

REDACTED

LB 00037

United States Environmental Protection Agency  
Region 4



35<sup>TH</sup> AVENUE REMOVAL INVESTIGATION  
BIRMINGHAM, ALABAMA  
JEFF CROWLEY, ON-SCENE COORDINATOR

FIELD SAMPLING LOGBOOK

Book 2 of 2

Inclusive Dates: 1/24/13 - 1/24/13

List of Sampling Team in logbook:

Name	Initials	Organization/Duties
(b) (6)		<u>STANT / AES</u> , Team Leader
		<u>OTIE</u>

**THIS PAGE LEFT INTENTIONALLY BLANK**



## 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 (SED) 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 ( $\leq$ ) 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). 1
- For residential properties with a total parcel lot size greater than ( $>$ ) 5,000 square feet and  $\leq$  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. 2
- 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. > 2

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 SED 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 34<sup>th</sup> 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 SED 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.

**THIS PAGE LEFT INTENTIONALLY BLANK**

555

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.

(b) (6)

ADDRESS: \_\_\_\_\_ PROPERTY ID: CV0638

DATE: 1/24/13 ARRIVAL TIME: 1250

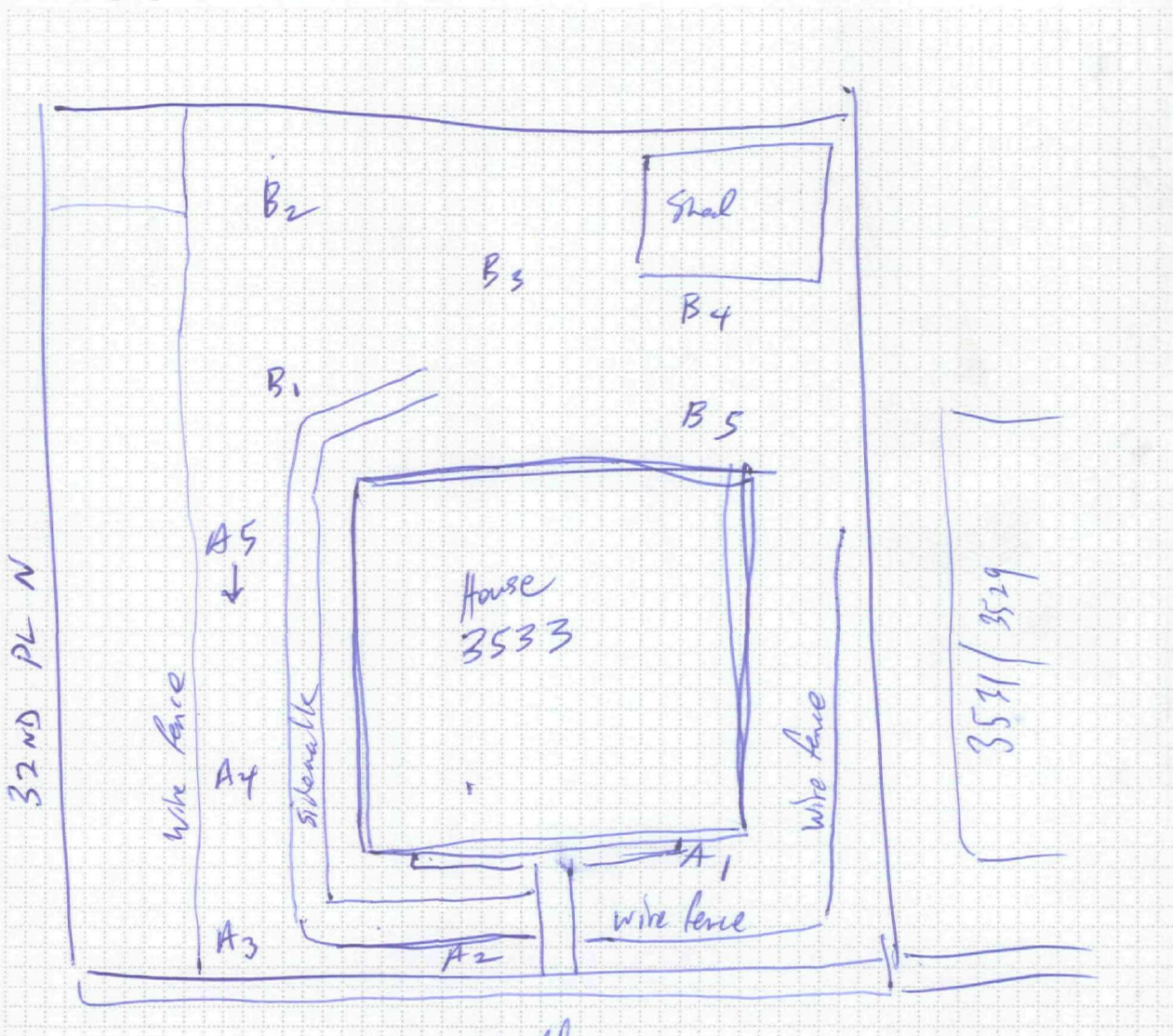
Other pertinent information (weather conditions, etc.):

