



1218520 1/2/13

**RICHLAND OPERATIONS OFFICE
P.O. BOX 550
RICHLAND, WASHINGTON 99352**

Heather - pls Add to
Admin Record 100-~~nr~~-100

Please Add the following
As key words or otherwise
tie to this form:

- | | |
|--------|---------------|
| MO-100 | MO-426 |
| MO-415 | MO-427 |
| MO-425 | MO-765 |
| HS-007 | HS |
| HS-008 | |

Thanks
R. H.

1218520

FACILITY STATUS CHANGE FORM

Date Submitted: Nov 26, 2012	Area: 100-N	Control #: D4-100N-0031
Originator: David Warren	Facility ID: Various Mobile Offices and Containers	
Phone: 539-6040	Action Memorandum: 100-N Ancillary Facilities	

This form documents agreement among the parties listed below on the status of the facility D&D operations and the disposition of underlying soil in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

- All D4 operations required by action memo complete.
- D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

This Facility Status Change Form covers the MO-100, MO-415, MO-425, MO-426, MO-427, and MO-765 mobile offices; as well as the HS-007 and HS-008 storage containers. These facilities were added to the scope of the *Action Memorandum for General Hanford Site Decommissioning Activities* (DOE/RL-2010-22) by Tri-Party Agreement Change Notice (TPA-CN-494) via the plug in approach identified in the Action Memorandum and corresponding *Removal Action Work Plan for River Corridor General Decommissioning Activities* (DOE/RL-2010-34). In consultation with DOE and the Lead Regulatory Agency (Ecology), it was determined that the completion and closeout process identified in the *Removal Action Work Plan for 100-N Area Ancillary Facilities* (DOE/RL 2002-70 Rev. 3) will be followed for consistency with respect to CERCLA removal activities for other 100-N Area facilities.

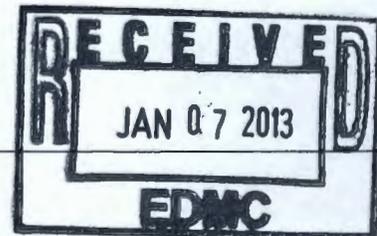
Deactivation: Utility isolation was performed at the facilities prior to beginning deactivation.

Decontamination and Decommissioning: If present, the following hazardous materials were removed prior to facility demolition: batteries, light bulbs, oils, grease, nonfriable asbestos-containing material, mercury, refrigerant, and polychlorinated biphenyls. Hazardous material removal and waste disposition was performed in accordance with the *Removal Action Work Plan for 100-N Area Ancillary Facilities*, DOE/RL-2002-70. No Hazardous Materials were associated with these facilities.

Demolition: The MO-765 mobile office and the HS-007 and HS-008 storage containers were demolished in March of 2012. The MO-100, MO-415, MO-425, MO-426, and MO-427 mobile offices were demolished in July of 2012. The demolition of the MO-425 and MO-426 mobile offices included excavation of the four adjacent underground tanks that received sink drainage from these two mobile offices. All demolition debris was loaded into roll-off containers and shipped to the Environmental Restoration Disposal Facility (ERDF) for disposal. Load out of debris was completed by August 30, 2012.

Description of Deferral (as applicable):

N/A

**Section 2: Underlying Soil Status**

- No waste site(s) present. No additional actions anticipated.
- Documented waste site(s) present. Cleanup and closeout to be addressed under Record of Decision.
- Potential waste site discovered during D4 operations. Waste site identification number <to be> assigned. Cleanup and closeout to be addressed under Record of Decision.

100-N2-1

FACILITY STATUS CHANGE FORM

Description of Current/As-Left Conditions:

MO-100, MO-415, MO-425, MO-426, MO-427, MO-765, HS-007, and HS-008 were demolished, loaded out, and then disposed of at the ERDF. No anomaly was encountered during their demolition or load out. Stained soil was identified during a post-demolition visual inspection performed at the MO-765 footprint (See Attachment 5). The stained soil was sampled and determined to be below groundwater and river protection Remedial Action Goals (RAGs). No other stained soils were observed during visual inspections of any other facility footprints. Radiological contamination was not identified during post-demolition Global Positioning Environmental Radiological Surveyor (GPERS) surveys performed at the mobile office demolition sites. Global Positioning System (GPS) civil surveys were performed to document the locations of these mobile offices and storage containers prior to demolition, as well as document the as left conditions of the areas once demolition was completed. Only minor excavation was required for demolition of all of the trailers except MO-425 and MO-426, for which the underground tanks adjacent the trailers were removed and the area was backfilled with clean borrow material.

The results of the GPERS surveys and the GPS civil surveys are displayed in Attachments 3 and 4, respectively.

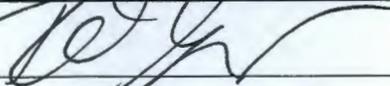
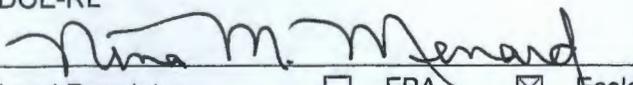
Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

Various Waste Information Data System (WIDS) sites from the 100-N-84 pipeline series were present in the soil underlying, or adjacent to, these mobile offices and storage containers. Of these WIDS sites, only 100-N-84:4 and 100-N-84:5 are expected to require remedial action and subsequent close out, which would be performed by the Field Remediation organization. The remaining pertinent WIDS sites from the 100-N-84 pipeline series are expected to be closed out with a No Action Reclassification Status, which would indicate that these WIDS sites do not require remedial action. Additionally, WIDS site 124-N-7 Sanitary Sewer System No. 7 was associated with MO-415. After being isolated, emptied, and filled with sand, 124-N-7 was assigned a Rejected Reclassification Status. Further closeout action of 124-N-7 is not expected.

The Sampling Determination Form (Attachment 5) is part of a process implemented by the *Removal Action Work Plan for 100-N Area Ancillary Facilities*, DOE/RL-2002-70, Revision 3. The Sampling Determination Form for these various mobile offices and storage containers (SDF-100N-029) represents a regulatory agreement between DOE and the Lead Regulator (Ecology), and indicates that the requirements of the Action Memorandum have been met with respect to demonstrating that cleanup criteria, MTCA Method B for Chemical Constituents and 15 mRem above Hanford Site background for Radiological Constituents, have been achieved for soils and structures remaining after facility removal. Further action will not be required by the D4 organization to demonstrate that cleanup criteria have been met for these mobile offices or storage containers.

Section 3: List of Attachments

1. Facility information (building history and characterization)
2. Project Photographs
3. Global Positioning Environmental Radiological Surveyor (GPERS) survey maps
4. Global Positioning System (GPS) civil survey information
5. Sampling Determination Form for Various 100-N mobile offices (MOs) and storage containers (HS) (SDF-100N-029)

 _____ DOE-RL	11/26/2012 _____ Date
 _____ Lead Regulator	12/13/2013 _____ Date
Lead Regulator <input type="checkbox"/> EPA <input checked="" type="checkbox"/> Ecology	

DISTRIBUTION:

EPA: Dennis Faulk, B1-46
 Ecology: Wanda Elliott, H0-57
 DOE: Rudy Guercia, A3-04
 Document Control, ~~H0-30~~ H4-11
 Administrative Record, H6-08

SIS Coordinator: Benjamin Cowin, H4-22
 D4 EPL: Clay McCurley, X5-50
 Sample Design/Cleanup Verification: ~~Megan Proctor~~, H4-22
 FR Engineering: Rich Carlson, N3-30
 FR EPL: Dan Saueressig, N3-30

D4 Project Facility Completion Form

Attachment 1: Facility Information (5 pages)

D4 Project Facility Completion Form

Facility Information

Introduction

This document provides information regarding the history, characterization, and final status at the completion of deactivation, decontamination, decommissioning, and demolition (D4) activities of the MO-100, MO-415, MO-425, MO-426, MO-427, and MO-765 mobile offices; and the HS-007 and HS-008 storage containers formerly located at the 100-N Area.

Site Information

MO-100 (also known as 1110-N): This mobile office consisted of two adjoined trailers constructed of sheet metal and plywood positioned atop an I-beam trailer frame. It was located east of the 1101-N Office Building, approximately 1050 feet southeast of the 105-N Reactor. It was used as an office space and did not contain a water or sewer utility.

MO-415 (also known as 1103-N): This mobile office consisted of many adjoined trailers constructed of sheet metal and plywood positioned atop an I-beam trailer frame. It was located approximately 1050 feet southeast of the 105-N Reactor. It was used as an office space, contained sewer utilities, and received potable water from a 500 gallon tank located near its southeast corner.

MO-425 & MO-426 (also known as 1158-NA & 1158-NB, respectively): These mobile offices were single-wide trailers constructed of sheet metal and plywood that were connected to each other by an enclosed wooden breezeway. They were located approximately 1800 feet southeast of the 105-N Reactor. They were used as analytical laboratories and later as enclosures to calibrate and repair industrial hygiene instruments. They contained sinks that drained to four underground tanks located just north of their location.

MO-427 (also known as 1158-NC): This mobile office was a single-wide trailer constructed of sheet metal and plywood with a rubber membrane roof. It was historically located near the MO-425 and MO-426 trailers, approximately 1800 feet southeast of the 105-N Reactor. During July or August of 2008, it was relocated east of MO-415, approximately 1100 feet southeast of the 105-N Reactor. In both locations, this mobile office was used as a dressing room and contained sewer utilities to support a restroom.

MO-765: This mobile office was a single-wide trailer constructed of sheet metal and plywood. It was historically located near the 176-N Survey Tent, approximately 2200 feet east of the 105-N Reactor, where it was used as an office space. Between August and October of 2006, it was relocated southeast of the 151-N Electrical Substation, approximately 1100 feet southeast of the 105-N Reactor, where it was used as a radiological counting facility.

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Table 1. Summary of Sampling/Surveying at 100-N Area Mobile Offices

Type	Quantity	Method Detection Limits	Results
Radiological Scoping Surveys	<u>MO-100</u> : 1 <u>MO-415</u> : 3 <u>MO-425/426</u> : 1 <u>MO-427</u> : 1 <u>MO-765</u> : 2 <u>HS-007/008</u> : 0	Beta-gamma – 1,000 removable/ 5,000 fixed ^a Alpha – 20 removable/ 100 fixed ^a	All results were less than the method detection limit.
Pre Demolition and in Process Radiological Surveys	Undetermined	Beta-gamma – 1,000 removable/ 5,000 fixed ^a Alpha – 20 removable/ 100 fixed ^a	Pre-demolition and in-process radiological surveys were not reviewed. Based on historical documentation, these mobile offices and storage containers did not contain processes or materials that would have resulted in contamination presence.
Post Demolition Radiological Surveys	0 Surveys	Beta-gamma – 1000 removable/ 5,000 fixed ^a	No radiological down-posting survey was required for these mobile offices or storage containers because they were radiologically clean structures.
Global Positioning Environmental Radiological Surveyor (GPERS) Surveys	4 Surveys	N/A	<p><u>MO-100, MO-415, & MO-427</u>: 2,902 data points were taken.</p> <p><u>MO-425 & MO-426</u>: 1,125 data points were taken.</p> <p><u>MO-765</u>: 155 data points were taken.</p> <p><u>HS-007 & HS-008</u>: No GPERS survey was performed.</p> <p>All results were less than 1.5 times background. Readings that are under 1.5 times the background count are considered to be insignificant. The GPERS survey maps are included in Attachment 3.</p>
Industrial Hygiene Surveys, Scoping and in Process	<u>MO-100</u> : 2 Bulk <u>MO-415</u> : 3 Bulk <u>MO-425/426</u> : 33 Bulk 80 Swipe 10 Area (Air) 7 Personal (Air) <u>MO-427</u> : 1 Bulk <u>MO-765</u> : 1 Bulk <u>HS-007</u> : 0 <u>HS-008</u> : 0	Bulk Samples: Hanford site background level – 2µg/g Wipe Samples: clean release level for surface contamination – .2 µg/100cm ² Industrial Hygiene metal concentration action level – 5000µg/g	<p><u>MO-100, MO-415, MO-427, or MO-765</u>: Beryllium was not detected above the Hanford site background level. These mobile offices were determined to not be beryllium-contaminated. Cadmium, lead, and chromium were not detected above the Industrial Hygiene metal concentration action level.</p> <p><u>MO-425 & MO-426</u>: Beryllium was detected above the Hanford site background level in one of two initial bulk samples. Following subsequent Industrial Hygiene sampling, MO-425 and MO-426 were determined to not be beryllium-contaminated. These subsequent samples did not exceed the Hanford site background level, the clean release level for surface contamination, nor the Industrial Hygiene metal concentration action level.</p>

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Asbestos – Thermal System Insulation and Miscellaneous Material	97 Samples	1% asbestos content (by weight)	<p>Visual asbestos inspections were performed for the six mobile offices by a certified asbestos inspector. 97 samples of potentially asbestos-containing material were taken during these inspections. One sample of a nonfriable roof patch from MO-100 was determined to contain asbestos above the method detection limit. No other sample yielded a detectable level of asbestos.</p> <p>A visual asbestos inspection was not performed for the HS-007 or HS-008 storage containers.</p>
Other	1 Sample	Contaminant-specific method detection limits	<p>This sample was taken from stained soil within the MO-765 footprint. No contaminant of potential concern was detected above the corresponding remedial action goal for Direct Exposure, Groundwater Protection, or River Protection.</p>
^a – dpm/100 cm ²			

Civil Survey Information

Pre and post-demolition Global Positioning System (GPS) civil surveys were performed at the location of MO-100, MO-415, MO-425, MO-426, MO-427, MO-765, HS-007, and HS-008. Copies of these GPS surveys are provided in Attachment 4.

Anomalies Discovered During Demolition

No anomaly was encountered during demolition or load out of the MO-100, MO-415, MO-425, MO-426, MO-427, or MO-765 mobile offices. Likewise, no anomaly was encountered during demolition or load out of the HS-007 or HS-008 storage containers.

Final Building Status and Underlying Soil

The MO-765 mobile office and the HS-007 and HS-008 storage containers were demolished in March of 2012. The MO-100, MO-415, MO-425, MO-426, and MO-427 mobile offices were demolished in July of 2012. The demolition of the MO-425 and MO-426 mobile offices included excavation of the four adjacent underground tanks that received sink drainage from these two mobile offices. All demolition debris was loaded into roll-off containers and shipped to the Environmental Restoration Disposal Facility (ERDF) for disposal. Load out of debris was completed by August 30, 2012.

Waste Information Data System (WIDS) sites 100-N-84:1, 100-N-84:3, 100-N-84:4, 100-N-84:5, 100-N-84:9, and 124-N-7 were located underneath, or adjacent to, the footprints of these mobile offices and storage containers. The 100-N-84 series WIDS sites were underground pipelines that transported steam condensate and raw, potable, and filtered water. Future remedial activity is not planned for 100-N-84:1, 100-N-84:3, or 100-N-84:9; and each is expected to be closed out with a No Action Reclassification Status. 100-N-84:4 and 100-N-84:5 are expected to be remediated by the Field Remediation organization. The 124-N-7 WIDS site is a sanitary

D4 Project Facility Completion Form

sewer system that received sanitary sewage. It has been isolated, emptied, and filled with sand and subsequently assigned a Rejected Reclassification Status. Therefore 124-N-7 is not expected to undergo further closeout action.

No anomaly was encountered during demolition or load out of these mobile offices or storage containers. A GPERS survey was performed at the footprint of each mobile office following load out. A visual inspection and post-demolition GPS civil survey was performed at the footprint of each mobile office and storage container following load out. Stained soil was observed during the visual inspection of the MO-765 footprint (See Attachment 5) The stained soil was sampled and no contaminant was detected above its corresponding remedial action goal. Accordingly, it was determined that the sampled soil would not be restricted from any future rural-residential use and that the contained residual contamination concentrations were protective of groundwater and the Columbia River. No additional stained soil was observed during visual inspections of the other footprint areas.

Only minor excavation was required for demolition of all of the trailers except MO-425 and MO-426, hence no backfill was required. The excavation for removal of the underground tanks adjacent to MO-425 and MO-426 was backfilled with clean borrow material.

Table 2. Contaminants of Concern for Facility Demolition

Contaminant of Concern	Management Practice/Determination of No Impact to the Soil
N/A	Based on historical documentation, these mobile offices and storage containers did not contain processes or materials that would have resulted in contamination presence. They were determined to be radiologically clean prior to demolition. No anomaly was identified during demolition or load out. The only soil stain observed during post-demolition visual inspection was sampled and determined to meet all applicable remedial action goal contaminant levels. GPERS surveys of the mobile office footprints did not detect radiological contamination. The GPERS survey maps are included in Attachment 3.

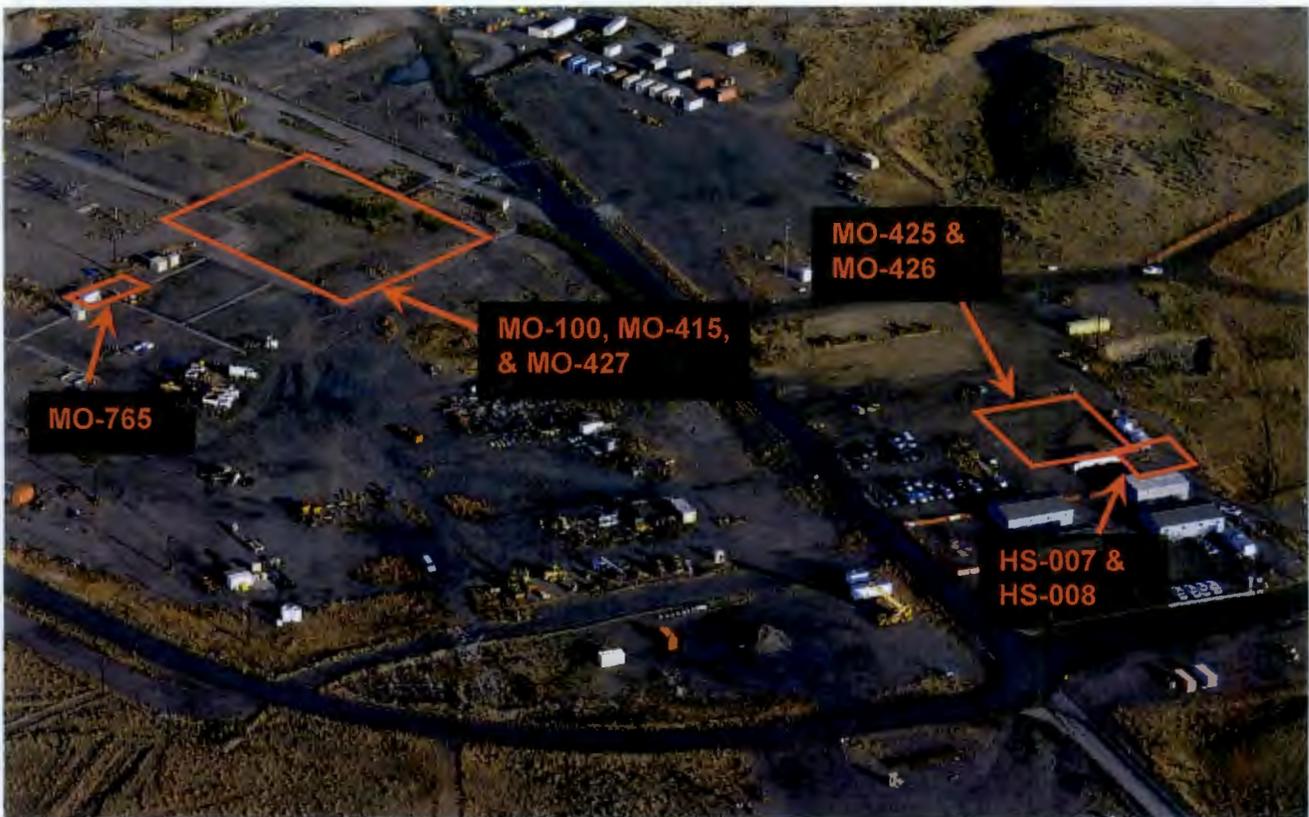
D4 Project Facility Completion Form

Attachment 2: Photographs (4 pages)

