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United States Environmental Protection Agency
Region 4

OTIE
Oneida Total Integrated Enterprises

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

35TH AVENUE REMOVAL INVESTIGATION
BIRMINGHAM, ALABAMA
JEFF CROWLEY, ON-SCENE COORDINATOR

FIELD SAMPLING LOGBOOK

Book ____ **of** ____

Inclusive Dates: 11/19/12 - 11/20/12

List of Sampling Team in logbook:

Name	Initials	Organization/Duties
(b) (6)		OTIE, Team Leader
		OTIE
		OTIE

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Sampling Procedures and Methodology

Unless specified elsewhere in this logbook, all soil samples will be collected in accordance with the EPA Science and Ecosystem Division (SESD) Field Branches Quality System and Technical Procedures (FBQSTP) Soil Sampling (SESDPROC-300-R2) based on the following design.

The total number of 5-point composite surface soil samples (0-4 inches below ground surface) to be collected from each property will be based on the lot size as follows:

- For residential properties with a total parcel lot size equal to or less than (≤) 5,000 square feet - the front yard and back yards of each property. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may also be collected from the side yard. Aliquots will be collected away from influences with drip lines and burn areas in a five dice configuration (each of the four corners and the center).
- For residential properties with a total parcel lot size greater than (>) 5,000 square feet and ≤ ¼-acre - the property should be divided into two roughly equal surface areas. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may be collected from the side yard with the remainder of the property being divided into two roughly equal surface areas. Aliquots will be collected away from influences including drip lines and burn areas with reasonably equal spacing between aliquots.
- Residential properties over ¼-acre in parcel lot size will be divided into ¼-acre sections. When dividing any such property with a substantial side yard (primarily corner lots), one composite soil sample may be collected from the side yard. Aliquots will be collected away from influences including drip lines and burn areas in a five dice configuration, if possible, with reasonably equal spacing between aliquots.

Grab surface soil samples will be collected from apparent exposure pathways where active play sets are located.

Three-point composite surface soil samples will be collected from distinct vegetable gardens from each residential property.

Samples shall not be collected under paved areas or under stationary fixed structures.

Grab sediment samples will be collected in accordance with EPA SESD FBSTP Sediment Sampling (SESDPROC-200-R2) from any surface water drainage pathways located on individual properties, as directed by the OSC, and in and along the banks of the 34th Street North Ditch.

Each surface soil or sediment sample should be homogenized in a stainless steel bowl. One 8-ounce jar will be filled and the remaining sample material will be placed in zip-top bags for screening. Information identifying the location, sample, and date/time will be inscribed on each jar and zip-top bag.

All sample bags will be screened for metals in accordance with SESD FBQSTP Field XRF Measurement (SESDPROC-107-R2) using a Niton XRF. The sample will be dried before sieving or analysis is performed. Once the sample has dried, the sample will be divided into two subsamples; one subsample will be sieved through a #10 screen (2 mm) and the other will be left unsieved. Once separated into sieved and unsieved samples, the zip-top bag will be compressed by folding over the excess plastic and removing as much air and space from the sample as possible. The XRF will be placed directly on the exterior of the compressed sample in the plastic zip-top bag to measure metals concentrations. Following XRF screening, the unsieved portion of the sample material will be containerized into one 8-ounce jars and the sieved portion of the sample will be containerized into another 8-ounce jar.

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Based on the site DQOs the 8-ounce jars of surface soil and sediment samples should be submitted to PEL, Tampa, Florida (a NELAC certified laboratory) for low level PAH, and/or TCL SVOC, RCRA metals, PCB, and/or Hexavalent Chromium analysis. RCRA metals will be analyzed from both the sieved and unsieved portions of the sample. All other analysis will be conducted on the unsieved portion.

The location of each aliquot will also be logged in accordance with SESD FBQSTP Global Positioning System (SESDPROC- 110-R3) using a Trimble GPS.

