Sent: Monday, July 21, 2008 8:11 AM
To: French, Mark S
Cc: Leary, Kevin D
Subject: RE: barriers/caps

(b)(5)

Kevin D. Leary-*U-Plant ZoneClosure/IS-1 Technical Lead*

U.S. Dept. of Energy-Richland

Certified Professional Soil Scientist/Hydrogeologist/Hydrologist

(509)-373-7285 (p) (509)-372-1926 (fax)

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"If you do the same thing over and over again, you cannot ever expect a different outcome." --Albert Einstein

From: French, Mark S
Sent: Wednesday, July 16, 2008 4:23 PM
To: Leary, Kevin D
Subject: barriers/caps

(b)(5)

Mark S. French
Federal Project Director
373-9863

(b5
deliberative)

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 9:54 AM
To: Mercado, Renato S
Subject: FW: Soils to support DOH Cap at US Ecology

From: Hathaway, H B (Boyd)
Sent: Friday, August 22, 2008 9:00 AM
To: Wilcox, Debra; Franco, Jose R (Joe)
Cc: Carosino, Robert M; Russell, Woody; Hathaway, H B (Boyd); Mercado, Renato S
Subject: RE: Soils to support DOH Cap at US Ecology

Clarification: We will be using the Atomic Energy Act as the authority using a GSA form and addendum to add other requirements to document the transfer of personal property.

*H. Boyd Hathaway, Realty Officer
U.S. Department of Energy
P.O. Box 550; MS A3-04
825 Jadwin Avenue
Richland, Washington 99352
Ph:509-376-7340 Cell:509-531-7881 Fax:509-376-1466*

From: Wilcox, Debra
Sent: Monday, August 18, 2008 10:30 AM
To: Franco, Jose R (Joe)
Cc: Carosino, Robert M; Russell, Woody; Hathaway, H B (Boyd)
Subject: RE: Soils to support DOH Cap at US Ecology

(b)(5)

(b5 Attorney-Client
and
Work product)

(b)(5)

Deb Wilcox
Office of Chief Counsel
(509) 376-3285 (Main Office)
(509) 531-2629 (Personal Cell)
(509) 372-7778 (Satellite Office)

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From: Franco, Jose R (Joe)
Sent: Thursday, August 14, 2008 4:57 PM
To: Franco, Jose R (Joe); Williamson, Barbara D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: RE: Soils to support DOH Cap at US Ecology

Here is what we have in our draft schedule as the process of getting the soils to DOH. This is a draft and it has some assumptions built in but I feel confident in what we are submitting. Any questions or comments please give me a call or email.

Joe

From: Franco, Jose R (Joe)
Sent: Wednesday, July 16, 2008 1:21 PM
To: Williamson, Barbara D; Payne, James D; Hathaway, H B (Boyd); Russell, Woody; Burandt, Mary E; Leary, Kevin D; Rodriguez, Annabelle L; Dudley, John R; Mercado, Renato S; French, Mark S; Robertson, Owen Jr; Glines, Wayne M; Wilcox, Debra; Romine, Larry D; Veitenheimer, S J (Steve)
Cc: McCormick, Matthew S; Flynn, Karen L; Bryson, Dana C
Subject: Soils to support DOH Cap at US Ecology

Hello Everyone

(b)(5)

(b5 Attorney Client,
work product
and
deliberative)

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What I would like help from you on is the following:

I need a list (b)(5)
(b)(5)

- 1) (b)(5)
- 2)

(b)(5)

Any questions shoot me and email or call 376-6628 or 376-4343.
Some examples of what I expect are :

- Identification of scope - 3 to 5 days project completion of Form Cultural resources request review
- Form Cultural resources request review - 3 to 5 days
- Decision to perform a full cultural review - 60 - 90 days
- SHPO and Tribes 30 day review

Joe Franco
AMRC

(b5
Attorney Client
and
deliberative)

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 9:49 AM
To: Mercado, Renato S
Subject: FW: Property Question

From: Wilcox, Debra
Sent: Thursday, June 26, 2008 9:49 AM
To: Hathaway, H B (Boyd); Dudley, John R
Cc: Williamson, Barbara D; Glines, Wayne M; Mercado, Renato S
Subject: RE: Property Question

Can Rene also join us today at 11:30 am to discuss this topic?

Deb Wilcox
Office of Chief Counsel
(509) 376-3285
(509) 531-2629 (cell)

From: Hathaway, H B (Boyd)
Sent: Thursday, June 26, 2008 8:42 AM
To: Wilcox, Debra; Dudley, John R
Cc: Williamson, Barbara D; Hathaway, H B (Boyd); Glines, Wayne M; Mercado, Renato S
Subject: RE: Property Question

Hi all:

Here are my thoughts on the subject. Rene and Wayne, feel free to chime in.

(b)(5)

- Rene Mercado is the sites Organization Property Manager Officer (OPMO) (b)(5)
- (b)(5) because RL's contractual relationship is with the WA Ecology via real estate lease and not US Ecology.
- (b)(5)

(b5
Attorney Client &
deliberative)

- Rene would provide the approved SF-122 Form back to the WA for their records.
- WA Ecology/US Ecology (receiver of donation) is responsible for shipment of donated property.

Let's meet and discuss further.

Thanks, Boyd.

*H. Boyd Hathaway, Realty Officer
U.S. Department of Energy
P.O. Box 550; MS A3-04
825 Jadwin Avenue
Richland, Washington 99352
Ph:509-376-7340 Cell:509-531-7881 Fax:509-376-1466*

From: Wilcox, Debra
Sent: Wednesday, June 25, 2008 1:52 PM
To: Hathaway, H B (Boyd); Dudley, John R
Cc: Williamson, Barbara D
Subject: Property Question

(b)(5)

Deb Wilcox
Office of Chief Counsel
(509) 376-3285
(509) 531-2629 (cell)

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(b5 Attorney Client and Work Product)

Crider, Tara

From: Mercado, Renato S
Sent: Tuesday, July 13, 2010 9:54 AM
To: Mercado, Renato S
Subject: FW: ERDF Soils Transfer
Attachments: SF122 TRNSFR ERDF SOIL TO DOH-USE.xlsx

From: Hathaway, H B (Boyd)
Sent: Tuesday, April 21, 2009 3:31 PM
To: Mercado, Renato S
Cc: Hathaway, H B (Boyd)
Subject: FW: ERDF Soils Transfer

Made changes to file

*H. Boyd Hathaway, Realty Officer
U.S. Department of Energy
P.O. Box 550; MS A3-04
825 Jadwin Avenue
Richland, Washington 99352
Ph:509-376-7340 Cell:509-531-7881 Fax:509-376-1466*

From: Mercado, Renato S
Sent: Tuesday, April 21, 2009 3:24 PM
To: Wilcox, Debra
Cc: Williamson, Barbara D; Russell, Woody; Hathaway, H B (Boyd); Wirkkala, Andrew H; Bryson, Dana C; Robertson, Owen Jr
Subject: RE: ERDF Soils Transfer

Please see attached SF122, Transfer form and let me know, if needs some revision, thanks.

*Renato S. Mercado
U.S. Department of Energy
Richland Operations Office
P.O. Box 550; MS A6-39
Richland, WA 99352
Ph: (509) 373-7286
Fax: (509) 376-1466*

From: Wilcox, Debra
Sent: Thursday, April 16, 2009 1:44 PM
To: Robertson, Owen Jr; Bryson, Dana C; Wirkkala, Andrew H
Cc: Williamson, Barbara D; Russell, Woody; Mercado, Renato S; Hathaway, H B (Boyd)
Subject: FW: ERDF Soils Transfer
Importance: High

For your info (not sure who prepared the letter). I've already attached my recommended changes on the letter in ESTARS, but am attaching them here also for your convenience. My changes would be in addition to Wayne's. Renato has already agreed to make my requested changes to the Transfer Form.

Deb Wilcox
Office of Chief Counsel
(509) 376-3285 (Main Office)
(509) 531-2629 (Personal Cell)
(509) 372-7778 (Satellite Office)

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From: Glines, Wayne M
Sent: Thursday, April 16, 2009 1:15 PM
To: Wilcox, Debra
Cc: Russell, Woody; Hathaway, H B (Boyd); Mercado, Renato S
Subject: RE: ERDF Soils Transfer
Importance: High

To All:

Relative to DOE O 5400.5 requirements, (b)(5)

(b)(5)

(b)(5)

Wayne M. Glines, CHP
Sr. RADCON Technical Advisor
Program Manager, Rad Site Services
Safety & Engineering Division
509-376-6506

From: Wilcox, Debra
Sent: Thursday, April 16, 2009 12:25 PM
To: Hathaway, H B (Boyd); Mercado, Renato S
Cc: Russell, Woody; Glines, Wayne M
Subject: ERDF Soils Transfer

Boyd/Renato:

(b)(5)

(b5
deliberative and
Attorney (least level)
work product

(b)(5)

If you could please provide a few more details (b)(5)

(b)(5) I would appreciate it very much. Call me either on my cell phone (531-2629) or at my remote office location (SAIC offices, 372-7778) until 3:30 pm today. After that, I will not be back in the office until Tuesday morning, April 21.

Deb Wilcox
Office of Chief Counsel
(509) 376-3285 (Main Office)
(509) 531-2629 (Personal Cell)
(509) 372-7778 (Satellite Office)

This E-mail message contains Attorney Work Product information and is privileged under the Freedom of Information Act 5 USC Sec. 552(b). Do not distribute without sender's permission.

(b5
Attorney Client
and
Work Product)

STANDARD FORM 122 JUNE 1974 GENERAL SERVICES ADMINISTRATION FPMR (41 CFR) 101-32.306 FPMR (41 CFR) 101-43.315	TRANSFER ORDER EXCESS PERSONAL PROPERTY	1. ORDER NO. 2. DATE <p style="text-align: right;">4/16/09</p>
---	---	--

3. TO: General Services Administration*	4. ORDERING AGENCY <i>(Full name and address)*</i> State of Washington Department of Health (DOH) 309 Bradley Blvd. Suite 201 Richland, WA 99352 Attn: Earl Fordham
5. Holding Agency <i>(Name and Address)*</i> Washington Closure Hanford, LLC (WCH) 2620 Fermi Avenue Richland, WA 99354	6. SHIP TO <i>(Consignee and Destination)*</i> U. S. Ecology (USE) Richland, WA 99352
7. Location of Property Washington Closure Hanford, LLC (WCH) Environmental Remediation Disposal Facility (ERDF) Richland, WA 99354	8. SHIPPING INSTRUCTIONS
9. Ordering Agency Approval A. Signature _____ B. Date _____ C. Title _____	10. APPROPRIATION SYMBOL AND TITLE
11. ALLOTMENT	12. GOVERNMENT B/L NO.

13. PROPERTY ORDERED						
GSA AND HOLDING AGENCY NOS. (a)	ITEM NO. (b)	DESCRIPTION <i>(Include noun name, FSC Group and Class, Condition Code and, if available, National Stock Number)</i> (c)	UNIT (d)	QUANTITY (e)	ACQUISITION VALUE	
					UNIT (f)	TOTAL (g)
		Excess soil from the excavation of Super Cell 9 This soil is to remain within the confines of the Hanford Site and be used by USE for barrier/capping material on the State of Washington leased land at the Hanford Site, Contract No. A(45-1)-1835. By accepting this excess soil for use, DOH/USE also releases and holds DOE and its contractor WCH harmless from any claims or liabilities related to the use of this soil or its "illegal" transport off the USE site or other unauthorized use.	cu yds	800,000	cubic yard	

Personal property purchased from the U. S. Government may or may not be authorized for export from the United States. If export is allowed, the purchaser is solely responsible for obtaining required clearances, approvals, and/or licenses. The purchaser also is required to pass on the DOE's export control guidance if the property is resold or otherwise disposed. The required DOE export control guidance is:

The use, disposition, export, and re-export of this property is subject to all applicable U.S. laws and regulations, including the Atomic Energy Act of 1954, as amended; the Arms Export Control Act ((22 U.S.C 2751 *et seq.*); the Export Administration Act of 1979 (560 U.S.C Append 2401 *et seq.*); Assistance to Foreign Atomic Energy Activities (10 CFR part 810); Export and Import of Nuclear Equipment and Material (10 CFR part 110); International Traffic Arms Regulations (22 CFR parts 120 *et seq.*); Export Administration Regulations (15 CFR part 730 *et seq.*) Foreign Assets Control Regulations (31 CFR parts 500 *et seq.*); and the Espionage Act (37 U.S.C. 791 *et seq.*) which, among other things, prohibits:

- a. The making of false statements and concealment of any material information regarding the use or disposition, export or re-export of the property; and
- b. Any use or disposition, export or re-export of the property which is not authorized in accordance with the provisions of this agreement.