D4 Project Facility Completion Form



Mobile Offices and Storage Containers Pre-Demolition



Mobile Offices and Storage Containers Post-Demolition

D4 Project Facility Completion Form



MO-100 Footprint Following Demolition and Load Out



MO-415 Footprint Following Demolition and Load Out

D4 Project Facility Completion Form



MO-427 Footprint Following Demolition and Load Out



MO-425 & MO-426 Footprints Following Demolition and Load Out

D4 Project Facility Completion Form

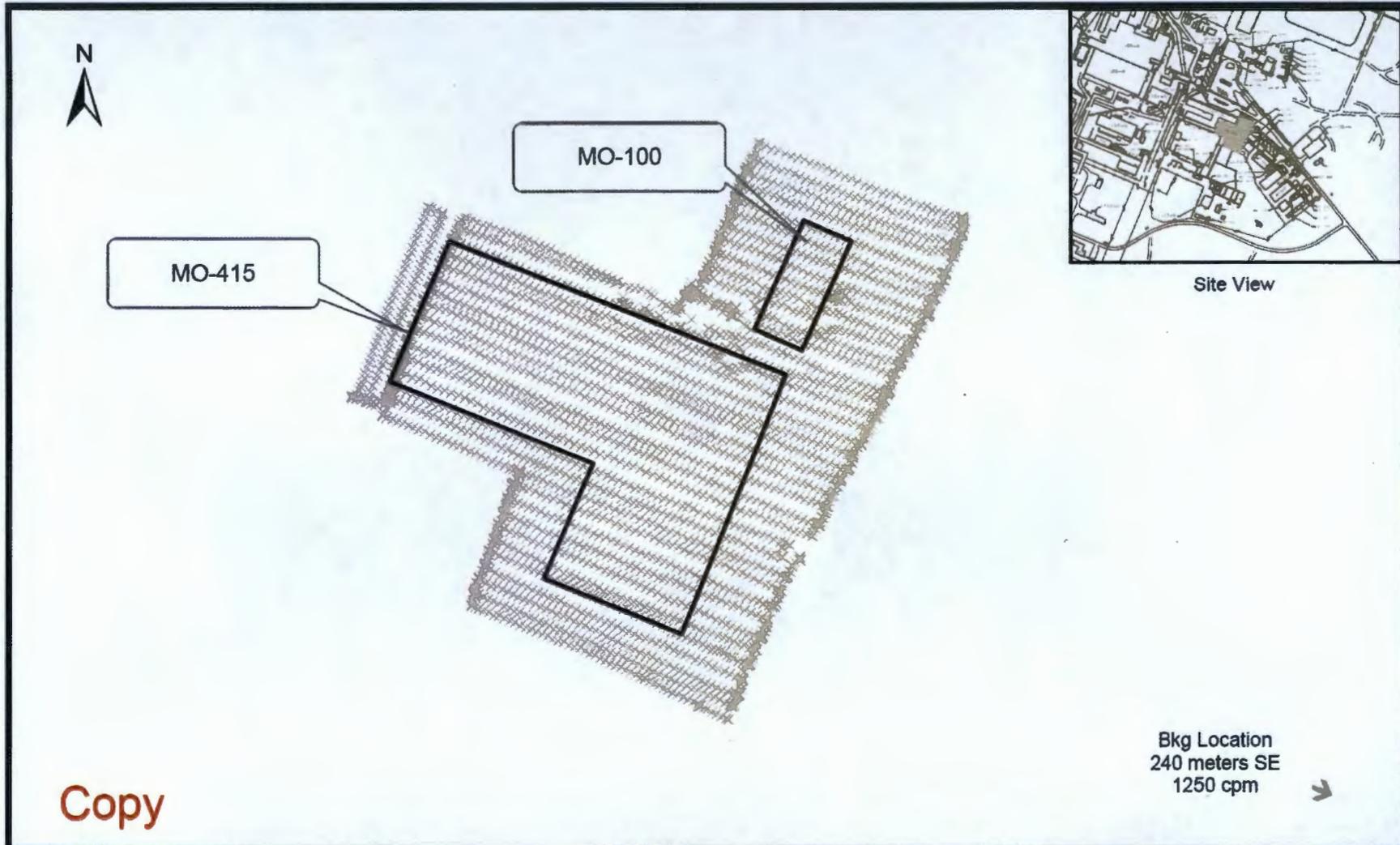


MO-765 Footprint Following Demolition and Load Out

D4 Project Facility Completion Form

Attachment 3: GPERS Surveys (4 pages)

D4 Project Facility Completion Form



Copy

Legend	Summary Statistics
NET CPM	Coverage File: N208
× <1875	Number of Data Pnts: 2902
● 1875 - 5000	Type of Survey: gamma
● 5000 - 10000	Max GCPM: 1643
● 10000 - 25000	Avg Bkg CPM: 1250
● 25000	Survey Date: 7/26/2012
	Area Surveyed: 3,666 m ²
	Project File: ESRFRM120116
	Pdf File: ESRFRM120116C

**100N D4
1103-N
GPERS Radiological Survey
Gamma Track Map**

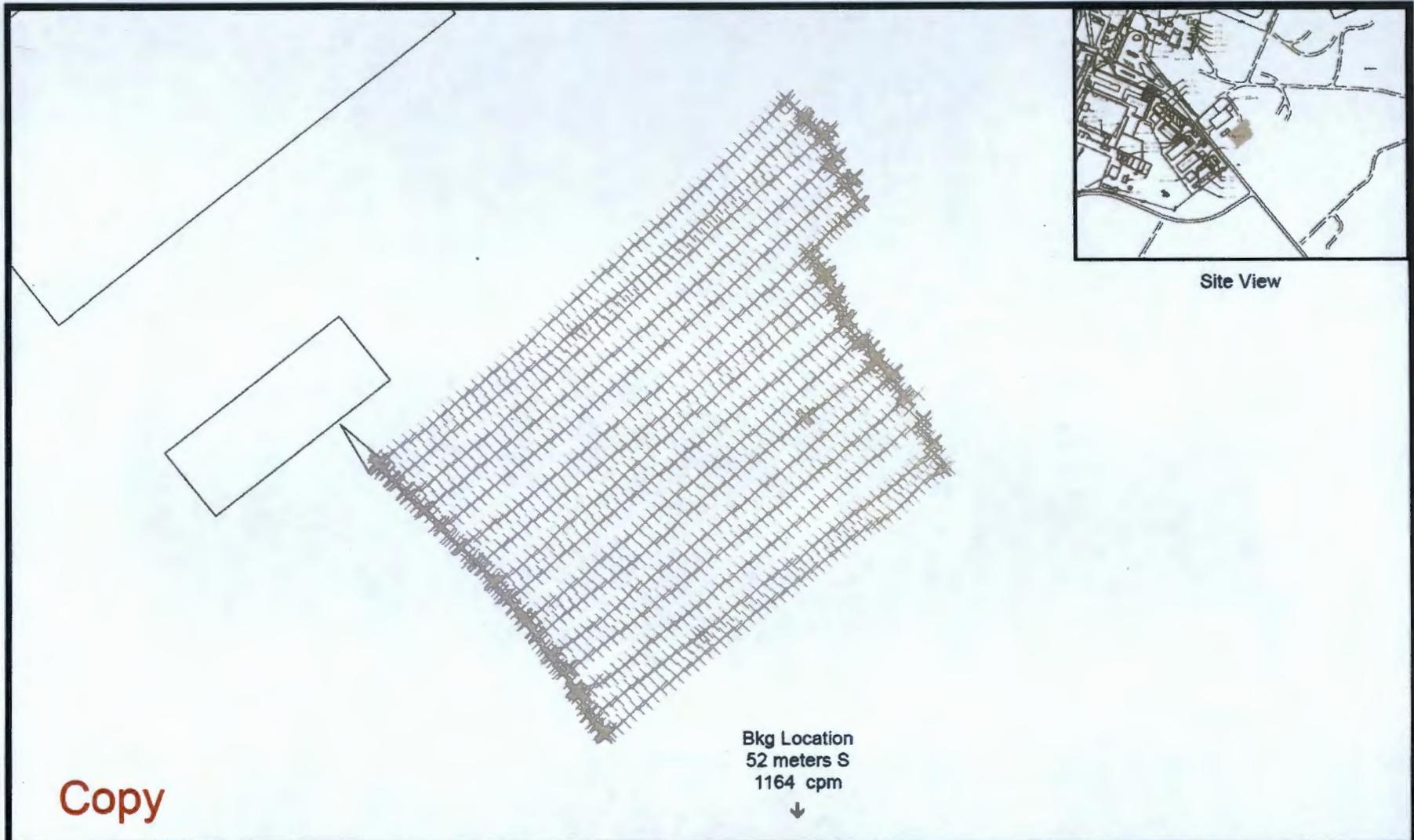
0 5 10 15 20 25
Meters

Environmental Excelsior
HANFORD

**EBERLINE
SERVICES**
HANFORD, INC.

Survey Map Prepared By Bruce Coomer, ESI

D4 Project Facility Completion Form



Copy

Bkg Location
52 meters S
1164 cpm
↓

Legend	Summary Statistics	100N D4 MO-425 / 426 Area GPERS Radiological Survey Gamma Track Map	
<p>NET CPM</p> <ul style="list-style-type: none"> × <1746 ● 1746 - 5000 ● 5000 - 10000 ● 10000 - 25000 ● 25000 	<p>Coverage File: N222 Number of Data Pnts: 1125 Type of Survey: gamma Max GCPM: 2100 Avg Bkg CPM: 1164 Survey Date: 8/9/2012 Area Surveyed: 1575 m² Project File: ESRFRM120120 Pdf File: ESRFRM120120C</p>	<p>0 5 10 15 20 Meters</p> <p>   </p> <p>Survey Map Prepared By Bruce Coomer, ESI</p>	

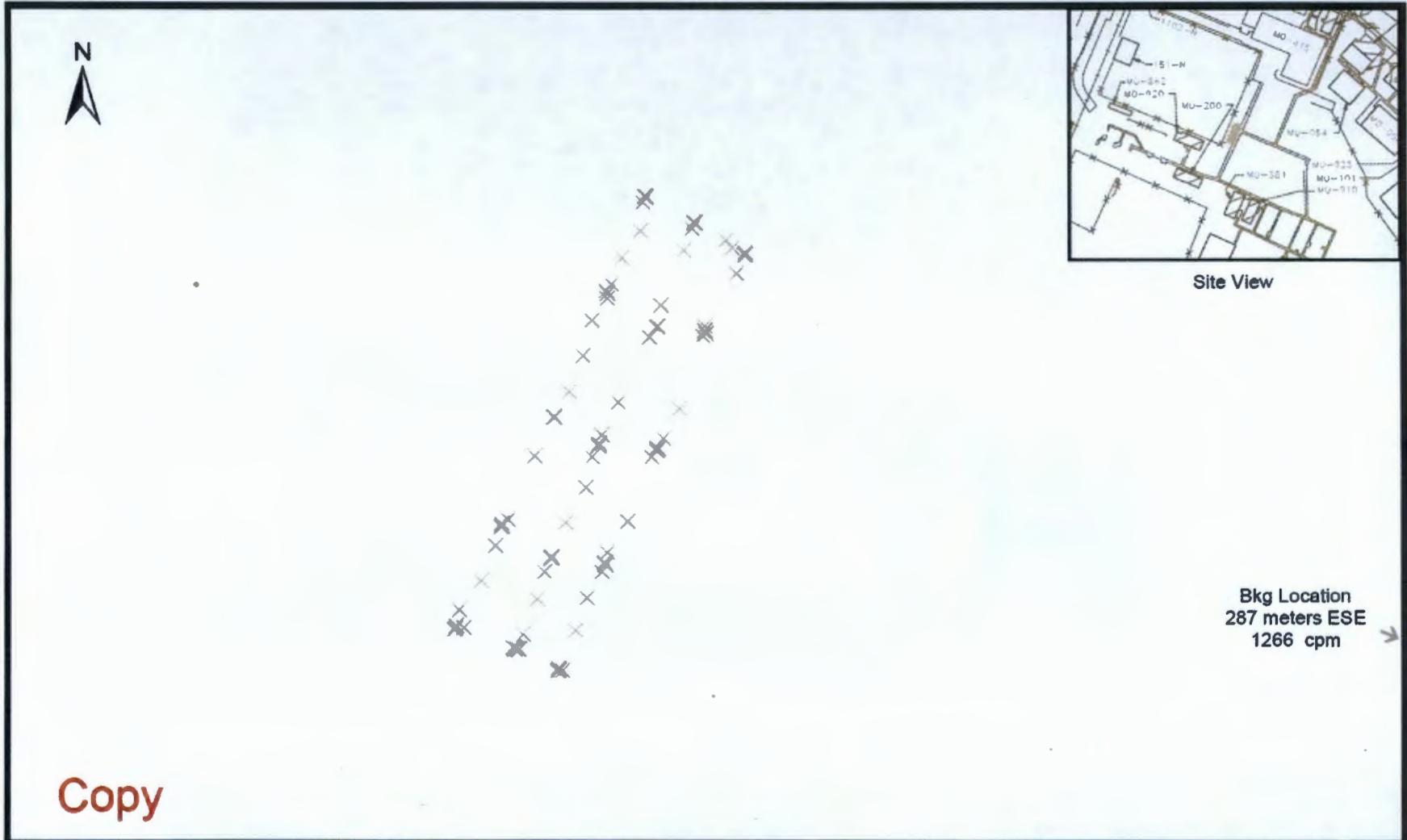
D4 Project Facility Completion Form



Copy

<p>Legend</p> <p>NET CPM</p> <ul style="list-style-type: none"> x <613 ● 613 - 5000 ● 5000 - 10000 ● 10000 - 25000 ● 25000 <p>Summary Statistics</p> <p>Coverage File: N067A Number of Data Pnts: 13 Type of Survey: beta Max GCPM: 567 Avg Bkg CPM: 409 Survey Date: 3/7/2012 Area Surveyed: 48 m² Project File: ESRFRM120036B Pdf File: ESRFRM120036BC</p>	<p>100N D4 MO-765 GPERS Radiological Survey Beta Track Map</p>	<p>0 1 2 3 4 5 Meters</p> <p>Survey Map Prepared By Bruce Coomer, ESI</p>
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D4 Project Facility Completion Form



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Legend	Summary Statistics	100N D4 MO-765 GPERS Radiological Survey Gamma Track Map	
NET CPM	Coverage File: N067A Number of Data Pnts: 142 Type of Survey: gamma Max GCPM: 1633 Avg Bkg CPM: 1266 Survey Date: 3/7/2012 Area Surveyed: 48 m ² Project File: ESRFRM120036G Pdf File: ESRFRM120036GC	<p>0 1 2 3 4 5 Meters</p>	
<ul style="list-style-type: none"> × <1899 ● 1899 - 5000 ● 5000 - 10000 ● 10000 - 25000 ● 25000 		<p>HANFORD</p>	
		<p>EBERLINE SERVICES HANFORD, INC.</p>	
		<p>Survey Map Prepared By Bruce Coomer, ESI</p>	

D4 Project Facility Completion Form

Attachment 4: GPS Civil Surveys (18 pages)

D4 Project Facility Completion Form

0636125

**GPS Pre Demo Survey for 1110N, HO-64-6337, MO427,
MO868**

Project : 100N-newtrailers

User name	maaye	Date & Time	1:51:20 PM 8/1/2012
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	NAD 1983 (Conus)		
Vertical Datum	NAD83	Geoid Model	GEOID99 (Conus)
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Survey Project Name: 100N New Mobile Office Locations
 Date: 12/8/2008
 Equipment: 5800
 Survey Purpose: Map the Mobile Office Corners
 Requested By: Brett Klinetobe
 Location: 100-N
 Charge Code: R32FX511X0
 Field Surveyor: Margo Aye
 Survey Software Used: Trimble Survey Controller, and Geomatics Office V.11
 Survey Equipment Used: 5800
 Control Monuments Used: D-4
 Survey Method: RTK
 Horizontal Precision: .020m
 Vertical Precision: .050m
 Fieldwork Start Date: 12/04/08
 Fieldwork Completion Date: 12/04/08
 Notes: The Septic Line was mapped on 08/13/08, at daylight.

GPS Name	Northing	Easting	Elevation	Feature Code	Time/Date
1	149331.158m	571484.463m	140.596m	bldg-corn-offset	15:23:01 4 Dec 2008
2	149329.232m	571484.864m	140.566m	bldg-corn-offset	15:23:15 4 Dec 2008
3	149321.805m	571481.942m	140.387m	bldg-corn-offset	15:23:40 4 Dec 2008
4	149321.303m	571480.111m	140.350m	bldg-corn-offset	15:24:01 4 Dec 2008
7	149324.412m	571475.920m	140.271m	corn-rr	15:25:36 4 Dec 2008
8	149323.394m	571476.466m	140.148m	corn-rr	15:25:52 4 Dec 2008
9	149322.306m	571478.464m	140.317m	elec-pull-box	15:26:02 4 Dec 2008
10	149333.507m	571480.859m	140.543m	bldg-corn-off	15:26:46 4 Dec 2008
11	149331.766m	571478.972m	140.472m	bldg-corn-off	15:27:47 4 Dec 2008
12	149316.748m	571478.007m	140.306m	bldg-corn-mo-427	15:28:13 4 Dec 2008
13	149317.912m	571477.380m	140.288m	bldg-corn-mo-427	15:28:35 4 Dec 2008
14	149302.703m	571472.063m	140.268m	bldg-corn-mo-427	15:29:21 4 Dec 2008
15	149302.373m	571470.765m	140.267m	bldg-corn-mo-427	15:29:34 4 Dec 2008
16	149298.757m	571469.471m	140.254m	bldg-corn-ho-64-3548	15:29:51 4 Dec 2008
17	149300.022m	571469.030m	140.183m	elec-pull-box	15:30:36 4 Dec 2008
18	149299.414m	571468.952m	140.239m	bldg-corn-off	15:31:00 4 Dec 2008
19	149289.727m	571465.825m	140.226m	bldg-corn-off	15:31:28 4 Dec 2008
20	149289.200m	571464.562m	140.241m	bldg-corn-off	15:31:47 4 Dec 2008
21	149290.154m	571462.335m	140.202m	bldg-corn-off	15:32:17 4 Dec 2008
22	149291.281m	571462.152m	140.224m	bldg-corn-off	15:32:41 4 Dec 2008
23	149300.426m	571465.511m	140.204m	bldg-corn-off-mo-868	15:33:11 4 Dec 2008
24	149300.800m	571466.893m	140.206m	bldg-corn-off-mo-868	15:33:48 4 Dec 2008
25	149304.540m	571467.784m	140.201m	bldg-corn-off	15:34:02 4 Dec 2008
26	149303.646m	571468.088m	140.136m	bldg-corn-off	15:34:17 4 Dec 2008
27	149318.824m	571473.011m	140.190m	bldg-corn-off	15:34:41 4 Dec 2008
28	149319.205m	571474.695m	140.153m	bldg-corn-off	15:34:58 4 Dec 2008
29	149313.538m	571479.768m	140.222m	telephone-access	15:35:27 4 Dec 2008
30	149305.916m	571478.052m	140.282m	elec-vault	15:35:50 4 Dec 2008
31	149298.275m	571472.652m	140.315m	capped-well	15:36:13 4 Dec 2008
32	149294.551m	571470.264m	140.332m	capped-well	15:36:33 4 Dec 2008
33	149317.238m	571477.219m	140.126m	elec-access-into-mo	15:37:10 4 Dec 2008
34	149323.713m	571472.217m	139.635m	elec-feed	15:37:45 4 Dec 2008
1	149315.016m	571490.566m	140.209m	sewer clean-out-90	
5	149319.412m	571481.330m	139.734m	sewer line-daylight	

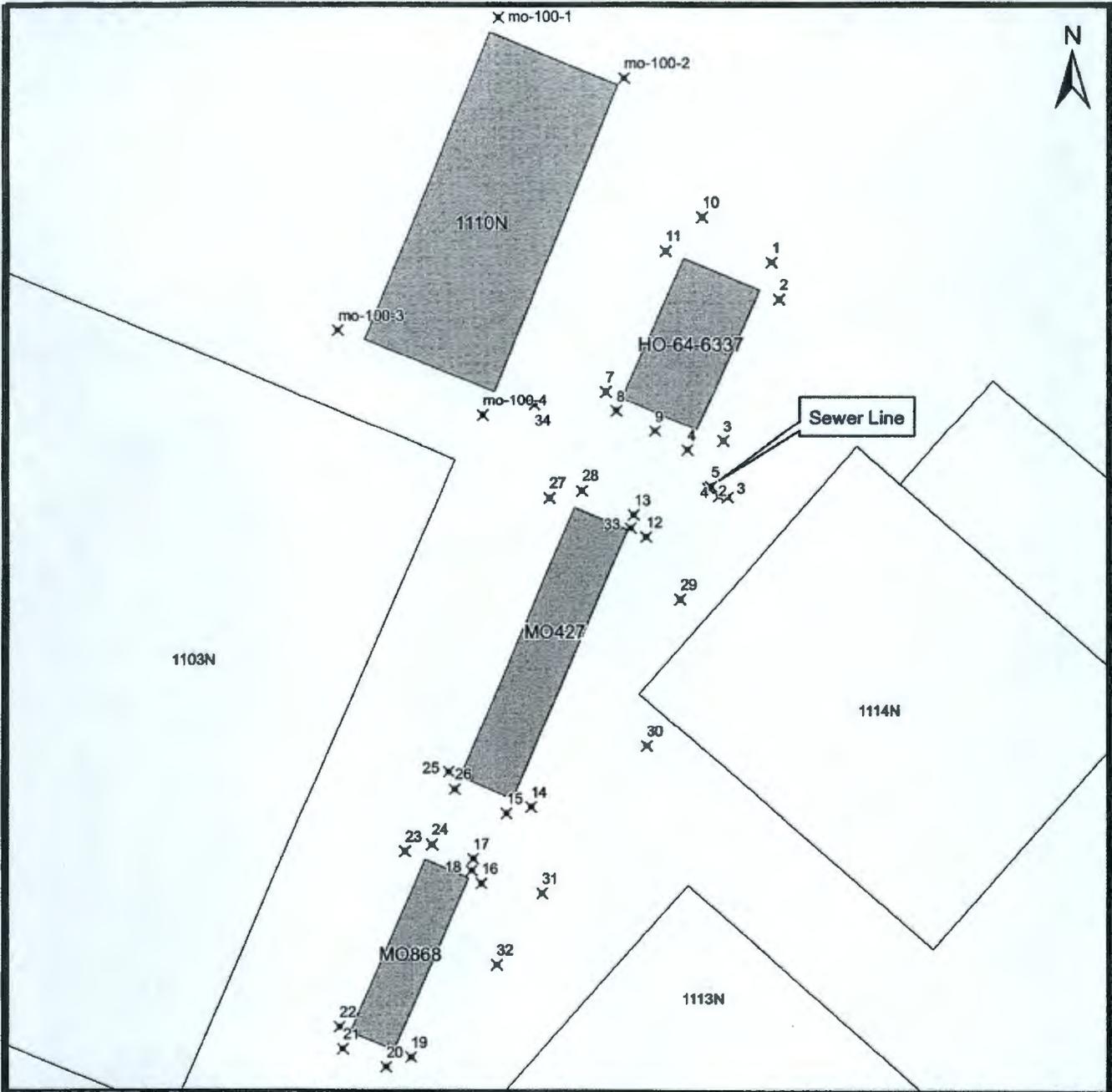
D4 Project Facility Completion Form

2	149319.330m	571481.198m	139.728m	sewer clean-out
3	149318.864m	571482.179m	139.731m	sewer line-daylight
4	149318.917m	571481.729m	139.761m	sewer line-daylight