A description of the color and texture of the aliquot material will be recorded in each box.

The ***station ID*** for each location will consist of seven characters, beginning with the six digit Property ID designation for the property followed by a alphabetic letter beginning with "A".

e.g. CV0001A would be the station ID for the front yard 5-pt composite sample collected at the property with Property ID CV0001.

The ***sample ID*** for each sample is the station ID with "CS" (composite soil), "GS" (grab soil), "SD" (sediment), or "SW" (surface water) appended, therefore, the sample ID for this sample would be CV0001A-CS. Co-located duplicates will be designated by appending a "D" to the end of the sample ID. Pan splits will be identified by appending an "SP" to the end of the sample ID.

ADDRESS: (b) (6) PROPERTY ID: CV0660

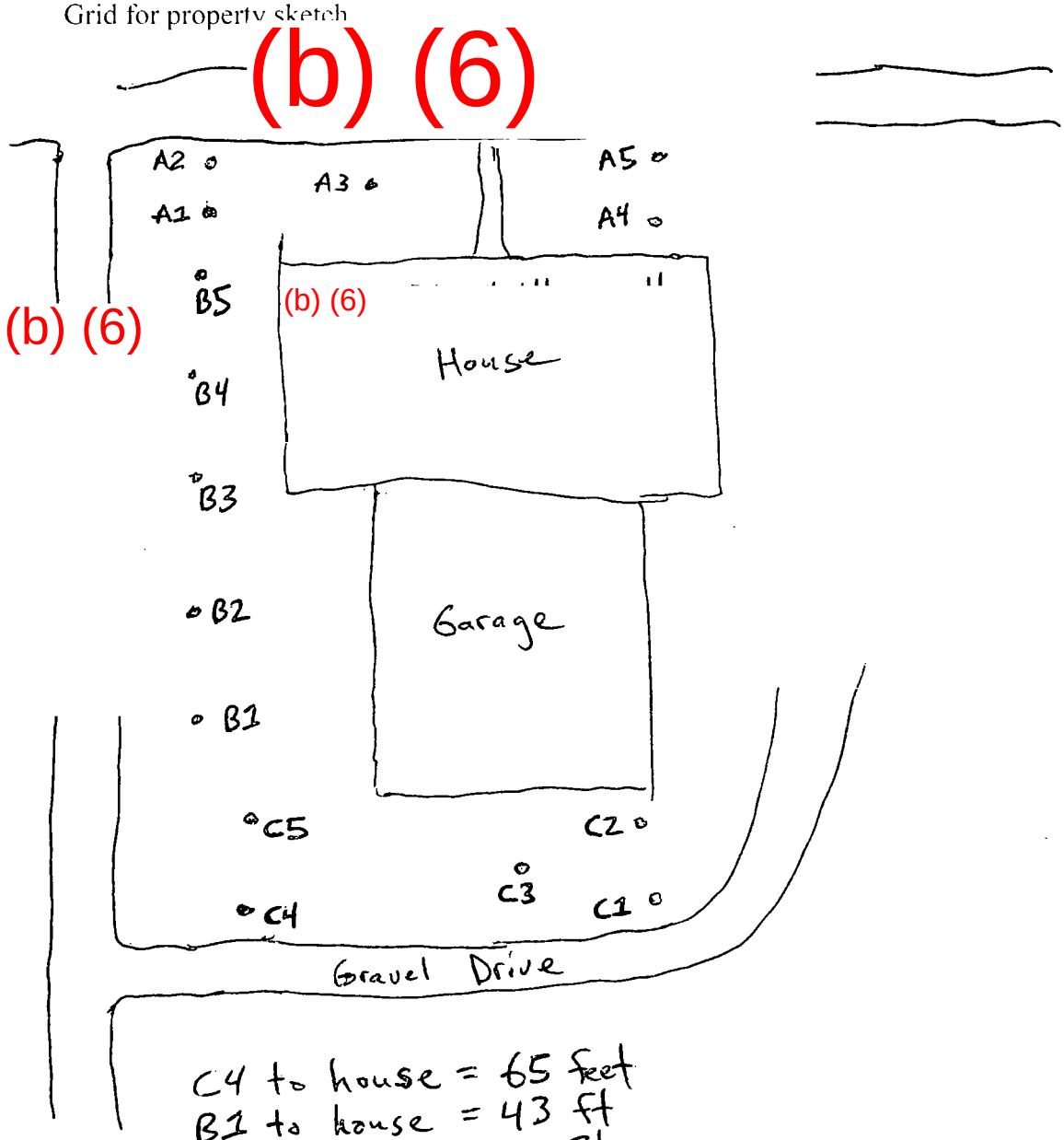
DATE: 11/19/12 ARRIVAL TIME: 1305

Other pertinent information (weather conditions, etc.):

60°F & partly cloudy

PROPERTY COMMENTS:

Grid for property sketch



C4 to house = 65 feet
B1 to house = 43 ft
A2 to house = 22 ft

STATION ID: CV0660C SAMPLE ID: CV0660C-CS

SAMPLE COLLECTION TIME: 1330

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: 20168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55993138 N *Longitude* 86.80100995 W

Media description: Dk brn silty clay damp with coal fragments

Aliquot #2 *Latitude:* 33.55991451 N *Longitude* 86.80098393 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55995315 N *Longitude* 86.80096305 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.56002246 N *Longitude* 86.80092665 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.56000305 N *Longitude* 86.80088747 W

Media description: Same soil

STATION ID: CV0660B SAMPLE ID: CV0660B-CS

SAMPLE COLLECTION TIME: 1415

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Side yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55998383 N *Longitude* 86.80084648 W