_____ Print or Type Name of Recipient	_____ Signature of Authorized Representative
_____ Print or Type Name If Not Recipient	_____ Title:
_____ Date	TOTAL= \$ _____ - \$ _____ -

14 RELEASING-DOE APPROVAL	A. SIGNATURE: RENATO MERCADO	B. TITLE: DOE-RL-OPMO	C. DATE													
FOR GSA USE ONLY	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">AGENCY AND LOCATION</th> <th rowspan="2">FSC</th> <th rowspan="2">CONDITION</th> <th rowspan="2">SOURCE CODE</th> </tr> <tr> <th>AGENCY</th> <th>STATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	AGENCY AND LOCATION		FSC	CONDITION	SOURCE CODE	AGENCY	STATE								
AGENCY AND LOCATION		FSC	CONDITION				SOURCE CODE									
AGENCY	STATE															



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

128600

06-AMRC-0291

JUN 30 2006

RECEIVED

JUL 10 2006

BY R & DC

Mr. P. L. Pettiette, President
Washington Closure Hanford, LLC
3070 George Washington Way
Richland, Washington 99354

Dear Mr. Pettiette:

CONTRACT NO. DE-AC06-05RL14655 – SURPLUS SOIL FROM THE ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF) - US ECOLOGY INC.

In response to WCH letter to S. L. Sedgwick, RL, from S. L. Feaster, same subject, dated June 19, 2006, you have full approval and authorization to allow US Ecology to perform sampling as a precursor activity to removal of surplus soil. It is our understanding that they want to use the soil for cover in their disposal facility. Since this soil pile is located in the pathway of future ERDF expansions, this activity could benefit both DOE and US Ecology. If you have questions, please contact me or your staff may contact Owen Robertson, Office of the Assistant Manager for the River Corridor, on (509) 373-6295.

Sincerely,

Stacie L. Sedgwick
Contracting Officer

AMRC:OCR

cc: S. L. Feaster, WCH
D. H. Houston, WCH
W. S. Shingler, WCH

Modified Proctor (ASTM D 1557)

Client: WCH
Address: ERDF



2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether
Project: S66X528A00
Project Location: ERDF Cells 7-8
Tested By: MF Date: 4/4/2008
Reviewed By: JV Date: 5/9/2008
Comments: Black Sand w/ some brown mixed in

Sample ID: SF-05
Sample Des: South Berm
Sampling Date: 3/26/2008
Sampled By: MF
Date Received: 3/26/2008

DENSITY DATA (grams)

Mold + Wet Soil	12.88	13.08	13.20	13.31	13.31
Mold Wt.	8.73	8.73	8.73	8.73	8.73
Wet Soil	4.16	4.36	4.47	4.58	4.58
lbs/cu. ft. (wet)	124.7	130.7	134.1	137.4	137.4
lbs/cu. ft. (dry)	112.9	116.4	118.4	120.6	120.1

MOISTURE DATA (grams)

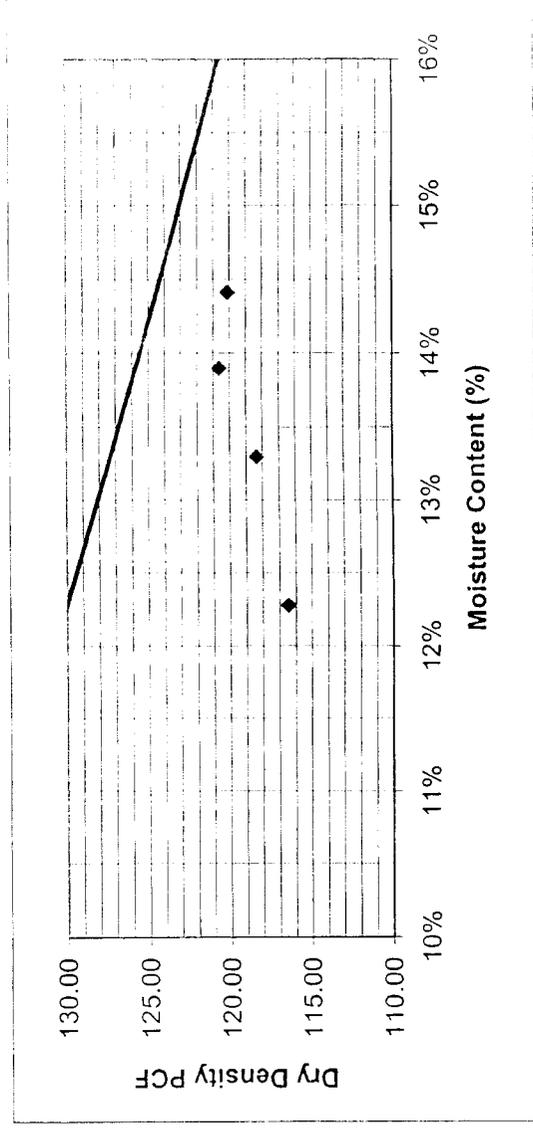
Tin No.	B43	E5	VI	ABC	E5
Wet Soil + Tin	1117.60	921.40	931.80	1496.20	946.70
Dry Soil + Tin	1030.70	847.60	842.90	1369.30	858.50
Tin Wt.	193.00	246.50	174.30	456.20	246.50
Dry Soil	837.70	601.10	668.60	913.10	612.00
% Moisture	10.4%	12.3%	13.3%	13.9%	14.4%
% Saturation	53.1%	68.7%	78.2%	86.8%	88.8%

MAXIMUM DRY DENSITY (PCF)

121.0

OPTIMUM MOISTURE CONTENT (%)

14.2%



Envirotech

Date

SOIL CLASSIFICATION (ASTM D-2487)



Client: WCH
Address: ERDF

2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether
Project: S66X528A00
Project Location: ERDF Cells 7-8
Tested By: LH Date: 5/12/2008
Reviewed By: JV Date: 5/13/2008
Sample ID: SF-05
Sample Des: South Berm : Black Sand w/ Brown
Sampling Date: 3/26/2008
Sampled By: MF
Date Received: 3/26/2008

Natural Moisture Content

Natural Moisture	2.1
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Atterberg Limits Test Results (ASTM D-4318)

Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	

Particle Size Analysis (ASTM D-422)

200 Wash Sieve Analysis (ASTM D-1140)

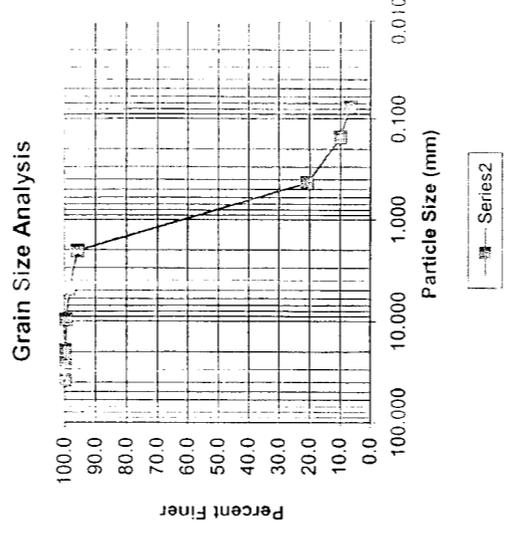
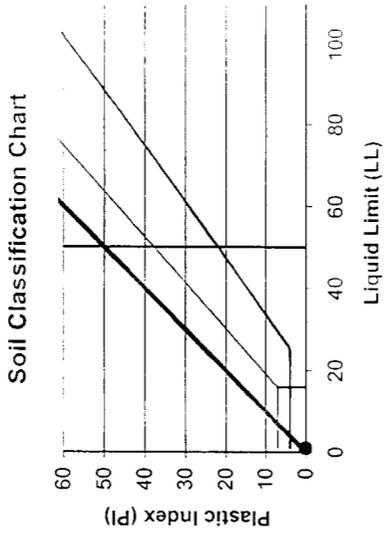
Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	100.0	
3/8 "	9.500	99.6	
No. 4	4.750	98.5	
No. 10	2.000	95.9	
No. 40	0.425	20.9	
No. 100	0.150	9.9	
No. 200	0.075	6.6	

Cu	6.40
Cc	3.60

Unified Soil Classification (ASTM D-2487)

SP: Poorly graded sand

Deviations from ASTM: None



Envirotech

Date

Modified Proctor (ASTM D 1557)

Client: WCH
Address: ERDF



2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether
Project: S66X528A00
Project Location: ERDF Cells 7-8
Tested By: MF Date: 4/4/2008
Reviewed By: JV Date: 5/9/2008
Comments: Black Sand

Sample ID: SF-04
Sample Des: South Berm
Sampling Date: 3/19/2008
Sampled By: MF
Date Received: 3/19/2008

DENSITY DATA (grams)

Mold + Wet Soil	13.36	13.38	13.33	13.31	13.22
Mold Wt.	8.73	8.73	8.73	8.73	8.73
Wet Soil	4.63	4.65	4.61	4.59	4.49
lbs/cu. ft. (wet)	138.9	139.5	138.2	137.6	134.7
lbs/cu. ft. (dry)	127.4	125.8	122.6	120.4	126.2

MOISTURE DATA (grams)

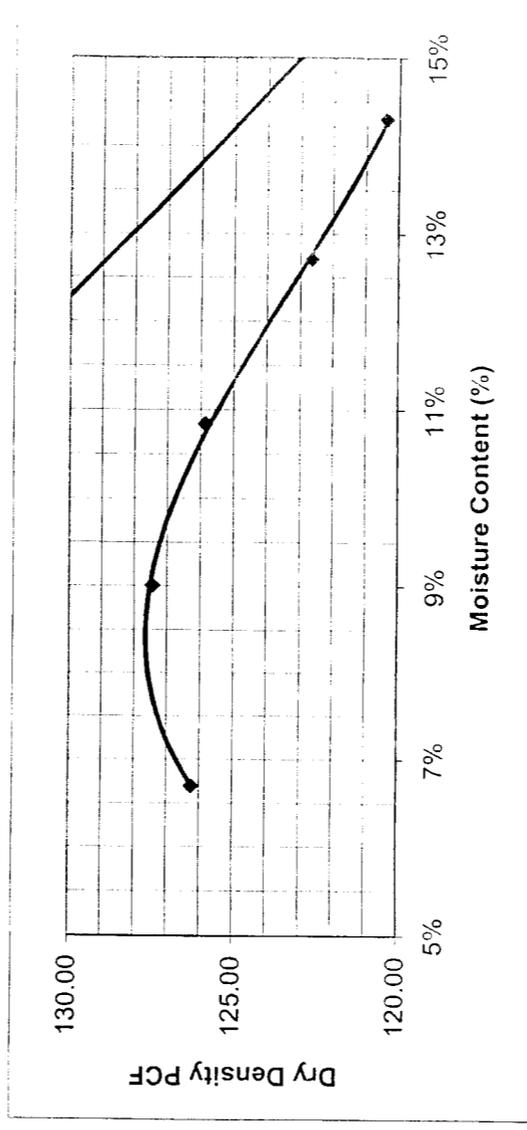
Tin No.	E4	XXI	E1	XIII	E1
Wet Soil + Tin	1146.00	1196.90	920.20	914.80	960.90
Dry Soil + Tin	1065.80	1096.90	844.10	823.00	916.00
Tin Wt.	175.10	174.30	245.30	181.20	245.20
Dry Soil	890.70	922.60	598.80	641.80	670.80
% Moisture	9.0%	10.8%	12.7%	14.3%	6.7%
% Saturation	68.0%	78.1%	83.8%	88.7%	48.8%

