

**REDACTED**

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 1 of 1

Inclusive Dates: 11/19/12 -

**List of Sampling Team in logbook:**

Name	Initials	Organization/Duties
(b) (6)		AES-STACT, Team Leader
		Sampler 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 ( $\leq$ ) 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).
- 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.
- 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 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 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.

(b) (6)

ADDRESS:

PROPERTY ID:

Fm 0269

DATE:

11/19/12

ARRIVAL TIME:

1350

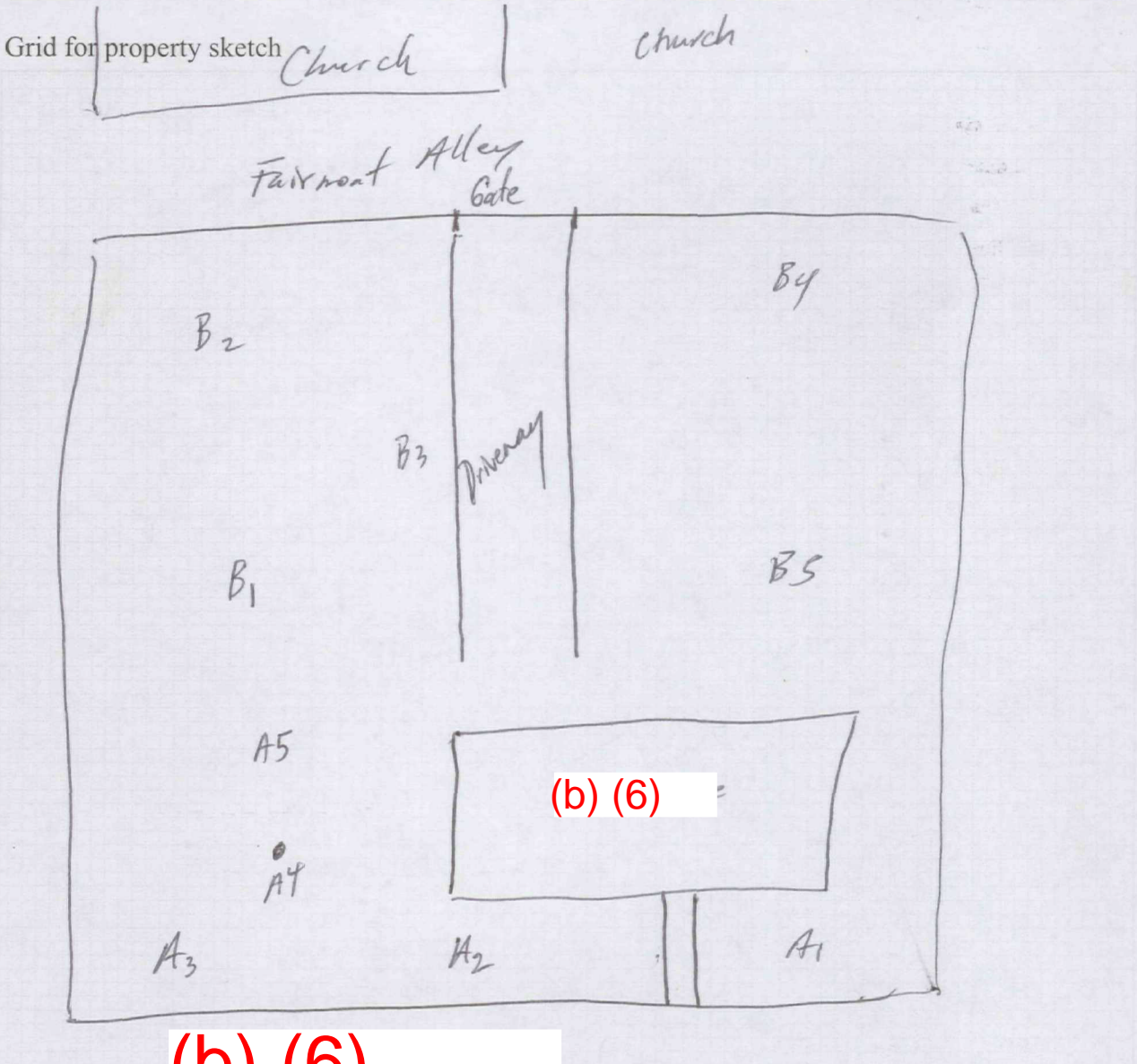
Other pertinent information (weather conditions, etc.):

64° F, humidity 45%, mostly sunny, W.W variable @ 0-5.

