



January 1, 2019

Mr. Charles Berry
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

Subject: Emergency Response Action Letter Report
Adair County Drum
Columbia, Adair County, Kentucky
Contract Number: EP-S4-14-03
TDD Number: TT-01-092

Dear Mr. Berry

The Tetra Tech Superfund Technical Assessment and Response Team (START) submits this report to summarize the emergency response activities conducted on May 17 through May 18, 2018, and offsite waste disposal activities on July 16, 2018 at the Adair County Drum site in Columbia, Adair County, Kentucky. This report includes four enclosures. Enclosure 1 contains figures illustrating the site location and site layout. Enclosure 2 contains a sampling summary table. Enclosure 3 contains a photographic log of the response activities. Enclosure 4 contains a copy of the Tetra Tech START logbook notes. Attachment 1 contains the laboratory data packages.

BACKGROUND

The Adair County Drum project (Site) property is located near 1010 Kentucky High Way 55 Business, Columbia, KY 42728 and is located on the property at the 600 block of Green Hills Road, behind 285 Woodland Acre Columbia, Adair County, Kentucky. Approximately 21 abandoned drums from an unknown source were identified by the neighboring property owner and reported to the Kentucky Department of Environmental Protection (KDEP). KDEP responded and requested the property owner at the 600 block of Green Hills Road, Mr. Rainwater to sample the drums. Mr. Rainwater hired a contractor to collect the samples. A composite sample of all the drums found on April 14, 2018 was collected and analyzed the sample for the following: RCRA Metals 6010, SVOC's 8270, VOC 8260, pH and ignitability. Laboratory analytical data indicated that flammable liquid could be present. The property owner Mr. Rainwater indicated to KDEP that he could not fund a removal action. KDEP contacted the U.S. Environmental Protection Agency (EPA) for assistance identifying the contents of the drums and for disposal.

RESPONSE ACTIVITIES

On May 17, 2018, EPA On-Scene Coordinator (OSC), Chuck Berry, KDEP representative John Rogers, a Tetra Tech START and Emergency and Rapid Response Services (ERRS) contractor Environmental Restoration (ER), met onsite to address the abandoned drums. The geographic coordinates of the Adair County Drum Site are 37.0945710 degrees North, -85.2840370 degrees West (see Figure 1 in Enclosure 1). Tetra Tech START identified several drums in poor condition that were releasing their contents on the ground (photographs provided in Enclosure 3).

OSC Berry tasked Tetra Tech START and ER to stage, segregate and conduct waste characterization, and conduct grab and composite sampling of the drums and soil from under the leaking drums. During the sampling event, Tetra Tech START performed hazard categorization (HAZCAT) analysis to guide drum bulking, segregation, and waste profiling. Tetra Tech START collected and composited drum samples based on HAZCAT results. Tetra Tech START collected four waste characterization composite samples:

- Sample WHRPD051820180730 consisted of a composite of drums 3, 5, 10, 15, 16, 18, 19 and 20;
- Sample WHRPD051820180800 consisted of a composite of drums 4, 9, 11, 12 and 2;
- Sample WHRPD051820180830 consisted of a composite of drums 1, 2, 6, 7, 8, 13, 14, 17 and 22;
- Sample WHRPD051720181845 consisted of a composite of the soil under drums 23 and 24.

Tetra Tech START submitted the waste characterization samples to Environmental Science Laboratory Mt. Juliet, TN for the following analysis: TCLP RCRA metals, VOC, SVOC, TCLP Pesticide/Herbicide, and ignitability, reactivity, and corrosivity. A summary of the laboratory analytical results is provided in Table 1 in Enclosure 2.

Tetra Tech START collected five soil samples to determine if the contents from damaged drums impacted the surrounding soil:

- Sample # WHRP051720181425 – a 5-point soil composite along the west bank of the dry ditch running along the north side of 285 Woodland Acre;
- Sample # WHRP051720181630 – a grab soil sample from under a drum on the west bank of the creek on 285 Woodland Acre;
- Sample # WHRP051820180900 – a grab soil sample from the dry ditch bottom;
- Sample # WHRP051820180910 – a 5-point soil composite sample from the drum storage area.

Laboratory analysis for the soil samples included totals for 8 RCRA metals, VOC, SVOC.