MAXIMUM DRY DENSITY (PCF)

127.5

OPTIMUM MOISTURE CONTENT (%)

8.5%



Envirotech

Date

SOIL CLASSIFICATION (ASTM D-2487)



Client: WCH
Address: ERDF

2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether
Project: S66X528A00
Project Location: ERDF Cells 7-8
Tested By: MF
Reviewed By: JV
Date: 4/1/2008
Date: 4/11/2008

Sample ID: SF-04
Sample Des: Cell Road Fill (Brown/Black Mix)
Sampling Date: 3/21/2008
Sampled By: MF
Date Received: 3/21/2008

Natural Moisture Content

Natural Moisture	N/A
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Atterberg Limits Test Results (ASTM D-4318)

Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	

Particle Size Analysis (ASTM D-422)

200 Wash Sieve Analysis (ASTM D-1140)

Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	97.0	
3/8 "	9.500	95.7	
No. 4	4.750	93.8	
No. 10	2.000	89.1	
No. 40	0.425	41.3	
No. 100	0.150	26.4	
No. 200	0.075	17.9	

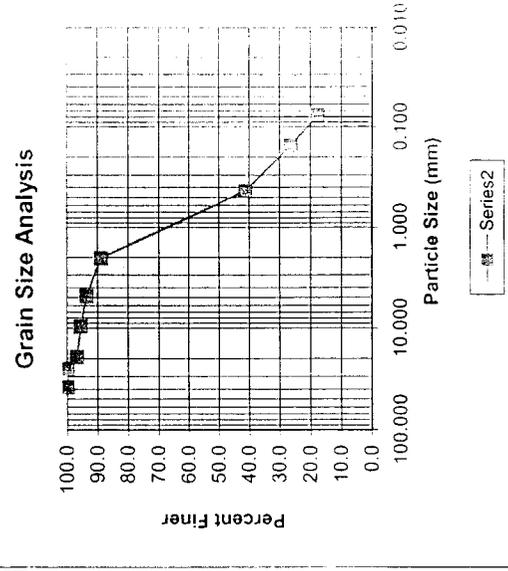
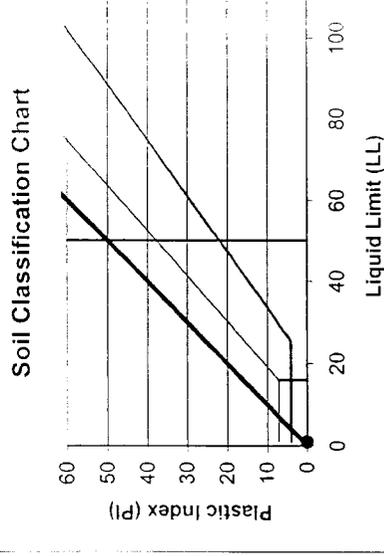
Cu	17.50
Cc	1.16

Unified Soil Classification (ASTM D-2487)

SM: Silty Sand

Deviations from ASTM: No Hydrometer Performed at Client Request

Envirotech



Date

SOIL CLASSIFICATION (ASTM D-2487)



Client: WCH
Address: ERDF

2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

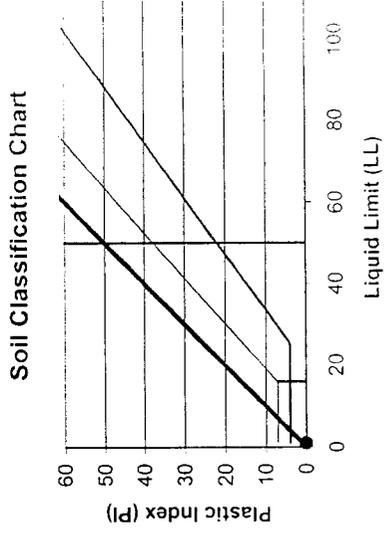
Contact Name: Tom Kisenwether Sample ID: SF-06
Project: S66X528A00 Sample Des: South Berm: Course Brown Sand
Project Location: ERDF Cells 7-8 Sampling Date: 4/9/2008
Tested By: RB Date: 4/10/2008 Sampled By: MF
Reviewed By: JV Date: 5/13/2008 Date Received: 4/9/2008

Natural Moisture Content

Natural Moisture	6.2
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Atterberg Limits Test Results (ASTM D-4318)

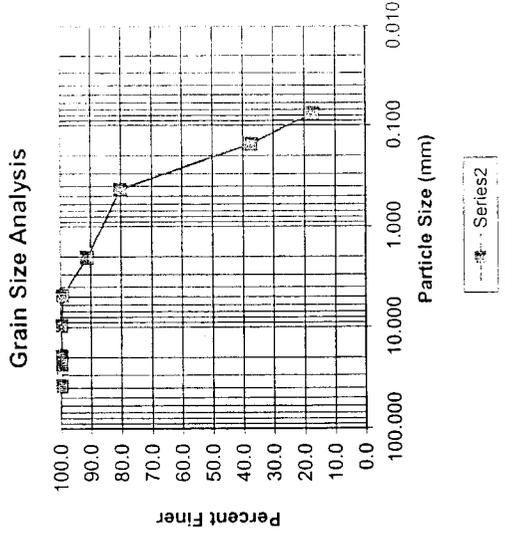
Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	



Particle Size Analysis (ASTM D-422)

200 Wash Sieve Analysis (ASTM D-1140)

Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	100.0	
3/8 "	9.500	100.0	
No. 4	4.750	99.5	
No. 10	2.000	91.2	
No. 40	0.425	80.3	
No. 100	0.150	37.4	
No. 200	0.075	17.2	



Cu	4.33
Cc	2.08

Unified Soil Classification (ASTM D-2487)

SM: Silty Sand

Deviations from ASTM: No Hydrometer Performed at Client Request

Envirotech

Date

Modified Proctor (ASTM D 1557)

Client: WCH
Address: ERDF



2500 N. 11th Street | Enid, OK 73701
(580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenweither Sample ID: SF-06
Project: S66X528A00 Sample Des: South Berm
Project Location: ERDF Cells 7-8 Sampling Date: 4/9/2008
Tested By: MF Date: 4/14/2008 Sampled By: MF
Reviewed By: JV Date: 4/15/2008 Date Received: 4/9/2008
Comments: South Berm Proctor - Course Brown Sand

DENSITY DATA (lbs)

Mold + Wet Soil	13.46	13.57	13.54	13.44	0.00
Mold Wt.	9.25	9.25	9.25	9.25	0.00
Wet Soil	4.20	4.32	4.29	4.19	
lbs/cu. ft. (wet)	126.1	129.6	128.6	125.6	
lbs/cu. ft. (dry)	113.3	114.5	109.7	103.8	

MOISTURE DATA (grams)

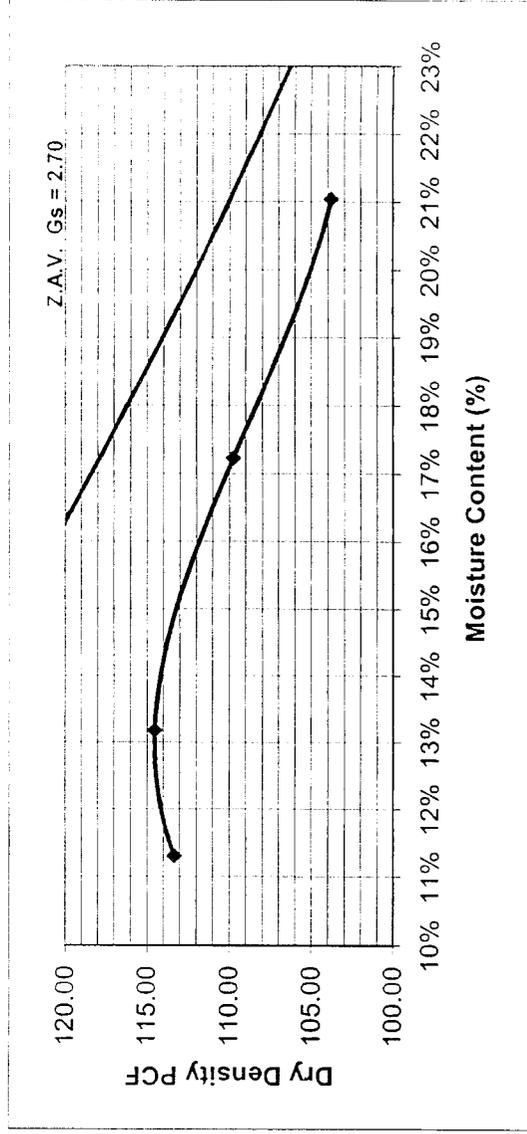
Tin No.	1	2	3	4	
Wet Soil + Tin	1718.90	1952.30	1938.70	1890.80	
Dry Soil + Tin	1544.30	1725.00	1653.80	1562.10	
Tin Wt.	0.00	0.00	0.00	0.00	
Dry Soil	1544.30	1725.00	1653.80	1562.10	
% Moisture	11.3%	13.2%	17.2%	21.0%	
% Saturation	58.4%	70.2%	81.4%	86.2%	

MAXIMUM DRY DENSITY (PCF)

115.0

OPTIMUM MOISTURE CONTENT (%)

13.3%



Envirotech

Date

Modified Proctor (ASTM D 1557)

Client: Bechtel
 Address: 3350 GWW, Richland, WA

**Sample Information**

Contact Name: Dave Duranceau
 Project: 03-117
 Project Location: Hanford - ERDF Cell 5&6
 Tested By: JS Date: 12/9/2003
 Reviewed By: JV Date: 12/10/2003
 Comments: Black and Brown sand 75%/25% with rocks

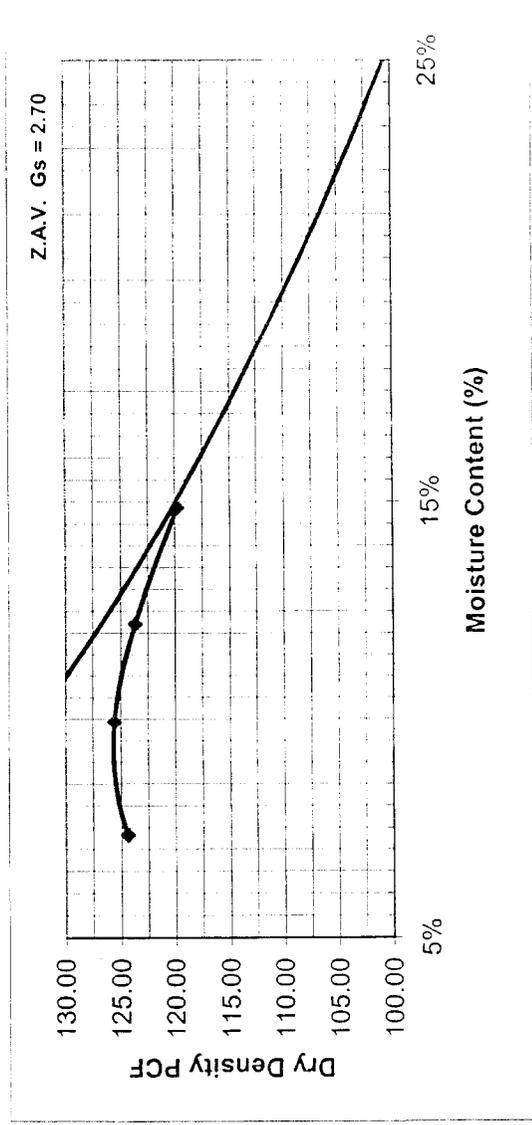
Sample ID: BF-10-MP
 Sample Des: Backfill
 Sampling Date: 12/5/2003
 Sampled By: JS
 Date Received: 12/5/2003