PROPERTY COMMENTS:

Resident not at home. Yard slopes significantly downhill from front on (b) (6) (west side) to back yard Fairmont Alley (east side).

Grid for property sketch



(b) (6)

STATION ID: FM0269A

SAMPLE ID: FM0269A-CS-ST

SAMPLE COLLECTION TIME: 1350

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

Front & side yard (north side)

Collection: Composite or Grab

MS/MSD? Y or N

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/Split sample station ID: FM0269A

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u>		Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.563996817</u>	N Longitude: <u>86.81367581</u>	W	
Media description: <u>brown silty clay dry</u>			
Aliquot #2: Latitude: <u>33.56405021</u>	N Longitude: <u>86.81368341</u>	W	
Media description: <u>as above</u>			
Aliquot #3: Latitude: <u>33.56410301</u>	N Longitude: <u>86.81367951</u>	W	
Media description: <u>dark brown silty clay w/ brick &amp; gravel</u>			
Aliquot #4: Latitude: <u>33.56408431</u>	N Longitude: <u>86.81362374</u>	W	
Media description: <u>as above</u>			
Aliquot #5: Latitude: <u>33.56408178</u>	N Longitude: <u>86.81355349</u>	W	
Media description: <u>as above</u>			

STATION ID: FM0269B

SAMPLE ID: FM0269B-CS-SP

SAMPLE COLLECTION TIME: 1410

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

back yard (east)

Collection: Composite or Grab

MS/MSD? Y or N

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/Split sample station ID: FM0269B

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u>		Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.56408492</u>	N Longitude: <u>86.81343824</u>	W	
Media description: <u>dark brown silty clay dry w/ coal like fragments &amp; brick</u>			
Aliquot #2: Latitude: <u>33.56408960</u>	N Longitude: <u>86.81329639</u>	W	
Media description: <u>as above</u>			
Aliquot #3: Latitude: <u>33.56404689</u>	N Longitude: <u>86.81337677</u>	W	
Media description: <u>dark brown silty clay dry</u>			
Aliquot #4: Latitude: <u>33.56397592</u>	N Longitude: <u>86.81329608</u>	W	
Media description: <u>as above</u>			
Aliquot #5: Latitude: <u>33.56399778</u>	N Longitude: <u>86.81342347</u>	W	
Media description: <u>as above</u>			

(b) (6)