56°F, mostly sunny, wind NE @ 8

PROPERTY COMMENTS:

Vacant property

Grid for property sketch



Huntsville Rd.



STATION ID:

CV0638AB

SAMPLE ID:

CV0638A-CS-SP

SAMPLE COLLECTION TIME:

1258/1308

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

back yard

Collection: ☒ Composite or ☐ GrabMS/MSD? Y or ☒ N

Field Duplicate or Split:

☒ Yes or ☐ No

If yes, indicate Duplicate/split sample station ID:

CV0638AB

GPS Coordinates: Trimble ☒ Instrument #:

18165

Logged? ☒ or ☐ N

Aliquot #1: Latitude:

33.55806747

N Longitude

86.80184244

W

Media description:

dk brown silt w/ coal fragments

Aliquot #2 Latitude:

33.55800937

N Longitude

86.80173363

W

Media description:

same as above

Aliquot #3: Latitude:

33.55822000

N Longitude

86.80198962

W

Media description:

same as above

Aliquot #4: Latitude:

33.55797075

N Longitude

86.80183236

W

Media description:

same as above

Aliquot #5: Latitude:

33.55803140

N Longitude

86.80189484

W

Media description:

same as above

STATION ID:

CV0638A

SAMPLE ID:

CV0638A-CS-SP

SAMPLE COLLECTION TIME:

1308/1258

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

front &amp; side yard

Collection: ☒ Composite or ☐ GrabMS/MSD? Y or ☒ N

Field Duplicate or Split:

☒ Yes or ☐ No

If yes, indicate Duplicate/split sample station ID:

CV0638A

GPS Coordinates: Trimble ☒ Instrument #:

18165

Logged? ☒ or ☐ N

Aliquot #1: Latitude:

33.55816424

N Longitude

86.80208339

W

Media description:

dk brown silt w/ coal fragments

Aliquot #2 Latitude:

33.55819888

N Longitude

86.80204285

W

Media description:

same as above

Aliquot #3: Latitude:

33.55801234

N Longitude

86.80182700

W

Media description:

same as above

Aliquot #4: Latitude:

33.55818153

N Longitude

86.80194321

W

Media description:

same as above

Aliquot #5: Latitude:

33.55813457

N Longitude

86.80188381

W

Media description:

same as above

(b) (6)

ADDRESS

PROPERTY ID:

040092

DATE:

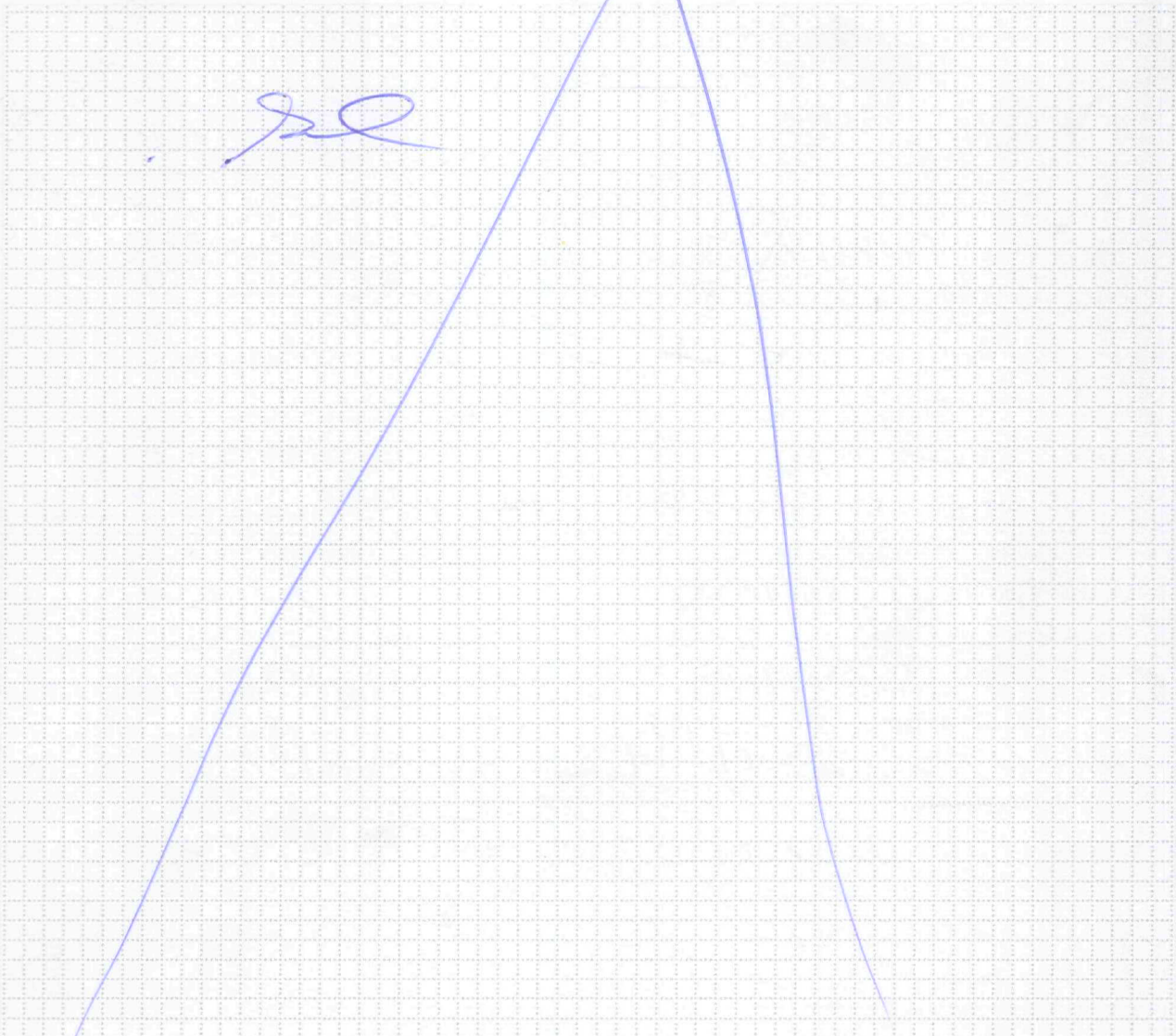
7/24/2013

ARRIVAL TIME:

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

Grid for property sketch





Jul

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:

STATION ID: \_\_\_\_\_ SAMPLE 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: <i>Latitude:</i>	N <i>Longitude</i>	W

Media description:

Aliquot #4: Latitude: N Longitude W

Media description:

Aliquot #5: Latitude: N Longitude W

Media description:

(b) (6)

ADDRESS:

PROPERTY ID: AP0062

DATE:

1/24/13

ARRIVAL TIME:

1415

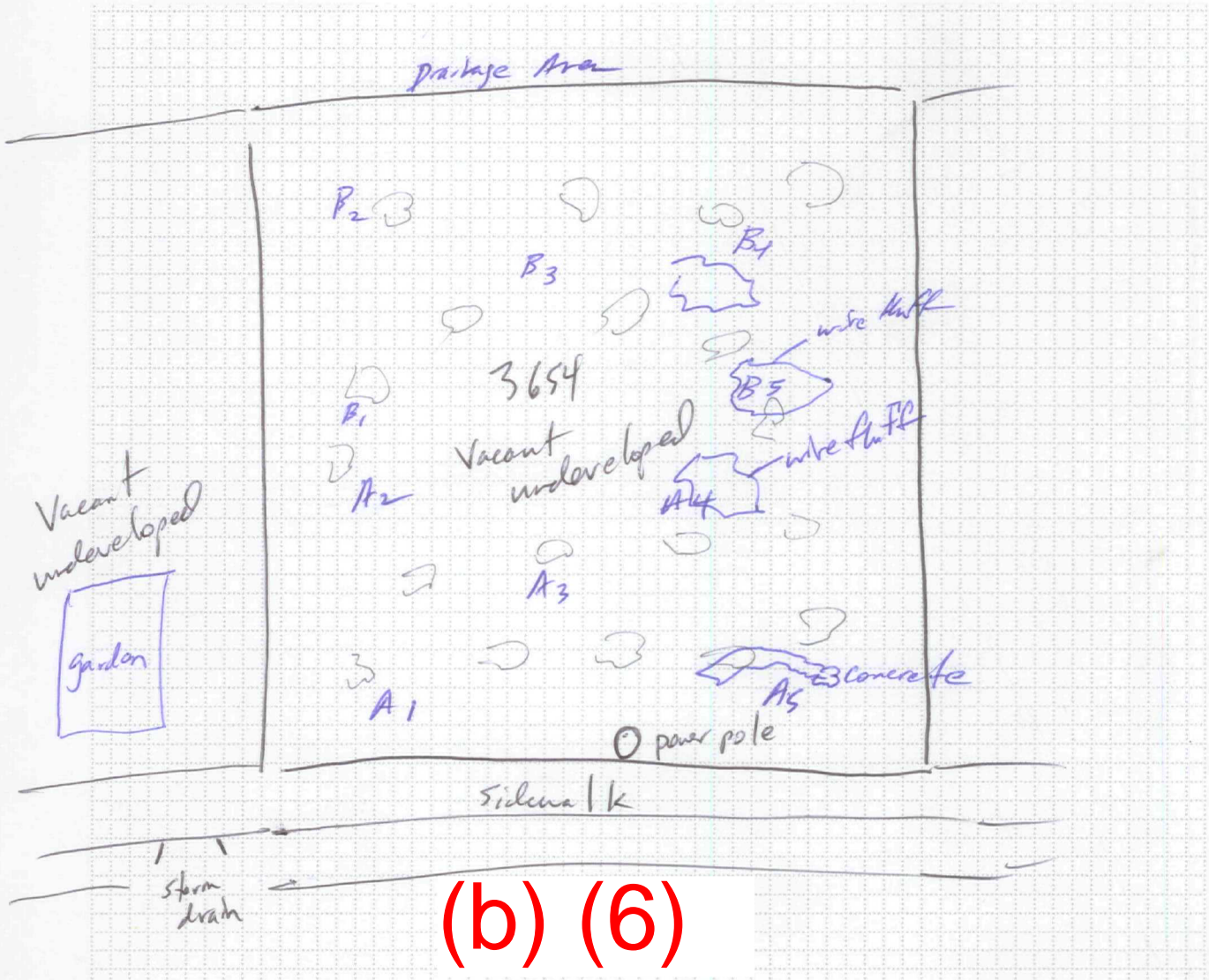
Other pertinent information (weather conditions, etc.):

