

**REDACTED**

LB88821

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: 12/17/12 - 12/19/12

List of Sampling Team in logbook:

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

ADDRESS: (b) (6)

PROPERTY ID: FM-0274

DATE: 12/17/12

ARRIVAL TIME: 1315

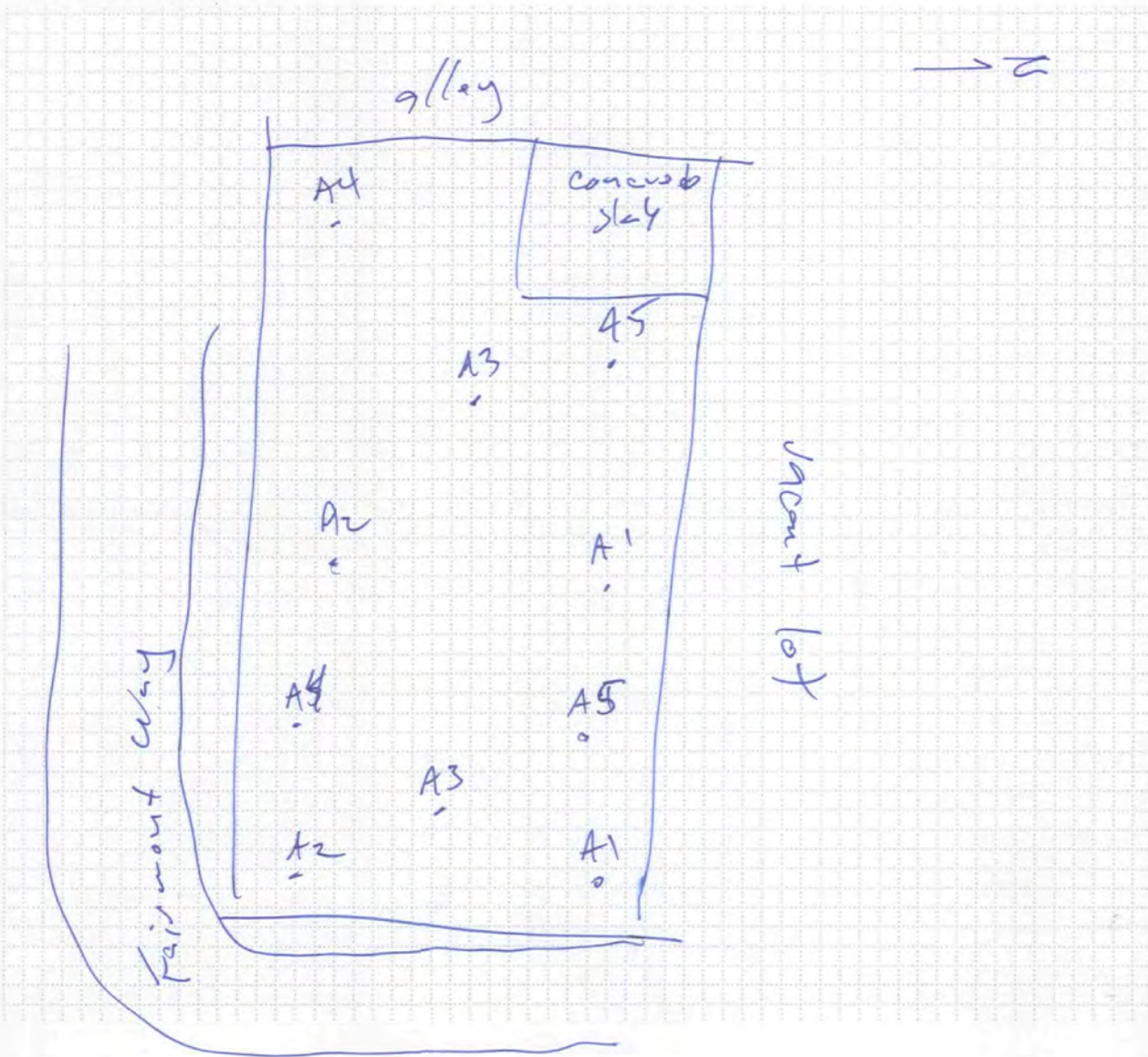
Other pertinent information (weather conditions, etc.):

cloudy, cool ~ 65° F, lt wind

PROPERTY COMMENTS:

vacant lot,

Grid for property sketch





STATION ID: **(b) (6)**

SAMPLE ID: ~~FM0274A-CS~~  
FM0274A-CS-SP

SAMPLE COLLECTION TIME: 1340

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

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

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: FM0274A-CS-SP

GPS Coordinates: Trimble <input checked="" type="checkbox"/>	Instrument #: 018595	Logged? <input checked="" type="checkbox"/>	Y or N
Aliquot #1: Latitude: 33.56199565	N Longitude: 86.81271035		W
Media description: dark, silty, clayey, very wet			
Aliquot #2: Latitude: 33.56178553	N Longitude: 86.81273470		W
Media description: same			
Aliquot #3: Latitude: 33.56185838	N Longitude: 86.81281427		W
Media description: same			
Aliquot #4: Latitude: 33.56176554	N Longitude: 86.81287656		W
Media description: same			
Aliquot #5: Latitude: 33.56195134	N Longitude: 86.81288874		W
Media description: same			

STATION ID: **(b) (6)**

SAMPLE ID: FM0274B-CS-SP

SAMPLE COLLECTION TIME: 1400

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

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

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: FM0274B-CS-SP

GPS Coordinates: Trimble <input checked="" type="checkbox"/>	Instrument #: 018595	Logged? <input checked="" type="checkbox"/>	Y or N
Aliquot #1: Latitude: 33.56196159	N Longitude: 86.81295595		W
Media description: dark, silty, clayey, very wet			
Aliquot #2: Latitude: 33.56176971	N Longitude: 86.81299234		W
Media description: same			
Aliquot #3: Latitude: 33.56186206	N Longitude: 86.81302398		W
Media description: same			
Aliquot #4: Latitude: 33.81314941	N Longitude: 86.81314941		W
Media description: same			
Aliquot #5: Latitude: 33.56194240	N Longitude: 86.81309578		W
Media description: same			

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

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

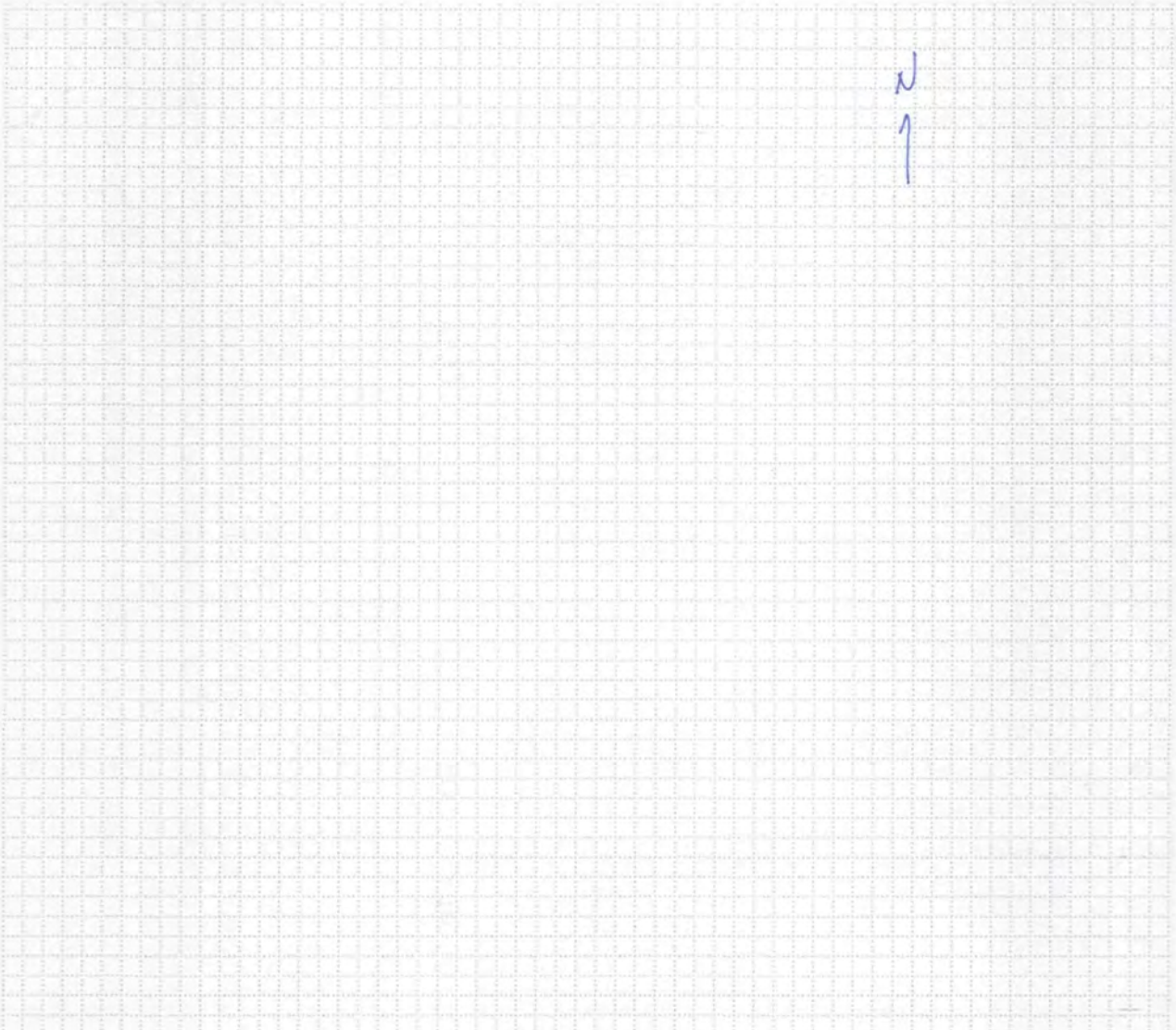
Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