ADDRESS: \_\_\_\_\_ PROPERTY ID: Fm0297

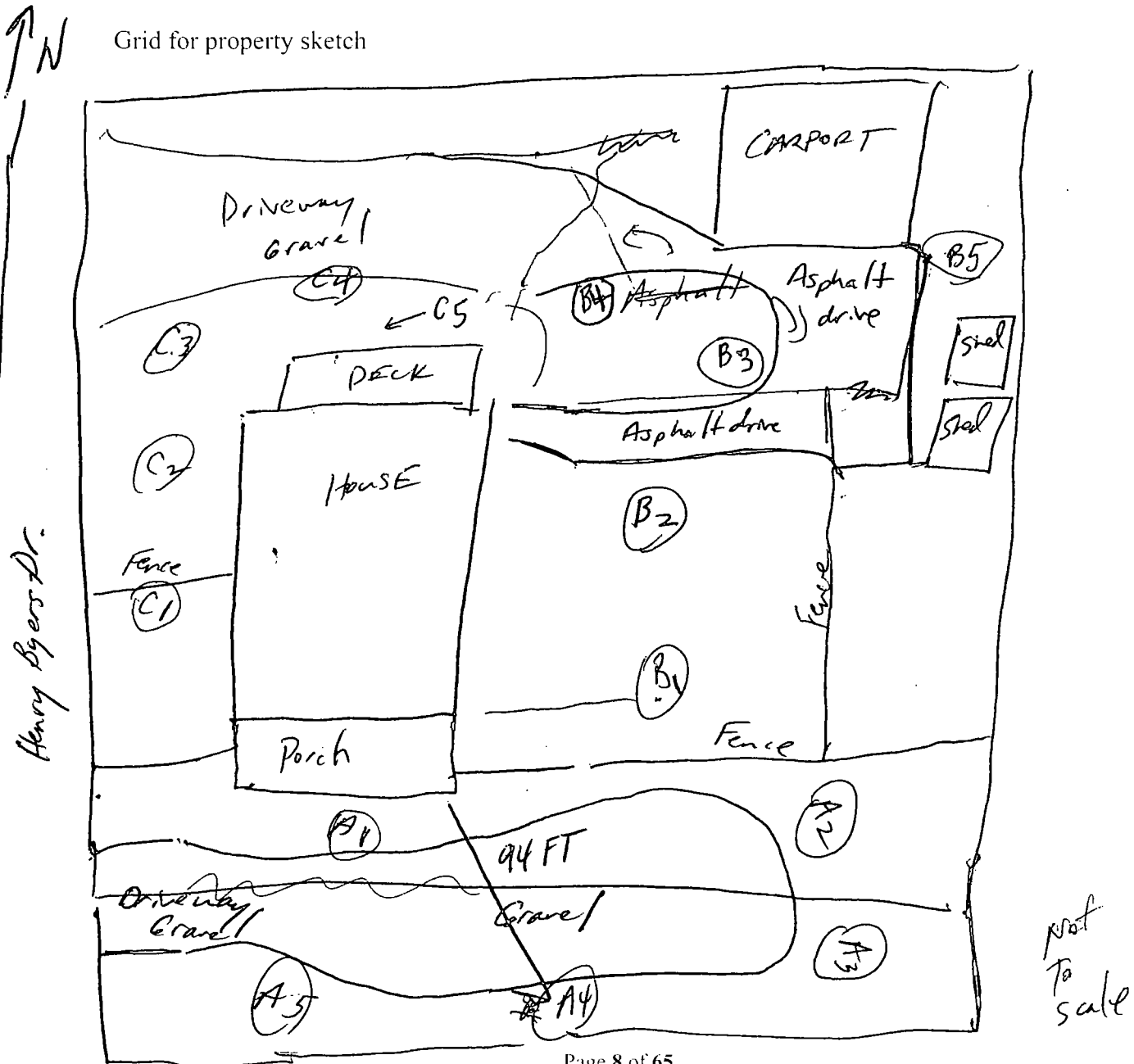
DATE: 11/19/12 ARRIVAL TIME: 1430

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

Vacant residence, significant amount of front yard is gravel driveway, back yard has gravel drive & asphalt drive.

Grid for property sketch



not to scale

STATION ID: Fm0297A SAMPLE ID: Fm0297A-CS-SP

SAMPLE COLLECTION TIME: 1505

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: Fm0297A

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u> Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.56938320</u> N Longitude: <u>86.80308728</u> W	Media description: <u>dark brown silty clay dry</u>
Aliquot #2: Latitude: <u>33.56938005</u> N Longitude: <u>86.80298675</u> W	Media description: <u>tan silty clay dry</u>
Aliquot #3: Latitude: <u>33.56925112</u> N Longitude: <u>86.80289460</u> W	Media description: <u>dark brown silty clay dry w/ some gravel</u>
Aliquot #4: Latitude: <u>33.56919405</u> N Longitude: <u>86.80298544</u> W	Media description: <u>as above</u>
Aliquot #5: Latitude: <u>33.56921542</u> N Longitude: <u>86.80307375</u> W	Media description: <u>as above</u>

STATION ID: Fm0297B SAMPLE ID: Fm0297B-CS-SP

SAMPLE COLLECTION TIME: 1525

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):  
side (east) yard & back (east) 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 <input checked="" type="checkbox"/> Instrument #: <u>16144</u> Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.56947148</u> N Longitude: <u>86.80297264</u> W	Media description: <u>dark brown silty clay</u>
Aliquot #2: Latitude: <u>33.56955419</u> N Longitude: <u>86.80297595</u> W	Media description: <u>as above</u>
Aliquot #3: Latitude: <u>33.56962746</u> N Longitude: <u>86.80294599</u> W	Media description: <u>as above</u>
Aliquot #4: Latitude: <u>33.56946089</u> N Longitude: <u>86.80284921</u> W	Media description: <u>dark brown silty clay dry w/ some gravel</u>
Aliquot #5: Latitude: <u>33.56965625</u> N Longitude: <u>86.80299438</u> W	Media description: <u>as above</u>

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

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

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Grid for property sketch

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STATION ID: 917 <sup>el</sup> FM0279C SAMPLE ID: 917 <sup>el</sup> FM0279C-CS-SP