57°F, mostly sunny, wind calm

PROPERTY COMMENTS:

vacant, heavily wooded lot

Grid for property sketch





STATION ID: HP0062A SAMPLE ID: HP0062A-CS

SAMPLE COLLECTION TIME: 1448

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

front (street side) of lot

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 <input checked="" type="checkbox"/> Instrument #: <u>18165</u>		Logged? <input checked="" type="checkbox"/> or N
Aliquot #1: Latitude: <u>33.56406205</u>	N Longitude <u>86.79211121</u>	W
Media description: <u>dk brwn silt w/ coal fragments</u>		
Aliquot #2 Latitude: <u>33.56423012</u>	N Longitude <u>86.79209661</u>	W
Media description: <u>same as above</u>		
Aliquot #3: Latitude: <u>33.56413270</u>	N Longitude <u>86.79204957</u>	W
Media description: <u>dk brwn silt w/ coal &amp; wire fluff material</u>		
Aliquot #4: Latitude: <u>33.56418493</u>	N Longitude <u>86.79195596</u>	W
Media description: <u>same as above</u>		
Aliquot #5: Latitude: <u>33.56404381</u>	N Longitude <u>86.79195352</u>	W
Media description: <u>large gravel &amp; concrete altered by brwn silt</u>		

STATION ID: HP0062B SAMPLE ID: HP0062B+CS

SAMPLE COLLECTION TIME: 1500

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

back of lot

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 <input checked="" type="checkbox"/> Instrument #: <u>18165</u>		Logged? <input checked="" type="checkbox"/> or N
Aliquot #1: Latitude: <u>33.56424641</u>	N Longitude <u>86.79209737</u>	W
Media description: <u>dk brwn/blk silt w/ sm. coal fragments</u>		
Aliquot #2 Latitude: <u>33.56434858</u>	N Longitude <u>86.79210863</u>	W
Media description: <u>same as above w/ larger coal pieces</u>		
Aliquot #3: Latitude: <u>33.56430618</u>	N Longitude <u>86.79203263</u>	W
Media description: <u>same as above</u>		
Aliquot #4: Latitude: <u>33.56432685</u>	N Longitude <u>86.79193505</u>	W
Media description: <u>dk brwn clayey silt</u>		
Aliquot #5: Latitude: <u>33.56425566</u>	N Longitude <u>86.79192489</u>	W
Media description: <u>dk brwn silt w/ wire fluff</u>		

(b) (6)

ADDRESS: \_\_\_\_\_ PROPERTY ID: HP0150

DATE: 1/24/13 ARRIVAL TIME: \_\_\_\_\_

Other pertinent information (weather conditions, etc.):