2 story home, brick first floor, natural stone  
2nd level

\* did not sample, need map of  
boundary

Grid for property sketch





(b) (6)

STATION ID: \_\_\_\_\_

SAMPLE ID: \_\_\_\_\_

*CS-SP*  
*Fm 0140A-SP*

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: \_\_\_\_\_

*Fm 0140A-CS-SP*

GPS Coordinates: Trimble  Instrument #: 018595 Logged?  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: \_\_\_\_\_

*CS-SP*  
*Fm 0140B-SP*

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 #: 018595 Logged?  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: \_\_\_\_\_ PROPERTY ID: \_\_\_\_\_

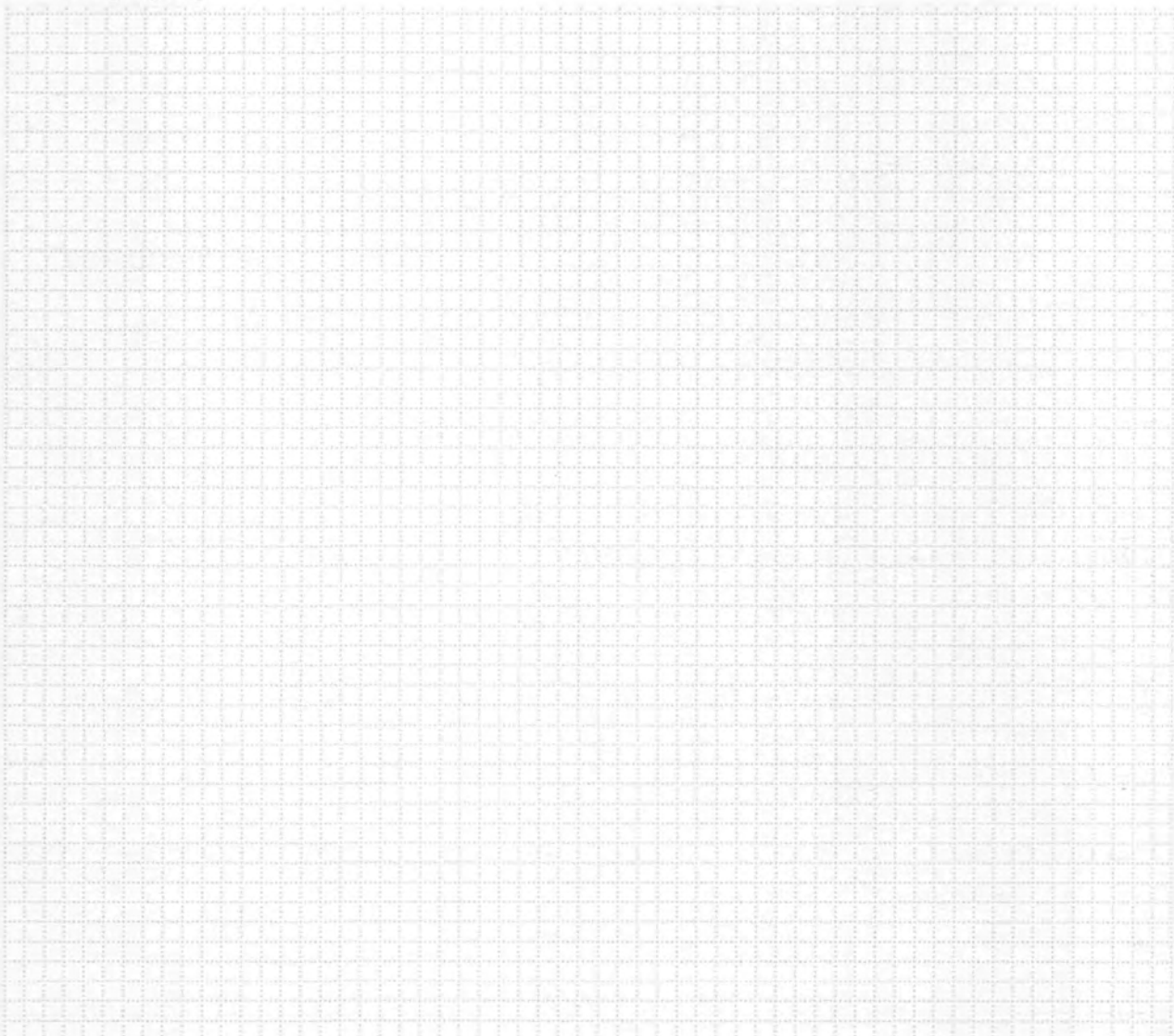
DATE: \_\_\_\_\_ ARRIVAL TIME: \_\_\_\_\_

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

\_\_\_\_\_  
Could not locate, need  
\_\_\_\_\_  
map.  
\_\_\_\_\_  
\_\_\_\_\_

Grid for property sketch



(b) (6)

STATION ID: \_\_\_\_\_ SAMPLE ID: Fm-0298A

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: Fm-0298B

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: _____		



ADDRESS: (b) (6) PROPERTY ID: CV-0449

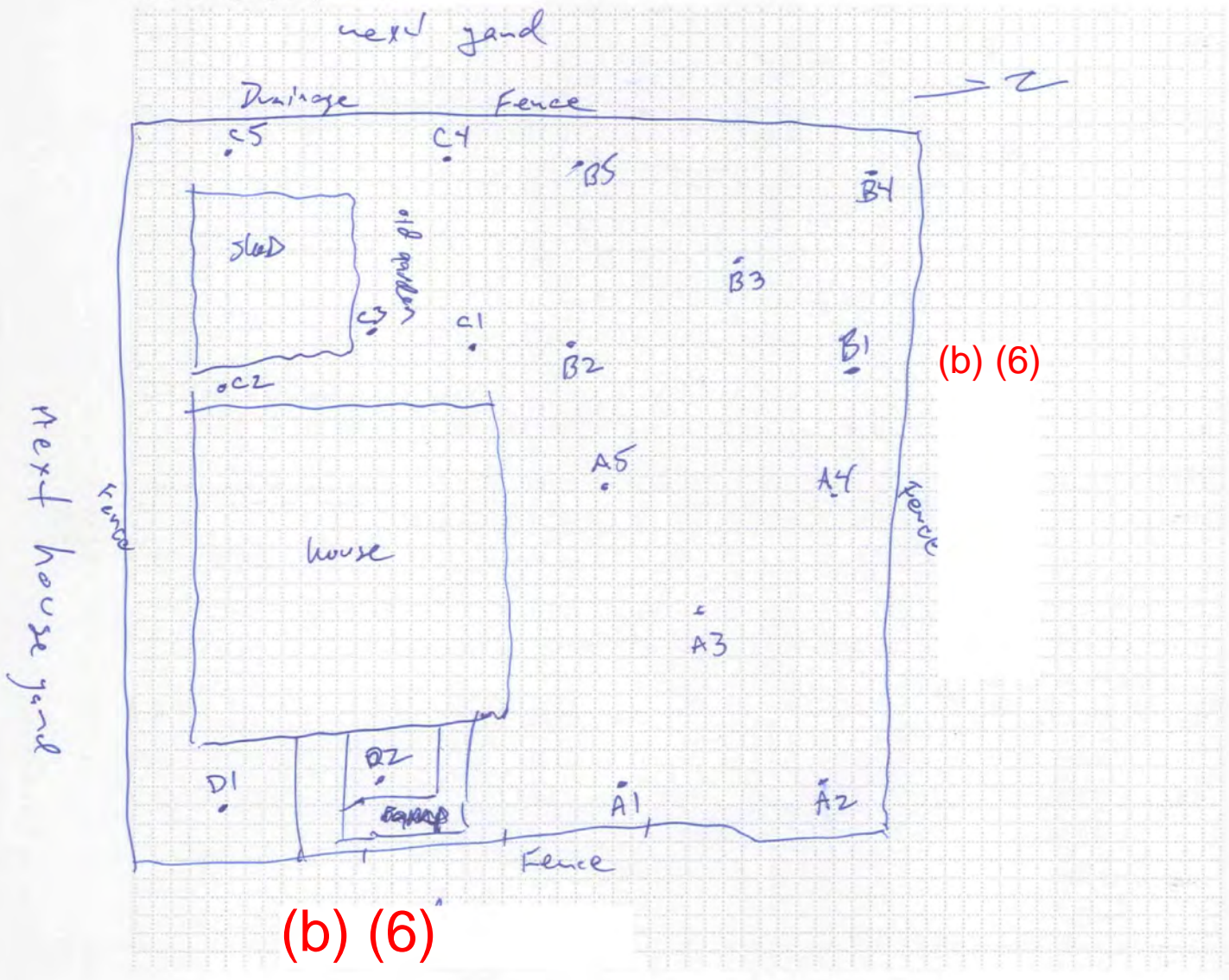
DATE: 12/17/12 ARRIVAL TIME: 1430

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

single story, corner lot, large yard  
w/ shed in sw corner

Grid for property sketch





(b) (6)