Media description: Dk brn silty clay damp with coal fragments

Aliquot #2 *Latitude:* 33.55994829 N *Longitude* 86.80080399 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55991242 N *Longitude* 86.80074992 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55987052 N *Longitude* 86.80069240 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55981713 N *Longitude* 86.80064094 W

Media description: Same soil

ADDRESS: _____ **PROPERTY ID:** _____

DATE: _____ **ARRIVAL TIME:** _____

Other pertinent information (weather conditions, etc.):

_____

PROPERTY COMMENTS:

_____

_____

_____

_____

Grid for property sketch

N. Ruby
11/19/12

STATION ID: CV0660A SAMPLE ID: CV0660A-CS

SAMPLE COLLECTION TIME: 1440

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front yard

Collection: (Composite) or Grab MS/MSD? Y or (N)

Field Duplicate or Split: *Yes or* (*No*) *If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? (Y) or N

Aliquot #1: *Latitude:* 33.55978676 N *Longitude* 86.80060919 W

Media description: Dk brn clayey soil damp

Aliquot #2 *Latitude:* 33.55977275 N *Longitude* 86.80059010 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55973836 N *Longitude* 86.80063625 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55969761 N *Longitude* 86.80070626 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55968478 N *Longitude* 86.80068603 W

Media description: Same Soil

STATION ID: SAMPLE ID:

SAMPLE COLLECTION TIME:

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [ ] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* N *Longitude* W

Media description:

Aliquot #2 *Latitude:* N *Longitude* W

Media description:

Aliquot #3: *Latitude:* N *Longitude* W

Media description:

Aliquot #4: *Latitude:* N *Longitude* W

Media description:

Aliquot #5: *Latitude:* N *Longitude* W

Media description:

11/19/12

(b) (6)