OSC Berry released Tetra Tech START from the site upon completion of sampling activities.

The EPA's ERRS contractor ER provided site stabilization, drum handling, bulking, and overpacking. ER moved the drums to the County DOT lot for secure storage

REMOVAL ACTIVITIES

EPA evaluated the waste characterization sample results and developed waste profiles for disposal. Based on the data, EPA determined all the drums contained non-hazardous waste. On July 16, 2018 Tetra Tech START met with ER and KDEP and provided oversight of the load out of the 24 drums for transport and offsite disposal to Tradebe Treatment and Recycling of TN, Millington, TN.



Mr. Charles Berry

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September 6, 2018

If you have any questions or need additional copies of this report, please call me at (615) 992-5556.

Sincerely,



Todd Taylor
START IV Project Manager



Andrew F. Johnson
START IV Program Manager

Enclosures (4)

Attachments (1)

cc: Katrina Jones, EPA Project Officer
Angel Reed, START IV Document Control Coordinator

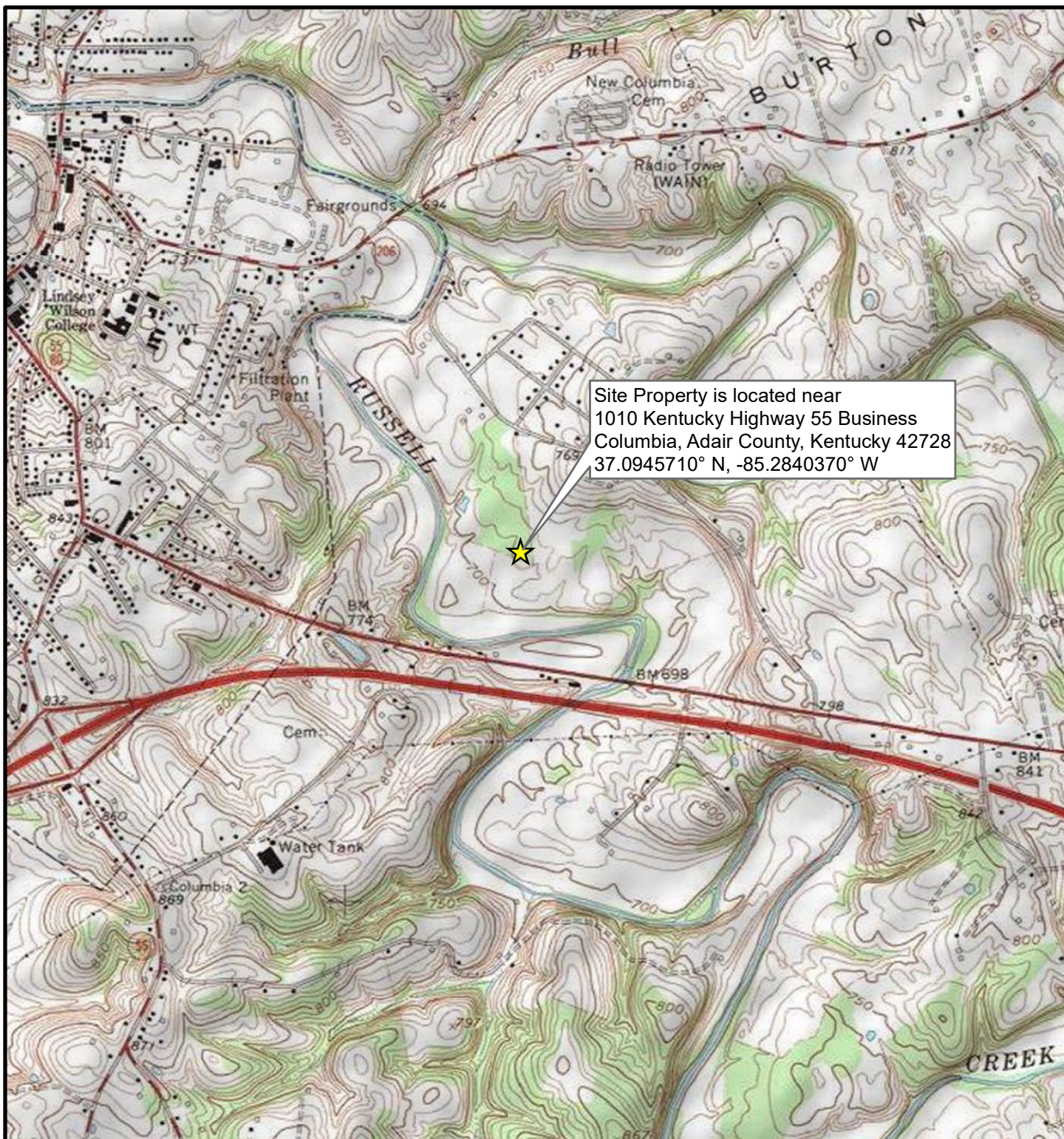


ENCLOSURE 1

FIGURES

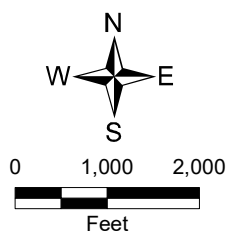
(Two pages)