DENSITY DATA (lbs)

Mold + Wet Soil	6460.00	6528.00	6539.00	6521.00
Mold Wt.	4441.00	4441.00	4441.00	4441.00
Wet Soil	2019.00	2087.00	2098.00	2080.00
lbs/cu. ft. (wet)	133.5	138.0	138.8	137.6
lbs/cu. ft. (dry)	124.4	125.6	123.7	119.8

MOISTURE DATA (grams)

Tin No.	C	D	E	F
Wet Soil + Tin	153.99	151.87	152.90	156.73
Dry Soil + Tin	146.89	142.65	141.72	142.97
Tin Wt.	50.02	49.82	50.07	50.44
Dry Soil	96.87	92.83	91.65	92.53
% Moisture	7.3%	9.9%	12.2%	14.9%
% Saturation	55.9%	78.4%	90.9%	98.7%

MAXIMUM DRY DENSITY (PCF)**126.00****OPTIMUM MOISTURE CONTENT (%)****10.5%**

Envirotech Engineering -CQA

Date

Modified Proctor (ASTM D 1557)

Client: Bechtel
 Address: 3350 GWW, Richland, WA



2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Dave Duranceau
 Project: 03-117
 Project Location: Hanford - ERDF Cell 5&6
 Tested By: JS Date: 12/10/2003
 Reviewed By: RS Date: 12/12/2003
 Comments: 50/50 Black/Brown mix, In-place sample

Sample ID: BF-11-MP
 Sample Des: Black/Brown
 Sampling Date: 12/9/2003
 Sampled By: JS
 Date Received: 12/9/2003

DENSITY DATA (lbs)

Mold + Wet Soil	6374.00	6428.00	6470.00	6432.00
Mold Wt.	4441.00	4441.00	4441.00	4441.00
Wet Soil	1933.00	1987.00	2029.00	1991.00
lbs/cu. ft. (wet)	127.8	131.4	134.2	131.7
lbs/cu. ft. (dry)	118.6	119.6	120.4	116.4

MOISTURE DATA (grams)

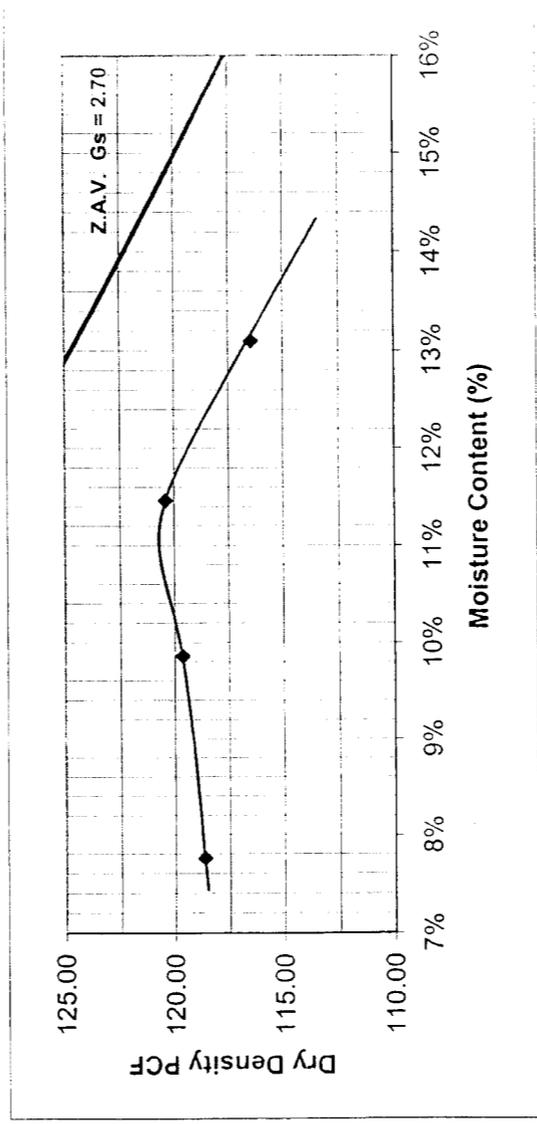
Tin No.	B	C	D	E
Wet Soil + Tin	158.48	155.24	152.40	155.86
Dry Soil + Tin	150.68	145.80	141.85	143.61
Tin Wt.	50.15	50.03	49.82	50.08
Dry Soil	100.53	95.77	92.03	93.53
% Moisture	7.8%	9.9%	11.5%	13.1%
% Saturation	49.9%	65.2%	77.5%	79.1%

MAXIMUM DRY DENSITY (PCF)

120.5

OPTIMUM MOISTURE CONTENT (%)

10.8%



Envirotech Engineering -CQA

Date

DRAWING NO. 0600X-DD-C0309		REV. NO. 0
PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 35409.00 EAST -73710.00		GROUND ELEVATION: 842.00 FEET
SHEET 1 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: ROW/RICHARDS
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SANDY SILT	RECOVERY
10		WATER CONTENT, PERCENT
15		WATER LEVEL
20		
25		
30	SILTY SAND	
35		
40		
45		
50		
55		
60		
65		
70		

PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 35888.00 EAST -71382.00		GROUND ELEVATION: 867.90 FEET
SHEET 1 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: HATCH/RICHARDS
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SALTY SAND	RECOVERY
10	GRAVELLY SAND	WATER CONTENT, PERCENT
15		WATER LEVEL
20	SAND	
25	SALTY SAND	
30		
35		
40		
45		
50		
55		
60		
65		
70	SANDY SILT	

PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 34142.00 EAST -79228.00		GROUND ELEVATION: 708.87 FEET
SHEET 2 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: SPAN
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SAND (EOLIAN SAND?)	RECOVERY
10	GRAVEL	WATER CONTENT, PERCENT
15	GRAVELLY SALTY SAND	WATER LEVEL
20		
25	SALTY SAND	
30	SANDY SILT	
35	SALTY SAND SAND-SILT	
40	SANDY SILT	
45	GRAVELLY SALTY SAND	
50		
55	SALTY SAND	
60		
65		
70	GRAVELLY SAND	
75		

PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 35409.00 EAST -73710.00		GROUND ELEVATION: 842.00
SHEET 2 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: ROW/RICHARDS
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SALTY SAND	RECOVERY
10		WATER CONTENT, PERCENT
15		WATER LEVEL
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
115		
120		
125		

PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 35888.00 EAST -71382.00		GROUND ELEVATION: 867.90
SHEET 2 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: HATCH/RICHARDS
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SALTY SAND	RECOVERY
10		WATER CONTENT, PERCENT
15		WATER LEVEL
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105	SALTY SAND	
110		
115		
120		
125		

PROJECT: EOPF BOREHOLE LOG		BORING NO. 222-222-1
BORING LOCATION NORTH 34142.00 EAST -79228.00		GROUND ELEVATION: 708.87
SHEET 2 OF 2		BORING DATE:
DRILLING METHOD AND EQUIPMENT: CABLE TOOL		LOGGED: CHECKED: DATE:
DRILLING CONTRACTOR: NOT DOCUMENTED		DRILLER: SPAN
DEPTH (FT)	SOIL PROFILE	SAMPLES
0	DESCRIPTION	BLOWS
5	SALTY SAND	RECOVERY
10		WATER CONTENT, PERCENT
15		WATER LEVEL
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
115		
120		
125		

NOTES

- BORINGS 699-35-698 AND 669-35-688 TRANSCRIBED FROM BORING LOGS SUPPLIED BY WCH GEOTECHNICAL DEPARTMENT. REMAINDER OF BORING LOGS TRANSCRIBED FROM WCH-SD-AP-128 REV.1. "SITE CHARACTERIZATION PLAN FOR THE ENVIRONMENTAL RESTORATION DISPOSAL FACILITY".
- FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-DD-C0308.

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42158
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES: 5/28/08

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NO.	DATE	DESCRIPTION	BY	CHK	APP	DATE
1	10/11/07	ISSUED FOR CONSTRUCTION	TJ	CYB	2/11	N/A

SCALE: AS SHOWN

U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC. WEAVER BOOS CONSULTANTS, LLC

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 54821.00 GROUND ELEVATION 841.10 FEET EAST -89986.00 BORING DATE:							
DRILLING METHOD AND EQUIPMENT: CABLE TOOL DRILLING CONTRACTOR: NOT DOCUMENTED DRILLER: SOCIETY/ROW		LOGGED: CHECKED: DATE:					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	TOPSOIL - (EOLIAN SAND?)						
5	SAND						
10							
15	GRAVELLY SAND						
20							
25	SILTY SAND						
30							
35	SAND						
40							
45	SILTY SAND						
50							
55							
60							
65							
70							

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 54821.00 GROUND ELEVATION 733.47 FEET EAST -89738.00 BORING DATE:							
DRILLING METHOD AND EQUIPMENT: CABLE TOOL DRILLING CONTRACTOR: NOT DOCUMENTED DRILLER: MATCH		LOGGED: CHECKED: DATE:					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	SAND - (EOLIAN SAND?)						
5							
10	GRAVELLY SAND						
15							
20	GRAVEL						
25							
30	SANDY GRAVEL						
35							
40	SILTY SAND						
45							
50							
55							
60							
65							
70							

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 55889 GROUND ELEVATION 713.9 FEET EAST -89738 BORING DATE: 4/28/84							
DRILLING METHOD AND EQUIPMENT: HOLLOW STEM AUGER, 8-57 DRILL DRILLING CONTRACTOR: CHECKED: E.A. JOHNSON DRILLER: D. ROSSMAN		LOGGED: CHECKED: DATE: 4/27/84					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	Yellowish Brown, Slightly Most Fine to Medium SAND with Some Coarse Sand						
5							
10	Compact, Dark Olive Gray, Silt to Medium to Coarse SAND, Trace SILT						
15							
20	Dense to very Dense, Light Yellowish Brown, Fine to Medium SAND						
25							
30	Very Dense, Light Brownish Gray, Dry, Medium to Coarse SAND						
35							
40	Very Dense, Pale Brown, Dry, Fine to Medium SAND, Trace SILT						
45							
50	Very Dense, Pale Yellow, Medium to Coarse SAND						
55							
60							
65							
70							

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 54521.00 GROUND ELEVATION 841.10 EAST -89986.00 BORING DATE:							
DRILLING METHOD AND EQUIPMENT: CABLE TOOL DRILLING CONTRACTOR: NOT DOCUMENTED DRILLER: SOCIETY/ROW		LOGGED: CHECKED: DATE:					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	SILTY SAND						
5							
10							
15							
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 34840.00 GROUND ELEVATION 733.47 EAST -89738.00 BORING DATE:							
DRILLING METHOD AND EQUIPMENT: CABLE TOOL DRILLING CONTRACTOR: NOT DOCUMENTED DRILLER: MATCH		LOGGED: CHECKED: DATE:					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	SILTY SAND						
5							
10							
15							
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							

DRAWING NO. 0600X-DD-C0310		REV. NO. 0					
PROJECT: ERF BOREHOLE LOG BORING NO. 899-35-68B SHEET 1 OF 1							
BORING LOCATION NORTH 34717 GROUND ELEVATION 701.43 FEET EAST -89986 BORING DATE: 4/23/84							
DRILLING METHOD AND EQUIPMENT: HOLLOW STEM AUGER, 8-57 DRILL DRILLING CONTRACTOR: CHECKED: EDWARD E. RAFFUSE DRILLER: D. ROSSMAN		LOGGED: CHECKED: DATE: 4/23/84					
DEPTH (FT)	SOIL PROFILE		SAMPLES		PENETRATION RESISTANCE		PIEZOMETER GRAPHIC
	DESCRIPTION	DRAWING LOG NUMBER	TYPE	BLOWS	WATER CONTENT, PERCENT	WATER LEVEL	
0	Yellowish Brown, Dry, Fine to Medium SAND with Some Coarse Sand						
5							
10	Compact to very Dense, (COLOR) Dry, Medium to Coarse SAND, Little Gravel						
15							
20	Dense to Very Dense, (COLOR) Dry, Fine to Medium SAND						
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							

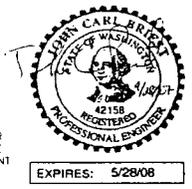
NOTES

- BORINGS 599-35-69B AND 599-35-68B TRANSCRIBED FROM BORING LOGS SUPPLIED BY WHC GEOTECHNICAL DEPARTMENT. REMAINDER OF BORING LOGS TRANSCRIBED FROM WHC-SD-AP-128 REV 1, "SITE CHARACTERIZATION PLAN FOR THE ENVIRONMENTAL RESTORATION DISPOSAL FACILITY".
- FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-DD-C0309B.