ADDRESS: _____ PROPERTY ID: CV0382A

DATE: 11/19/12 ARRIVAL TIME: 1545

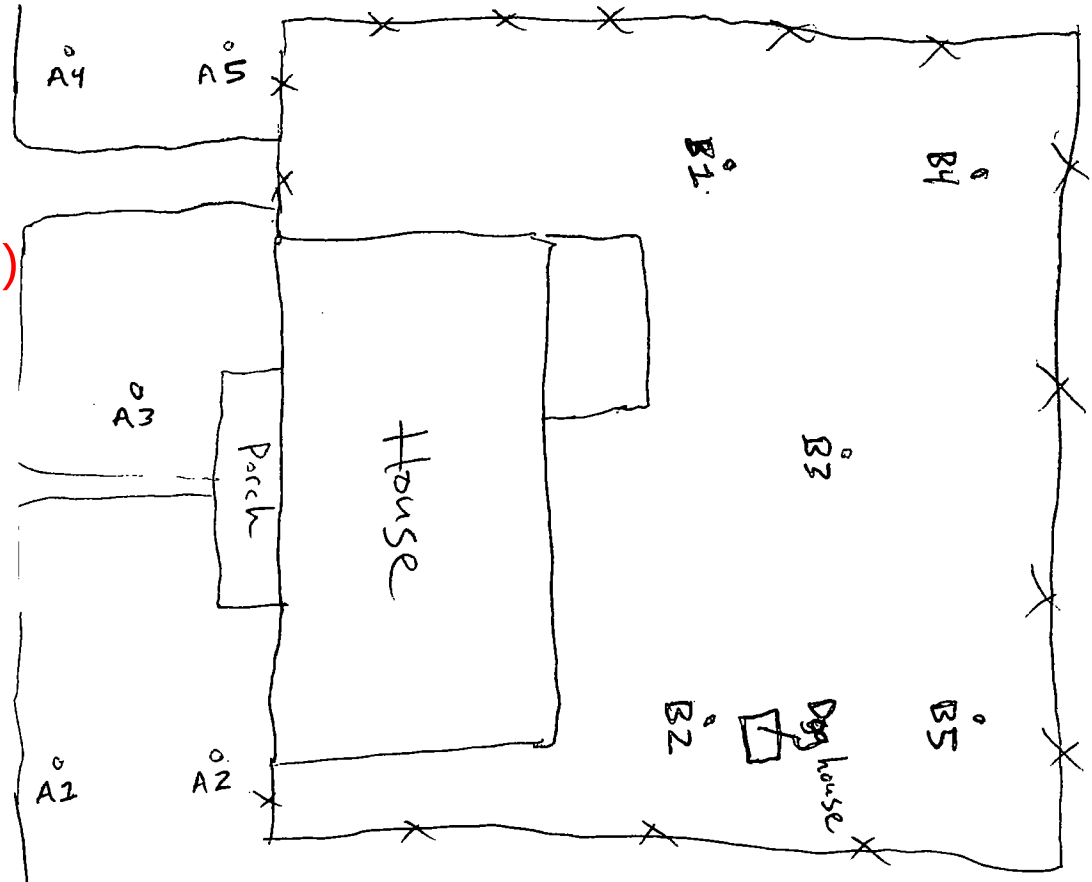
Other pertinent information (weather conditions, etc.):

55°F + clear

PROPERTY COMMENTS:

Grid for property sketch

(b) (6)



A4 to house = 28 feet
B4 to house = 62 feet

STATION ID: CV0382A SAMPLE ID: CV0382A-CS

SAMPLE COLLECTION TIME: 1600

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
Front yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55633512 N *Longitude* 86.79938607 W

Media description: Dk brn silty soil damp

Aliquot #2 *Latitude:* 33.55633711 N *Longitude* 86.79933879 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55640450 N *Longitude* 86.79936716 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.5564564 N *Longitude* 86.79938723 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55645870 N *Longitude* 86.79932296 W

Media description: Same soil

STATION ID: CV0382B SAMPLE ID: CV0382B-CS

SAMPLE COLLECTION TIME: 1615

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
Back yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55642214 N *Longitude* 86.79910321 W