Legend

★ Site Location



Map Source:
USGS 7.5 Minute Topographic Quadrangle Map:
Columbia, KY 1974



United States
Environmental Protection Agency
Region 4

FIGURE 1

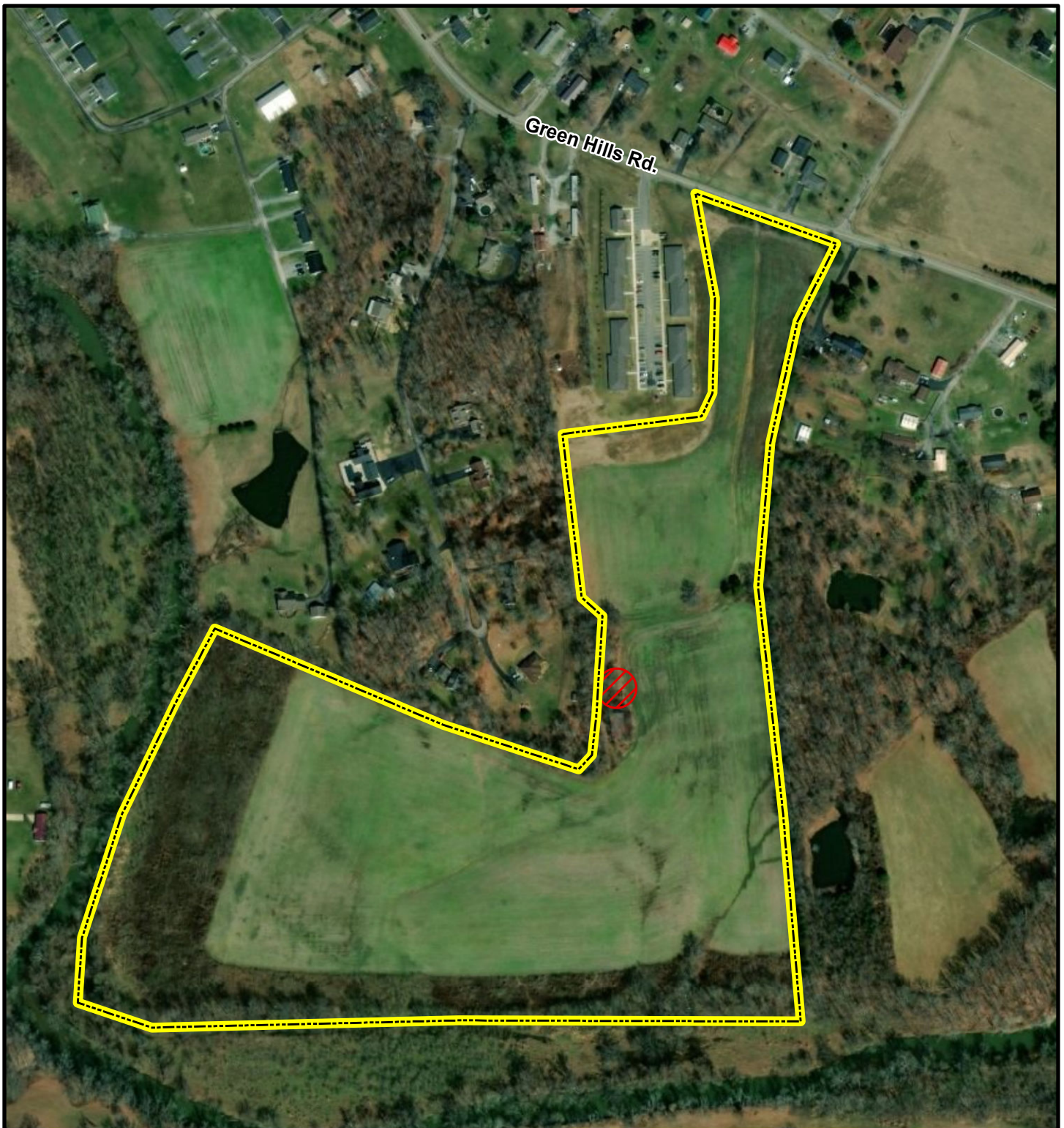
Site Location

TDD Name: Adair County Drum Site
TDD No.: TT-01-092
City: Columbia **County:** Adair **State:** Kentucky





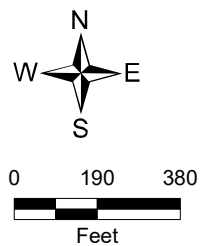
TETRA TECH

Date:
12/3/2018
Analyst:
KATIE WISE

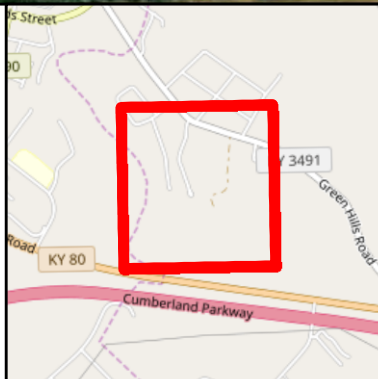


Legend

-  Drum and sampling area
-  Property boundary



Map Source:
ESRI World Imagery



United States
Environmental Protection Agency
Region 4

FIGURE 2

Site Layout

TDD Name: Adair County Drum Site
TDD No.: TT-01-092
City: Columbia **County:** Adair **State:** Kentucky



TETRA TECH

Date:
12/26/2018
Analyst:
KATIE WISE

ENCLOSURE 2
SAMPLING SUMMARY TABLE
(One page)



TABLE 1
ADAIR COUNTY DRUM SITE
WASTE STREAM ANALYTICAL RESULTS