SAMPLE COLLECTION TIME: 1550

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

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

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: FM0279C

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u> Logged? <u>(Y)</u> or N
Aliquot #1: Latitude: <u>33.56951801</u> N Longitude <u>86.80315149</u> W Media description: <u>dark brown silty clay dry</u>
Aliquot #2 Latitude: <u>33.56961175</u> N Longitude <u>86.80314589</u> W Media description: <u>as above</u>
Aliquot #3: Latitude: <u>33.56967799</u> N Longitude <u>86.80314378</u> W Media description: <u>as above</u>
Aliquot #4: Latitude: <u>33.56970974</u> N Longitude <u>86.80307264</u> W Media description: <u>as above</u>
Aliquot #5: Latitude: <u>33.56965968</u> N Longitude <u>86.80306927</u> W Media description: <u>as above</u>

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 #: <u>917</u> 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: _____

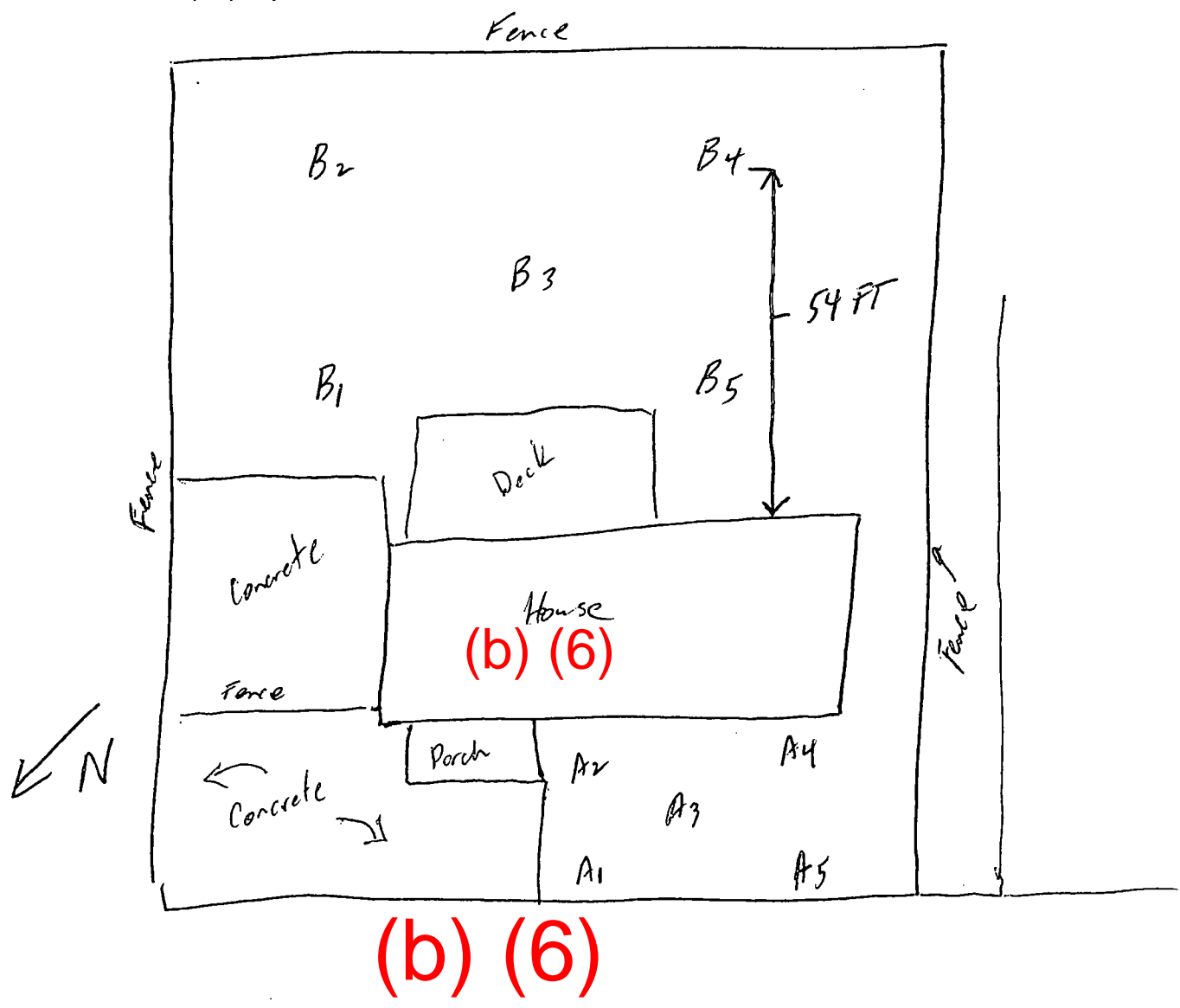
ADDRESS: **(b) (6)** PROPERTY ID: Fm 0131