Media description: Dk brn silty soil damp

Aliquot #2 *Latitude:* 33.55636042 N *Longitude* 86.79910990 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55640241 N *Longitude* 86.79904853 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55642964 N *Longitude* 86.79898637 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55635507 N *Longitude* 86.79898217 W

Media description: Same soil

ADDRESS: (b) (6)

PROPERTY ID: CV0691

DATE: 11/20/12

ARRIVAL TIME: 0900

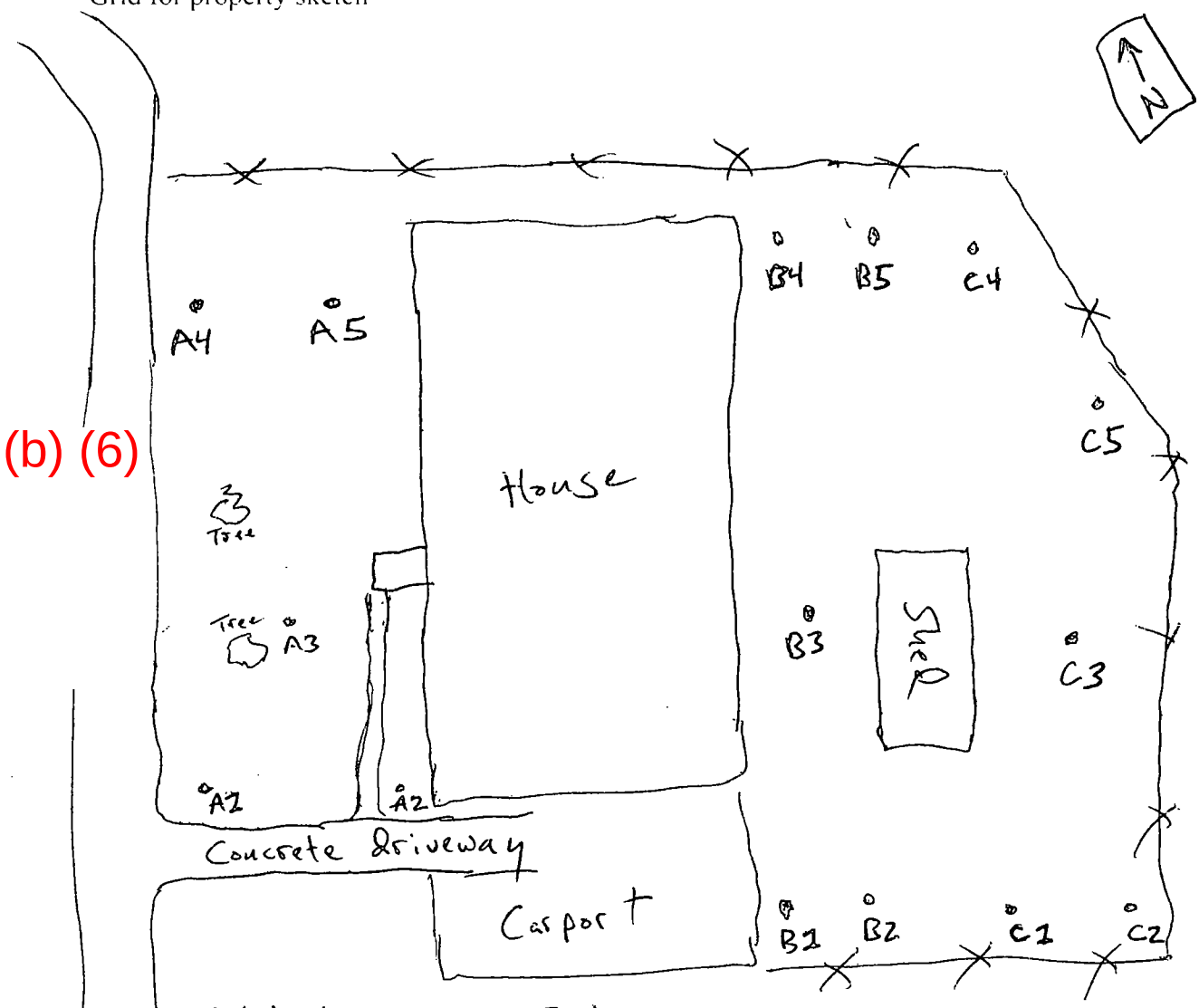
Other pertinent information (weather conditions, etc.):