GPS Name	Northing	Easting	Elevation	Feature Code	Time/Date
mo-100-1	149343.714m	571470.278m	139.979m	corn-bldg	08:54:49 27 Sep 2006
mo-100-2	149340.604m	571476.846m	140.232m	corn-bldg	08:55:24 27 Sep 2006
mo-100-3	149327.600m	571462.025m	139.862m	corn-bldg	08:56:11 27 Sep 2006
mo-100-4	149323.187m	571469.495m	139.912m	corn-bldg	08:56:30 27 Sep 2006

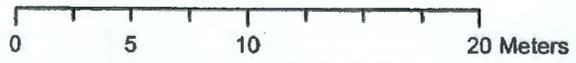
[Back to top](#)

D4 Project Facility Completion Form



GPS Pre Demo Survey Report For 1110N, HO-64-6337, MO427, MO868 Buildings

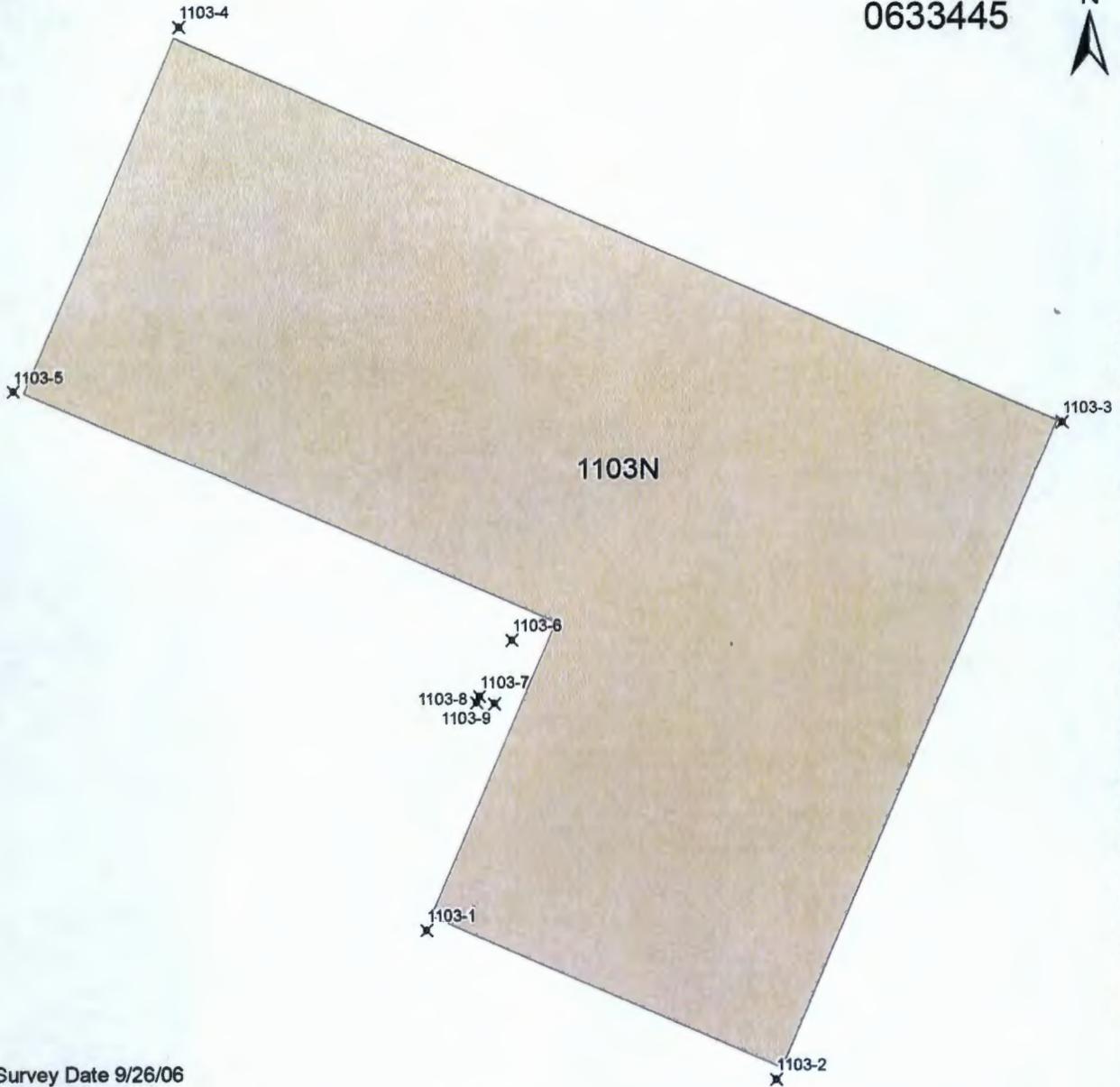
- × GPS Survey Points
See GPS Survey Report for Point Details
- Building Locations
- Historic Building Locations



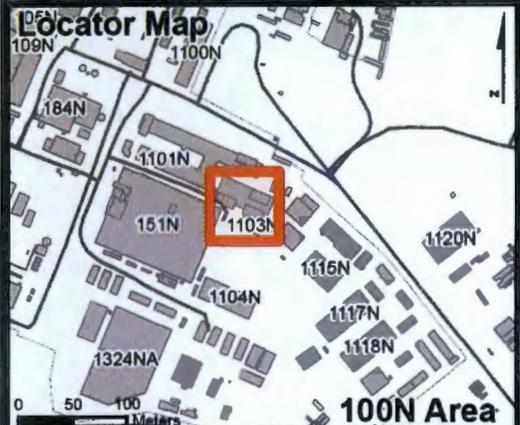
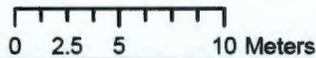
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D4 Project Facility Completion Form

0633445



GPS Survey Date 9/26/06
 US State Plane 1983
 Zone: Washington South 4602;
 NAD83, NAVD88; Units are in Meters



GPS Pre Demo Survey Report For 1103N (MO-415) Building

Name	Feat_Code	Northing	Easting	Elevation
1103-1	corner-bldg	149294.00	571434.69	139.839
1103-2	corner-bldg	149286.20	571453.20	139.974
1103-3	corner-bldg	149320.71	571468.32	139.963
1103-4	corner-bldg	149341.38	571421.57	139.771
1103-5	corner-bldg	149322.36	571412.82	139.786
1103-6	corner-bldg	149309.22	571439.22	139.872
1103-7	piv	149306.24	571437.51	139.745
1103-8	water-cap	149305.94	571437.34	139.745
1103-9	riser	149305.88	571438.30	139.844

WCH:04/09/12:V:\maaye\ArcMap\100N\predemo-1103N.mxd, 3:11:24 PM

D4 Project Facility Completion Form

0636124

GPS Post Demo Survey for 1103N, 1110N, MO868, MO427, & HO-64-6337

Project : 100N_073112

User name	maaye	Date & Time	10:17:09 AM 8/1/2012
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	(WGS 84)		
Vertical Datum	NAVD88	Geoid Model	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Survey Project Name: Post Demo Survey for 1103N, 1110M, MO868, MO427, & HO-64-6337
 Date: 7/31/2012
 Equipment: 5800
 Survey Purpose: Post demo survey
 Requested By: Chris Edwards
 Location: 100N
 Charge Code:
 Field Surveyor: Margo Aye
 Survey Software Used: Trimble Survey Controller, and Geomatics Office V.11
 Survey Equipment Used: 5800
 Control Monuments Used: N-2
 Survey Method: RTK
 Horizontal Precision: .020m
 Vertical Precision: .050m
 Fieldwork Start Date: 073112
 Fieldwork Completion Date: 073112
 Notes: Mobile Office 1103N, is also known as MO-415, and 1110N is also known as MO-100

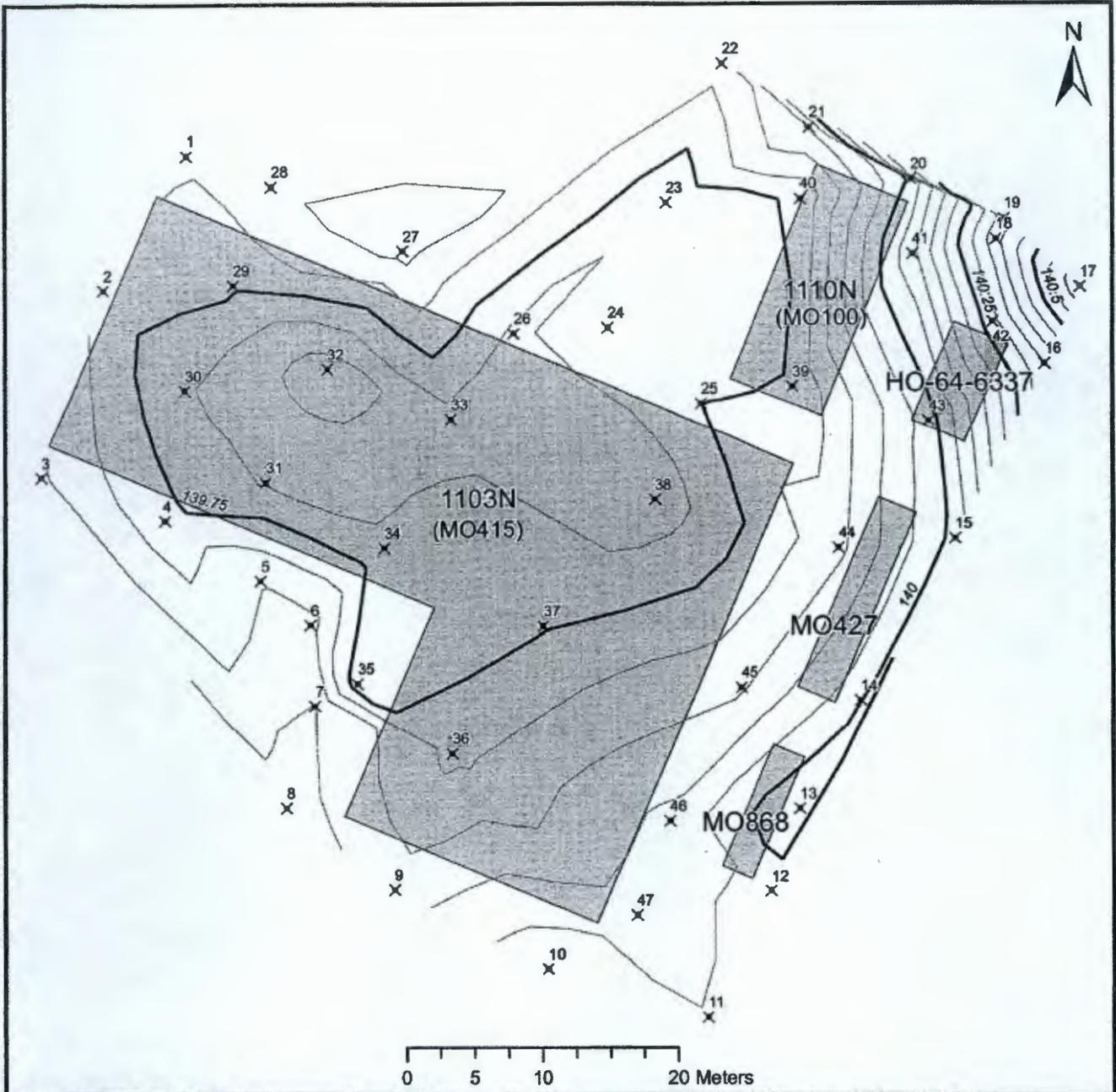
GPS Name	Northing	Easting	Elevation	Feature Code	Time/Date
1	149343.706m	571423.436m	139.809m	topo	12:04:33 31 Jul 2012
2	149333.824m	571417.319m	139.783m	topo	12:05:09 31 Jul 2012
3	149319.837m	571412.771m	139.857m	topo	12:05:37 31 Jul 2012
4	149316.629m	571421.817m	139.765m	topo	12:05:56 31 Jul 2012
5	149312.157m	571428.848m	139.847m	topo	12:06:13 31 Jul 2012
6	149308.858m	571432.409m	139.866m	topo	12:06:27 31 Jul 2012
7	149302.903m	571432.744m	139.901m	topo	12:06:43 31 Jul 2012
8	149295.350m	571430.688m	139.927m	topo	12:07:04 31 Jul 2012
9	149289.298m	571438.585m	139.873m	topo	12:07:25 31 Jul 2012
10	149283.429m	571449.906m	139.990m	topo	12:07:48 31 Jul 2012
11	149279.834m	571461.641m	139.953m	topo	12:08:10 31 Jul 2012
12	149289.188m	571466.367m	139.969m	topo	12:08:31 31 Jul 2012
13	149295.282m	571468.487m	140.050m	topo	12:08:48 31 Jul 2012
14	149303.284m	571472.965m	139.986m	topo	12:09:11 31 Jul 2012
15	149315.223m	571479.935m	140.016m	topo	12:09:35 31 Jul 2012
16	149328.259m	571486.522m	140.348m	topo	12:10:01 31 Jul 2012
17	149333.970m	571489.099m	140.647m	topo	12:10:18 31 Jul 2012
18	149337.534m	571482.958m	140.383m	topo	12:10:37 31 Jul 2012
19	149339.033m	571483.544m	140.375m	topo	12:10:54 31 Jul 2012
20	149341.936m	571476.752m	140.010m	topo	12:11:11 31 Jul 2012
21	149345.678m	571469.289m	139.905m	topo	12:11:31 31 Jul 2012
22	149350.333m	571462.814m	139.819m	topo	12:11:51 31 Jul 2012
23	149340.240m	571458.612m	139.706m	topo	12:12:14 31 Jul 2012
24	149330.996m	571454.308m	139.731m	topo	12:12:41 31 Jul 2012
25	149325.313m	571461.188m	139.749m	topo	12:13:05 31 Jul 2012
26	149330.562m	571447.434m	139.691m	topo	12:14:01 31 Jul 2012
27	149336.703m	571439.276m	139.865m	topo	12:14:30 31 Jul 2012
28	149341.431m	571429.623m	139.845m	topo	12:15:19 31 Jul 2012
29	149334.182m	571426.860m	139.757m	topo	12:15:38 31 Jul 2012
30	149326.348m	571423.329m	139.706m	topo	12:15:55 31 Jul 2012
31	149319.452m	571429.212m	139.695m	topo	12:16:17 31 Jul 2012
32	149327.943m	571433.698m	139.624m	topo	12:16:36 31 Jul 2012
33	149324.178m	571442.825m	139.683m	topo	12:16:55 31 Jul 2012

D4 Project Facility Completion Form

34	149314.554m	571437.871m	139.712m	topo	12:17:21	31	Jul	2012
35	149304.542m	571435.891m	139.724m	topo	12:17:49	31	Jul	2012
36	149299.366m	571442.879m	139.787m	topo	12:18:20	31	Jul	2012
37	149308.785m	571449.611m	139.746m	topo	12:18:40	31	Jul	2012
38	149318.137m	571457.791m	139.668m	topo	12:19:02	31	Jul	2012
39	149326.578m	571468.004m	139.753m	topo	12:19:27	31	Jul	2012
40	149340.518m	571468.597m	139.758m	topo	12:19:51	31	Jul	2012
41	149336.444m	571476.859m	140.085m	topo	12:20:07	31	Jul	2012
42	149331.395m	571482.697m	140.282m	topo	12:20:30	31	Jul	2012
43	149324.004m	571478.016m	139.974m	topo	12:20:45	31	Jul	2012
44	149314.557m	571471.359m	139.837m	topo	12:21:09	31	Jul	2012
45	149304.237m	571464.168m	139.844m	topo	12:21:31	31	Jul	2012
46	149294.362m	571458.871m	139.914m	topo	12:21:55	31	Jul	2012
47	149287.394m	571456.435m	139.924m	topo	12:22:14	31	Jul	2012

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D4 Project Facility Completion Form



**GPS Post Demo Survey Report For
MO415, MO868, MO100, MO427
& HO-64-6337 Buildings**

GPS Post Demolition Survey Points:

x See Survey Report for Point Details

GPS Post Demolition Topography:

— Major Contour .25 Meter Interval

— Minor Contour .05 Meter Interval

■ Building Location Pre-Demolition

Date: 8/1/2012 V:\naaye\ArcMap\100N\postdemo-mo415.mxd

0579145

GPS Survey Data Report for Job 947- MO013, MO425, MO426, MO427, Pre Demolition

Project : JOB 947

User name	maaye	Date & Time	8:38:18 AM 12/20/2006
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	NAD 1983 (Conus)		
Vertical Datum	NAD83	Geoid Model	GEOID99 (Conus)
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Survey Project Name/Title: Job 947-MO-013, MO-425, MO-426, MO427
Buildings
Survey Purpose: GPS the area corners and surrounding
features for the described Mobile Offices
Requested By: Amy Hood
General Site Location: 100-N
Charge Code:
Field Surveyor: Margo Aye
Computer Software Used: Trimble Survey Controller, and Geomatics
Office V.11
Survey Equipment Used: 5800
Control Monuments Used:
Survey Method: RTK
Estimated Horizontal Precision: .02m
Estimated Vertical Precision: .05m
Fieldwork Start Date: 3/22/06
Completion Date: 10/24/06