DATE: 11/20/12 ARRIVAL TIME: 0832

Other pertinent information (weather conditions, etc.):  
49°F, humidity 86%, wind calm, sunny/clear

PROPERTY COMMENTS:  
Resident not at home, Bulk gate unblocked.  
Dogs chained in rear of back yard.  
Small front yard, large back yard  
Yard slopes from **(b) (6)** down hill to house

Grid for property sketch





STATION ID: FM0131A SAMPLE ID: FM0131A-CS-SP

SAMPLE COLLECTION TIME: 0900

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: FM0131A

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u> Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33, 56619369</u> N Longitude: <u>86.81041136</u> W	Media description: <u>dk brown silty clay dry</u>
Aliquot #2 Latitude: <u>33, 56613938</u> N Longitude: <u>86.81039193</u> W	Media description: <u>as above</u>
Aliquot #3: Latitude: <u>33.56615306</u> N Longitude: <u>86.81042923</u> W	Media description: <u>as above</u>
Aliquot #4: Latitude: <u>33.56613075</u> N Longitude: <u>86.81043872</u> W	Media description: <u>as above</u>
Aliquot #5: Latitude: <u>33.56617325</u> N Longitude: <u>86.81045664</u> W	Media description: <u>as above</u>

STATION ID: FM0131B SAMPLE ID: FM0131B-CS-SP

SAMPLE COLLECTION TIME: 0915

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: FM0131B

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>16144</u> Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33, 56602028</u> N Longitude: <u>86.81026733</u> W	Media description: <u>dk brown silty clay dry</u>
Aliquot #2 Latitude: <u>33, 56593031</u> N Longitude: <u>86.81022832</u> W	Media description: <u>as above</u>
Aliquot #3: Latitude: <u>33, 56595400</u> N Longitude: <u>86.81029985</u> W	Media description: <u>tan silty clay dry</u>
Aliquot #4: Latitude: <u>33, 56590762</u> N Longitude: <u>86.81031596</u> W	Media description: <u>tan silty clay dry with strips of asphalt like material</u>
Aliquot #5: Latitude: <u>33, 56599486</u> N Longitude: <u>86.81034941</u> W	Media description: <u>dk brown silty clay dry</u>

45 gravel

(b) (6)

ADDRESS: \_\_\_\_\_

PROPERTY ID: CV0415

DATE: 11/20/12

ARRIVAL TIME: 0940

Other pertinent information (weather conditions, etc.):