STATION ID: \_\_\_\_\_

SAMPLE ID: CV0449A-SP <sup>CS-SP</sup>

SAMPLE COLLECTION TIME: 1500

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

NE Corner, front

Collection: Composite or Grab

MS/MSD? Y or N

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: CV0449A-SP <sup>CS-SP</sup>

GPS Coordinates: Trimble <input checked="" type="checkbox"/> Instrument #: <u>018595</u>		Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.55527275</u>	N Longitude: <u>86.80063737</u>	W	
Media description: <u>med brn, sandy, clayey, wet</u>			
Aliquot #2: Latitude: <u>33.55538140</u>	N Longitude: <u>86.80063691</u>	W	
Media description: <u>same</u>			
Aliquot #3: Latitude: <u>33.55534034</u>	N Longitude: <u>86.80072860</u>	W	
Media description: <u>same</u>			
Aliquot #4: Latitude: <u>33.55538827</u>	N Longitude: <u>86.80085286</u>	W	
Media description: <u>same</u>			
Aliquot #5: Latitude: <u>33.55530130</u>	N Longitude: <u>86.80086000</u>	W	
Media description: <u>same</u>			

STATION ID: (b) (6) <sup>n</sup>

SAMPLE ID: CV0449B-SP <sup>CS-SP</sup>

SAMPLE COLLECTION TIME: 1530

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

NW corner 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: CV0449B-SP <sup>B CS-SP</sup>

GPS Coordinates: Trimble [ ] Instrument #: <u>018595</u>		Logged? <input checked="" type="checkbox"/> or N	
Aliquot #1: Latitude: <u>33.55539129</u>	N Longitude: <u>86.80090068</u>	W	
Media description: <u>med brn, sandy, clayey, wet</u>			
Aliquot #2: Latitude: <u>33.55529815</u>	N Longitude: <u>86.80090363</u>	W	
Media description: <u>same</u>			
Aliquot #3: Latitude: <u>33.55534267</u>	N Longitude: <u>86.80097248</u>	W	
Media description: <u>same, standing water</u>			
Aliquot #4: Latitude: <u>33.55538411</u>	N Longitude: <u>86.80104941</u>	W	
Media description: <u>same</u>			
Aliquot #5: Latitude: <u>33.55529109</u>	N Longitude: <u>86.80104900</u>	W	
Media description: <u>same</u>			

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

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

Other pertinent information (weather conditions, etc.):

PROPERTY COMMENTS:

Grid for property sketch

12/18/12  
[Signature]



STATION ID: **(b) (6)**

SAMPLE ID: CV0449C-SP <sup>CS-SP</sup>

SAMPLE COLLECTION TIME: 1550

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

SW corner

Collection: Composite or Grab

MS/MSD? Y or N

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: CV0449C-SP <sup>CS-SP</sup>

GPS Coordinates: Trimble <input checked="" type="checkbox"/>		Instrument #: <u>018595</u>	Logged? <input checked="" type="checkbox"/>	Y or N
Aliquot #1: Latitude: <u>33.55525918</u>	N Longitude	<u>86.80092230</u>		W
Media description: <u>black silty, clayey, very wet</u>				
Aliquot #2 Latitude: <u>33.55515766</u>	N Longitude	<u>86.80092551</u>		W
Media description: <u>same</u>				
Aliquot #3: Latitude: <u>33.55522844</u>	N Longitude	<u>86.80095922</u>		W
Media description: <u>same</u>				
Aliquot #4: Latitude: <u>33.55524405</u>	N Longitude	<u>86.80105496</u>		W
Media description: <u>same</u>				
Aliquot #5: Latitude: <u>33.55518072</u>	N Longitude	<u>86.80106409</u>		W
Media description: <u>same</u>				

STATION ID: **(b) (6)**

SAMPLE ID: CV0449D-SP <sup>CS-SP</sup>

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: CV0449D-SP <sup>CS-SP</sup>

GPS Coordinates: Trimble <input checked="" type="checkbox"/>		Instrument #: <u>018595</u>	Logged? Y or N
Aliquot #1: Latitude: <u>33.55515645</u>	N Longitude	<u>86.80063164</u>	W
Media description: <u>lt. brown, sandy soil, <del>rather</del> moist</u>			
Aliquot #2 Latitude: <u>33.55518685</u>	N Longitude	<u>86.80064190</u>	W
Media description: <u>same</u>			
Aliquot #3: Latitude: _____	N Longitude	_____	W
Media description: _____			
Aliquot #4: Latitude: _____	N Longitude	_____	W
Media description: _____			
Aliquot #5: Latitude: _____	N Longitude	_____	W
Media description: _____			

(b) (6)

ADDRESS

PROPERTY ID: FM0140

DATE: 12/18/12

ARRIVAL TIME: 0845

Other pertinent information (weather conditions, etc.):

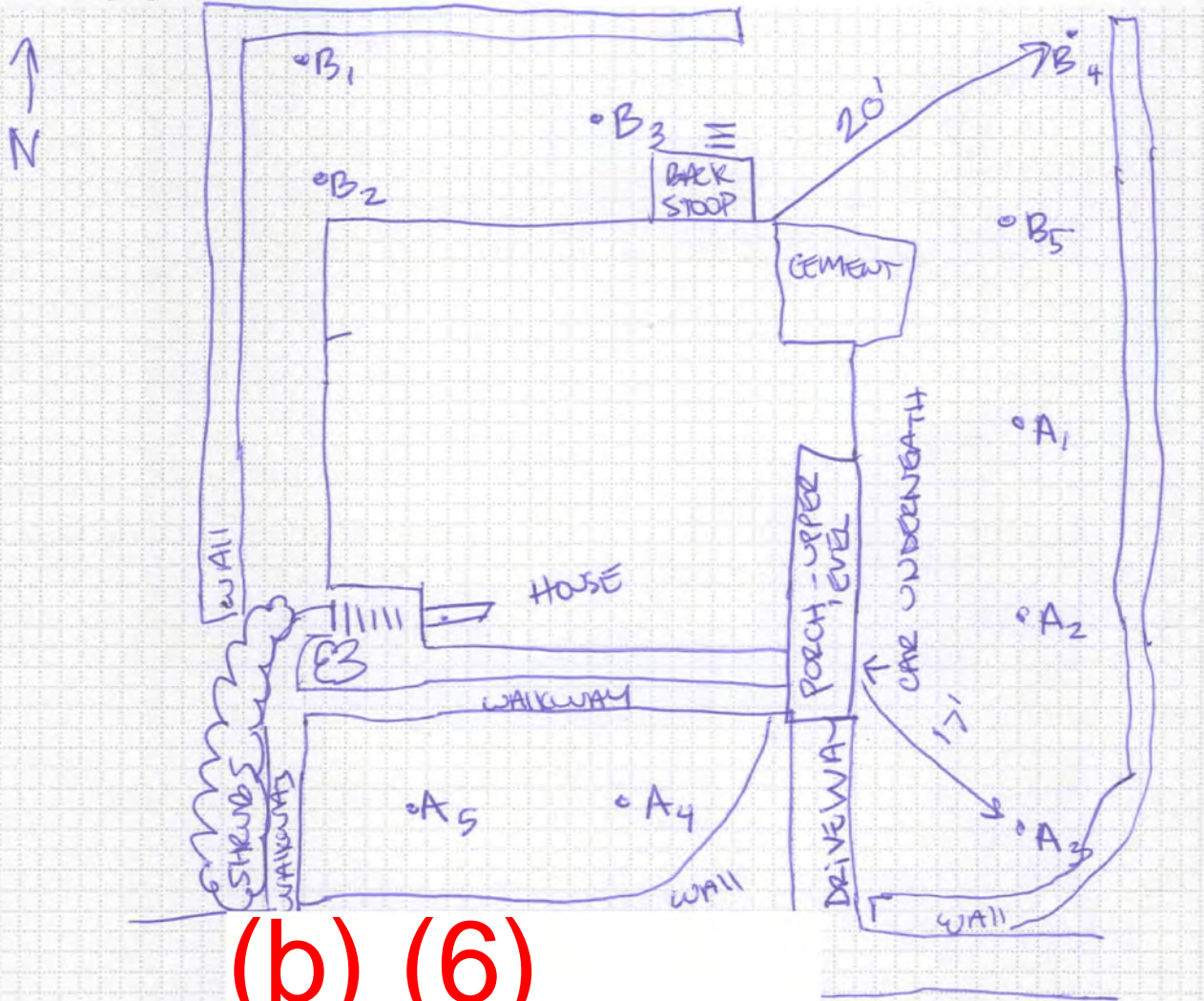
48°F, CLEAR SKIES, NO WIND

PROPERTY COMMENTS:

AIR MONITORING INSTRUMENTATION STARTED AT 0847.

NOT ENOUGH SPACE TO SAMPLE ON WEST SIDE  
OF PROPERTY.