Notes: *Logbook# EL1571*

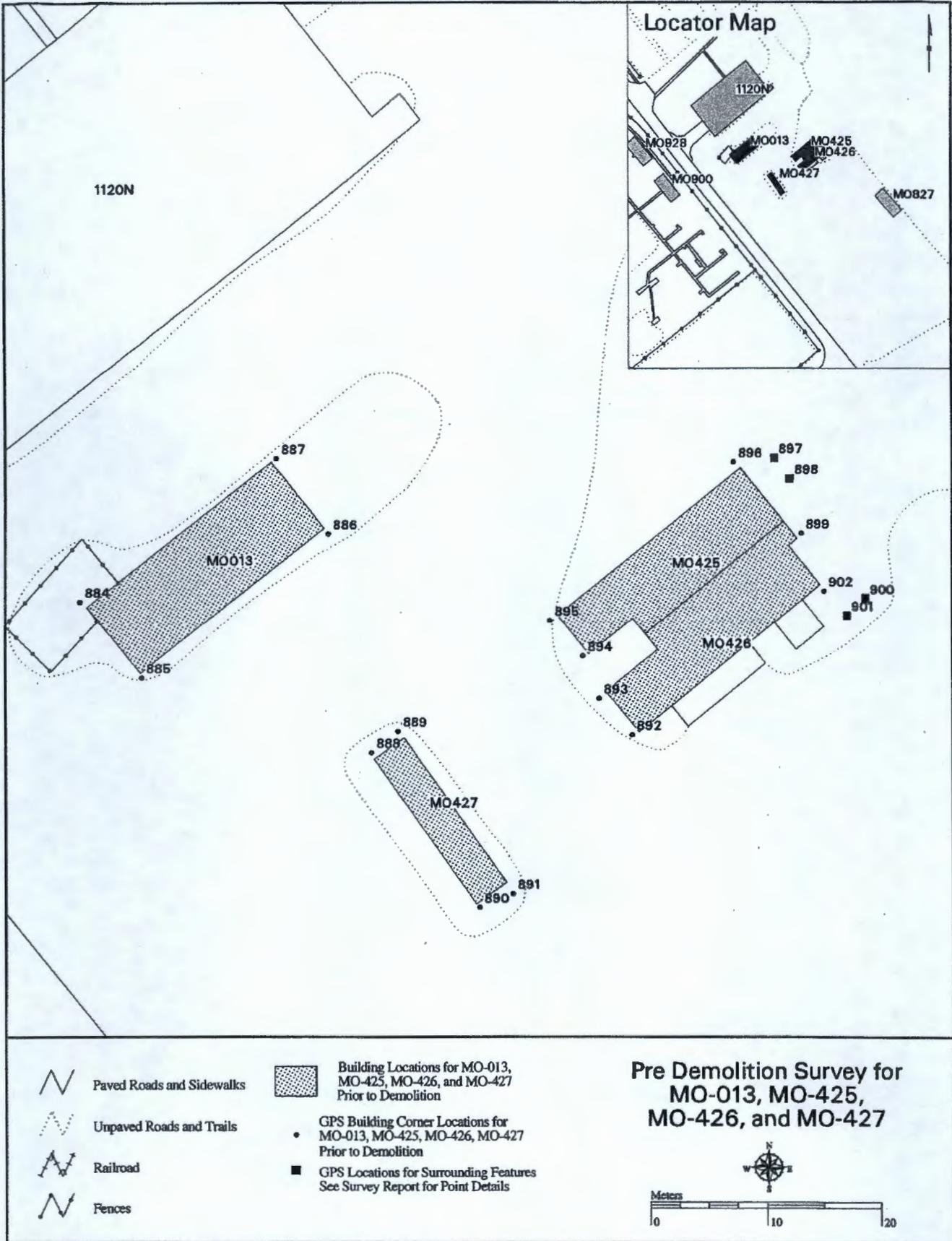
Name	Northing	Easting	Elevation	Feature Code	Description
884	149250.035m	571627.311m	142.560m	corn-bldg	MO-013
885	149243.478m	571632.529m	142.699m	corn-bldg	MO-013
886	149255.865m	571648.424m	142.555m	corn-bldg	MO-013
887	149262.374m	571643.976m	142.429m	corn-bldg	MO-013
888	149237.038m	571652.130m	142.432m	corn-bldg	MO-427
889	149238.867m	571654.462m	142.414m	corn-bldg	MO-427
890	149223.645m	571661.448m	142.233m	corn-bldg	MO-427
891	149224.816m	571664.288m	142.197m	corn-bldg	MO-427

D4 Project Facility Completion Form

892	149238.542m	571674.484m	142.158m	corn-bldg	MO-426
893	149241.692m	571671.698m	142.252m	corn-bldg	MO-426
894	149245.308m	571670.328m	142.323m	corn-bldg	MO-425
895	149248.391m	571667.527m	142.605m	corn-bldg	MO-425
896	149262.052m	571683.278m	142.143m	corn-bldg	MO-425
897	149262.384m	571686.719m	142.128m	confined space	MO-425
898	149260.594m	571688.156m	142.144m	confined space	MO-426
899	149255.884m	571689.141m	142.107m	corn-bldg	MO-426
900	149250.299m	571694.727m	141.768m	confined space	MO-426
901	149248.813m	571693.125m	141.832m	confined space	MO-426
902	149250.930m	571691.104m	141.991m	corn-bldg	MO-426

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D4 Project Facility Completion Form



D4 Project Facility Completion Form

0637365

**GPS Post Demo Survey for 1158NA, 1158NB
(MO425 & MO426)**

Project : 100N_073112

User name	maaye	Date & Time	9:33:50 AM 8/14/2012
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	(WGS 84)		
Vertical Datum	NAVD88	Geoid Model	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	US survey feet		

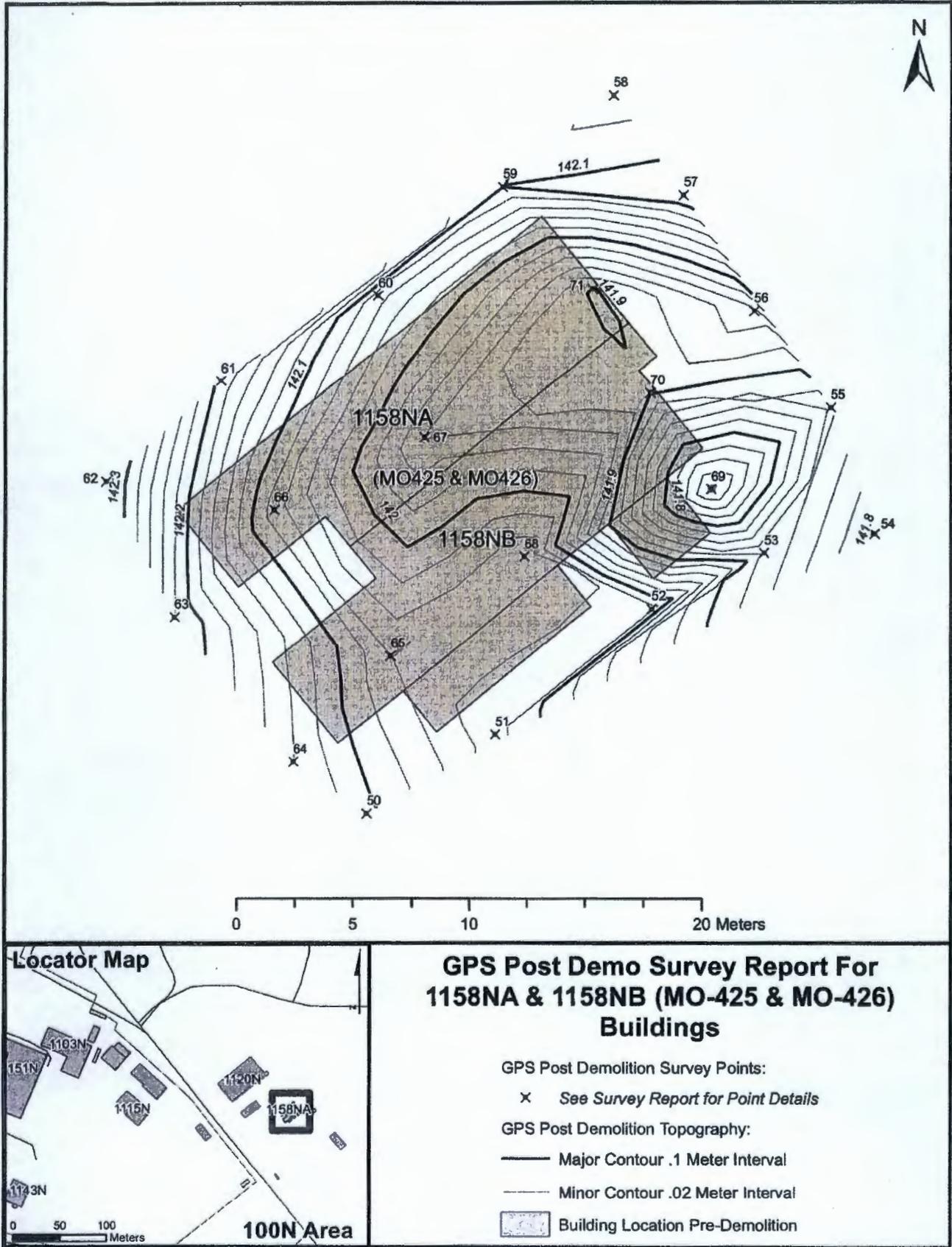
Survey Project Name: Post Demo Survey For 1158NA & 1158NB (MO425, MO426) Buildings
 Date: 7/31/2012
 Equipment: 5800
 Survey Purpose: Post demo survey
 Requested By: Chris Edwards
 Location: 100N
 Charge Code:
 Field Surveyor: Margo Aye
 Survey Software Used: Trimble Survey Controller, and Geomatics Office V.11
 Survey Equipment Used: 5800
 Control Monuments Used: N-2
 Survey Method: RTK
 Horizontal Precision: .020m
 Vertical Precision: .050m
 Fieldwork Start Date: 073112
 Fieldwork Completion Date: 073112

Notes:

GPS Name	Northing	Eastng	Elevation	Feature Code	Time/Date
50	149235.772m	571676.316m	466.225sfttopo		12:42:01 31 Jul 2012
51	149239.172m	571681.859m	465.969sfttopo		12:42:21 31 Jul 2012
52	149244.581m	571688.572m	465.971sfttopo		12:42:37 31 Jul 2012
53	149246.959m	571693.407m	465.476sfttopo		12:42:55 31 Jul 2012
54	149247.770m	571698.197m	465.217sfttopo		12:43:11 31 Jul 2012
55	149253.215m	571696.298m	465.434sfttopo		12:43:33 31 Jul 2012
56	149257.418m	571692.958m	465.726sfttopo		12:43:50 31 Jul 2012
57	149262.412m	571689.889m	466.263sfttopo		12:44:10 31 Jul 2012
58	149266.629m	571686.912m	466.100sfttopo		12:44:26 31 Jul 2012
59	149262.771m	571682.162m	466.209sfttopo		12:44:43 31 Jul 2012
60	149258.087m	571676.765m	466.102sfttopo		12:45:07 31 Jul 2012
61	149254.403m	571670.040m	466.509sfttopo		12:45:27 31 Jul 2012
62	149250.052m	571665.128m	466.956sfttopo		12:45:51 31 Jul 2012
63	149244.241m	571668.046m	466.604sfttopo		12:46:09 31 Jul 2012
64	149237.999m	571673.163m	466.340sfttopo		12:46:33 31 Jul 2012
65	149242.544m	571677.340m	466.077sfttopo		12:47:03 31 Jul 2012
66	149248.818m	571672.332m	466.103sfttopo		12:47:24 31 Jul 2012
67	149251.938m	571678.764m	465.678sfttopo		12:47:44 31 Jul 2012
68	149246.803m	571683.129m	466.066sfttopo		12:48:05 31 Jul 2012
69	149249.700m	571691.114m	464.938sfttopo		12:48:27 31 Jul 2012
70	149253.855m	571688.503m	465.554sfttopo		12:48:45 31 Jul 2012
71	149258.382m	571686.062m	465.546sfttopo		12:49:03 31 Jul 2012

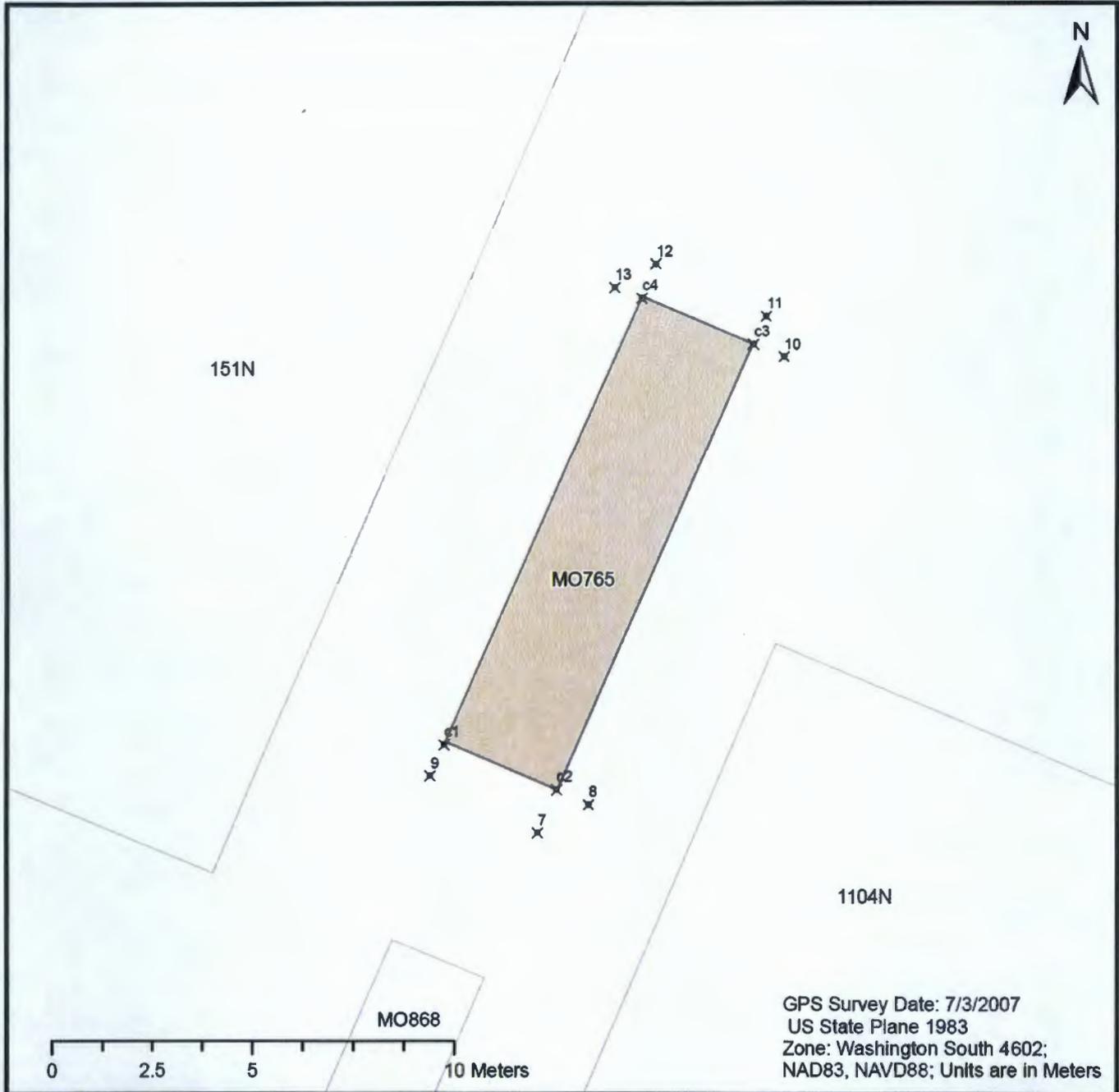
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D4 Project Facility Completion Form



Date: 8/14/2012 11:45:01 GISHome\maaye\ArcMap\100N\postdemo-mo426.mxd

D4 Project Facility Completion Form



GPS Pre Demo Survey For MO765 Building

× GPS Pre Demolition Survey Points

Name	Feat_Code	Northing	Easting	Elevation
7	MO-765	149244.492	571399.538	140.104
8	MO-765	149245.192	571400.794	140.086
9	MO-765	149245.918	571396.875	140.029
10	MO-765	149256.459	571405.616	140.014
11	MO-765	149257.484	571405.174	140.022
12	MO-765	149258.807	571402.442	140.064
13	MO-765	149258.228	571401.423	140.065
c1	Corner	149246.703	571397.214	0
c2	Corner	149245.572	571400.007	0
c3	Corner	149256.775	571404.866	0
c4	Corner	149257.945	571402.093	0

WCH: \\Hgis01\gishome\maaye\ArcMap\100N\predemo-mo765.mxd Date: 11/5/2012

D4 Project Facility Completion Form

0633194

GPS Post Demo Survey for MO765

Project : 100N-030712

Job 1195

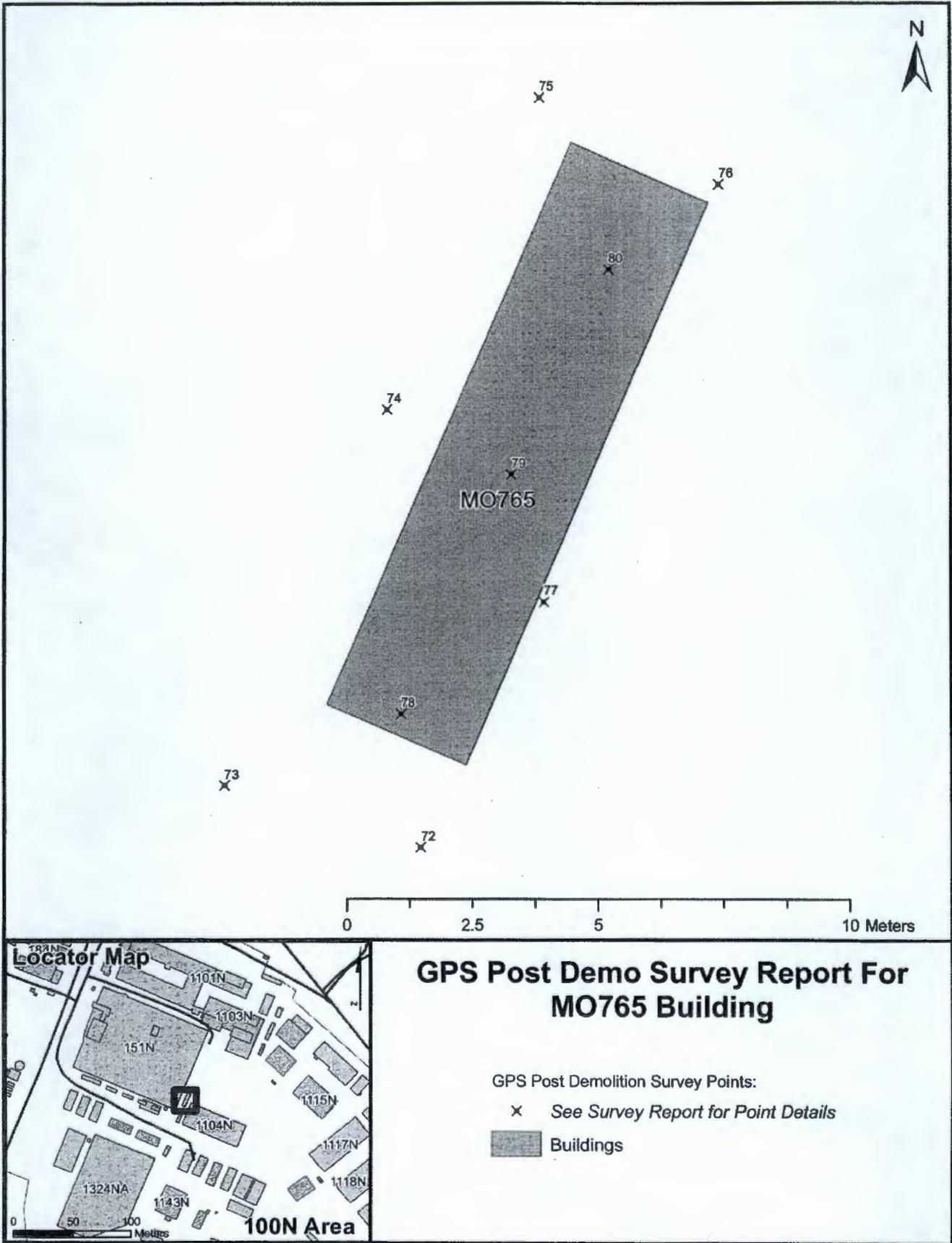
User name	maaye	Date & Time	8:09:48 AM 3/13/2012
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	(WGS 84)		
Vertical Datum	NAVD88	Geoid Model	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Survey Project Name: 1112N Post Demolition Survey
Date: 3/12/2012
Equipment: 5800
Survey Purpose: Map the post demo area for the 1112N building
Requested By: Clay McCurley
Location: 100N
Charge Code:
Field Surveyor: Margo Aye
Survey Software Used: Trimble Survey Controller, and Geomatics Office V.11
Survey Equipment Used: 5800
Control Monuments Used: N-2
Survey Method: RTK
Horizontal Precision: .020m
Vertical Precision: .050m
Fieldwork Start Date: 3/7/12
Fieldwork Completion Date: 3/7/12
Notes:

Name	Northing	Easting	Elevation	Feature Code	Description:
72	149243.928m	571399.119m	140.065m	mo-765	
73	149245.156m	571395.235m	140.011m	mo-office	
74	149252.654m	571398.454m	140.046m	mo-office	
75	149258.856m	571401.482m	140.071m	mo-office	
76	149257.160m	571405.057m	140.031m	mo-office	
77	149248.815m	571401.571m	140.023m	mo-office	
78	149246.581m	571398.732m	140.045m	mo-office	
79	149251.342m	571400.923m	140.048m	mo-office	
80	149255.462m	571402.868m	140.062m	mo-office	

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D4 Project Facility Completion Form



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D4 Project Facility Completion Form

0633558

GPS Pre Demo Survey for HS-0007 and HS-0008

Project : 100N-030712 and 100n-hs

User name	maaye	Date & Time	1:44:04 PM 4/10/2012
Coordinate System	US State Plane 1983	Zone	Washington South 4602
Project Datum	(WGS 84)		
Vertical Datum	NAVD88	Geoid Model	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Survey Project Name: Pre Demo Survey for HS-0007, and HS-0008
Date: 3/12/2012
Equipment: 5800
Survey Purpose: Map the pre demo locations for the two structures.
Requested By: Clay McCurley
Location: 100N
Charge Code:
Field Surveyor: Margo Aye
Survey Software Used: Trimble Survey Controller, and Geomatics Office V.11
Survey Equipment Used: 5800
Control Monuments Used: N-2
Survey Method: RTK
Horizontal Precision: .020m
Vertical Precision: .050m
Fieldwork Start Date: 11/26/2007 & 3/7/12
Fieldwork Completion Date: 11/26/2007 & 3/7/12
Notes: The HS structures were moved in 2008 and then demolished in 2012 . This report includes coordinates for both locations.