~50°F + partly cloudy calm

PROPERTY COMMENTS:

No garden, no play set & no drainage area evident

Grid for property sketch



A4 to house = 35 feet
B5 to house = 24 feet
C4 to house = 59 feet

STATION ID: CV0691A SAMPLE ID: CV0691A-CS

SAMPLE COLLECTION TIME: 0920

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
Front yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No* *If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55924188 N *Longitude* 86.80264542 W

Media description: Dk brn clayey soil moist ~~with~~ RS

Aliquot #2 *Latitude:* 33.55929882 N *Longitude* 86.80270435 W

Media description: Same soil

Aliquot #3: *Latitude:* ~~Same so~~ RS 33.55924728 N *Longitude* 86.80271559 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55918605 N *Longitude* 86.80270847 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55923089 N *Longitude* 86.80277872 W

Media description: Same soil

STATION ID: CV0691B SAMPLE ID: CV0691B-CS

SAMPLE COLLECTION TIME: 0930

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
Back yard

Collection: Composite or Grab MS/MSD? Y or N

Field Duplicate or Split: *Yes or No* *If yes, indicate* Duplicate/split sample station ID:

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55940630 N *Longitude* 86.80282053 W

Media description: Dk brn silty loam moist

Aliquot #2 *Latitude:* 33.55944022 N *Longitude* 86.80284752 W

Media description: Dk brn same soil

Aliquot #3: *Latitude:* 33.55939308 N *Longitude* 86.80287120 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55934434 N *Longitude* 86.80290799 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55937783 N *Longitude* 86.80294159 W

Media description: Same soil

ADDRESS: _____ **PROPERTY ID:** _____

DATE: _____ **ARRIVAL TIME:** _____

Other pertinent information (weather conditions, etc.):

_____

PROPERTY COMMENTS:

_____

_____

_____

_____

Grid for property sketch

11/20/12

STATION ID: CV0691C **SAMPLE ID:** CV0691C-CS

SAMPLE COLLECTION TIME: 0940

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back yard

Collection: Composite or Grab **MS/MSD?** Y or N

Field Duplicate or Split: *Yes or No* *If yes, indicate* **Duplicate/split sample station ID:**

GPS Coordinates: Trimble [X] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* 33.55948824 N *Longitude* 86.80289953 W

Media description: Dk brn silty soil damp with coal fragments

Aliquot #2 *Latitude:* 33.55953968 N *Longitude* 86.80296655 W

Media description: Same soil

Aliquot #3: *Latitude:* 33.55948329 N *Longitude* 86.80296472 W

Media description: Same soil

Aliquot #4: *Latitude:* 33.55940921 N *Longitude* 86.80299595 W

Media description: Same soil

Aliquot #5: *Latitude:* 33.55946646 N *Longitude* 86.80301587 W

Media description: Same soil

STATION ID: **SAMPLE ID:**

SAMPLE COLLECTION TIME:

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Collection: Composite or Grab **MS/MSD?** Y or N

Field Duplicate or Split: *Yes or No* *If yes, indicate* **Duplicate/split sample station ID:**

GPS Coordinates: Trimble [ ] Instrument #: Logged? Y or N

Aliquot #1: *Latitude:* N *Longitude* W

Media description:

Aliquot #2 *Latitude:* N *Longitude* W

Media description:

Aliquot #3: *Latitude:* N *Longitude* W

Media description:

Aliquot #4: *Latitude:* N *Longitude* W

Media description:

Aliquot #5: *Latitude:* N *Longitude* W

Media description:

11/20/12

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