Grid for property sketch



(b) (6)



STATION ID: FM0140

SAMPLE ID: FM0140A-CS-SP

SAMPLE COLLECTION TIME: 0910

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

FRONT AND 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: FM0140A-CS-SP

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

Aliquot #1: Latitude: 33.56821781 N Longitude 86.81032559 W

Media description: REDISH-BROWN SILTY CLAY

Aliquot #2 Latitude: 33.56822191 N Longitude 86.81032340 W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.56815656 N Longitude 86.81032547 W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.56815308 N Longitude 86.81041335 W

Media description: SAME AS #1

Aliquot #5: Latitude: 33.56814199 N Longitude 86.81045125 W

Media description: SAME AS #1

STATION ID: FM0140

SAMPLE ID: FM0140B-CS-SP

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: FM0140B-CS-SP

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

Aliquot #1: Latitude: 33.56836218 N Longitude 86.81046384 W

Media description: REDISH-BROWN SILTY CLAY - MOIST

Aliquot #2 Latitude: 33.56833700 N Longitude 86.81046140 W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.56835109 N Longitude 86.81038639 W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.56836348 N Longitude 86.81034510 W

Media description: SAME AS #1

Aliquot #5: Latitude: 33.56832560 N Longitude 86.81031530 W

Media description: SAME AS #1

(b) (6)

ADDRESS: \_\_\_\_\_ PROPERTY ID: FM0298

DATE: 12/18/12 ARRIVAL TIME: 0940

Other pertinent information (weather conditions, etc.):

48°F, SUNNY, NO WIND

PROPERTY COMMENTS:

NO HOUSE ON-SITE.

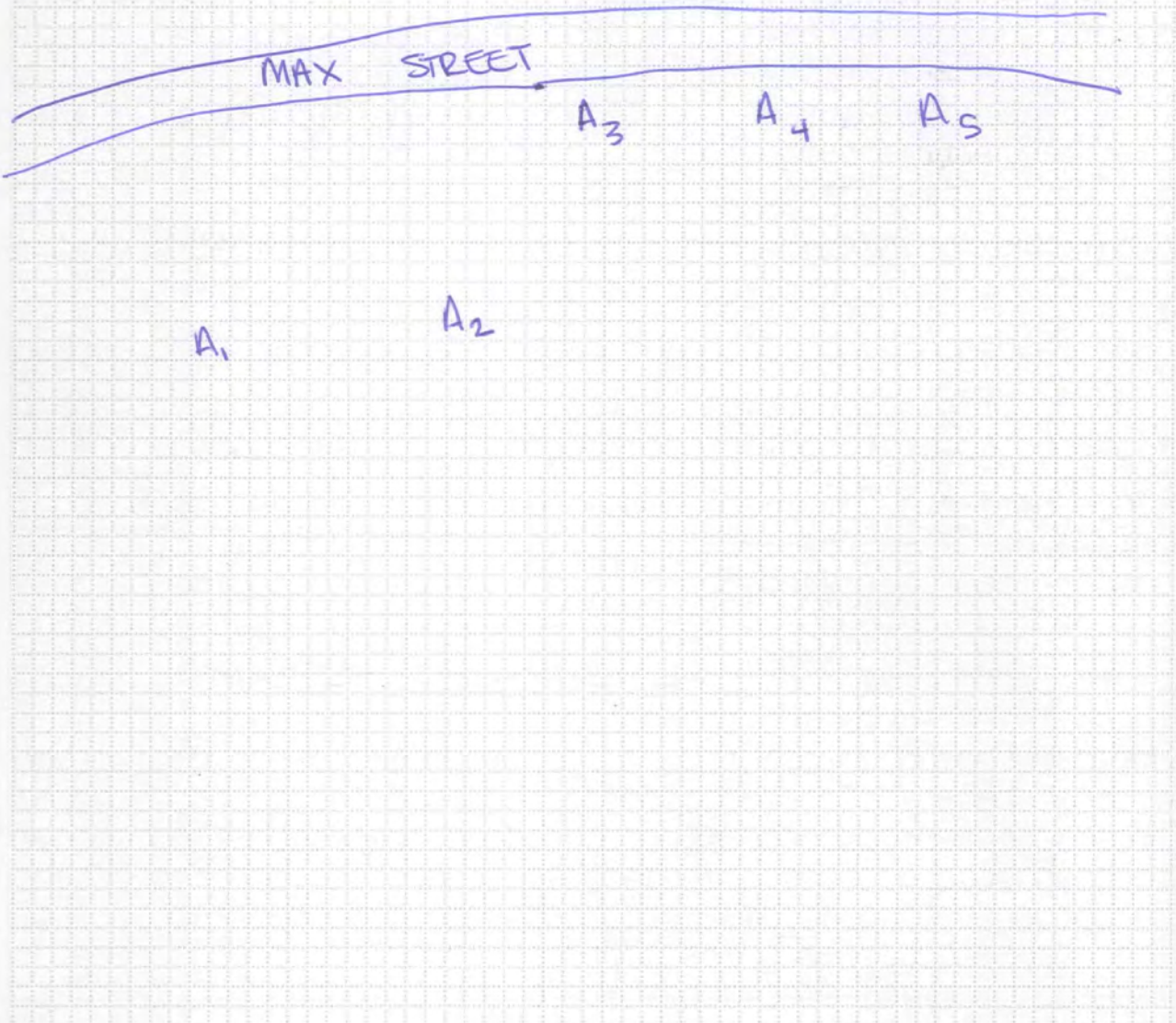
STARTED AIR MONITORING EQUIPMENT @ 0942

WOODS AREA - HEAVY UNDERBRUSH PREVENTED

FURTHER SAMPLING.

Grid for property sketch

N ↑





STATION ID: FM0298

SAMPLE ID: FM0298A-CS-SP

SAMPLE COLLECTION TIME: 1000

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

WOODS AREA NEAR MAX STREET

Collection: Composite or Grab

MS/MSD? Y or N

Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: FM0298A-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.50858670</u>	N Longitude: <u>86.81041950</u>	W	
Media description: <u>DARK BROWN SILTY WITH TAN-ORANGE CLAY</u>			
Aliquot #2: Latitude: <u>33.50857649</u>	N Longitude: <u>86.81040374</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.5080232</u>	N Longitude: <u>86.81043149</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.50861896</u>	N Longitude: <u>86.81039379</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.50862840</u>	N Longitude: <u>86.81035506</u>	W	
Media description: <u>SAME AS #1</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 #: _____		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: CV0422

DATE: 12/18/12

ARRIVAL TIME: 1010

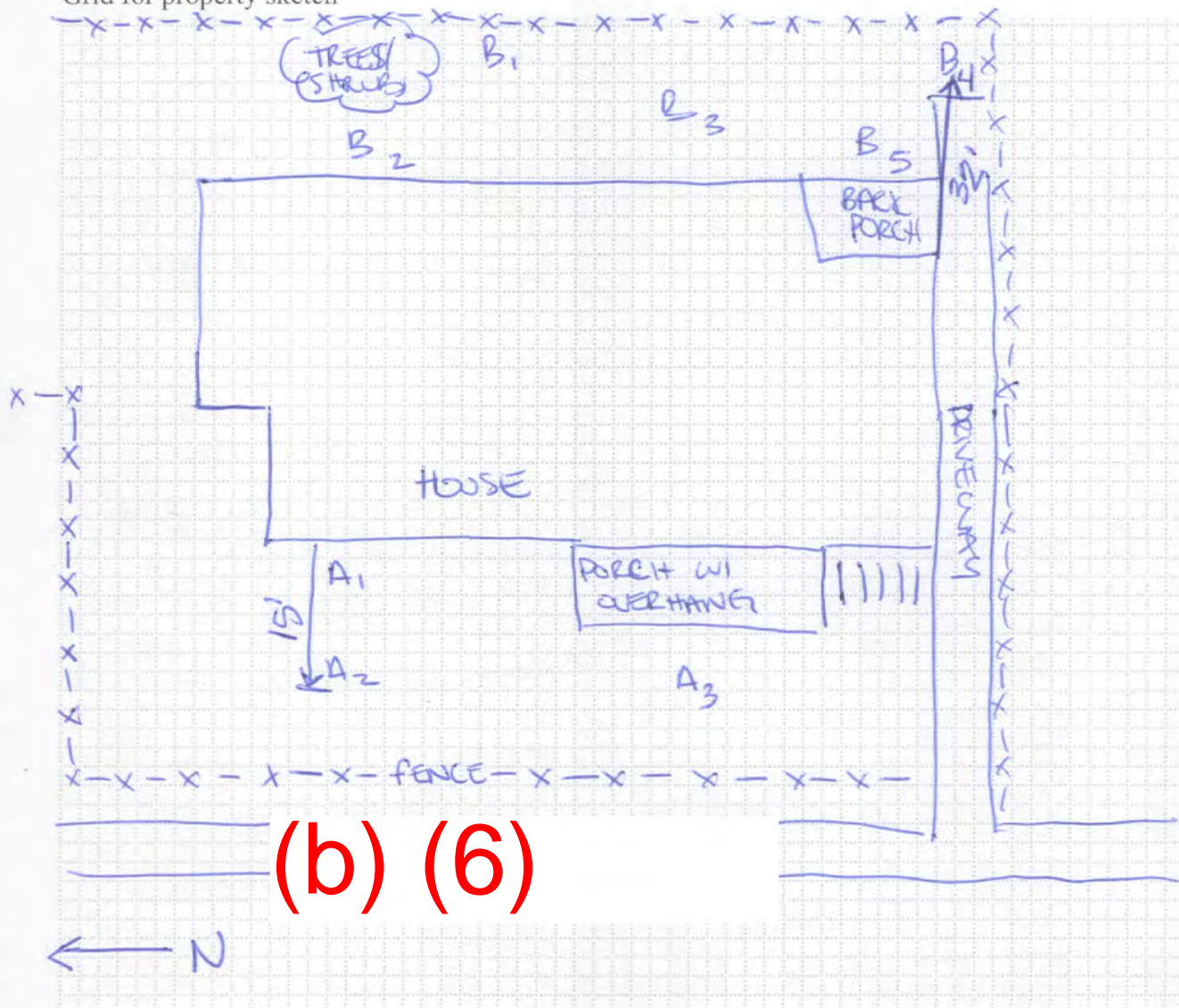
Other pertinent information (weather conditions, etc.):