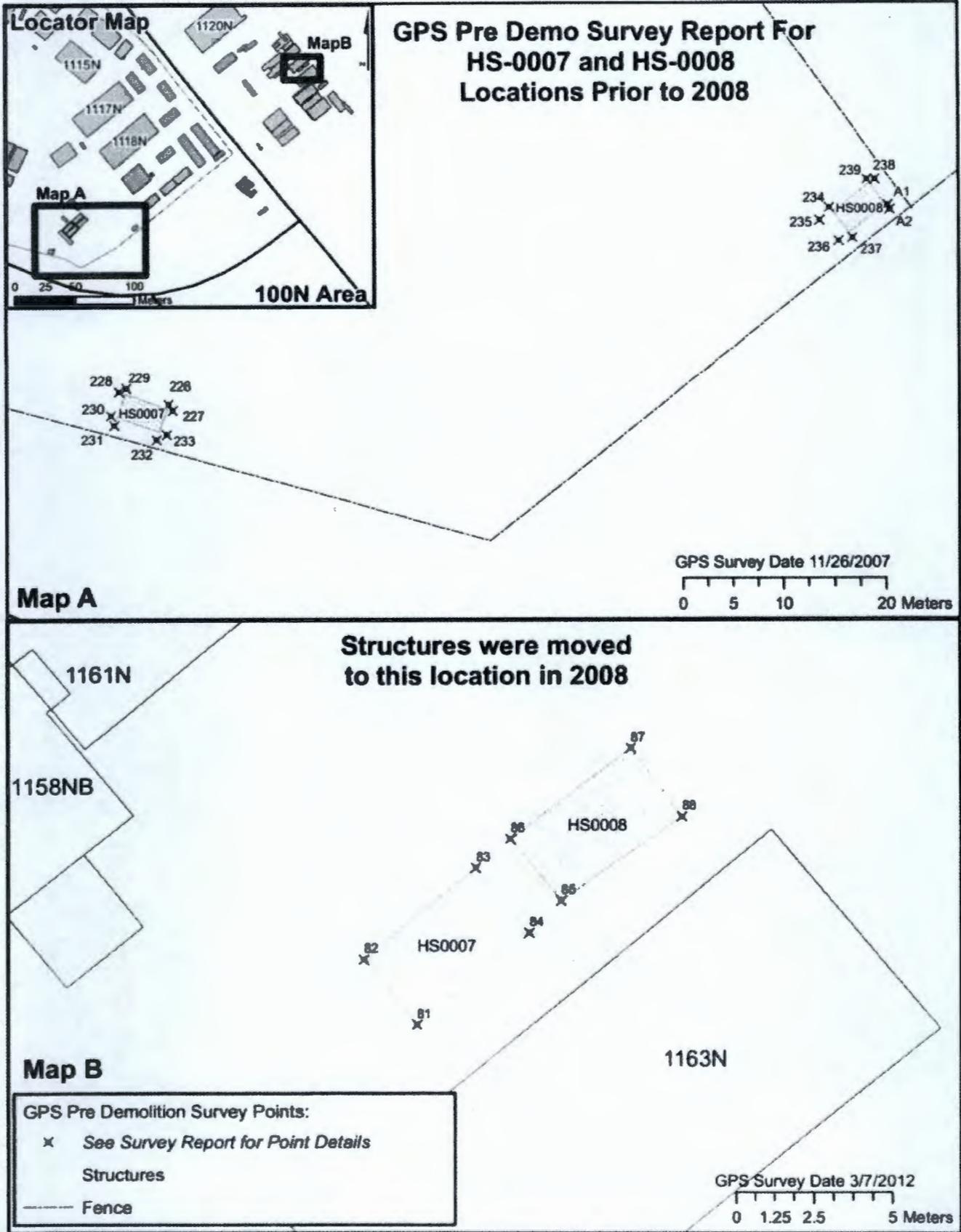
Map A Coordinates:

GPS Name	Northing	Easting	Elevation	Feature Code	Time/Date
226	149091.804m	571490.722m	139.973m	HS-007	13:11:55 26 Nov 2007
227	149091.182m	571491.158m	139.976m	HS-007	13:12:12 26 Nov 2007
228	149093.370m	571486.484m	139.925m	HS-007	13:13:06 26 Nov 2007
229	149093.034m	571485.751m	139.962m	HS-007	13:13:23 26 Nov 2007
230	149090.659m	571484.953m	140.022m	HS-007	13:13:42 26 Nov 2007
231	149089.704m	571485.271m	140.012m	HS-007	13:13:57 26 Nov 2007
232	149088.255m	571489.509m	140.054m	HS-007	13:14:22 26 Nov 2007
233	149088.775m	571490.533m	140.028m	HS-007	13:14:38 26 Nov 2007
234	149111.467m	571555.909m	141.266m	HS-008	13:16:39 26 Nov 2007
235	149110.198m	571554.956m	141.167m	HS-008	13:17:02 26 Nov 2007
236	149108.139m	571556.786m	141.311m	HS-008	13:17:20 26 Nov 2007
237	149108.453m	571558.139m	141.311m	HS-008	13:17:36 26 Nov 2007
238	149114.241m	571559.604m	141.258m	HS-008	13:18:05 26 Nov 2007
239	149114.226m	571560.346m	141.310m	HS-008	13:18:31 26 Nov 2007
A1	149111.730m	571561.592m	?		
A2	149111.267m	571561.805m	?		

Map B Coordinates:

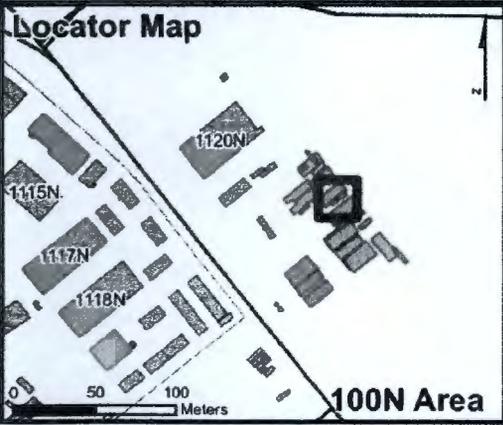
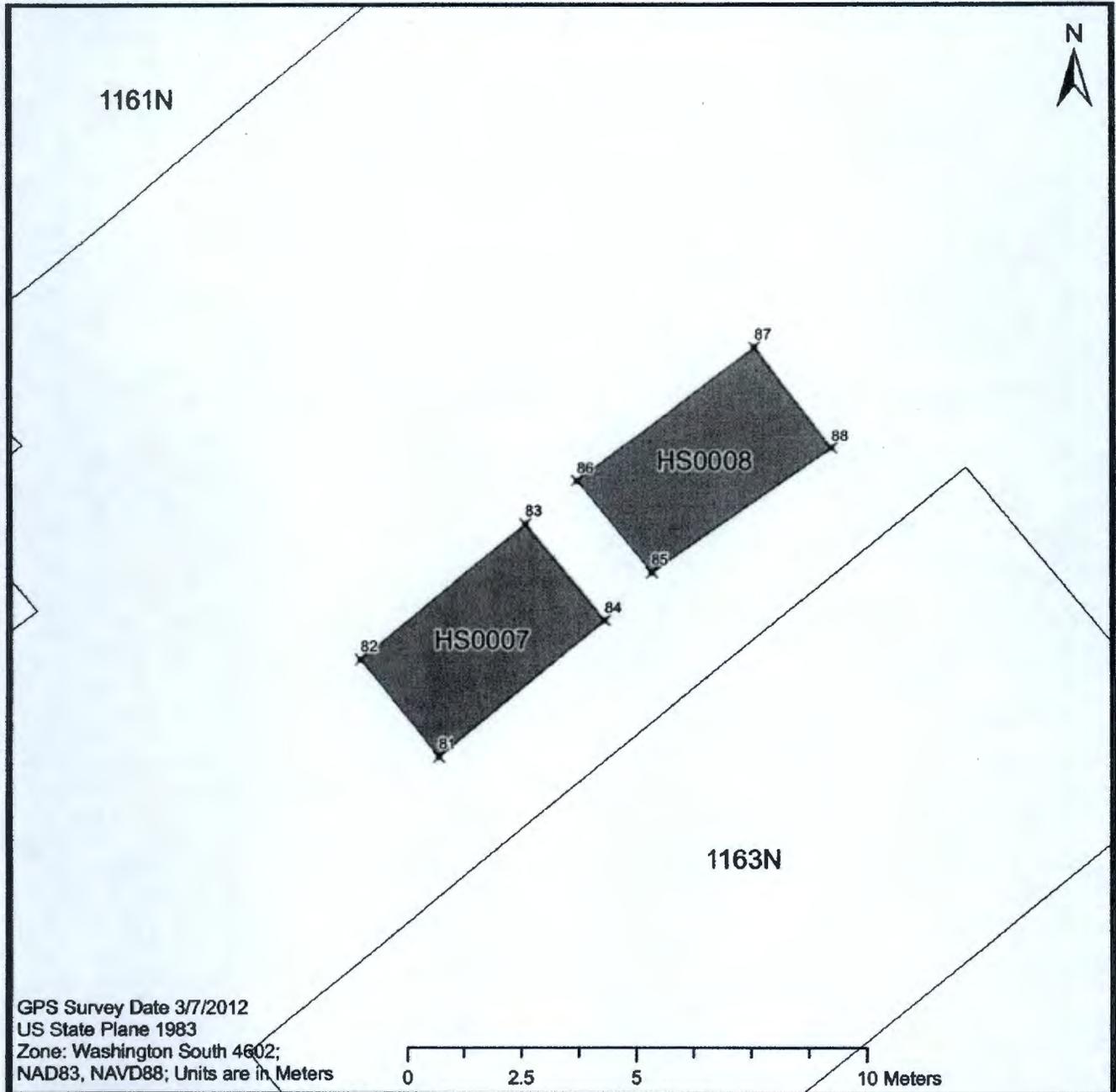
81	149244.655m	571699.867m	141.832m	HS-007	14:45:21 7 Mar 2012
82	149246.774m	571698.141m	141.879m	HS-007	14:45:39 7 Mar 2012
83	149249.737m	571701.762m	141.817m	HS-007	14:45:59 7 Mar 2012
84	149247.619m	571703.478m	141.802m	HS-007	14:46:17 7 Mar 2012
85	149248.662m	571704.493m	141.767m	HS-008	14:46:37 7 Mar 2012
86	149250.682m	571702.870m	141.806m	HS-008	14:46:52 7 Mar 2012
87	149253.649m	571706.737m	141.800m	HS-008	14:47:11 7 Mar 2012
88	149251.405m	571708.397m	141.762m	HS-008	14:47:32 7 Mar 2012

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WCH:04/10/12:\maaya\ArcMap\100N\predemo-HS0007-8.mxd, 2:22:06 PM

D4 Project Facility Completion Form



GPS Post Demo Survey Report For HS-007 and HS-008

× GPS Post Demolition Survey Points Structures

Name	Feat_Code	Northing	Easting	Elevation
81	HS-007	149244.65	571699.86	141.832
82	HS-007	149246.77	571698.14	141.879
83	HS-007	149249.73	571701.76	141.817
84	HS-007	149247.61	571703.47	141.802
85	HS-008	149248.66	571704.49	141.767
86	HS-008	149250.68	571702.87	141.806
87	HS-008	149253.64	571706.73	141.8
88	HS-008	149251.40	571708.39	141.762

WCH:04/10/12:V:\maaye\ArcMap\100N\postdemo-HS0007-8.mxd, 2:40:57 PM

D4 Project Facility Completion Form

**Attachment 5: Sampling Determination Form for Various 100-N mobile offices (MOs) and storage containers (HS) (SDF-100N-029)
(32 pages)**

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

Determination Number
SDF-100N-029

A. INSTRUCTIONS

This form must be completed to: 1) document existing data in order to determine if current data is suitable to prove completion of 100-N Ancillary Facilities, or 2) document that site-specific sampling and analyses are needed to provide completion for 100-N Ancillary Facilities.

B. GENERAL INFORMATION

<p>Building Name: <u>Various 100-N mobile offices (MOs) and storage containers (HS)</u></p>	<p>MO-100 (1110-N), MO-415 (1103-N), MO-425 (1158-NA), MO-426 (1158-NB), MO-427 (1158-NC), MO-765; HS storage containers HS-007 (HS-0007) and HS-008 (HS-0008); Includes staging pile areas utilized to manage non-hazardous demolition debris.</p>
<p>Building Number:</p>	<p>containers HS-007 (HS-0007) and HS-008 (HS-0008); Includes staging pile areas utilized to manage non-hazardous demolition debris.</p>

WIDS Sites Associated or Adjacent

Multiple WIDS sites were located adjacent to the facilities listed above. However, no WIDS site was associated with these facilities and demolition/removal activities required only minimal disturbance of the soil underneath and around these facilities.

Other:

MO-100 (also known as 1110-N): This mobile office consisted of two adjoined trailers constructed of sheet metal and plywood positioned atop an I-beam trailer frame (SIS Facility Summary Report for 1110-N pg. 1 & CCN 165394 pg. 1). It was located east of the 1101-N Office Building, approximately 1050 feet southeast of the 105-N Reactor. This mobile office was used as an office space and did not contain a water or sewer utility (SIS Facility Summary Report for 1110-N pg. 1 & CCN 165394 pg. 1). It was demolished in July of 2012 (SIS Facility Summary Report for 1110-N pg. 1 & CCN 165394 pg. 2). The use of a staging pile area for demolition debris was approved prior to demolition (CCN 165821).

MO-415 (also known as 1103-N): This mobile office consisted of many adjoined trailers constructed of sheet metal and plywood positioned atop an I-beam trailer frame (SIS Facility Summary Report for 1103-N [2] pg. 1 & CCN 165395 pg. 1). It was located approximately 1050 feet southeast of the 105-N Reactor. This mobile office was used as an office space and contained sewer utilities to support kitchens and restrooms (SIS Facility Summary Report for 1103-N [2] pg. 1 & CCN 165395 pg. 1). It received potable water from a 500 gallon tank located near its southeast corner (CCN 165395 pg. 1). It was demolished in July of 2012 (SIS Facility Summary Report for 1103-N [2] pg. 1 & CCN 165395 pg. 1). The use of a staging pile area for demolition debris was approved prior to demolition (CCN 165821).

MO-425 & MO-426 (also known as 1158-NA & 1158-NB, respectively): These mobile offices were single-wide trailers constructed of sheet metal and plywood that were connected to each other by an enclosed wooden breezeway (SIS Facility Summary Report for 1158-NA pg. 1, SIS Facility Summary Report for 1158-NB pg. 1, and CCN 167654 pg. 1). They were located approximately 1800 feet southeast of the 105-N Reactor. These mobile offices were used as an analytical laboratory and later as enclosures to calibrate and repair industrial hygiene instruments (SIS Facility Summary Report for 1158-NA pg. 1, SIS Facility Summary Report for 1158-NB pg. 1, and CCN 167654 pg. 1). They contained sinks that drained to four underground tanks located just north of their location (CCN 167654 pg. 1). The contents of the tanks were sampled prior to their disposal to a sanitary sewer (CCN 167654 pg. 1). These mobile offices were demolished along with the adjacent underground tanks in July of 2012 (SIS Facility Summary Report for 1158-NA pg. 1, SIS Facility Summary Report for 1158-NB pg. 1, and CCN 167654 pg. 1). The use of a staging pile area for demolition debris was approved prior demolition (CCN 166168).

MO-427 (also known as 1158-NC): This mobile office was a single-wide trailer constructed of sheet metal and plywood and capped with a rubber membrane roof (SIS Facility Summary Report for 1158-NC pg. 1, SIS Facility Summary Report for MO-427 pg. 1, and CCN 165396 pg. 1). It was historically located near the MO-425 and MO-426 trailers, approximately 1800 feet southeast of the 105-N Reactor. During July or August of 2012, it was relocated east of MO-415, approximately 1100 feet southeast of the 105-N Reactor (SIS Facility Summary Report for 1158-NC pg. 1 & SIS Facility Summary Report for MO-427 pg. 1). In both locations, this mobile office was used as a dressing room and contained sewer utilities to support a restroom (SIS Facility Summary Report for 1158-NC pg. 1; SIS Facility Summary Report for MO-427 pg. 1; CCN 165396 pg. 1; and H-1-80013, Sheet 1). It was demolished in July of 2012 (SIS Facility Summary Report for MO-427 pg. 1 & CCN 165396 pg. 1). The use of a staging pile area for demolition debris was

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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approved prior to demolition (CCN 165821).

MO-765: This mobile office was a single-wide trailer constructed of sheet metal and plywood (SIS Facility Summary Report for MO-765 [1] pg. 1 & SIS Facility Summary Report for MO-765 [2] pg. 1). It was historically located near the 176-N Survey Tent, approximately 2200 feet east of the 105-N Reactor, where it was used as an office space (SIS Facility Summary Report for MO-765 [1] pg. 1 & SIS Facility Summary Report for MO-765 [2] pg. 1). Between August and October of 2006, it was relocated southeast of the 151-N Electrical Substation, approximately 1100 feet southeast of the 105-N Reactor, where it was used as a radiological counting facility (SIS Facility Summary Report for MO-765 [2] pg. 1 & CCN 164018 pg. 1). It was demolished in March of 2012 (SIS Facility Summary Report for MO-765 [2] pg. 1 & CCN 164018 pg. 1).

HS-007 & HS-008 (also known as HS-0007 & HS-0008, respectively): These storage containers were rectangular conex boxes, HS-007 had an area of 64 square feet and HS-008 had an area of 240 square feet (CCN 165382 pg. 1). They were used to store chemicals within the 100-N Area (CCN 165382 pg. 1). They were historically located east-southeast of the 1143-N Carpenter/Paint Shop, approximately 1500 feet southeast of the 105-N Reactor (CCN 165382 Figures 1 & 2). Between September of 2008 and May of 2009, these containers were relocated east of the 1120-N Training Building, approximately 1700 feet southeast of the 105-N Reactor (CCN 165382 pg. 1, Figure 3, and Figure 4). They were demolished in March of 2012 (CCN 165382 pgs. 1 & 3).