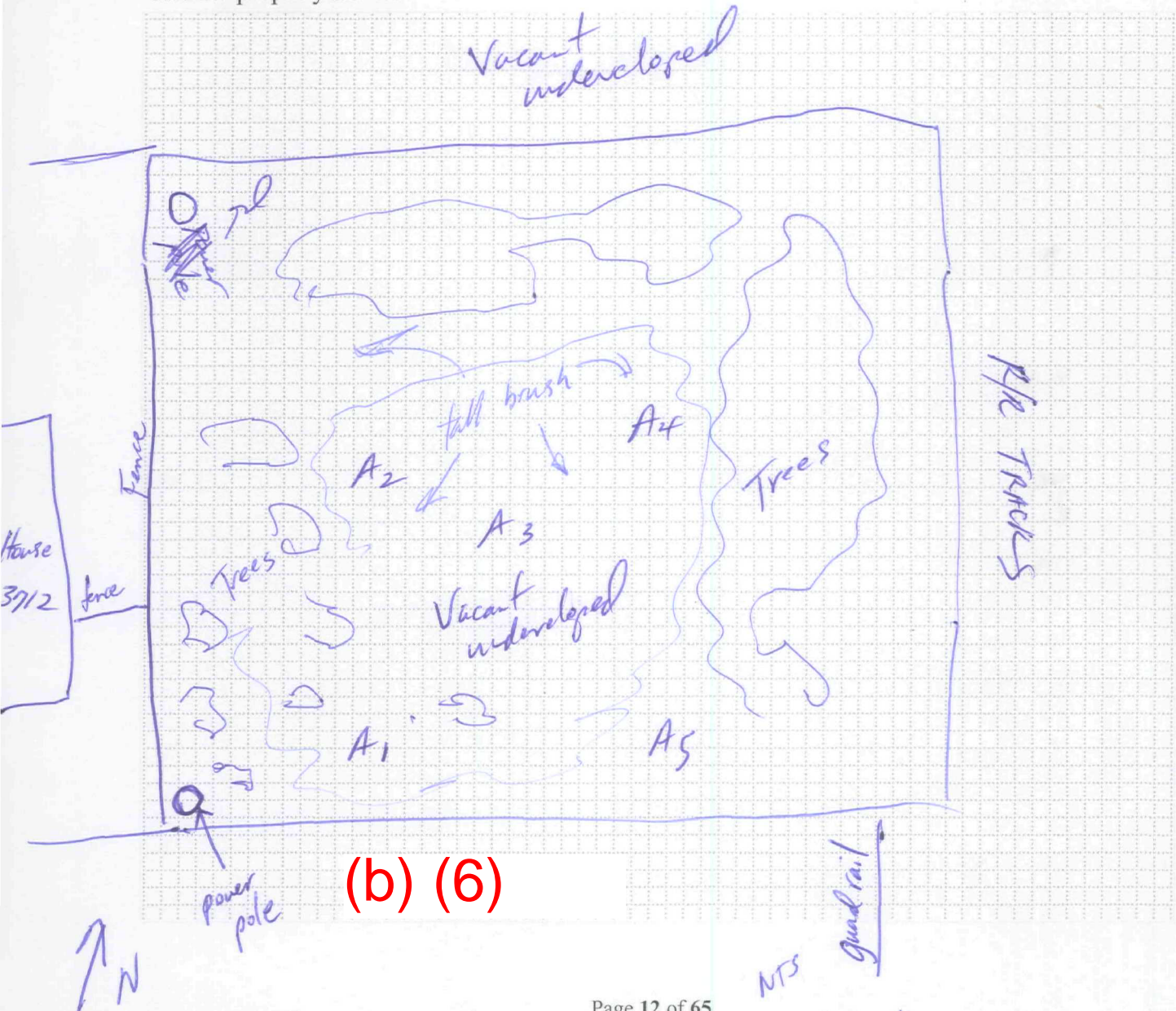
57°F, mostly sunny, wind N @ 0-5

PROPERTY COMMENTS:

Vacant, undeveloped wooded property w/  
dense vegetation.

\* Parcel inadvertently sampled.

Grid for property sketch





STATION ID: HP0150ASAMPLE ID: HP0150A-CSSAMPLE COLLECTION TIME: 1535

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

central portion & <sup>near</sup> cornersCollection: Composite or GrabMS/MSD? Y or NField Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: \_\_\_\_\_GPS Coordinates: Trimble ☒ Instrument #: 18165 Logged? Y or NAliquot #1: Latitude: 33.56484827 N Longitude: 86.79001008 WMedia description: dk brn clayey siltAliquot #2 Latitude: 33.56496340 N Longitude: 86.79002429 WMedia description: same as aboveAliquot #3: Latitude: 33.56490575 N Longitude: 86.78996757 WMedia description: same as aboveAliquot #4: Latitude: 33.56495945 N Longitude: 86.78988362 WMedia description: same as aboveAliquot #5: Latitude: 33.56483445 N Longitude: 86.78987072 WMedia description: dk brn blk clayey silt