52°F, SUNNY - CLEAR SKIES

PROPERTY COMMENTS:

AIR MONITORING ~ @ 1023

Grid for property sketch



(b) (6)



STATION ID: CV0422

SAMPLE ID: CV0422A-CS-SP

SAMPLE COLLECTION TIME: 10:37

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: CV0422A-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55933798</u>	N Longitude <u>86.79940101</u>	W	
Media description: <u>DARK BROWN MOIST SANDY SOIL WITH SANDSTONE FRAGMENTS</u>			
Aliquot #2 Latitude: <u>33.55931882</u>	N Longitude <u>86.79941891</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.55929496</u>	N Longitude <u>86.79939114</u>	W	
Media description: <u>SAME AS #1</u>			
<del>Aliquot #4: Latitude: _____</del>	<del>N Longitude _____</del>	<del>W</del>	
<del>Media description: _____</del>			
<del>Aliquot #5: Latitude: _____</del>	<del>N Longitude _____</del>	<del>W</del>	
<del>Media description: _____</del>			

STATION ID: CV0422

SAMPLE ID: CV0422B-CS-SP

SAMPLE COLLECTION TIME: 1050

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: CV0422B-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55942666</u>	N Longitude <u>86.79921886</u>	W	
Media description: <u>REDISH-BROWN SILTY CLAY</u>			
Aliquot #2 Latitude: <u>33.55951463</u>	N Longitude <u>86.79923110</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.55946720</u>	N Longitude <u>86.79912763</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.55947617</u>	N Longitude <u>86.79912954</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.55946475</u>	N Longitude <u>86.79917809</u>	W	
Media description: <u>SAME AS #1</u>			

(b) (6)

ADDRESS

PROPERTY ID: CV0424

DATE: 12/18/12

ARRIVAL TIME: 1225

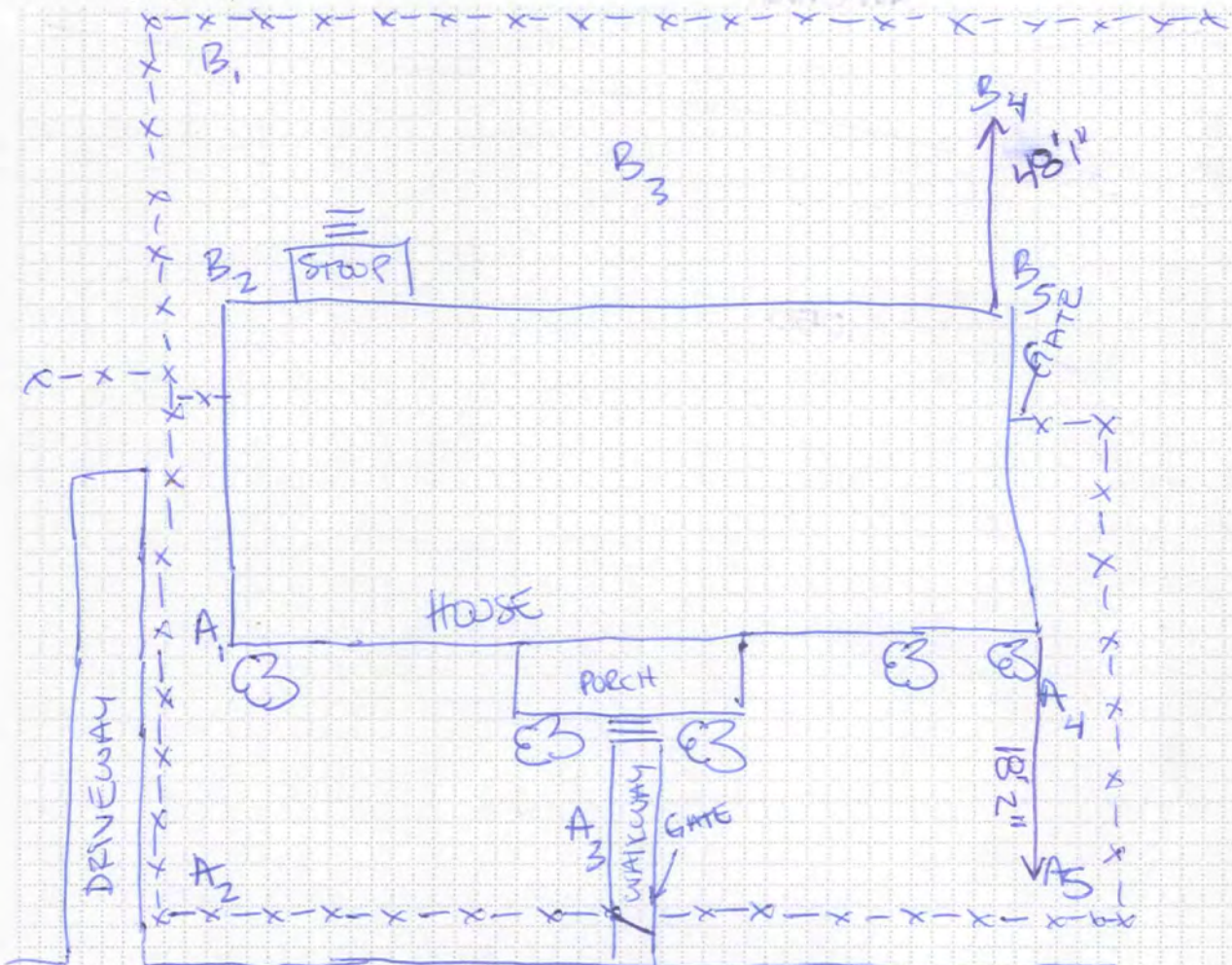
Other pertinent information (weather conditions, etc.):

59°F, SUNNY - CLEAR SKIES, NOWIND

PROPERTY COMMENTS:

STARTED AIR MONITORING EQUIPMENT 2 @ 1227

Grid for property sketch



(b) (6)

← 2



STATION ID: CV0424

SAMPLE ID: CV0424A-CS-SP

SAMPLE COLLECTION TIME: 1245

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: CV0424A-CS-SP

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

Aliquot #1: Latitude: 33.55957840 ~~43983~~ N Longitude 86.79933119 ~~49951~~ W

Media description: DARK BROWN SILTY SOIL

Aliquot #2 Latitude: 33.55950274 ~~39967~~ N Longitude 86.79941783 ~~54312~~ W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.55951670 ~~37742~~ N Longitude 86.79933894 ~~49889~~ W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.55952588 ~~36041~~ N Longitude 86.79925846 ~~42335~~ W

Media description: SAME AS #1

Aliquot #5: Latitude: 33.55943369 ~~33424~~ N Longitude 86.79935180 ~~45572~~ W

Media description: SAME AS #1

STATION ID: CV0424

SAMPLE ID: CV0424B-CS-SP

SAMPLE COLLECTION TIME: 1300

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: CV0424B-CS-SP

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

Aliquot #1: Latitude: 33.55957840 N Longitude 86.79933119 W

Media description: ORANGE-BROWN SILTY CLAY

Aliquot #2 Latitude: 33.55950274 N Longitude 86.79941783 W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.55951670 N Longitude 86.79933894 W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.55952588 N Longitude 86.79925846 W

Media description: SAME AS #1

Aliquot #5: Latitude: 33.55943369 N Longitude 86.79935180 W

Media description: SAME AS #1



(b) (6)