C: INFORMATION SOURCES

Available information (list document number for each if applicable):

<p>Historical Site Assessment: MO-013, MO-050, MO-055, MO-100, MO-358, MO-390, MO-403, MO-415, MO-425, MO-426, MO-427, MO-740, MO-765, MO-766, MO-767, MO-827, MO-848, MO-900, MO-911, MO-950, HS-007, HS-008 / 100N: CCN 128265</p>	<p>Site Walkdown: Visual Inspection of the MO-765 and HS-007 / 008 Mobile Trailer Footprints: CCN 167414</p> <p>Visual Inspection of Various 100N Mobile Offices: CCN 167421</p>
<p>IH Characterization Report: N/A</p>	<p>Radiological Survey: Global Positioning Environmental Radiological Surveyor (GPERS) surveys:</p> <ul style="list-style-type: none"> • ESR-FRM-12-0108C • ESR-FRM-12-0036BC • ESR-FRM-12-0036GC • ESR-FRM-12-0116C • ESR-FRM-12-0120C
<p>IHC/FHC Document: N/A</p>	<p>WDS/SIS: RCC Stewardship Information System (SIS) Facility Summary Reports for:</p> <ul style="list-style-type: none"> • 1110-N (MO-100) • 1103-N (2) (MO-415) • 1158-NA (MO-425) • 1158-NB (MO-426) • 1158-NC (MO-427) • MO-427 • MO-765 (1) • MO-765 (2) • HS-0007 (1) (HS-007) • HS-0007 (2) (HS-007) • HS-0008 (1) (HS-008) • HS-0008 (2) (HS-008)

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

Determination Number
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Post-Demolition Summary Reports for:

- MO-100: CCN 165394
- MO-415: CCN 165395
- PDSR: • MO-425 & MO-426: CCN 167654
- MO-427: CCN 165396
- MO-765: CCN 164018
- HS-007 & HS-008: CCN 165382

**Asbestos Inspection and Sampling
Reports for:**

- MO-100: CCN 164450
- MO-415: CCN 164875
- MO-425 & MO-426: CCN 164381
- MO-427: CCN 165727
- MO-765: CCN 164344

Facility Inspection: • MO-415: CCN 164875

Waste Characterization Checklist: N/A

Summary Report: N/A

Other:

- Ecology Approval of Staging Pile Location for MO-425 & MO-426 Demolition: CCN 166168
- Ecology Approval of Staging Pile Locations for MO-100, MO-415, and MO-427 Demolition: CCN 165821
- Radiological Survey Record: RSR-100N-10-0128 (Radiological Scoping of MO-765)
- Photographs:

MO-100 Photographs (time stamps shown in brackets):

- Pre-Demolition: SIS Facility Summary Report for 1110-N pgs. 3-6 & CCN 165394 pg. 6
- Post-Demolition: SIS Facility Summary Report for 1110-N pg. 7 [7/25/2012], CCN 165394 pg. 7, and CCN 167421 pg. 3 [8/30/2012]

MO-415 Photographs (time stamps shown in brackets):

- Pre-Demolition: SIS Facility Summary Report for 1103-N (2) pgs. 3-8 & CCN 165395 pg. 6
- Post-Demolition: SIS Facility Summary Report for 1103-N (2) pg. 9 [7/25/2012]; CCN 165395 pg. 7 [7/25/2012]; and CCN 167421 pg. 4 [8/30/2012], pg. 5 [8/30/2012], and pg. 6 [8/30/2012]

MO-425 & MO-426 Photographs (time stamps shown in brackets):

- Pre-Demolition: SIS Facility Summary Report for 1158-NA pg. 3 [11/2/2005], pg. 4 [6/13/2006], and pg. 5; SIS Facility Summary Report for 1158-NB pg. 3 [11/2/2005], pg. 4 [6/13/2006], and pg. 5; and CCN 167654 pgs. 6 [11/2/2005] and 7
- Post-Demolition: SIS Facility Summary Report for 1158-NA pg. 6, SIS Facility Summary Report for 1158-NB pg. 6, CCN 167421 pg. 7 [8/30/2012], and CCN 167654 pgs. 8-9

MO-427 Photographs (time stamps shown in brackets):

- Pre-Demolition: SIS Facility Summary Report for 1158-NC pg. 2 [11/2/2005], pg. 3 [6/13/2006], and pg. 4; SIS Facility Summary Report for MO-427 pg. 3; and CCN 165396 pg. 5
- Post-Demolition: CCN 165396 pg. 6 & CCN 167421 pg. 8 [8/30/2012]

MO-765 Photographs:

- Pre-Demolition: SIS Facility Summary Report for MO-765 (1) pgs. 2 & 3, SIS Facility Summary Report for MO-765 (2) pgs. 3 & 4, and CCN 164018 pg. 5
- Post-Demolition: SIS Facility Summary Report for MO-765 (2) pgs. 5 & 6, CCN 164018 pg. 6, and CCN 167414 pgs. 4 & 6

HS-007 & HS-008 Photographs:

- Pre-Demolition: CCN 165382 pgs. 5 & 6
- Post-Demolition: CCN 165382 pg. 7 & CCN 167414 pg. 5

D. HAZARDOUS SUBSTANCES

Check all that apply:

None Asbestos containing material Lead PCBs/PCB Articles Oils/Greases

Chemicals List: _____

Radiological Contamination Mercury/Mercury Devices

Other: Various mobile offices contained HVAC units which would have held refrigerant, however neither the names nor numbers of such facilities are provided in documentation (CCN 128265 pg. 4).

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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References/Comments:

Based on reviewed historical documentation, none of the storage containers or mobile offices addressed in this form contained processes or materials that would have resulted in contamination presence (CCN 128265 pgs. 1 & 2).

- Asbestos containing material: asbestos detected in nonfriable roof peak patch from MO-100 (CCN 164450 Appendix 1), no other facility addressed in this form appears to have contained asbestos (CCN 164344 Appendix 1, CCN 164381 Appendix 1, CCN 164875 Appendix 1, and CCN 165727 Appendix 1)
- Radiological Contamination: possibility for biological contamination presence (CCN 128265 pg. 3), a photograph of MO-765 appears to show a radiological sign on the building exterior (SIS Facility Summary Report for MO-765 [2] pg. 4 & CCN 164018 pg. 5).
- Mercury/Mercury Devices: various mobile offices reportedly exhibited signs of having underwent mercury switch removal, however neither the names nor numbers of such facilities are provided in documentation (CCN 128265 pg. 3)
- PCBs/PCB Articles: potential for presence within door actuators and fluorescent light ballasts (CCN 128265 pg. 3)

Liquids: Yes No

If yes, describe source and nature of liquids:

- MO-415: This mobile office contained sewer utilities to support kitchens and restrooms (SIS Facility Summary Report for 1103-N [2] pg. 1 & CCN 165395 pg. 1). It received potable water from an exterior 500 gallon tank (CCN 165395 pg. 1).
- MO-425 & MO-426: These mobile offices contained sinks that drained liquids, presumably laboratory wastes, to exterior underground storage tanks (CCN 167654 pg. 1).
- MO-427: This mobile office contained sewer utilities to support a restroom (SIS Facility Summary Report for 1158-NC pg. 1; SIS Facility Summary Report for MO-427 pg. 1; CCN 165396 pg. 1; and H-1-80013, Sheet 1).

Were the hazardous substances removed from the facility prior to demolition? Yes No

As verified by what documentation:

The only apparent instance of hazardous substance presence within any of these facilities is the asbestos-containing patch found on the MO-100 roof (CCN 164450 Appendix 1). An Asbestos Hazard Emergency Response Act (AHERA)-certified inspector determined that this was nonfriable material (CCN 164450 pg. 3 & Appendix 1). Accordingly, it was not removed prior to demolition and the facility was demolished utilizing the appropriate asbestos controls.

Notwithstanding the asbestos-containing patch at the MO-100 mobile office, none of the storage containers or mobile offices addressed in this form contained processes or materials that would have resulted in contamination presence (CCN 128265 pgs. 1 & 2).

Was there potential for hazardous substances to be introduced into the soils during facility operations or demolition? Yes No N/A

References/Comments:

Based on process knowledge and reviewed documentation, these mobile offices and storage containers were not involved in operations or processes that could have resulted in contamination or hazardous material presence (CCN 128265 pgs. 1 & 2). There was, however, potential for hazardous substances to be present at these facilities as a result of biological vector transport (CCN 128265 pgs. 1 & 2).

List any hazardous materials left in the building for demolition:

The non-friable asbestos-containing roof patch on the MO-100 mobile office was left in place for demolition.

Does review of historical records and process knowledge indicate a potential for radiological or chemical contamination to be present in the facility?

Radiological Contamination: Radiological contamination was not identified in any reviewed survey record.

- GPERs Surveys: The final location of each of the mobile offices addressed in this form underwent a post-demolition GPERs survey. Likewise, the location of the debris staging area used during demolition of the MO-425 and MO-426 mobile offices underwent a GPERs survey. None of these surveys detected radiological contamination (ESR-FRM-12-0108C / 0036BC / 0036GC / 0118C / 0120C). The locations of the HS-007 and HS-008 storage containers did not undergo a GPERs survey (CCN 165382 pg. 2).
- Radiological Scoping Surveys: No radiological contamination was identified in the radiological scoping survey for

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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the MO-765 mobile office (RSR-100N-10-0128). No other radiological scoping survey was found for the storage containers or mobile offices addressed in this form (CCN 165382 pg. 1, CCN 165394 pg. 1, CCN 165395 pg. 1, CCN 165396 pg. 1, and CCN 167654 pg. 1).

- Other Routine and Work Progress Surveys: No additional radiological surveys were reviewed during completion of this form because no pertinent GPERS survey identified radiological contamination; and, based on reviewed historical documentation, none of the storage containers or mobile offices addressed in this form contained processes or materials that would have resulted in contamination presence (CCN 128265 pgs. 1 & 2). It should be noted that a photograph of the MO-765 mobile office appears to show a radiological sign on the building exterior (SIS Facility Summary Report for MO-765 [2] pg. 4 & CCN 164018 pg. 5).

Chemical Contamination: Based on reviewed historical documentation, none of the storage containers or mobile offices addressed in this form contained processes or materials that would have resulted in contamination presence (CCN 128265 pgs. 1 & 2).

Comments:

MO-100: Pertinent design drawing is H-1-45007, Sheet 27
 MO-415: Pertinent design drawings are H-1-45007, Sheets 20 & 27; H-1-41757, Sheet 1
 MO-425 & MO-426: Pertinent design and location drawing is H-1-80013, Sheet 1
 MO-427: Pertinent design and location drawings are H-1-91299 & H-1-80013, Sheet 1
 MO-765: Pertinent location drawing is H-1-88938

E. FIELD OBSERVATIONS

Visual Inspection

Were any stained soils/anomalies discovered during or after demolition of the facility? Yes No

References/Comments:

No areas of stained soil were identified within the footprints of the locations of the MO-100, MO-415, MO-425, MO-426, or MO-427 mobile offices; nor the footprint of the locations of the HS-007 or HS-008 storage containers (CCN 167414 & CCN 167421). This determination includes the debris staging areas used during demolition of the MO-100, MO-415, MO-425, MO-426, and MO-427 mobile offices (CCN 167421 pg. 1).

One area of stained soil was identified within the footprint of the location of the MO-765 mobile office (CCN 167414 pgs. 1 & 6). A sample was taken and the analysis revealed that no contaminant was present above the Remedial Action Goals (RAGs) (CCN 167414 pgs. 1 & 8). See Attachment 2 for analysis of results.

No anomaly was encountered during or after demolition of any of the storage containers or mobile offices addressed in this form (CCN 164018 pg. 2, CCN 165382 pg. 2, CCN 165394 pg. 3, CCN 165395 pg. 3, CCN 165396 pg. 2, CCN 167414 pg. 1, CCN 167421 pg. 1, and CCN 167654 pg. 3). This determination includes the debris staging areas used during demolition of the MO-100, MO-415, MO-425, MO-426, and MO-427 mobile offices (CCN 167421 pg. 1).

Were samples taken of the stained soils/anomalies? Yes No N/A

References/Comments:

A sample was taken of the stained soil found within the footprint of the final location of the MO-765 mobile office (CCN 167414 pgs. 1 & 8). See Attachment 2 for analysis of results.

Do results of the samples indicate that chemical contamination exists? Yes No N/A

References/Comments:

Sample analysis results revealed that no contaminant was present above the Remedial Action Goals (RAGs) (CCN 167414 pgs. 1 & 8). See Attachment 2 for analysis of results.

Is the area potentially a discovery site? Yes No

References/Comments:

N/A

Radiological Surveys

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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SDF-100N-029

Did radiological surveys (GPERS or equivalent) identify contamination? Yes No

References/Comments:

The final location of each of the mobile offices addressed in this form underwent a post-demolition GPERS survey. Likewise, the location of the debris staging area used during demolition of the MO-425 and MO-426 mobile offices underwent a GPERS survey. None of these surveys detected radiological contamination (ESR-FRM-12-0108C / 0036BC / 0036GC / 0116C / 0120C). It should be noted that the MO-427 and MO-765 facilities were relocated during their existence, and accordingly none of these GPERS surveys covered their initial locations. However, because their final location footprints do not contain radiological contamination, it is unlikely that their initial locations would contain radiological contamination (ESR-FRM-12-0116C / 0036BC / 0036GC).

No GPERS survey was performed on any of the locations occupied by the HS-007 or HS-008 storage containers (CCN 165382 pg. 2).

Were samples taken of the radiologically contaminated soils? Yes No N/A

References/Comments:

This question is not applicable because radiologically contaminated soil was not found.

Is the area potentially a discovery site? Yes No

References/Comments:

No radiologically contaminated soil was found.

Were the contaminated materials removed? Yes No N/A

References/Comments:

This question is not applicable because radiologically contaminated soil was not found.

F. WIDS SITES

Were there any WIDS sites affected by D4 activities? Yes No

If yes, list the WIDS sites:

No indication of an effect to a WIDS site was found.

Were the WIDS site(s) completely removed? Yes No

References/Comments:

This question is not applicable because no indication of an effect to a WIDS site was found.

Will the Ancillary Facility Footprint be deferred to FR to be closed out with a co-located Waste Site? Yes No

References/Comments:

Deferral is not necessary for closeout of these facilities.

G. COPCs FOR SOILS AND STRUCTURES REMAINING AFTER DEMOLITION

What are the potential contaminants of concern for the remaining below-grade soil?

None SVOC VOC Metals TPH Rad PCBs

Other (Specify): _____

Comments:

N/A

Summary of in-process soil sampling requirements:

N/A

Constituents detected / concentrations / rationale

Asbestos was detected in a roof patch on the MO-100 mobile office (CCN 164450 Appendix 1).

-Refer to Sample (HEIS) Number J1N494

Attachment 1

167421

^WCH Document Control

From: Warren, David J
Sent: Monday, September 10, 2012 3:52 PM
To: ^WCH Document Control
Subject: FW: Visual Inspection of various 100-N Mobile Offices

Attachments: 100-N Mobile Offices Visual Inspection.doc; ESRFRM120116C.pdf; ESRFRM120120C.pdf; 1103-N Ecology Approval of Staging Pile Locations.pdf; MO-425.426 Staing Pile Approval.pdf; ESRFRM120108C.pdf

Please CHRON this e-mail and attachments as visual inspection of various 100-N mobile office trailer footprints. Please advise me of the CHRON # assigned. Thanks.

Dave Warren
539-6040

From: Warren, David J
Sent: Monday, September 10, 2012 3:30 PM
To: Allen, Mark E
Cc: McCurley, Clay D
Subject: Visual Inspection of various 100-N Mobile Offices

All,

At approximately 1000 hours on 8/30/12, the footprints of the MO-100, MO-415 (1103-N), MO-425/426, and MO-427 including the demolition and staging pile areas were visually inspected for signs of staining or anomalous items. The areas were observed to be free of any stained soils or anomalies that would be indicative of chemical or petroleum contamination. The post-demolition GPERS survey(s) (Performed 7/26/2012 and 8/9/2012) didn't identify contamination, nor was any expected since the structures were not radiologically contaminated. Additionally, attached is the GPERS surveys of the staging pile area for MO-425/426 (Performed 6/27/2012) prior to demolition. Please see the attached word file for photographs that were taken during the inspection and the PDF files of the GPERS survey(s). I've also included Ecology approval to operate staging piles for demolition of the various trailers. I'll CHRON this e-mail and attachments for future use as reference for closure documentation. Feel free to contact me if you have any questions. Thanks.

David Warren
100-N D4 Environmental Project Lead
WCH
539-6040



100-N Mobile
Offices Visual In..



ESRFRM120116
C.pdf (909 KB)



ESRFRM120120
C.pdf (861 KB)



1103-N Ecology
Approval of Sta...



MO-425.426
aing Pile Approva



ESRFRM120108
C.pdf (864 KB)