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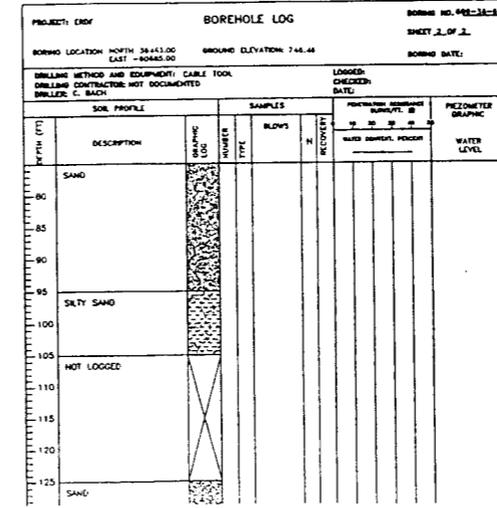
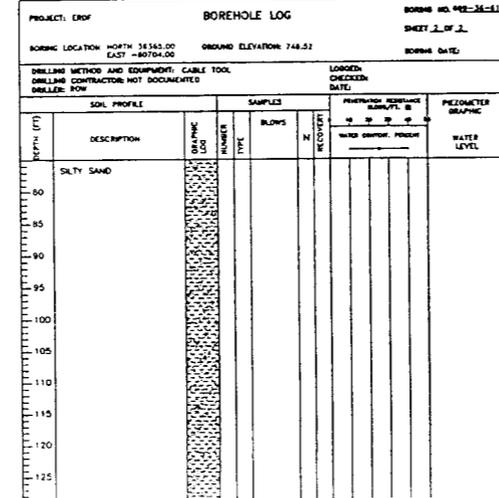
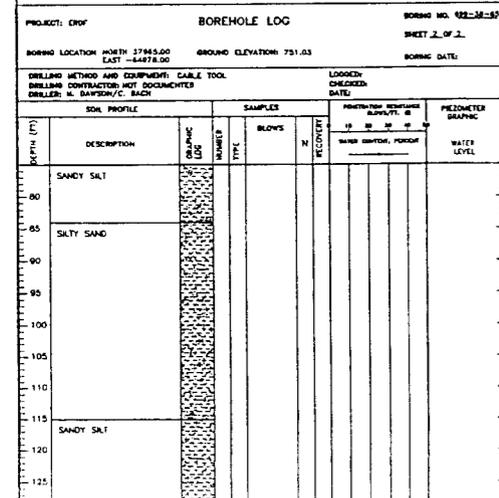
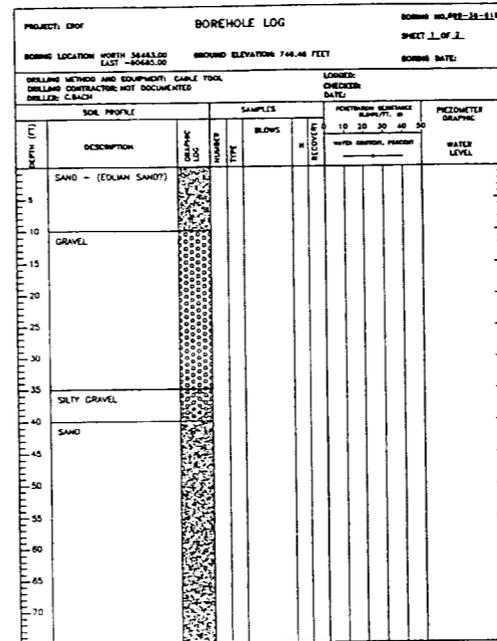
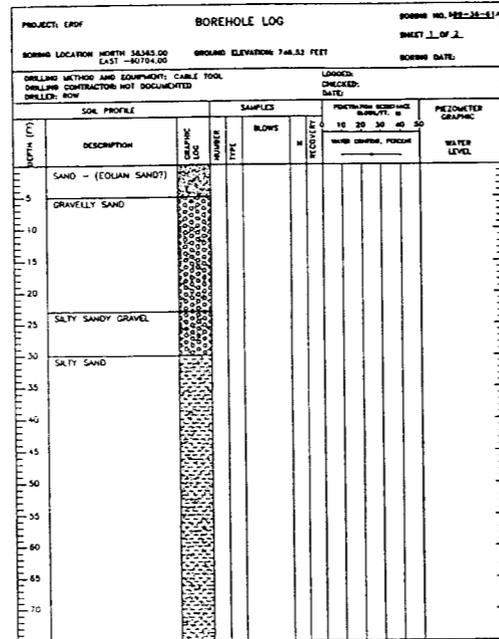
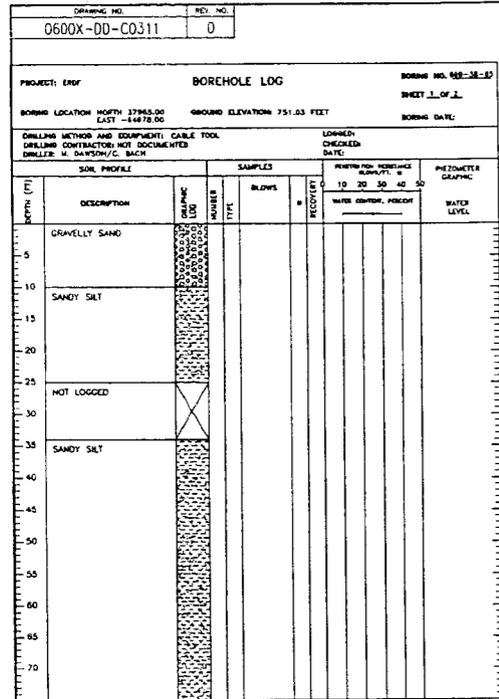


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DATE	DESCRIPTION	ISSUED FOR CONSTRUCTION	DATE	DESCRIPTION
9/12/07				

U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC
WEAVER BOOS CONSULTANTS, LLC



NOTES

- BORINGS 699-35-69B AND 699-35-88B TRANSCRIBED FROM BORING LOGS SUPPLIED BY WHC GEOTECHNICAL DEPARTMENT. REMAINDER OF BORING LOGS TRANSCRIBED FROM WHC-SD-AP-128 REV. 1. "SITE CHARACTERIZATION PLAN FOR THE ENVIRONMENTAL RESTORATION DISPOSAL FACILITY".
- FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-DD-C0308.

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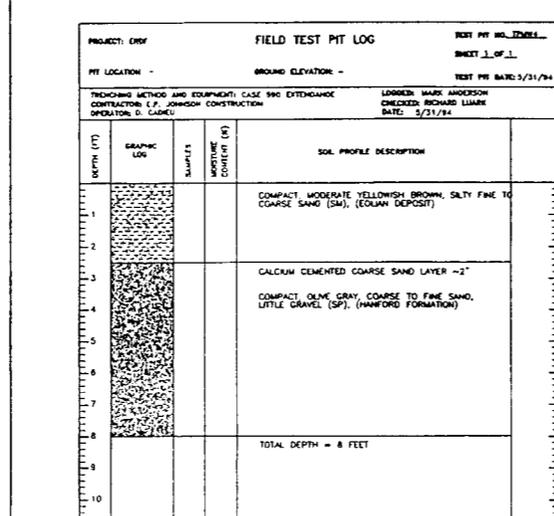
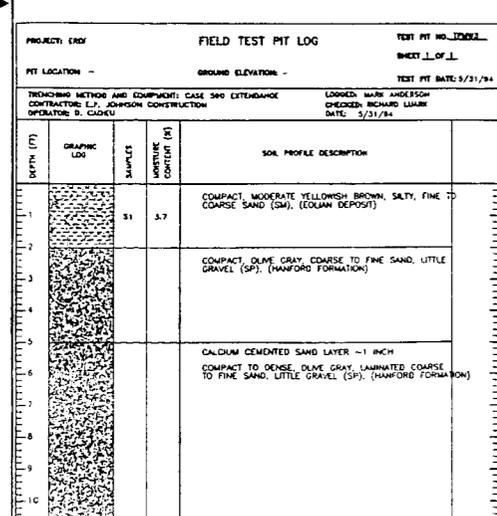
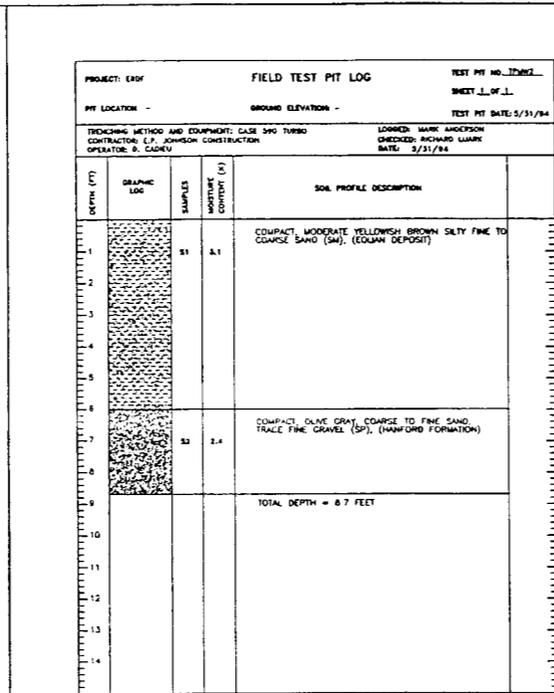
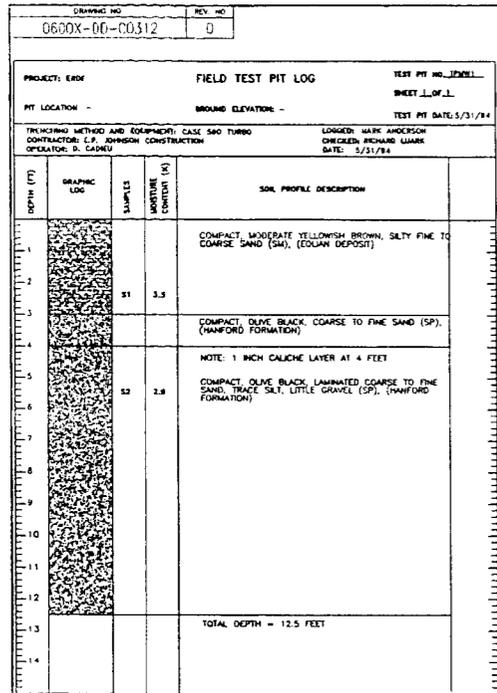
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1	9/18/07	ISSUED FOR CONSTRUCTION	JV	CJB	9/18/07