ADDRESS

PROPERTY ID: CV0421

DATE: 12/18/12

ARRIVAL TIME: 1300

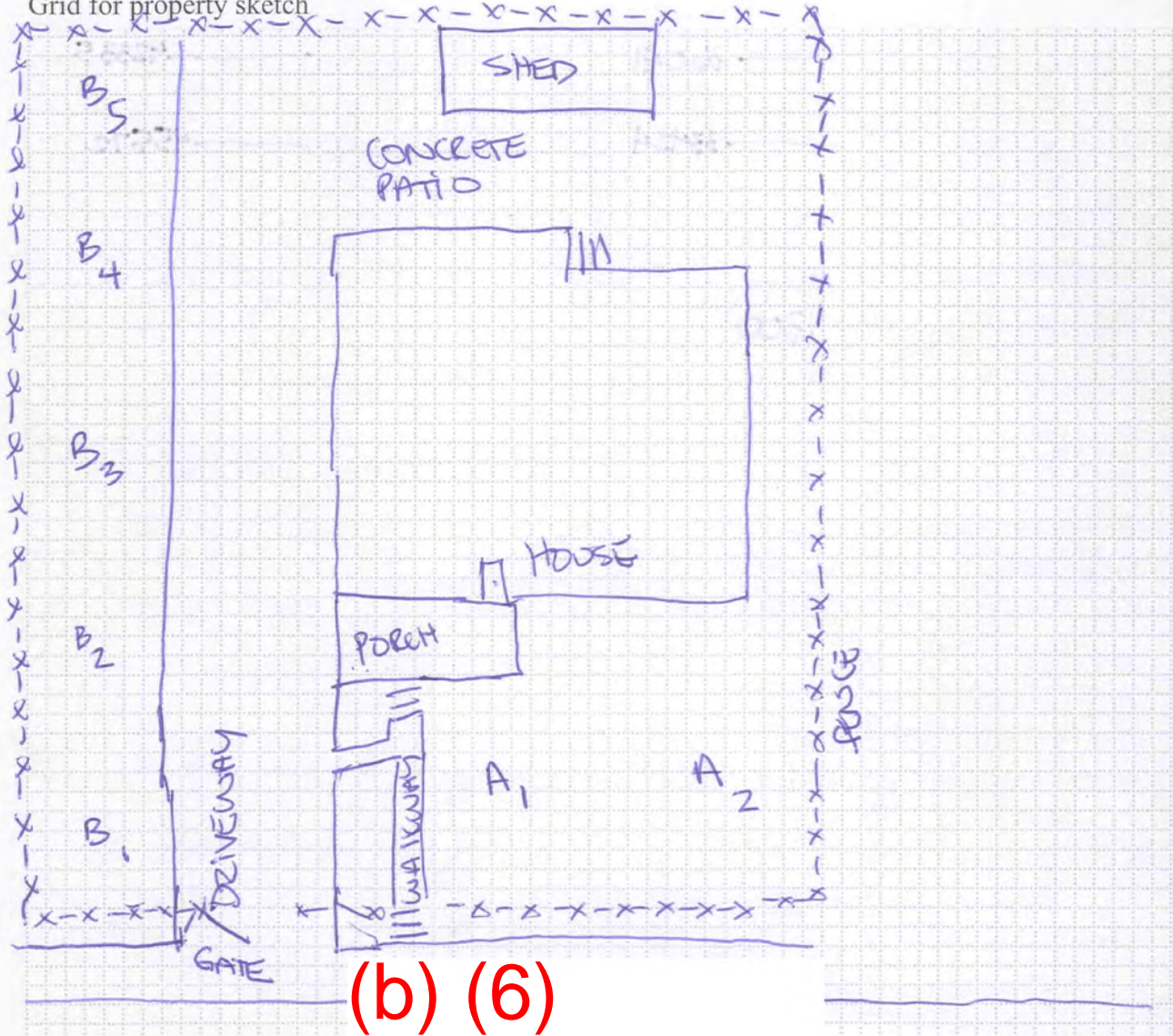
Other pertinent information (weather conditions, etc.):

WOF, SUNNY - CLEAR SKIES

PROPERTY COMMENTS:

STARTED AIR MONITORING EQUIPMENT @ 1310

Grid for property sketch



(b) (6)



STATION ID: CV0421

SAMPLE ID: CV0421A-CS-SP

SAMPLE COLLECTION TIME: 1320

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: CV0421A-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55920483</u>	N Longitude <u>86.79951517</u>	W	
Media description: <u>DARK BROWN SILTY SOIL</u>			
Aliquot #2 Latitude: <u>33.5592348</u>	N Longitude <u>86.79953260</u>	W	
Media description: <u>DARK BROWN SILTY SOIL</u>			
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: CV0421

SAMPLE ID: CV0421B-CS-SP

SAMPLE COLLECTION TIME: 1357

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: CV0421B-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55912492</u>	N Longitude <u>86.79940232</u>	W	
Media description: <u>DARK BROWN SILTY SOIL</u>			
Aliquot #2 Latitude: <u>33.55909371</u>	N Longitude <u>86.79946949</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.55901070</u>	N Longitude <u>86.79950107</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.55895453</u>	N Longitude <u>86.79956837</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.55892150</u>	N Longitude <u>86.79961581</u>	W	
Media description: <u>SAME AS #1</u>			



(b) (6)

ADDRESS

PROPERTY ID: CVO 228

DATE: 12/18/12

ARRIVAL TIME: 1415

Other pertinent information (weather conditions, etc.):

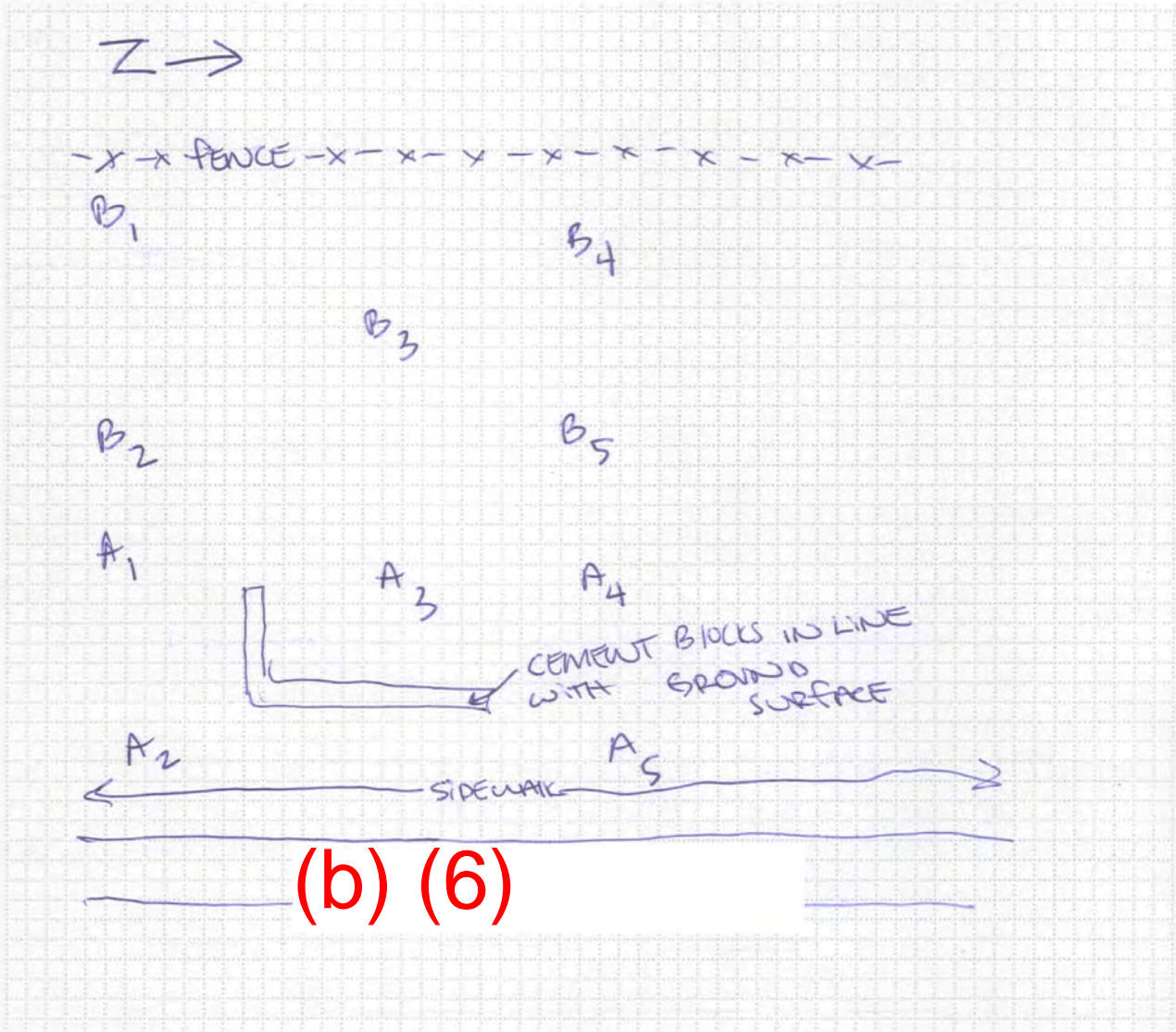
59°F, SUNNY - CLEAR SKIES

PROPERTY COMMENTS:

VACANT LOT - NO STRUCTURE PRESENT ON-SITE

STARTED AIR MONITORING EQUIPMENT @ ~

Grid for property sketch



STATION ID: CVO228

SAMPLE ID: CVO228A-CS-SP

SAMPLE COLLECTION TIME: 1430

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

NEAR STREET (FRONT)

Collection:  Composite or Grab

MS/MSD? Y or  N

Field Duplicate or Split:  Yes or No If yes, indicate Duplicate/split sample station ID: CVO228A-CS-SP

GPS Coordinates:	Trimble [ ]	Instrument #:	Logged?	Y or N
Aliquot #1: Latitude:	<u>33.55654959</u>	N Longitude	<u>86.80190841</u>	W
Media description:	<u>BLACK SLT</u>			
Aliquot #2: Latitude:	<u>33.55654690</u>	N Longitude	<u>86.80174659</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #3: Latitude:	<u>33.55659578</u>	N Longitude	<u>86.80180721</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #4: Latitude:	<u>33.55662680</u>	N Longitude	<u>86.80190323</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #5: Latitude:	<u>33.55664651</u>	N Longitude	<u>86.80174127</u>	W
Media description:	<u>SAME AS #1</u>			

STATION ID: CVO228

SAMPLE ID: CVO228B-CS-SP

SAMPLE COLLECTION TIME: 1450

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

NEAR FENCE (BACK)

Collection:  Composite or Grab

MS/MSD? Y or  N

Field Duplicate or Split:  Yes or No If yes, indicate Duplicate/split sample station ID: CVO228B-CS-SP