100-N Mobile Offices Removal Visual Inspection Photographs



MO-100 Footprint Looking Southwest



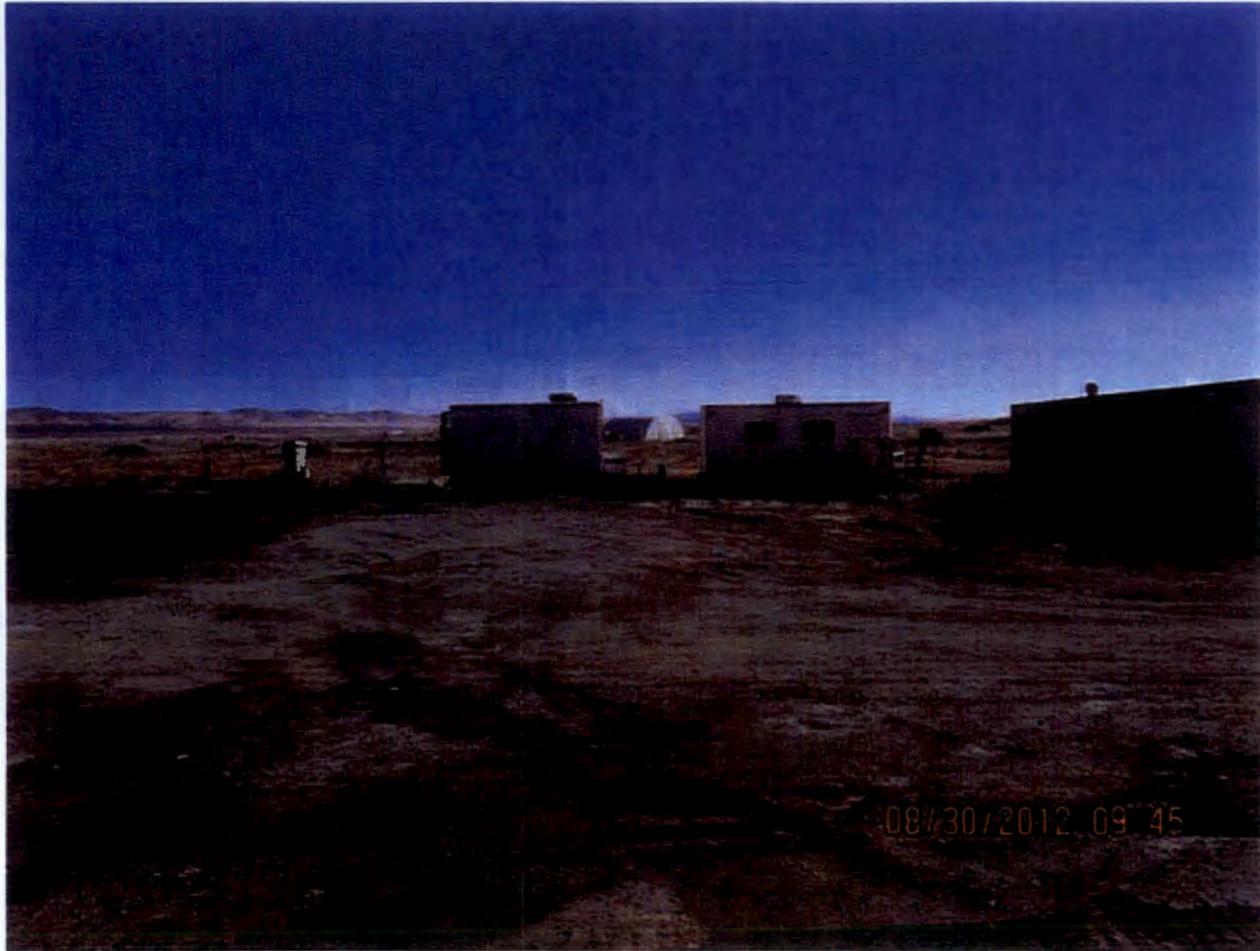
MO-415 (1103-N) Footprint Looking North



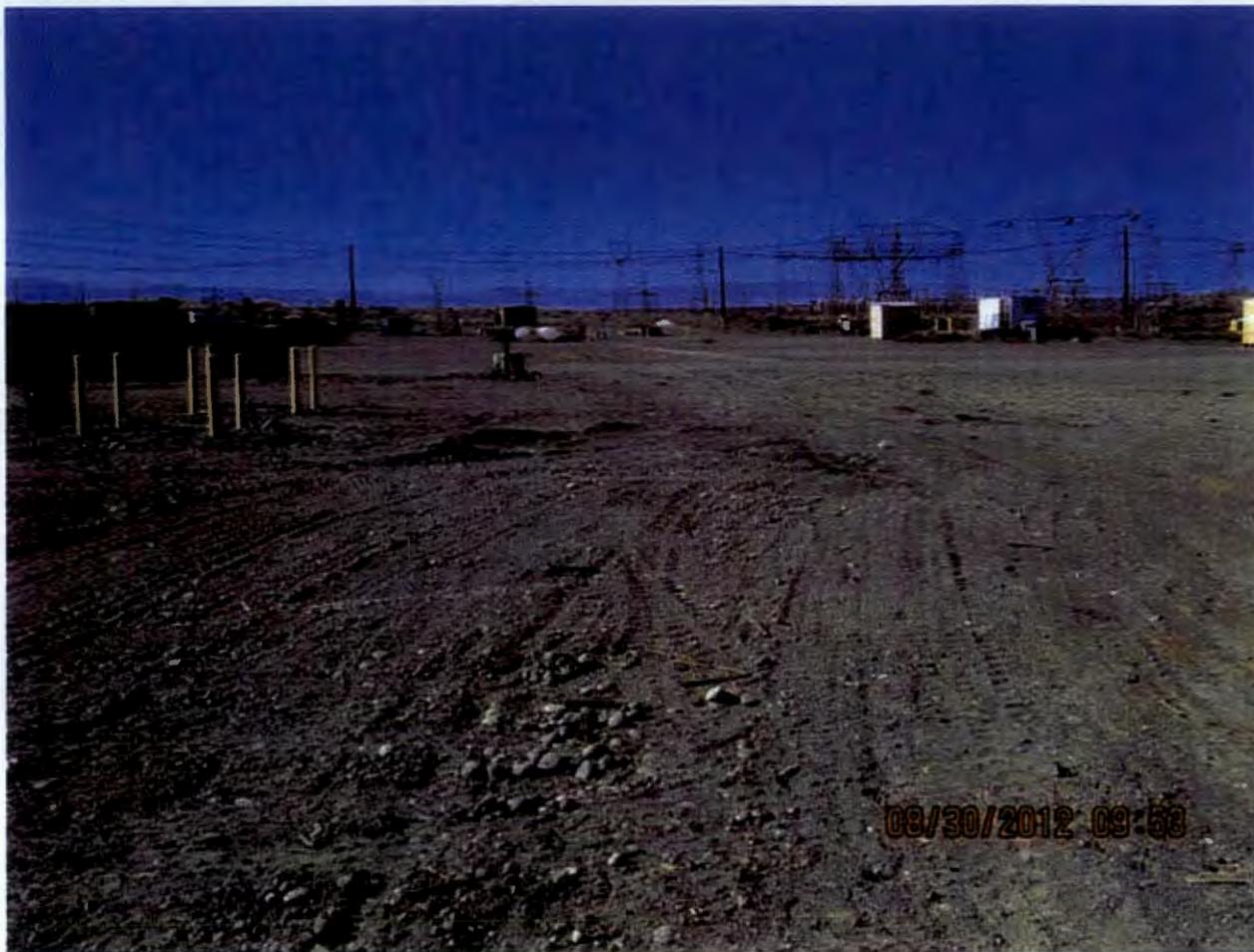
MO-415 (1103-N) Footprint Looking South



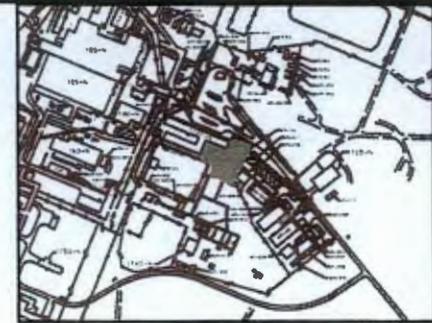
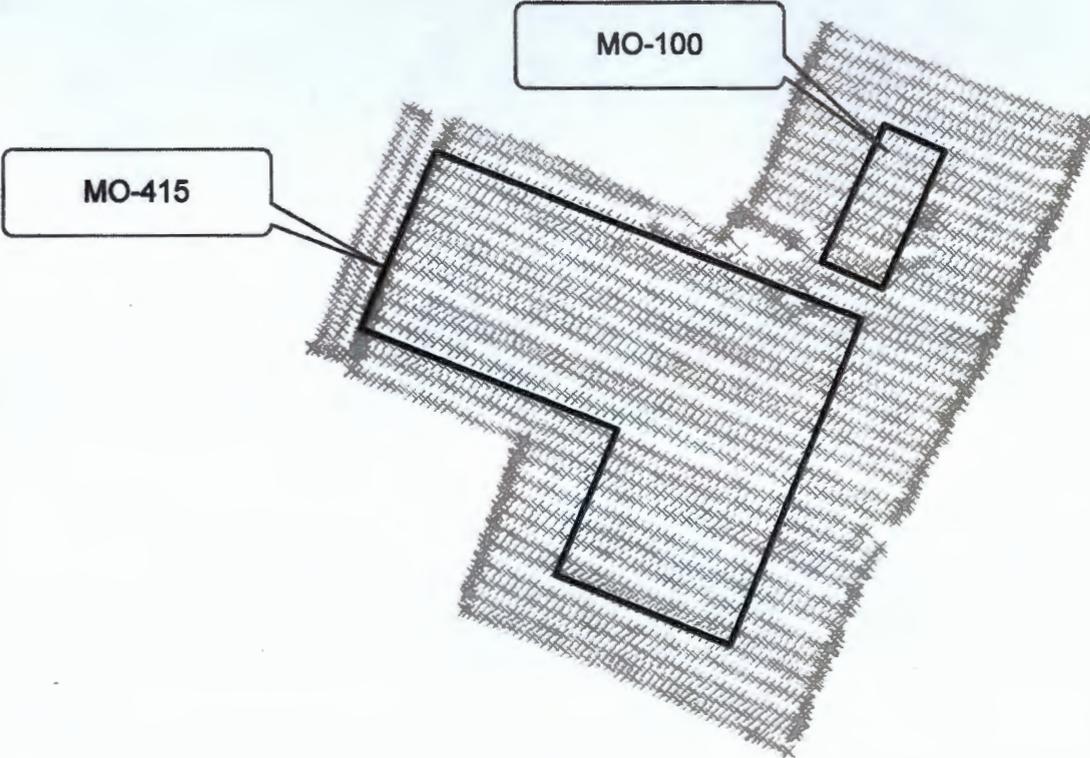
MO-415 (1103-N) Footprint Looking North



MO-425/426 Footprint Looking Northeast



MO-427 Footprint Looking South



Site View

Copy

Bkg Location
240 meters SE
1250 cpm →

Legend

NET CPM

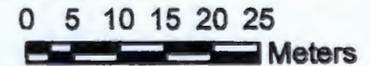
- X <1875
- 1875 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N208
Number of Data Pnts: 2902
Type of Survey: gamma
Max GCPM: 1643
Avg Bkg CPM: 1250
Survey Date: 7/28/2012
Area Surveyed: 3,866 m²
Project File: ESRFRM120116
Pdf File: ESRFRM120116C

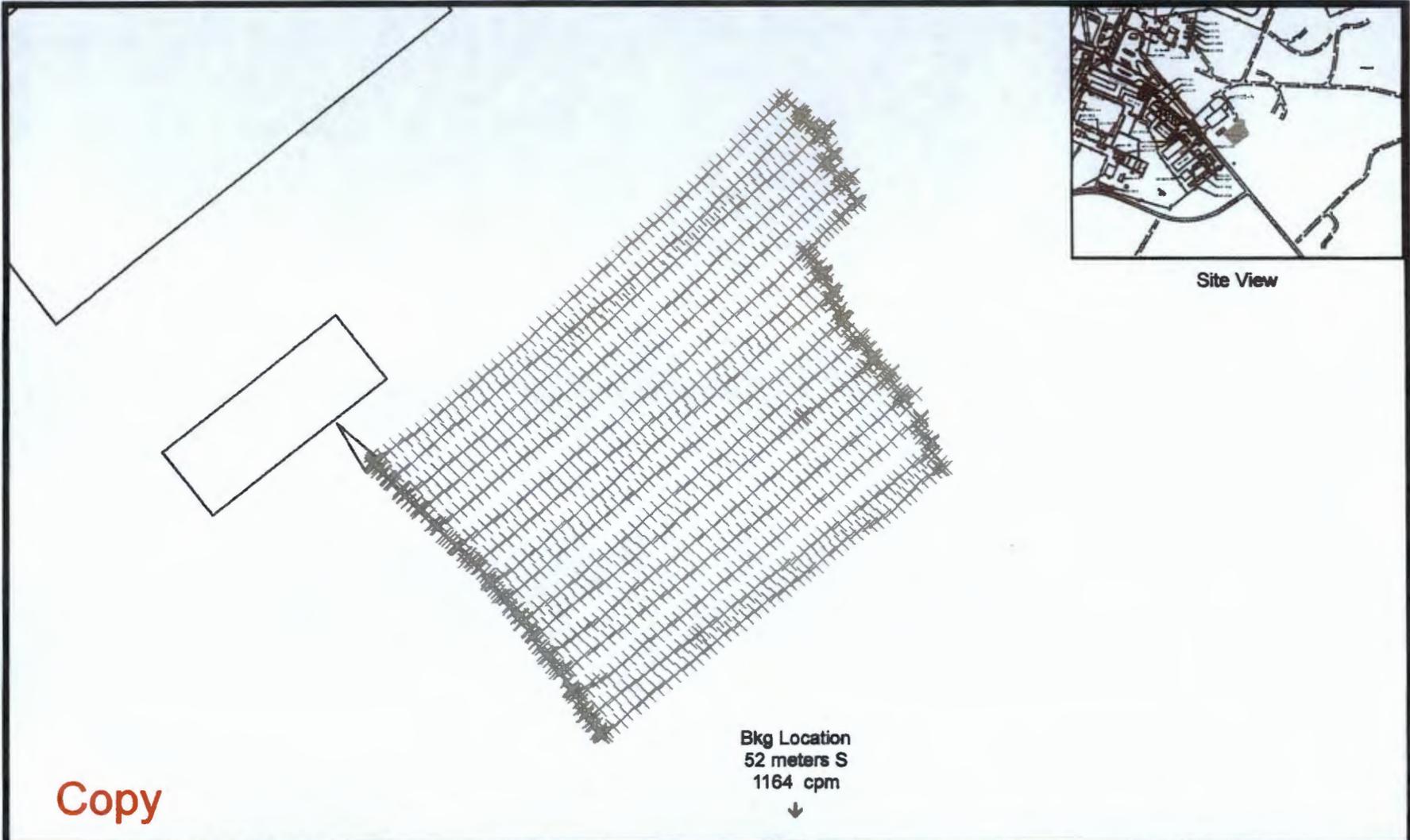
**100N D4
1103-N**

**GPERS Radiological Survey
Gamma Track Map**



**EBERLINE
SERVICES
HANFORD, INC.**

Survey Map Prepared By Bruce Coomer, ESI



Copy

Site View

Bkg Location
52 meters S
1164 cpm
↓

Legend

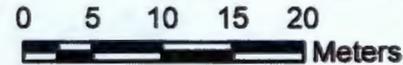
NET CPM

- X <1746
- 1746 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N222
 Number of Data Pnts: 1125
 Type of Survey: gamma
 Max GCPM: 2100
 Avg Bkg CPM: 1164
 Survey Date: 8/9/2012
 Area Surveyed: 1575 m²
 Project File: ESRFRM120120
 Pdf File: ESRFRM120120C

**100N D4
 MO-425 / 426 Area
 GPERs Radiological Survey
 Gamma Track Map**



Survey Map Prepared By Bruce Coomer, ES

^WCH Document Control

From: McCurley, Clay D
Sent: Thursday, June 07, 2012 7:45 AM
To: ^WCH Document Control
Cc: Trevino, Ruben A; Flannery, Michael (Mike) D; Bigby, Daniel A; Comer, John W; Warren, David J; Faust, Toni L
Subject: MO-425 and MO-426 Demolition - Ecology Approval of Staging Pile Location
Attachments: MO-425-426 Staging Pile.doc

Please print the attachment and chron it with this email per the subject. Also, please let me know which chron number is assigned. Thanks. Clay

From: Elliott, Wanda (ECY) [<mailto:wel461@ECY.WA.GOV>]
Sent: Thursday, June 07, 2012 7:21 AM
To: McCurley, Clay D
Cc: Boyd, Alicia; Warren, David J; Trevino, Ruben A; Flannery, Michael (Mike) D; Bigby, Daniel A; Allen, Mark E; Guercia, Rudolph F; Faust, Toni L
Subject: RE: MO-425-426 Demolition - Ecology Approval of Staging Pile Locations

I approve.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: McCurley, Clay D [<mailto:cdmccurl@wch-rcc.com>]
Sent: Wednesday, June 06, 2012 3:35 PM
To: Elliott, Wanda (ECY)
Cc: Boyd, Alicia (ECY); Warren, David J; Trevino, Ruben A; Flannery, Michael (Mike) D; Bigby, Daniel A; Allen, Mark E; Guercia, Rudolph F; Faust, Toni L
Subject: MO-425-426 Demolition - Ecology Approval of Staging Pile Locations

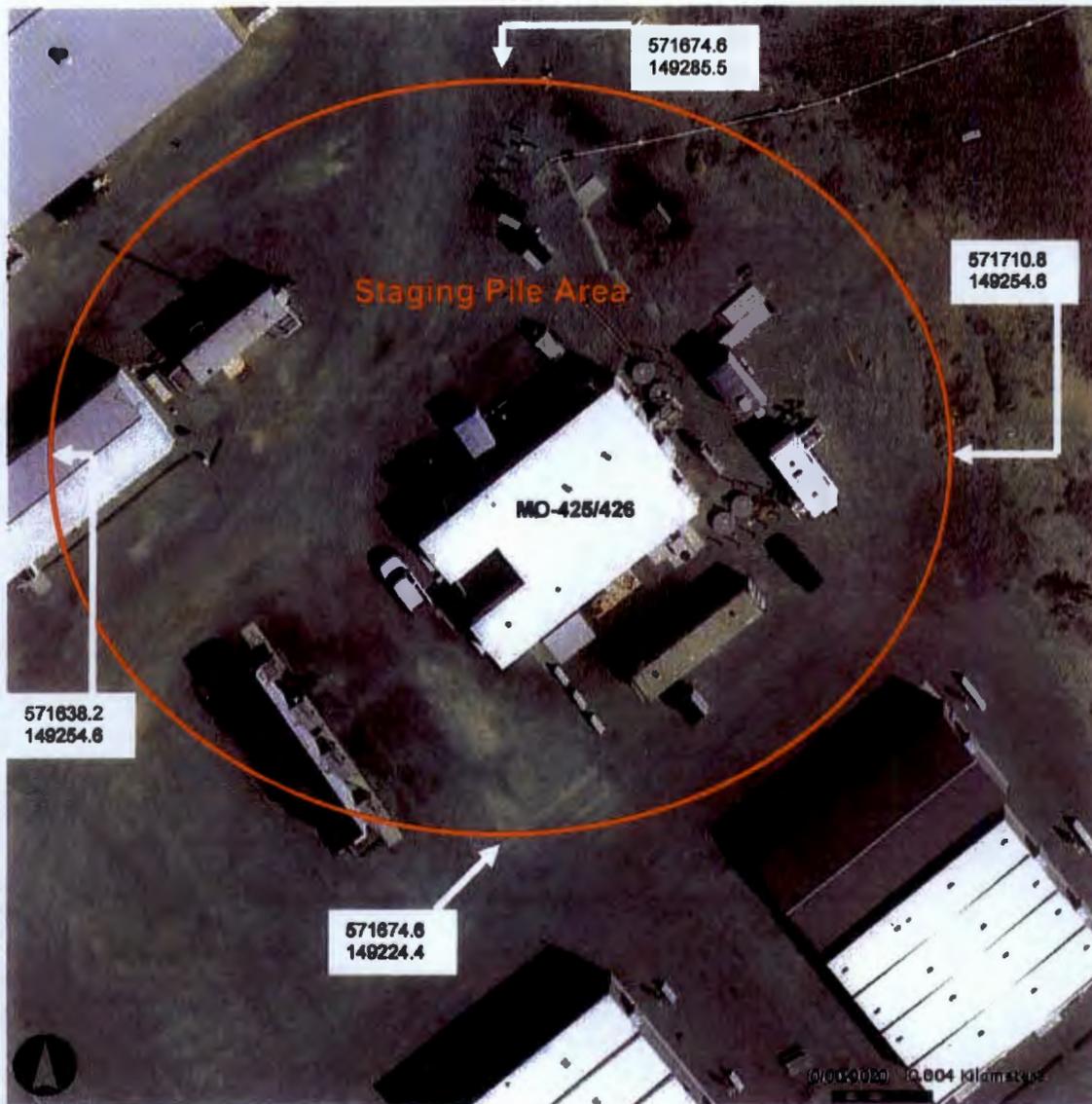
Wanda. We will soon be starting the demolition of the Industrial Hygiene Field Services Facility (MO-425/426) and other structures in its immediate vicinity. The size and number of structures we will be simultaneously demolishing is sufficiently large that maintaining the debris within the footprint of the buildings or direct loading during demolition may not be practical. These structures are also outside the 100-N AOC. We have identified an area surrounding and including these structures (see attachment) that we would like to reserve for a staging pile of demolition debris if needed. As specified in section 4.2.3.2 of the *Removal Action Work Plan for 100-N Area Ancillary Facilities* (DOE/RL-2002-70, Rev. 3), we are requesting Ecology's approval to use all or a portion of this area for staging piles. Please contact me if you have any questions.

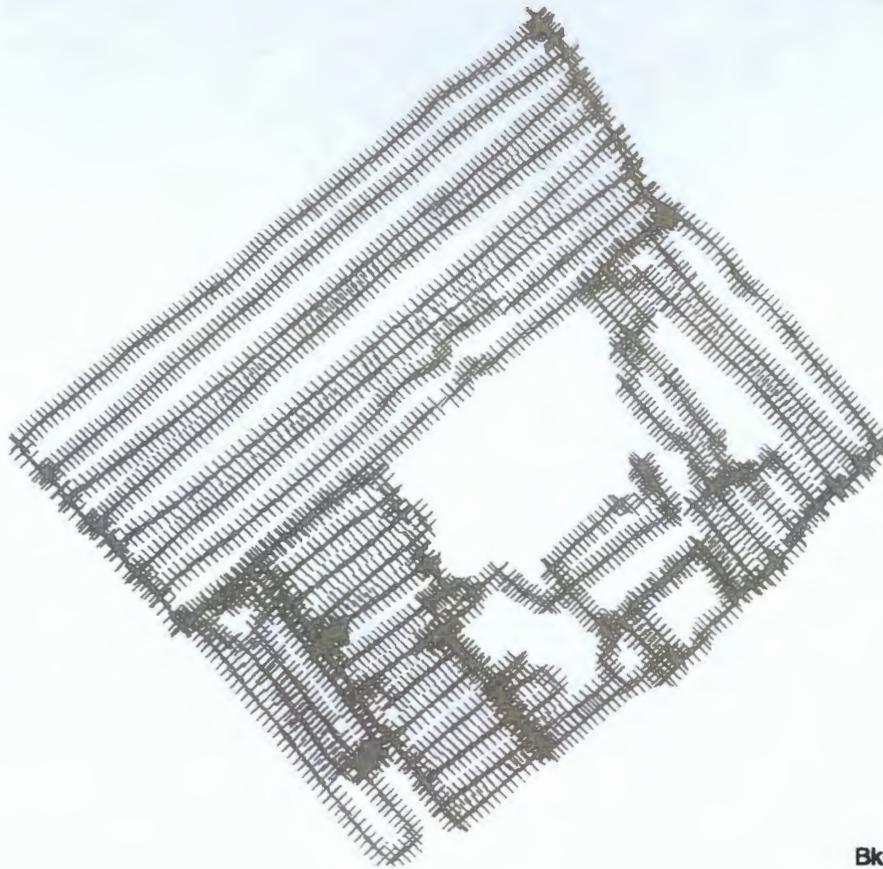
Thanks. Clay



MO-425-426
aging Pile.doc (1

Staging Pile Area for Demolition of MO-425, MO-426 and Other Nearby Structures





Site View

Copy

Bkg Location
40 meters S
1166 cpm



Legend

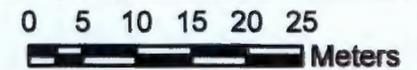
NET CPM

- X <1749
- 1749 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N179
Number of Data Pnts: 2447
Type of Survey: gamma
Max GCPM: 1533
Avg Bkg CPM: 1166
Survey Date: 6/27/2012
Area Surveyed: 3,148 m²
Project File: ESRFRM120108
Pdf File: ESRFRM120108C

**100N D4
MO-425 / 426 Area
GPERS Radiological Survey
Gamma Track Map**



**EBERLINE
SERVICES
HANFORD, INC.**

Survey Map Prepared By Bruce Coomer, ESI

^WCH Document Control

From: McCurley, Clay D
Sent: Thursday, May 31, 2012 7:34 AM
To: ^WCH Document Control
Cc: Trevino, Ruben A; Flannery, Michael (Mike) D; Bigby, Daniel A; Warren, David J; Faust, Toni L
Subject: 1103-N (MO-415), MO-100 and MO-427 Demolition - Ecology Approval of Staging Pile Locations

Attachments: 100-N Mobile Offices Staging Piles.doc

Please print the attachment and chron with this email per the subject. Let me know which chron number has been applied.