U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC. | WEAVER BOOS CONSULTANTS, LLC



NOTES

1. FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-00-C0306.

PROPOSED SOIL TEST PITS

DATE: 10/11/07

PROJECT: ERDF

TEST PIT NO. 12061

OPERATOR: D. CADOU

LOGGED: MARK ANDERSON

CHECKED: RICHARD LUARK

DATE: 5/31/84

SCALE: AS SHOWN

ISSUED FOR CONSTRUCTION

DATE: 10/11/07

DESCRIPTION: SOIL TEST PIT LOG

SCALE: AS SHOWN

U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
RIVER CORRIDOR CLOSURE CONTRACT

WASHINGTON CLOSURE HANFORD LLC
WEAVER BOOS CONSULTANTS, LLC

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JOHN CARL BATES
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES: 5/28/08

DRAWING NO. 0600X-DD-C0313
REV. NO. 0

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 5/31/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]	S1	2.8	COMPACT MODERATE YELLOWISH BROWN, SILTY FINE TO COARSE SAND (SM), (EOLIAN DEPOSIT)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND, TRACE GRAVEL (SP), (HANFORD FORMATION)
9				
TOTAL DEPTH = 9 FEET				

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 6/1/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]	S1	4.5	COMPACT PALE YELLOWISH BROWN, SILTY FINE TO COARSE SAND (SM), (EOLIAN DEPOSIT)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND TO SAND AND GRAVEL, LITTLE SILT (SP-GM), (HANFORD FORMATION)
9				
TOTAL DEPTH = 9 FEET				

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 6/1/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]			COMPACT PALE YELLOWISH BROWN, SILTY FINE TO COARSE SAND (SM)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND AND GRAVEL (SP), (HANFORD FORMATION)
9				
10	[Graphic Log: 10-13 ft]	S1	2.8	COMPACT TO DENSE MODERATE YELLOWISH BROWN, SILTY COARSE TO FINE SAND, LITTLE TO SOME GRAVEL (SM), (HANFORD FORMATION)
11				
12				
13				
TOTAL DEPTH = 13 FEET				

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 6/1/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]	S1	4.5	COMPACT MODERATE YELLOWISH BROWN, SILTY FINE TO COARSE SAND (SP-SM), (EOLIAN DEPOSIT)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND, SOME TRACE GRAVEL (SP), (HANFORD FORMATION)
9				
TOTAL DEPTH = 9 FEET				

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 6/1/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]			COMPACT MODERATE YELLOWISH BROWN, SILTY FINE TO MEDIUM SAND (SM), (EOLIAN DEPOSIT)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND, SOME TRACE GRAVEL (SP), (HANFORD FORMATION)
9				
TOTAL DEPTH = 9 FEET				

PROJECT: ERF		FIELD TEST PIT LOG		TEST PIT NO. J2002
PIT LOCATION -		GROUND ELEVATION -		SHEET 1 OF 1
TRENCHING METHOD AND EQUIPMENT: CASE 390 EXTENDANCE CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADNU		LOGGED: MARK ANDERSON CHECKED: RICHARD LUARE DATE: 5/31/84		TEST PIT DATE: 6/1/84
DEPTH (FT)	GRAPHIC LOG	SAMPLES	MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Graphic Log: 1-4 ft]	S1	6.7	COMPACT MODERATE YELLOWISH BROWN, SILTY FINE TO COARSE SAND, TRACE GRAVEL (SM), (EOLIAN DEPOSIT)
2				
3				
4				
5	[Graphic Log: 5-7 ft]			COMPACT TO DENSE PALE YELLOWISH BROWN CALCIUM CEMENTED COARSE SAND, LITTLE TO TRACE FINE GRAVEL (SP), (HANFORD FORMATION)
6				
7				
8	[Graphic Log: 8-9 ft]			COMPACT OLIVE BLACK COARSE TO FINE SAND, SOME TRACE GRAVEL (SP), (HANFORD FORMATION)
9				
10	[Graphic Log: 10-13 ft]	S1	2.8	COMPACT TO DENSE MODERATE YELLOWISH BROWN, SILTY COARSE TO FINE SAND, LITTLE TO SOME GRAVEL (SM), (HANFORD FORMATION)
11				
12				
13				
TOTAL DEPTH = 13 FEET				

NOTES

1 FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-DD-C0308.

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U.S. DEPARTMENT OF ENERGY
WASHINGTON CLOSURE
HANFORD, LLC.

WEAVER 800 CONSULTANTS, LLC

DRAWING NO. 0600X-DD-C0315		REV. NO. 6	
PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1251		SHEET 1 OF 1	
TEST PIT DATE: 12/1/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	LOOSE TO COMPACT PALE YELLOWISH BROWN COARSE TO FINE SAND WITH SOME SALT (SW-SM), (EOLIAN DEPOSIT)
2		S2	
3	[Stippled pattern]	S3	COMPACT TO DENSE, BROWNISH BLACK COARSE TO FINE GRAVEL WITH SOME COARSE TO FINE SAND (DRY, S&S) CEMENTATION AT CONTACT (CW), (HANFORD FORMATION)
4			
5			
6			TOTAL DEPTH = 10 FEET

PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1251		SHEET 1 OF 1	
TEST PIT DATE: 12/1/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	LOOSE, PALE YELLOWISH BROWN COARSE TO FINE SAND WITH LITTLE SALT (SW-SM), (EOLIAN DEPOSIT)
2			
3	[Stippled pattern]	S2	COMPACT TO DENSE, GRAY COARSE TO FINE TO MEDIUM SAND, TRACE S&S (CW), (HANFORD FORMATION)
4			
5			
6			TOTAL DEPTH = 8 FEET

PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1252		SHEET 1 OF 1	
TEST PIT DATE: 11/31/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	PALE YELLOWISH BROWN COARSE TO FINE SAND LITTLE SALT (SW), (EOLIAN DEPOSIT)
2			
3	[Stippled pattern]	S2	LIGHT OLIVE BROWN MEDIUM TO FINE SAND, SOME S&S, TRACE COARSE TO FINE GRAVEL (SW)
4			
5			
6			TOTAL DEPTH = 12.5 FEET

PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1253		SHEET 1 OF 1	
TEST PIT DATE: 11/30/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	LOOSE, PALE YELLOWISH BROWN COARSE TO FINE SAND, LITTLE S&S (SW-SM), (EOLIAN DEPOSIT)
2			
3	[Stippled pattern]	S2	COMPACT TO DENSE, PALE SAND, MEDIUM TO FINE GRAVEL WITH SOME COARSE TO FINE SAND (DRY, S&S) CEMENTATION AT CONTACT (CW), (HANFORD FORMATION)
4			
5			
6			TOTAL DEPTH = 6 FEET

PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1254		SHEET 1 OF 1	
TEST PIT DATE: 11/30/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	LOOSE, LIGHT BROWNISH GRAY FINE SAND SOME S&S (SM), (EOLIAN DEPOSIT)
2			
3	[Stippled pattern]	S2	COMPACT TO DENSE, PALE SAND, MEDIUM TO FINE GRAVEL WITH SOME COARSE TO FINE SAND (DRY, S&S) CEMENTATION AT CONTACT (CW), (HANFORD FORMATION)
4			
5			
6			TOTAL DEPTH = 6 FEET

PROJECT: ERF		FIELD TEST PIT LOG	
TEST PIT NO. 1255		SHEET 1 OF 1	
TEST PIT DATE: 11/30/94		GROUND ELEVATION: -	
TESTING METHOD AND EQUIPMENT: FORD 5550 CONTRACTOR: E.P. JOHNSON CONSTRUCTION OPERATOR: D. CADREU		LOGGED: MARK ANDERSON CHECKED: SCOTT STONEHAM DATE: 1/23/95	
DEPTH (FT)	GRAPHIC LOG	SAMPLES MOISTURE CONTENT (%)	SOIL PROFILE DESCRIPTION
1	[Stippled pattern]	S1	LOOSE, PALE YELLOWISH BROWN COARSE TO FINE SAND, LITTLE TO SOME S&S (SM), (EOLIAN DEPOSIT)
2			
3	[Stippled pattern]	S2	DENSE, COARSE GRAVEL, LITTLE COARSE TO FINE SAND (HANFORD FORMATION)
4			
5			
6			TOTAL DEPTH = 6 FEET

NOTES

1 FOR LOCATIONS OF SOIL BORINGS, SOIL TEST PITS, AND EXISTING WELLS, SEE DRAWING NO. 0600X-DD-C0308.

DEPTH (FT)	MOISTURE (%)	GRAVIMETRIC (%)	WATER CONTENT (%)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

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JCH - DOCUMENT CONTROL

SOX 504 R00

DOCUMENT CONTROL 10/11/07

MY STAMP AND SEAL APPLY TO THOSE CHANGES MADE IN REVISION(S) OF THE ORIGINAL DESIGN WAS NOT PREPARED UNDER MY DIRECTION.
THIS DRAWING HAS BEEN PREPARED IN PART ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.



U.S. DEPARTMENT OF ENERGY
DOE RICHLAND OPERATIONS OFFICE
WASHINGTON CLOSURE | WEAVER BOOS CONSULTANTS, LLC
HANFORD, ILL.

Enclosure II

French, Mark

From: Robertson, Owen Jr
Sent: Tuesday, July 15, 2008 8:36 AM
To: Wilcox, Debra; French, Mark S; Hathaway, H B (Boyd)
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data
Attachments: SF-01 Proctor.xls; SF-01 Class.xls

Deb,

Soil data usually refers to the sand, silt, and clay content. I requested from WCH a listing of the data send to Michelle Mandis (see below). It consisted of soil classification and compaction data collected by the Construction Quality Assurance (CQA) contractor, Envirotech, last March (see attachments), and boring and test pit logs from the initial construction of Cells 1&2.

The soil data collected by the CQA contractor (b)(5)

(b)(5)

I hope this helps.

Thanks,
Owen

From: Wilcox, Debra
Sent: Monday, July 14, 2008 4:31 PM
To: French, Mark S; Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data

(b)(5)

Deb Wilcox
Office of Chief Counsel
(509) 376-3285
(509) 531-2629 (cell)

THIS EMAIL MESSAGE INCLUDES ATTORNEY WORK PRODUCT INFORMATION AND IS PRIVILEGED. DO NOT FURTHER DISTRIBUTE WITHOUT PERMISSION OF THE SENDER.

(b5
Attorney Client
and
work product)

From: French, Mark S
Sent: Monday, July 14, 2008 4:27 PM
To: Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Wilcox, Debra
Subject: FW: Use of ERDF Soil Data

(b)(5)

Mark S. French
Federal Project Director
373-9863

From: Mandis, Michelle (ECY) [mailto:MICH461@ecy.wa.gov]
Sent: Monday, July 14, 2008 3:52 PM
To: French, Mark S
Cc: Skinnerland, E R (Ron); Singleton, Deborah; Ollero, Jennifer (ECY); Robertson, Owen Jr
Subject: Use of ERDF Soil Data

Mark~

Ron requested that I touch base and verify that it was acceptable with USDOE to forward ERDF soils data to US Ecology personnel so that they may send it to their sub-contractor. Mr. Thom Kisenwether (373-9173) from Washington Closure sent me the data from 18 borings and several test pits.