GPS Coordinates:	Trimble [ ]	Instrument #:	Logged?	Y or N
Aliquot #1: Latitude:	<u>33.55653264</u>	N Longitude	<u>86.80212533</u>	W
Media description:	<u>BLACK SILTY SOIL WITH COAL FRAGMENTS</u>			
Aliquot #2: Latitude:	<u>33.55654166</u>	N Longitude	<u>86.80198277</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #3: Latitude:	<u>33.55657840</u>	N Longitude	<u>86.80204840</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #4: Latitude:	<u>33.556601955</u>	N Longitude	<u>86.80213155</u>	W
Media description:	<u>SAME AS #1</u>			
Aliquot #5: Latitude:	<u>33.55662356</u>	N Longitude	<u>86.80199080</u>	W
Media description:	<u>SAME AS #1</u>			



(b) (6)

ADDRESS

PROPERTY ID: CVO230

DATE: 12/18/12

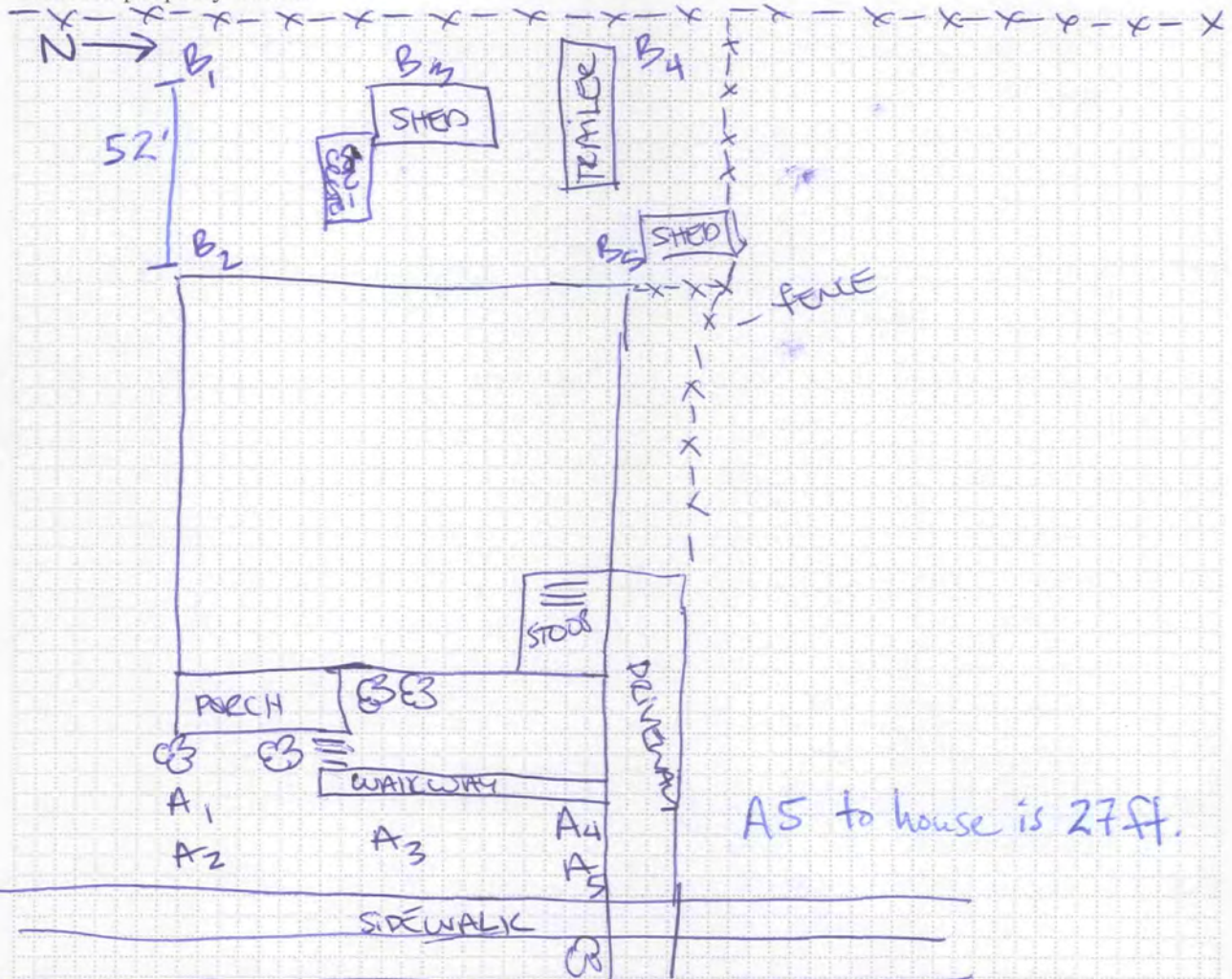
ARRIVAL TIME: 1500

Other pertinent information (weather conditions, etc.):

59°F, SUNNY

PROPERTY COMMENTS:

Grid for property sketch



(b) (6)

STATION ID: CVO230

SAMPLE ID: CVO230A-CS-SP

SAMPLE COLLECTION TIME: 1515

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: CVO230A-CS-SP

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

Aliquot #1: Latitude: 33.55668363 N Longitude 86.80179102 W

Media description: BLACK SILTY SOIL

Aliquot #2 Latitude: 33.55667035 N Longitude 86.80174881 W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.55670777 N Longitude 86.80176741 W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.55674412 N Longitude 86.80178574 W

Media description: SAME AS #1

Aliquot #5: Latitude: 33.55674473 N Longitude 86.80173964 W

Media description: SAME AS #1

STATION ID: CVO230

SAMPLE ID: CVO230B-CS-SP

SAMPLE COLLECTION TIME: 1535

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: CVO230B-CS-SP

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

Aliquot #1: Latitude: 33.55667902 N Longitude 86.80212205 W

Media description: BLACK SILTY SOIL

Aliquot #2 Latitude: 33.55667663 N Longitude 86.80199254 W

Media description: SAME AS #1

Aliquot #3: Latitude: 33.55671070 N Longitude 86.80204431 W

Media description: SAME AS #1

Aliquot #4: Latitude: 33.55678022 N Longitude 86.80214433 W

Media description: BROWN SILTY CLAY

Aliquot #5: Latitude: 33.55675374 N Longitude 86.80199081 W

Media description: SAME AS #4



(b) (6)

ADDRESS:

PROPERTY ID:

CV0451

DATE: 12/19/2012

ARRIVAL TIME:

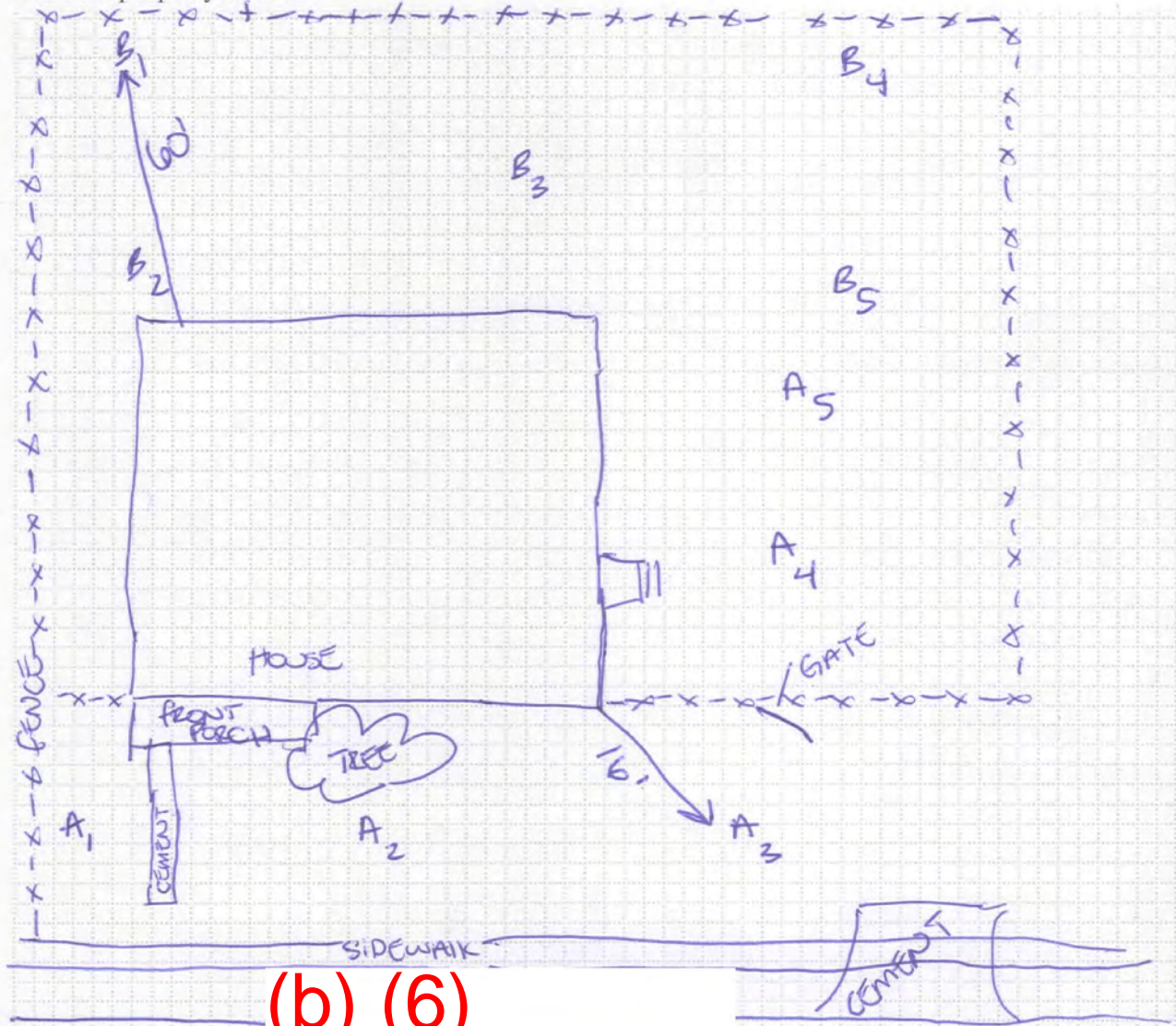
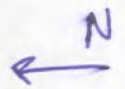
0845