Thanks. Clay

From: Elliott, Wanda (ECY) [<mailto:wel461@ECY.WA.GOV>]
Sent: Thursday, May 31, 2012 7:17 AM
To: McCurley, Clay D
Subject: RE: 1103-N (MO-415) Demolition - Ecology Approval of Staging Pile Locations

I approve.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: McCurley, Clay D [<mailto:cdmccurl@wch-rcc.com>]
Sent: Thursday, May 31, 2012 7:02 AM
To: Elliott, Wanda (ECY)
Cc: Boyd, Alcia (ECY); Warren, David J; Trevino, Ruben A; Flannery, Michael (Mike) D; Bigby, Daniel A; Allen, Mark E; Guercia, Rudolph F; Faust, Toni L
Subject: 1103-N (MO-415) Demolition - Ecology Approval of Staging Pile Locations

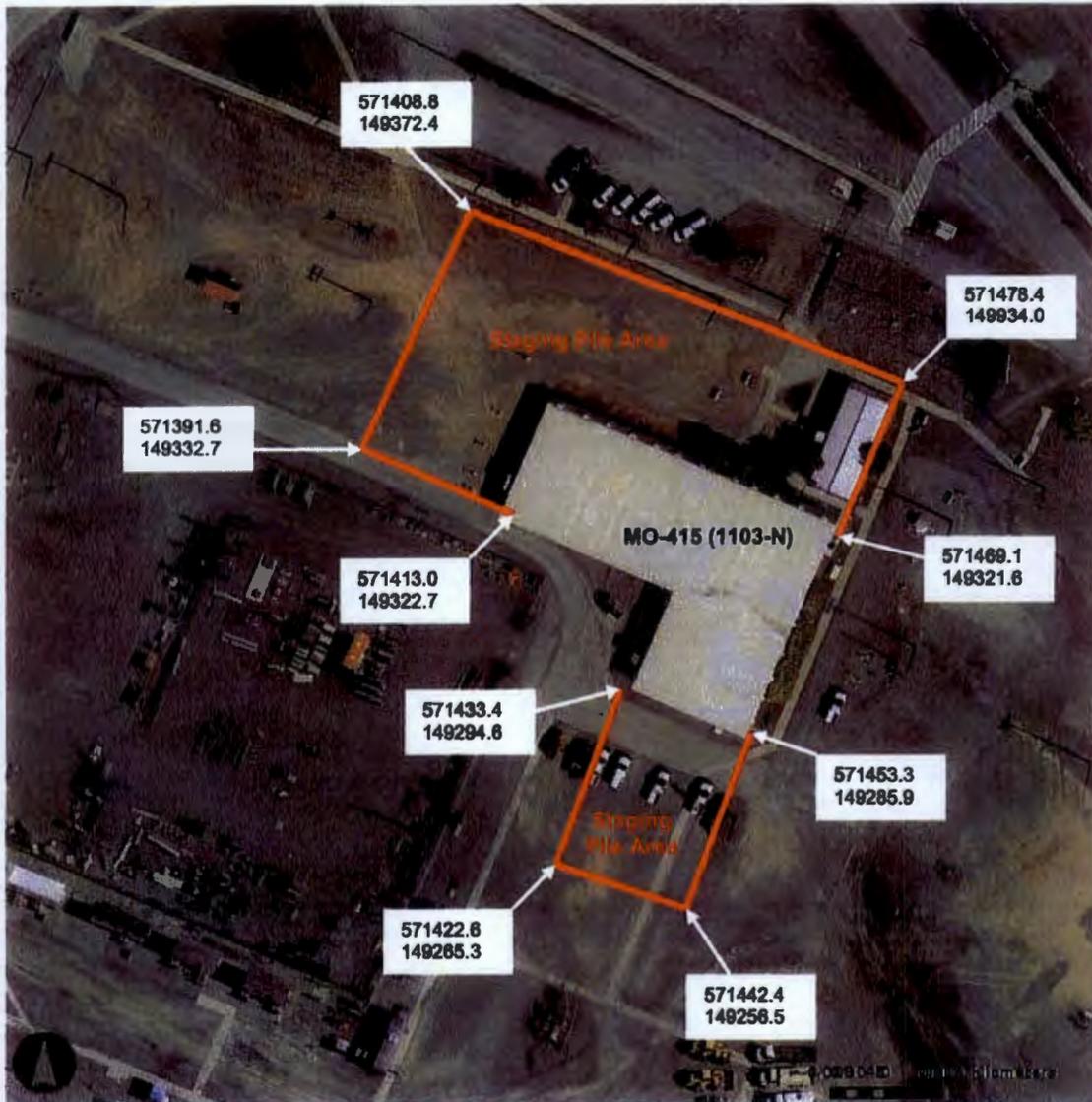
Wanda. We will soon be starting the demolition of our 1103-N (MO-415) office building and other structures in its immediate vicinity (e.g., MO-100, MO-427). The size and number of structures we will be simultaneously demolishing is sufficiently large that maintaining the debris within the footprint of the buildings or direct loading during demolition may not be practical. These structures are also outside the 100-N AOC. We have identified areas adjacent these structures (see attachment) that we would like to reserve for staging piles of demolition debris if needed. As specified in section 4.2.3.2 of the *Removal Action Work Plan for 100-N Area Ancillary Facilities* (DOE/RL-2002-70, Rev. 3), we are requesting Ecology's approval to use all or portions of these areas for staging piles. Please contact me if you have any questions.

Thanks. Clay



100-N Mobile
Offices Staging P...

Staging Pile Area for MO-415 (1103-N) and Other Nearby Mobile Offices



Attachment 2

167414

^WCH Document Control

From: Warren, David J
Sent: Monday, September 10, 2012 8:42 AM
To: ^WCH Document Control
Subject: FW: Visual Inspection of the MO-765 and HS-007/008 Mobile Trailers

Attachments: MO-765-HS-007.008 Visual Inspection.doc; MO-765 Evaluation.doc; ESRFRM120036BC.pdf; ESRFRM120036GC.pdf

Please CHRON this e-mail and attachments as Visual Inspection of the MO-765 and HS-007/008 mobile trailer footprints. Please advise me of the CHRON #. Thanks.

Dave Warren
539-6040

From: Warren, David J
Sent: Monday, September 10, 2012 8:14 AM
To: Allen, Mark E
Subject: Visual Inspection of the MO-765 and HS-007/008 Mobile Trailers

At approximately 1000 hours on 3/13/12, the footprints of the MO-765 and HS-007/008 mobile office trailers were visually inspected for signs of staining or anomalous items. One stained area, presumed to be darker colored soil, was observed in the footprint of the former location of the MO-765. That stain was sampled and the subsequent results indicated no constituents detected above the Remedial Action Goals (RAGs). Analysis of the sample results are attached in a white paper below below. All other areas were observed to be free of any stained soils or anomalies that would be indicative of chemical or petroleum contamination. The post demo GPERS survey for MO-765 (Performed 3/7/2012) didn't identify contamination, nor was any expected since the structure was not radiologically contaminated. It should be noted that both MO-765 and HS-007/008 were relocated to the 1143-N area for demolition following the removal of the 1143-N building. For this reason there are no post demo GPERS surveys for HS-007/008 as the facilities were not demolished in place. Please see the attached word file for photographs that were taken during the inspection and PDF file of the GPERS survey(s). I'll CHRON this e-mail and attachments for future use as reference for closure documentation. Feel free to contact me if you have any questions. Thanks.

David Warren
100-N D4 Environmental Project Lead
WCH
539-6040



MO-765-HS-007.008 Visual Inspe..



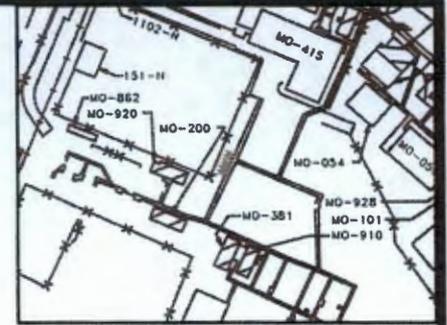
MO-765 Evaluation.doc (851 k



ESRFRM120036 BC.pdf (810 KB)



ESRFRM120036 GC.pdf (811 KB)



Site View

Bkg Location
287 meters ESE
1266 cpm →

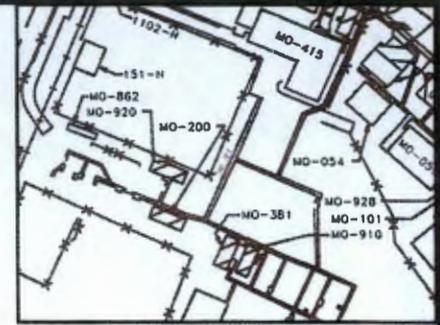
Copy

Legend	Summary Statistics
NET CPM	Coverage File: N067A
X <1899	Number of Data Pnts: 142
● 1899 - 5000	Type of Survey: gamma
● 5000 - 10000	Max GCPM: 1833
● 10000 - 25000	Avg Bkg CPM: 1266
● 25000	Survey Date: 3/7/2012
	Area Surveyed: 48 m ²
	Project File: ESRFRM120036G
	Pdf File: ESRFRM120036GC

100N D4 MO-765 GPERS Radiological Survey Gamma Track Map



Survey Map Prepared By Bruce Coomer, ESI



Site View



Bkg Location
287 meters ESE
409 cpm →

Copy

Legend

- NET CPM
- X <813
- 813 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N067A
Number of Data Pnts: 13
Type of Survey: beta
Max GCPM: 567
Avg Bkg CPM: 409
Survey Date: 3/7/2012
Area Surveyed: 48 m²
Project File: ESRFRM120036B
Pdf File: ESRFRM120036BC

**100N D4
MO-765
GPERS Radiological Survey
Beta Track Map**

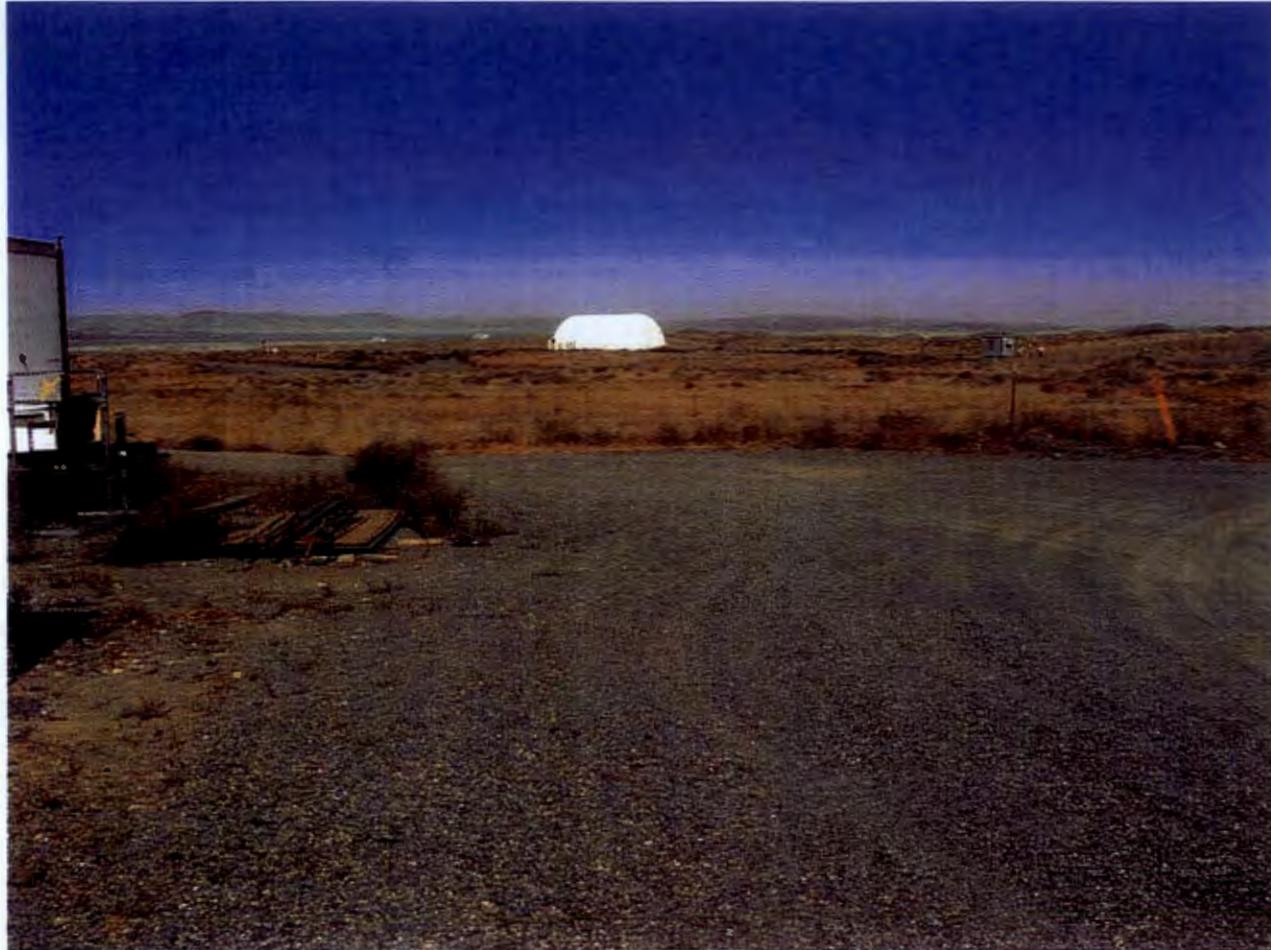


Survey Map Prepared By Bruce Coomer, ESI

MO-765 and HS-007/008 Removal Visual Inspection Photographs



MO-765 Footprint Looking North (Note darker colored soil in center of photo)



HS-007/008 Footprint Looking Northeast

Evaluation of MO-765 Footprint Soil Sample

Introduction

On May 7, 2012, a soil sample was collected from a stained area that had been identified in the footprint of former MO-765 (Figure 1). The sample (J1P1X9) was submitted for metals, polychlorinated biphenyl and total petroleum hydrocarbon laboratory analyses to evaluate if the stained material contained contaminants above the remedial action goals for direct exposure and make a decision concerning whether or not this material may remain in place or require removal as specified in the *Removal Action Work Plan for 100-N Area Ancillary Facilities* (DOE-RL 2012).

Data Evaluation

Analytical results for this soil sample (Tables 1 and 2) were conservatively compared against the applicable cleanup criteria for soil as presented in the *Remedial Design Report/Remedial Action Work Plan for the 100-N Area* (DOE-RL 2006). An evaluation of these results (Table 3) show that residual contaminant concentrations in the soil do not preclude any future uses (as bounded by the rural-residential scenario) and allow for unrestricted use of shallow zone soils (i.e., surface to 4.6 m [15 ft] deep). The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.

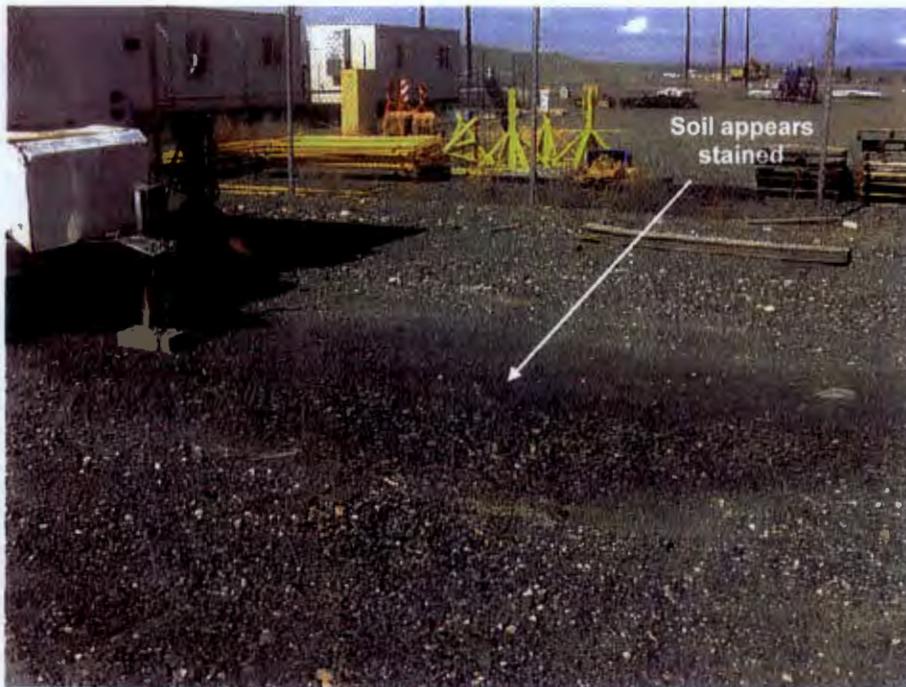


Figure 1. View of stained soil where MO-765 was formerly located (facing west).

Evaluation of MO-765 Footprint Soil Sample

Table 1. Inorganic Sample Summary Table.

Sample Number	Sample Date	Aluminum			Antimony			Arsenic			Barium			Beryllium			Boron		
		mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL
J1P1X9	5/7/12	4810		4.55	0.545	U	0.545	1.43		0.909	54.5		0.455	0.154	B	0.182	1.39	B	1.82

Sample Number	Sample Date	Cadmium			Calcium			Chromium			Cobalt			Copper			Iron		
		mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL
J1P1X9	5/7/12	0.104	B	0.182	8550		90.9	7.59		0.182	4.55		1.82	10.8		0.909	15300		1.82

Sample Number	Sample Date	Lead			Magnesium			Manganese			Mercury			Molybdenum			Nickel		
		mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL
J1P1X9	5/7/12	2.93		0.455	3700		68.2	203		4.55	0.024	U	0.024	0.526	B	1.82	5.77		3.64

Sample Number	Sample Date	Potassium			Selenium			Silicon			Silver			Sodium			Vanadium		
		mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL
J1P1X9	5/7/12	939		364	0.273	U	0.273	365		1.82	0.182	U	0.182	2970		45.5	49		2.27

Sample Number	Sample Date	Zinc		
		mg/kg	Q	PQL
J1P1X9	5/7/12	37.6		9.09

B = Detected below reporting limit
 Q = qualifier
 PQL = practical quantitation limit
 U = undetected

Table 2. Polychlorinated Biphenyl and Oil and Grease Sample Summary Table.

Sample Number	Sample Date	Aroclor-1061			Aroclor-1221			Aroclor-1232			Aroclor-1242			Aroclor-1248			Aroclor-1254		
		ug/kg	Q	PQL															
J1P1X9	5/7/12	19.4	U	19.4	5.94	J	19.4												

Sample Number	Sample Date	Aroclor-1260			Aroclor-1262			Aroclor-1268			Oil and grease		
		ug/kg	Q	PQL	ug/kg	Q	PQL	ug/kg	Q	PQL	mg/kg	Q	PQL
J1P1X9	5/7/12	19.4	U	19.4	19.4	U	19.4	19.4	U	19.4	87.7		21.4

Evaluation of MO-765 Footprint Soil Sample

Table 3. Comparison of the Stained Soil Sample Concentrations to Soil Action Levels

COPC	Result (mg/kg)	Soil Cleanup Levels (mg/kg) ^a			Does the Result Exceed RAGs?
		Direct Exposure	Protective of Groundwater	River Protection	
Arsenic	1.43	20 ^b	20 ^b	20 ^b	No
Barium	54.5	5,600	200	400	No
Beryllium	0.154 (<BG)	10.4 ^d	1.51 ^b	1.51 ^b	No
Boron ^e	1.39 (<BG)	7,200	320	-- ^f	No
Cadmium ^c	0.104 (<BG)	13.9 ^d	0.81 ^b	0.81 ^b	No
Chromium, total	7.59	80,000	18.5 ^b	18.5 ^b	No
Cobalt	4.55	24	15.7 ^b	-- ^f	No
Copper	10.8	2,960	59.2	22.0 ^b	No
Lead	2.93	353	10.2 ^b	10.2 ^b	No
Manganese	203	3,760	512 ^b	512 ^b	No
Molybdenum ^e	0.526 (<BG)	400	8	-- ^f	No
Nickel	5.77	1,600	19.1 ^b	27.4	No
Vanadium	49	560	85.1 ^b	-- ^f	No
Zinc	37.6	24,000	480	67.8 ^b	No
Oil and grease	87.7	200	200	200	No

^a Lookup values and RAGs obtained from the 100 Area RDR/RAWP (DOE-RL 2006) unless otherwise noted.

^b Where cleanup levels are less than background, cleanup levels default to background per WAC 173-340-700[4][d] (1996). The arsenic cleanup level of 20 mg/kg has been agreed to by the Tri-Party Agreement Project managers (DOE-RL 2006).

^c Hanford Site-specific background value is not available; it was not evaluated during background study. Value used is from *Natural Background Soil Metals Concentrations in Washington State* (Ecology 1994).

^d Carcinogenic cleanup level calculated based on the inhalation exposure pathway (WAC 173-340-750[3], 1996) using an airborne particulate mass-loading rate of 0.0001 g/m³ (*Hanford Guidance for Radiological Cleanup* [WDOH 1997]).

^e No Hanford Site-specific or Washington State background value is available.

^f No parameters (bioconcentration factors or ambient water quality criteria values) are available from the Washington State Department of Ecology Cleanup Levels and Risk Calculations database or other databases to calculate cleanup levels (WAC 173-340-730(3)(a)(iii), 1996 [Method B for surface waters]).

-- = not applicable

BG = background

COPC = contaminant of potential concern

EPA = U.S. Environmental Protection Agency

RAG = remedial action goal

RDL = required detection limit

RDR/RAWP = Remedial Design Report/Remedial Action Work Plan for the 100 Area

RESRAD = RESidual RADioactivity (dose assessment model)

WAC = Washington Administrative Code

References

DOE-RL, 2006, *Remedial Design Report/Remedial Action Work Plan for the 100-N Area*, DOE/RL-2005-93, Rev. 0, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE-RL, 2012, *Removal Action Work Plan for 100-N Area Ancillary Facilities*, DOE/RL-2002-70, Rev. 3, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Ecology, 1994, *Natural Background Soil Metals Concentrations in Washington State*, Publication No. 94-115, Washington State Department of Ecology, Olympia, Washington.

WAC 173-340, 1996, "Model Toxics Control Act -- Cleanup," *Washington Administrative Code*.

WDOH, 1997, *Hanford Guidance for Radiological Cleanup*, WDOH/320-015, Rev. 1, Washington State Department of Health, Olympia, Washington.