Thanks,

Michelle

Modified Proctor (ASTM D 1557)

Client: **WCH**
 Address: **ERDF**

ENVIROTECH
 2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether	Sample ID: SF-01
Project: S66X528A00	Sample Des: Test Pad Sub
Project Location: ERDF Cells 7-8	Sampling Date: 3/12/2008
Tested By: MF Date: 3/21/2008	Sampled By: MF
Reviewed By: JV Date: 3/21/2008	Date Received: 3/12/2008
Comments: North Berm Brown Sand Mixed with Black Sand	

DENSITY DATA (grams)

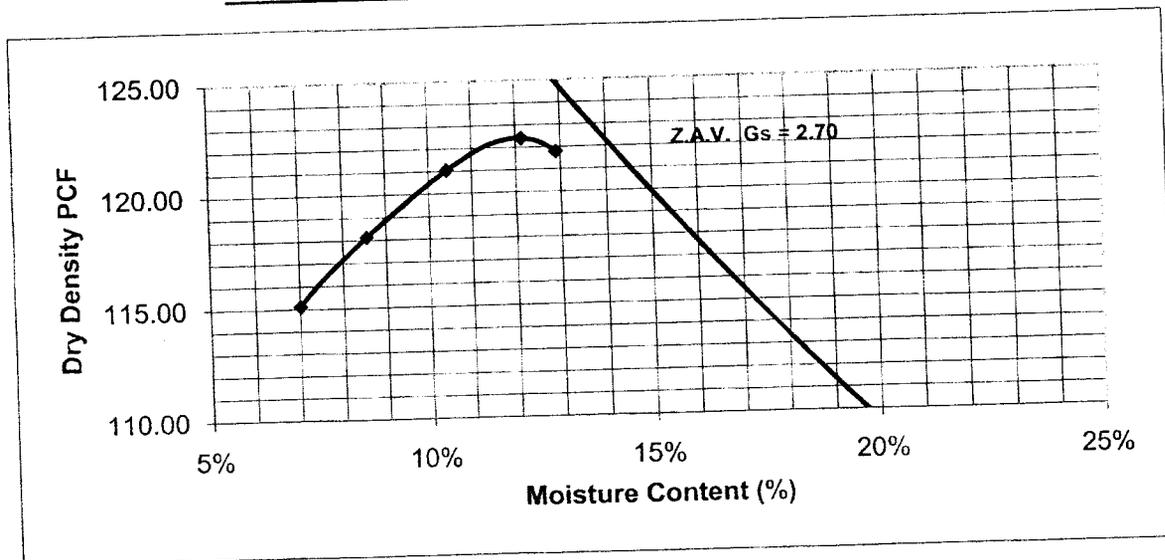
Mold + Wet Soil	12.98	13.16	13.28	12.81	13.29
Mold Wt.	8.71	8.71	8.71	8.71	8.71
Wet Soil	4.28	4.46	4.58	4.11	4.58
lbs/cu. ft. (wet)	128.3	133.7	137.3	123.2	137.5
lbs/cu. ft. (dry)	118.1	121.0	122.4	115.1	121.8

MOISTURE DATA (grams)

Tin No.	XIII	VI	XII	ES	E2
Wet Soil + Tin	680.73	677.92	720.96	695.10	711.30
Dry Soil + Tin	641.34	630.39	662.56	665.72	658.22
Tin Wt.	181.20	174.26	181.17	246.48	246.70
Dry Soil	460.14	456.13	481.39	419.24	411.52
% Moisture	8.6%	10.4%	12.1%	7.0%	12.9%
% Saturation	54.2%	71.8%	87.0%	40.8%	90.8%

MAXIMUM DRY DENSITY (PCF)
122.4

OPTIMUM MOISTURE CONTENT (%)
12.1%



Envirotech

Date

SOIL CLASSIFICATION (ASTM D-2487)



2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Client: WCH
Address: ERDF

Sample Information

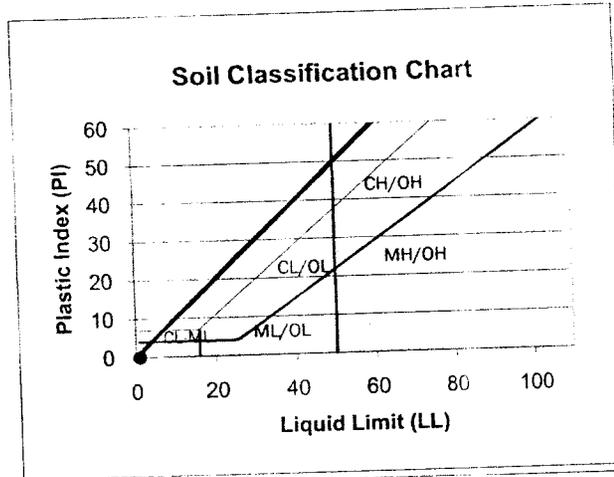
Contact Name: Tom Kisenwether	Sample ID: SF-01
Project: S66X528A00	Sample Des: Test Pad Sub. Brw and Blk sand
Project Location: ERDF Cells 7-8	Sampling Date: 3/12/2008
Tested By: MF Date: 3/20/2008	Sampled By: MF
Reviewed By: JV Date: 3/21/2008	Date Received: 3/12/2008

Natural Moisture Content

Natural Moisture	N/A
------------------	-----

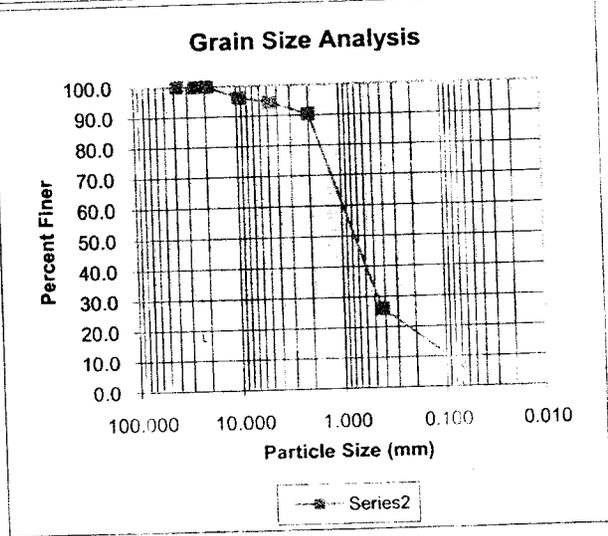
Atterberg Limits Test Results (ASTM D-4318)

Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	



Particle Size Analysis (ASTM D-422) 200 Wash Sieve Analysis (ASTM D-1140)

Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	100.0	
3/8 "	9.500	96.0	
No.4	4.750	94.4	
No. 10	2.000	90.2	
No. 40	0.425	26.1	
No. 200	0.075	7.3	



Cu	10.56
Cc	2.47

Unified Soil Classification (ASTM D-2487)

SW: Well Graded Sand

Deviations from ASTM: None

Envirotech

Date

Enclosure III



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

*Scott/Bov -
Prepare file*

08-AMRC-0216

AUG 20 2008

140958

Mr. Gary Robertson, Director
State of Washington
Department of Health
Office of Radiation Protection
PO Box 47827
Olympia, Washington 98504-7827

Dear Mr. Robertson:

**USING ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF) EXCESS SOIL
AT US ECOLOGY LOW-LEVEL RADIOACTIVE WASTE (LLRW) DISPOSAL SITE**

In reply to your letter to me, same subject, dated July 9, 2008, the excavated soil that may be available from ERDF equate to approximately 450,000 cubic yards. Your letter states that US Ecology needs 800,000 cubic yards of soil. The remaining 350,000 cubic yards needed can potentially be obtained by excavating the soil from the future construction area for cells 9 and 10. Construction of cells 9 and 10 is scheduled to begin in early Fiscal Year 2011.

Before construction of cells 9 and 10 can start, we must process a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD) Amendment for the additional of cells 9 and 10. The schedule for this activity is set to begin in October 2008 and to be completed within 9 months.

I agree that a Memorandum of Understanding (MOU) (or something similar) is required for us to go forward with the project. The MOU should contain details, such as safety procedures, procedures, preservation of eolian soils, haul routes, etc. The MOU should be established between US Ecology and Washington Closure Hanford (WCH), subject to review and approval by our respective offices.

The U.S. Department of Energy, Richland Operations Office (RL) has done a review of the soils and believes that this is a good potential opportunity for the agencies to work together. The soil transfer will require significant interface and RL requests the following items:

RECEIVED

AUG 27 2008

**WCH - DOCUMENT
CONTROL**

Mr. Gary Robertson
08-AMRC-0216

-2-

- Department of Health maintain the master schedule
- Department of Health lead the effort on development of the MOU
- Agreement on the MOU
- RL and Department of Health assign project leads
- Department of Health is the lead for establishing a charter for the project with review and approval by both agencies

Attached you will find a draft copy of our draft schedule. We look forward in working with you on this opportunity.

If you have questions, please contact me or your staff may contact Owen Robertson, of my staff, on (509) 521-1045.

Sincerely,


Joe R. Franco, Assistant Manager
for the River Corridor

AMRC:OCR

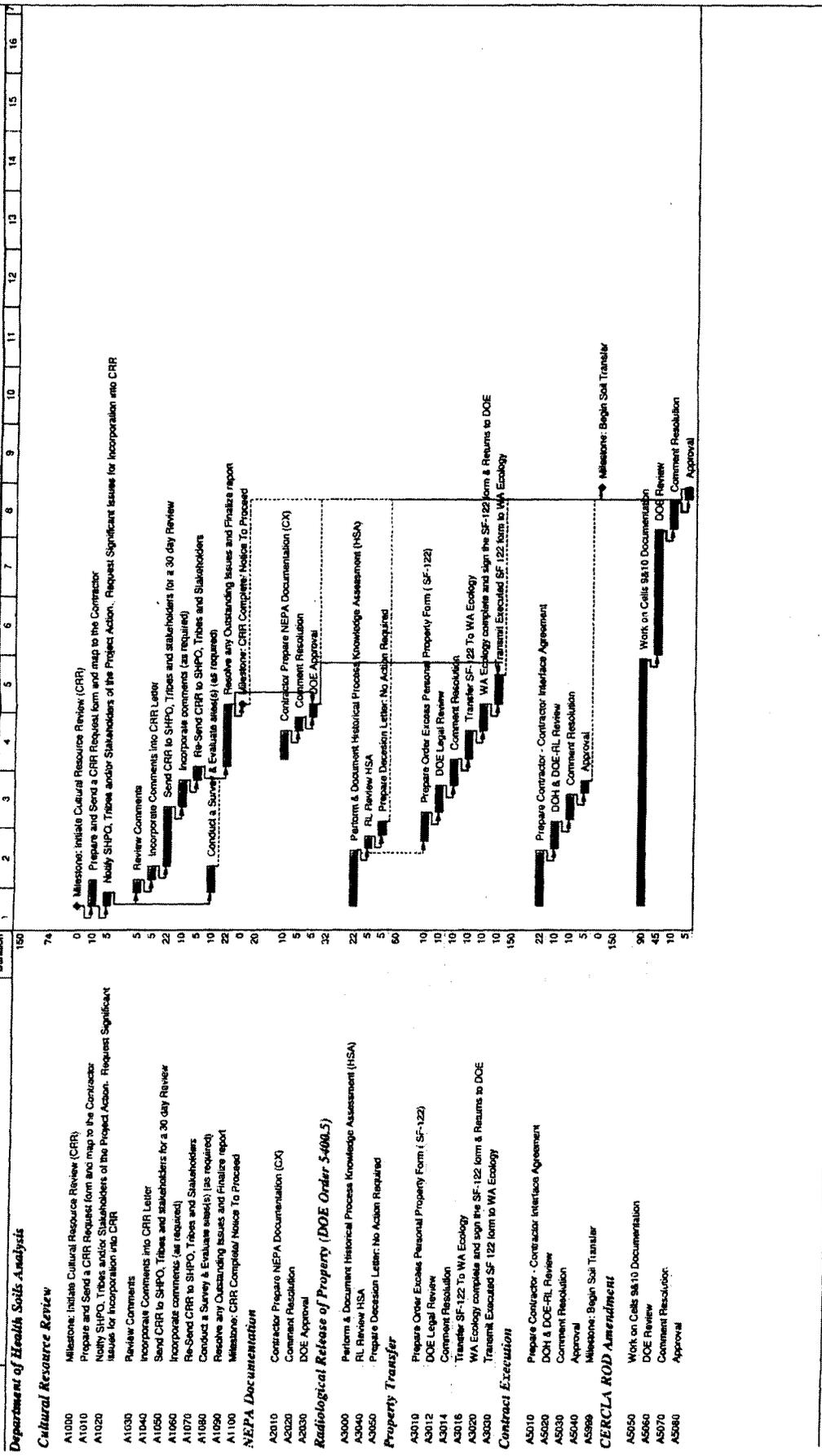
Attachment

cc w/attach:

B. C. Covert, WCH

D. R. Einan, EPA

E. W. Fordham, DOH



French, Mark

From: Franco, Jose R (Joe)
Sent: Wednesday, July 01, 2009 8:19 AM
To: 'Fordham, Earl W (DOH)'
Cc: French, Mark S; Robertson, Owen Jr
Subject: ERDF Soil

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Earl
(b)(5)

Give me a call when you can.