Other pertinent information (weather conditions, etc.):

50°F, SUNNY-CLEAR SKIES

PROPERTY COMMENTS:

Grid for property sketch



(b) (6)

STATION ID: CV0451

SAMPLE ID: CV0451A-CS-SP

SAMPLE COLLECTION TIME: 0900

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

FRONT AND 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: CV0451A-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55525493</u>	N Longitude <u>86.80048663</u>	W	
Media description: <u>BROWN SILT MIXED WITH GRAVEL</u>			
Aliquot #2: Latitude: <u>33.55522647</u>	N Longitude <u>86.80047197</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.55519219</u>	N Longitude <u>86.80046480</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.55518257</u>	N Longitude <u>86.80039532</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.55517577</u>	N Longitude <u>86.80031730</u>	W	
Media description: <u>SAME AS #1</u>			

STATION ID: CV0451

SAMPLE ID: CV0451B-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: CV0451B-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.55526548</u>	N Longitude <u>86.80009427</u>	W	
Media description: <u>DARK BROWN SILTY CLAY</u>			
Aliquot #2: Latitude: <u>33.55527220</u>	N Longitude <u>86.80025548</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.55521847</u>	N Longitude <u>86.80017842</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.55516845</u>	N Longitude <u>86.80013601</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.55516510</u>	N Longitude <u>86.80025840</u>	W	
Media description: <u>SAME AS #1</u>			



(b) (6)

ADDRESS

PROPERTY ID:

HP 0190

DATE:

12/19/12

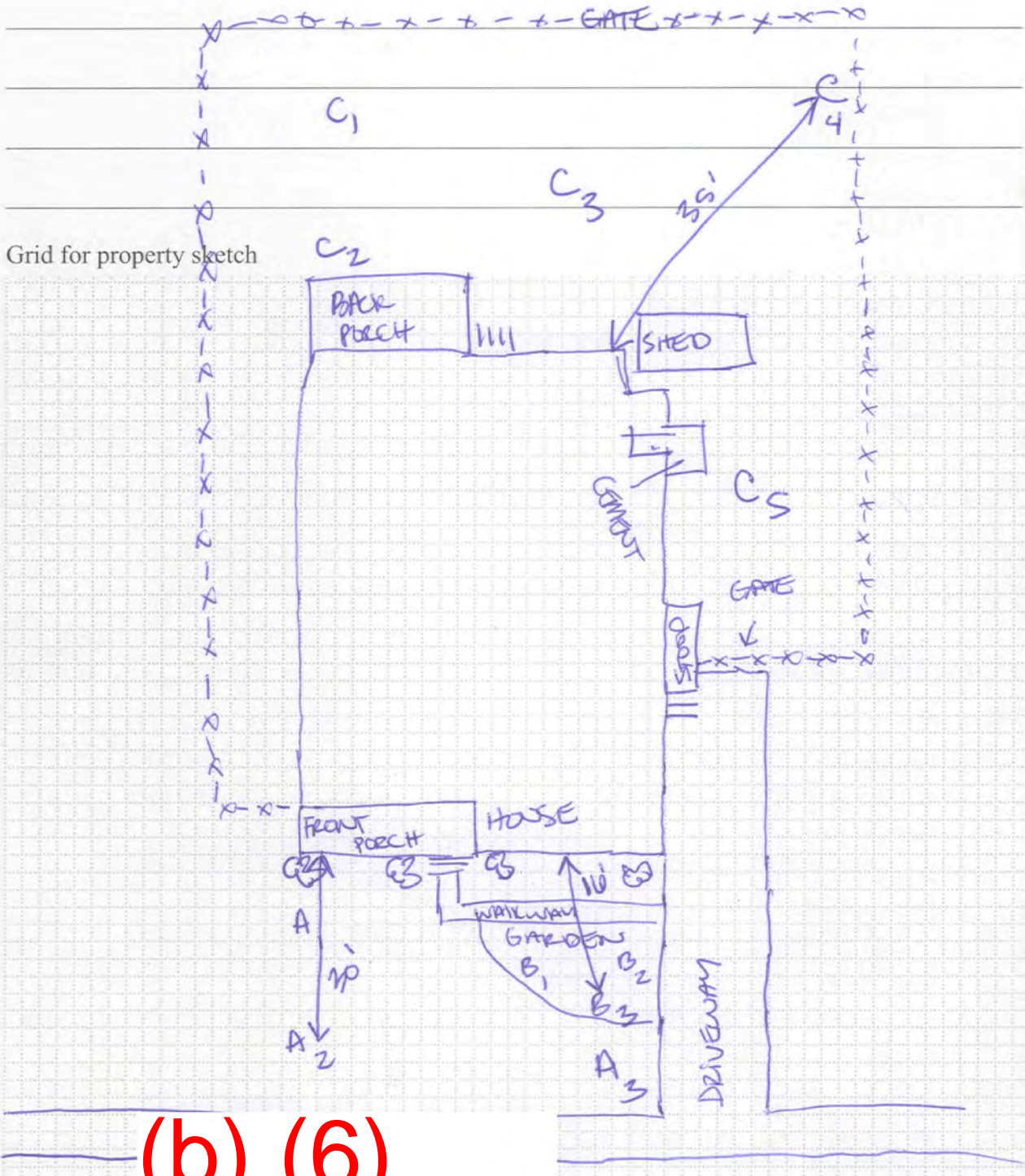
ARRIVAL TIME:

0930

Other pertinent information (weather conditions, etc.):

60°F, SUNNY - CLEAR SKIES

PROPERTY COMMENTS:



(b) (6)

STATION ID: HP0190

SAMPLE ID: HP0190A-CS-SP

SAMPLE COLLECTION TIME: 0950

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: HP0190A-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.50581709</u>	N Longitude: <u>86.79181709</u>	W	
Media description: <u>BROWN SILTY CLAY</u>			
Aliquot #2: Latitude: <u>33.50581836</u>	N Longitude: <u>86.79184896</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.50581495</u>	N Longitude: <u>86.79178505</u>	W	
Media description: <u>SAME AS #1</u>			
<del>Aliquot #4: Latitude: _____</del>	<del>N Longitude: _____</del>	<del>W</del>	
<del>Media description: _____</del>			
<del>Aliquot #5: Latitude: _____</del>	<del>N Longitude: _____</del>	<del>W</del>	
<del>Media description: _____</del>			

STATION ID: HP0190

SAMPLE ID: HP0190B-CS-SP

SAMPLE COLLECTION TIME: 1000

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

GARDEN IN 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: HP0190B-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.50581709 4205</u>	N Longitude: <u>86.79181709 79420</u>	W	
Media description: <u>BROWN SILTY CLAY</u>			
Aliquot #2: Latitude: <u>33.50581836 3332</u>	N Longitude: <u>86.79184896 78510</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.50584264</u>	N Longitude: <u>86.79178179</u>	W	
Media description: <u>SAME AS #1</u>			
<del>Aliquot #4: Latitude: _____</del>	<del>N Longitude: _____</del>	<del>W</del>	
<del>Media description: _____</del>			
<del>Aliquot #5: Latitude: _____</del>	<del>N Longitude: _____</del>	<del>W</del>	
<del>Media description: _____</del>			



(b) (6)

ADDRESS:

PROPERTY ID:

HP0190

DATE:

12/19/12

ARRIVAL TIME:

0930

Other pertinent information (weather conditions, etc.):

SEE PAGE 32

PROPERTY COMMENTS:

SEE PAGE 32

Grid for property sketch

SEE PAGE 32

STATION ID: HP0190

SAMPLE ID: HP0190C-CS-SP

SAMPLE COLLECTION TIME: 10:15

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: HP0190C-CS-SP

GPS Coordinates: Trimble [ ] Instrument #: _____		Logged? Y or N	
Aliquot #1: Latitude: <u>33.510015299</u>	N Longitude <u>86.79185253</u>	W	
Media description: <u>DARK BROWN SILTY CLAY</u>			
Aliquot #2 Latitude: <u>33.510011400</u>	N Longitude <u>86.79185234</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #3: Latitude: <u>33.510010718</u>	N Longitude <u>86.79179125</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #4: Latitude: <u>33.510015715</u>	N Longitude <u>86.79175728</u>	W	
Media description: <u>SAME AS #1</u>			
Aliquot #5: Latitude: <u>33.51000560</u>	N Longitude <u>86.79175102</u>	W	
Media description: <u>SAME AS #1</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 #: _____		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: _____			



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