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: \_\_\_\_\_

Nothing Follows

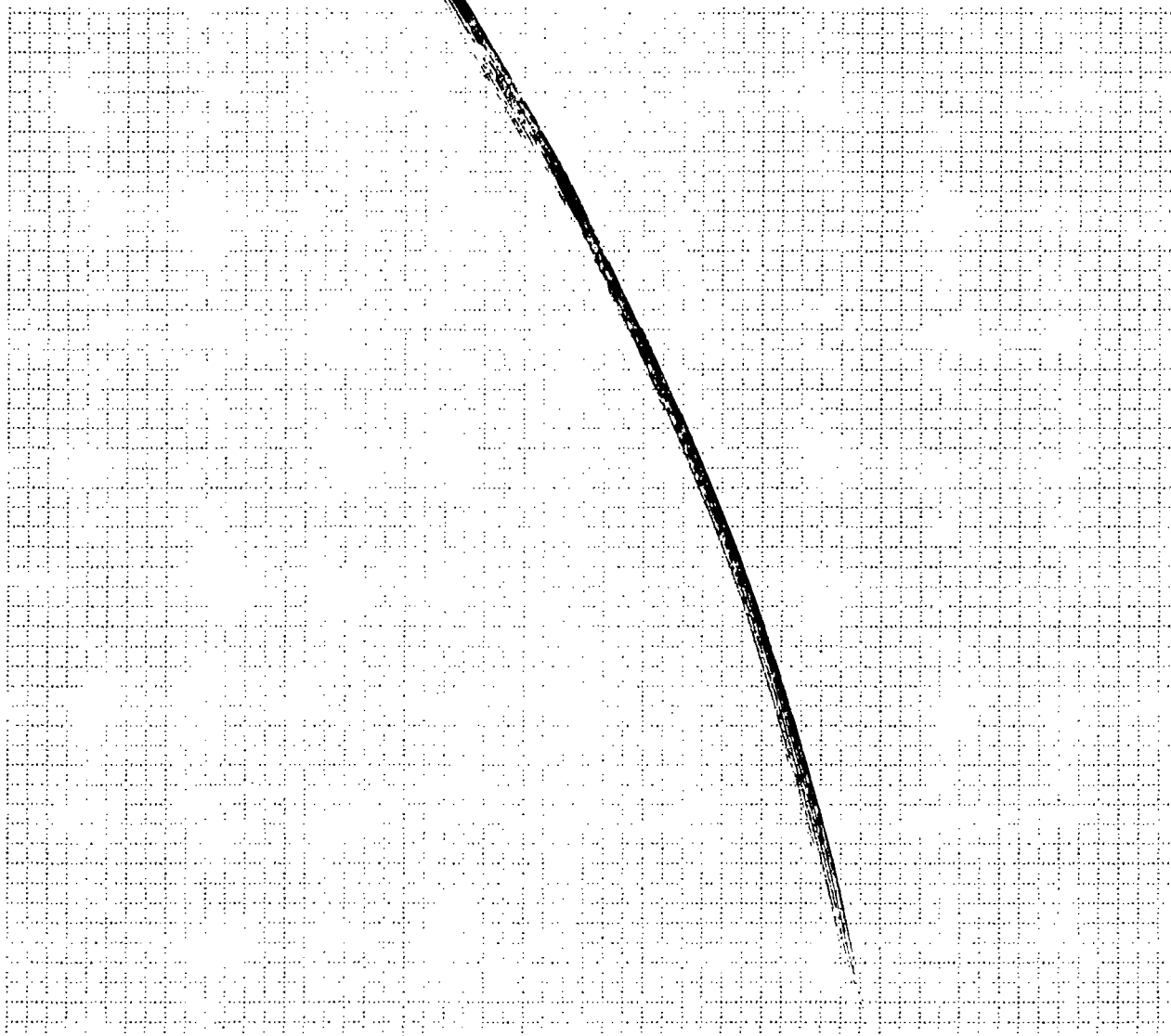
ADDRESS: \_\_\_\_\_ PROPERTY ID: \_\_\_\_\_

DATE: \_\_\_\_\_ ARRIVAL TIME: \_\_\_\_\_

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

Grid for property sketch





The remaining pages in this logbook are  
blank and have not been scanned.