376-4343

Joe Franco
AMRC

(b5
de liberative)

French, Mark

From: Franco, Jose R (Joe)
Sent: Thursday, July 09, 2009 10:28 AM
To: Bryson, Dana C; Robertson, Owen Jr; French, Mark S
Subject: FW: ERDF Soils

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

FYI

From: Fordham, Earl W (DOH) [mailto:Earl.Fordham@DOH.WA.GOV]
Sent: Thursday, July 09, 2009 10:24 AM
To: Franco, Jose R (Joe)
Subject: RE: ERDF Soils

Thanks, Joe.

(b)(5) March 2010 will
probably work nicely in our plans to construct next season.

From: Franco, Jose R (Joe) [mailto:Jose_R_Joe_Franco@RL.gov]
Sent: Thursday, July 09, 2009 10:18 AM
To: Fordham, Earl W (DOH)
Cc: Robertson, Owen Jr; French, Mark S; Bryson, Dana C
Subject: ERDF Soils

Earl

As I had notified you here is the scheduled date when we will start the excavation on cell 10. This may change as we go through the process and we will keep you informed. Mid March 2010

Cell 9 is in works this month.

Joe Franco
AMRC

(b5
deliberative)

Enclosure IV

French, Mark

From: Robertson, Owen Jr
Sent: Tuesday, July 15, 2008 8:36 AM
To: Wilcox, Debra; French, Mark S; Hathaway, H B (Boyd)
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data
Attachments: SF-01 Proctor.xls; SF-01 Class.xls

Deb,

Soil data usually refers to the sand, silt, and clay content. I requested from WCH a listing of the data send to Michelle Mandis (see below). It consisted of soil classification and compaction data collected by the Construction Quality Assurance (CQA) contractor, Envirotech, last March (see attachments), and boring and test pit logs from the initial construction of Cells 1&2.

The soil data collected by the CQA contractor (b)(5)

(b)(5)

I hope this helps.

Thanks,
Owen

From: Wilcox, Debra
Sent: Monday, July 14, 2008 4:31 PM
To: French, Mark S; Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Williamson, Barbara D; Dudley, John R
Subject: RE: Use of ERDF Soil Data

(b)(5)

Deb Wilcox
Office of Chief Counsel
(509) 376-3285
(509) 531-2629 (cell)

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(b5
Attorney Client
and
work product)

From: French, Mark S
Sent: Monday, July 14, 2008 4:27 PM
To: Hathaway, H B (Boyd); Robertson, Owen Jr
Cc: Franco, Jose R (Joe); Wilcox, Debra
Subject: FW: Use of ERDF Soil Data

(b)(5)

Mark S. French
Federal Project Director
373-9863

From: Mandis, Michelle (ECY) [mailto:MICH461@ecy.wa.gov]
Sent: Monday, July 14, 2008 3:52 PM
To: French, Mark S
Cc: Skinnerland, E R (Ron); Singleton, Deborah; Ollero, Jennifer (ECY); Robertson, Owen Jr
Subject: Use of ERDF Soil Data

Mark~

Ron requested that I touch base and verify that it was acceptable with USDOE to forward ERDF soils data to US Ecology personnel so that they may send it to their sub-contractor. Mr. Thom Kisenwether (373-9173) from Washington Closure sent me the data from 18 borings and several test pits.

Thanks,

Michelle

(b5 Attorney Client
and
deliberative)

Modified Proctor (ASTM D 1557)



Client: **WCH**
 Address: **ERDF**

2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Sample Information

Contact Name: Tom Kisenwether	Sample ID: SF-01
Project: S66X528A00	Sample Des: Test Pad Sub
Project Location: ERDF Cells 7-8	Sampling Date: 3/12/2008
Tested By: MF Date: 3/21/2008	Sampled By: MF
Reviewed By: JV Date: 3/21/2008	Date Received: 3/12/2008
Comments: North Berm Brown Sand Mixed with Black Sand	

DENSITY DATA (grams)

Mold + Wet Soil	12.98	13.16	13.28	12.81	13.29
Mold Wt.	8.71	8.71	8.71	8.71	8.71
Wet Soil	4.28	4.46	4.58	4.11	4.58
lbs/cu. ft. (wet)	128.3	133.7	137.3	123.2	137.5
lbs/cu. ft. (dry)	118.1	121.0	122.4	115.1	121.8

MOISTURE DATA (grams)

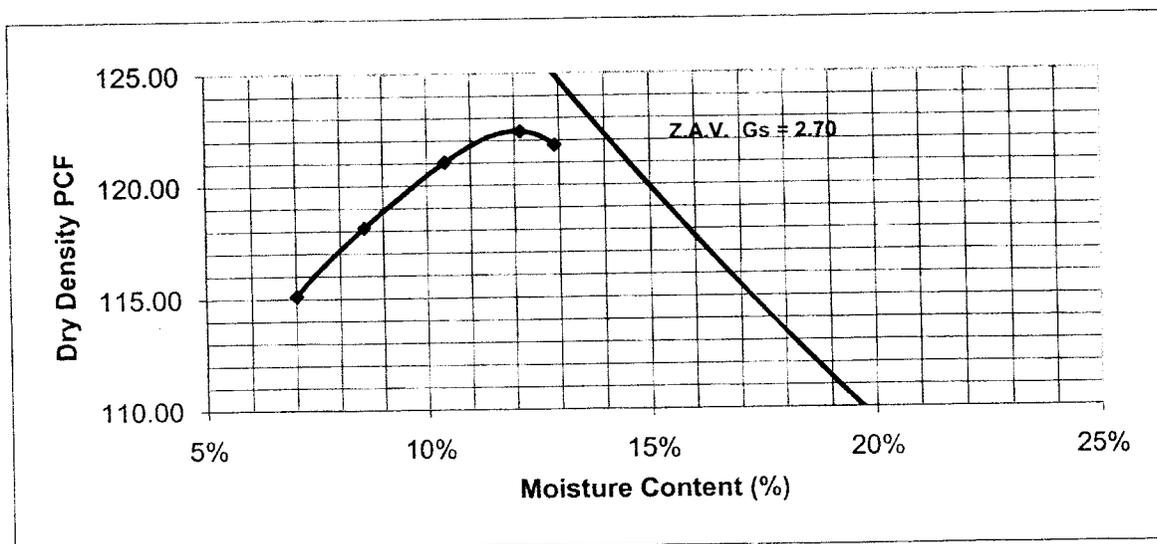
Tin No.	XIII	VI	XII	ES	E2
Wet Soil + Tin	680.73	677.92	720.96	695.10	711.30
Dry Soil + Tin	641.34	630.39	662.56	665.72	658.22
Tin Wt.	181.20	174.26	181.17	246.48	246.70
Dry Soil	460.14	456.13	481.39	419.24	411.52
% Moisture	8.6%	10.4%	12.1%	7.0%	12.9%
% Saturation	54.2%	71.8%	87.0%	40.8%	90.8%

MAXIMUM DRY DENSITY (PCF)

122.4

OPTIMUM MOISTURE CONTENT (%)

12.1%



Envirotech

Date

SOIL CLASSIFICATION (ASTM D-2487)



2500 N. 11th Street | Enid, OK 73701
 (580) 234-8780 | Fax (580) 237-4302

Client: WCH
 Address: ERDF

Sample Information

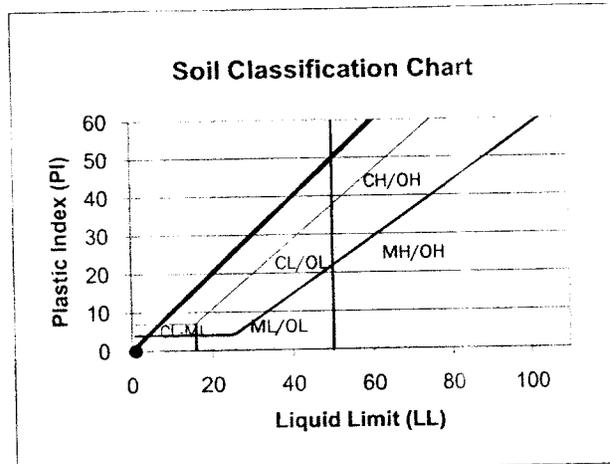
Contact Name:	Tom Kisenwether	Sample ID:	SF-01
Project:	S66X528A00	Sample Des:	Test Pad Sub. Brw and Blk sand
Project Location:	ERDF Cells 7-8	Sampling Date:	3/12/2008
Tested By:	MF	Date:	3/20/2008
Reviewed By:	JV	Date:	3/21/2008
		Sampled By:	MF
		Date Received:	3/12/2008

Natural Moisture Content

Natural Moisture	N/A
------------------	-----

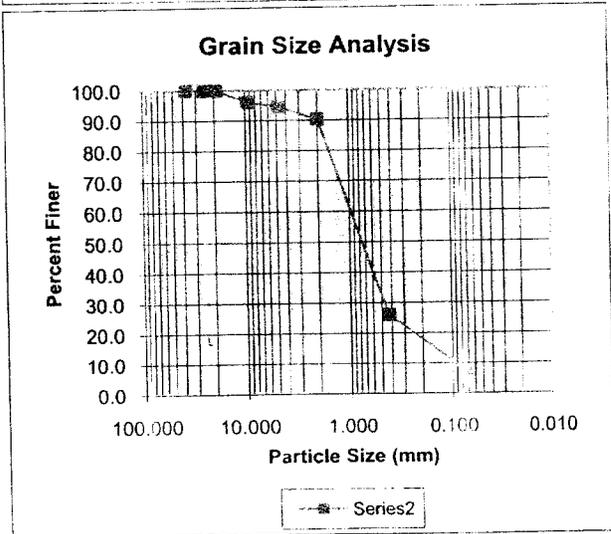
Atterberg Limits Test Results (ASTM D-4318)

Flow Index	0	Spec
Liquid Limit	N/A	
Plastic Limit	N/A	
Plasticity Index	N/A	



Particle Size Analysis (ASTM D-422) 200 Wash Sieve Analysis (ASTM D-1140)

Sieve No	Sieve Opening	% Passing	Spec
1 1/2 "	37.500	100.0	
1 "	25.000	100.0	
3/4 "	19.000	100.0	
3/8 "	9.500	96.0	
No. 4	4.750	94.4	
No. 10	2.000	90.2	
No. 40	0.425	26.1	
No. 200	0.075	7.3	



Cu	10.56
Cc	2.47

Unified Soil Classification (ASTM D-2487)
SW: Well Graded Sand

Deviations from ASTM: None

 Envirotech

 Date