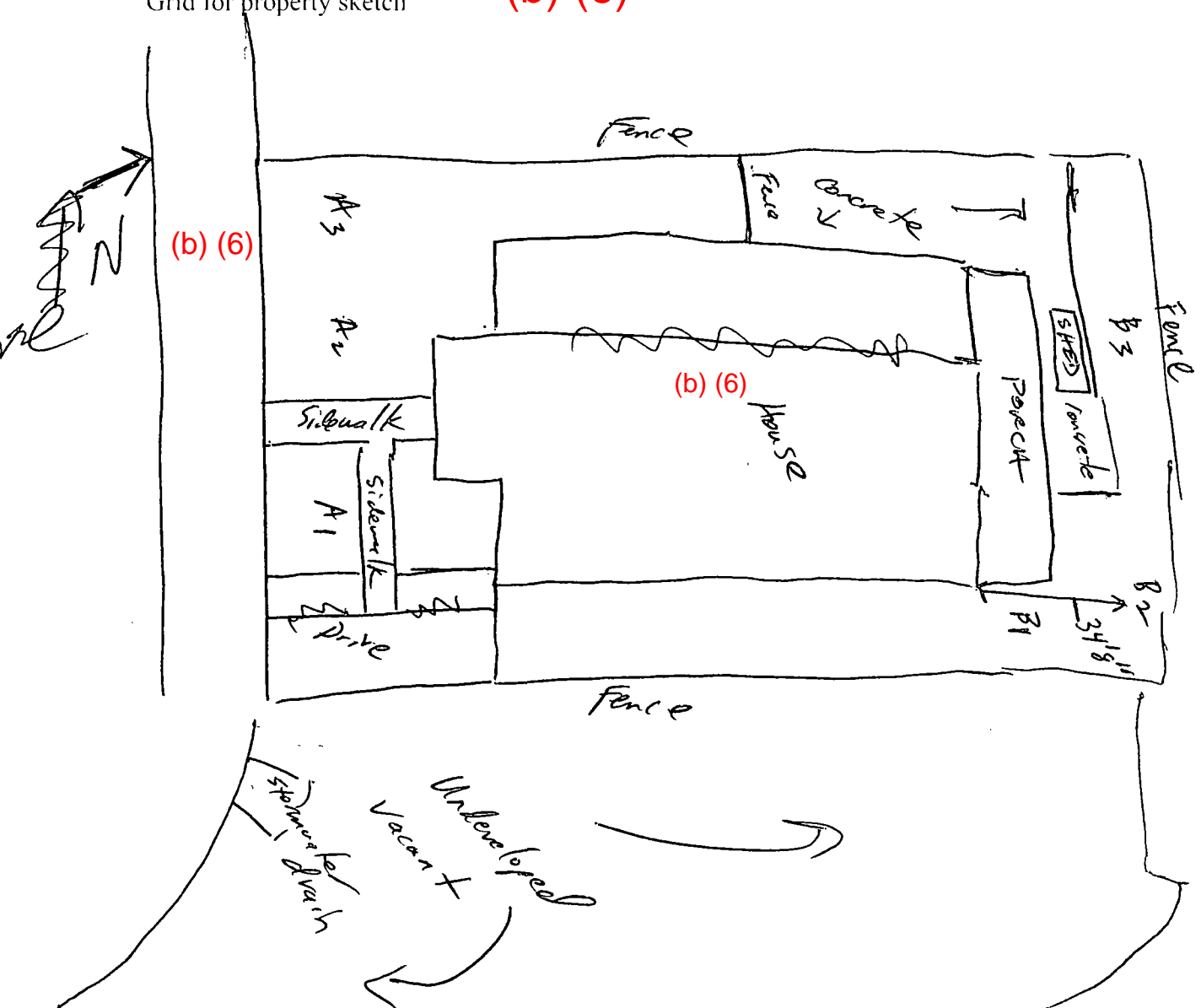
52° F, humidity 85%, wind calm, sunny/clear

PROPERTY COMMENTS:

Resident at home. House occupies most of property.

(b) (6)

Grid for property sketch



STATION ID: CV0415 A SAMPLE ID: CV0415A-CS

SAMPLE COLLECTION TIME: 1005

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

very small front yard

Collection: Composite or Grab 3 POINT 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>16144</u>	Logged? <input checked="" type="checkbox"/> Y or <input type="checkbox"/> N
Aliquot #1: Latitude: <u>33.55899228</u>	N Longitude: <u>86.79899294</u>	W
Media description: <u>dark brown silt silty clay dry loose</u>		
Aliquot #2: Latitude: <u>33.55901531</u>	N Longitude: <u>86.79901570</u>	W
Media description: <u>as above</u>		
Aliquot #3: Latitude: <u>33.55903382</u>	N Longitude: <u>86.79904468</u>	W
Media description: <u>as above</u>		
Aliquot #4: Latitude: _____	N Longitude: _____	W
Media description: _____		
Aliquot #5: Latitude: _____	N Longitude: _____	W
Media description: _____		

STATION ID: CV0415 B SAMPLE ID: CV0415B-CS

SAMPLE COLLECTION TIME: 1020

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

v. small back yard

Collection: Composite or Grab 3 POINT 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>16144</u>	Logged? <input checked="" type="checkbox"/> Y or <input type="checkbox"/> N
Aliquot #1: Latitude: <u>33.55911141</u>	N Longitude: <u>86.79881448</u>	W
Media description: <u>dk brown silty clay, dry, loose</u>		
Aliquot #2: Latitude: <u>33.55917282</u>	N Longitude: <u>86.79876976</u>	W
Media description: <u>as above</u>		
Aliquot #3: Latitude: <u>33.55921952</u>	N Longitude: <u>86.79882759</u>	W
Media description: <u>as above</u>		
Aliquot #4: Latitude: _____	N Longitude: _____	W
Media description: _____		
Aliquot #5: Latitude: _____	N Longitude: _____	W
Media description: _____		

JD

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blank and have not been scanned.