ANALYTE	WHRPD051720181845 DRUMS 23 & 24 NON-HAZARDOUS	WHRPD051820180730 DRUMS 3,5,10,15,16,18,19, & 20 NON-HAZARDOUS DOT CLASS 3 FLAMMABLE	WHRPD051820180800 DRUMS 4,9,11,12, & 21 NON-HAZARDOUS	WHRPD051820180830 DRUMS 1,2,6,7,8,13,14,17, & 22 NON-HAZARDOUS
WET CHEMISTRY (mg/l)				
REACTIVE CYANIDE	0.25 U	0.05 U	0.00635	0.25 U
pH				
CORROSIVITY BY PH	6.23 T8	5.56 T8	5.17 T8	6.18 T8
METALS (mg/l)				
BARIUM	0.267	0.1 U	0.1 U	0.1 U
CHROMIUM	2.03	0.13	0.1 U	2.26
VOLATILE ORGANIC COMPOUNDS (mg/l)				
2-BUTANONE (MEK)	0.5 U	12	1.31	0.874

Notes:

mg/l	Milligrams per liter
T8	Sample(s) received past/too close to holding time expiration
U	Not detected at the Reporting Limit/(or MDL where applicable)
Bold	The associated value was detected in the sample

TABLE 2
ADAIR COUNTY DRUM SITE
SOIL ANALYTICAL RESULTS

ANALYTE	WHRP051720181425 WEST BANK 5 POINT COMPOSITE NON-HAZARDOUS	WHRP051720181630 UNDER WEST BANK DRUM GRAB NON-HAZARDOUS	WHRP051820180900 CREEK BOTTOM GRAB NON-HAZARDOUS	WHRP051820180910 FOUND DRUM AREA 5 POINT COMPOSITE NON-HAZARDOUS	WHRPD051820180835 STAINED DRUM AREA GRAB NON-HAZARDOUS
MERCURY (mg/kg)					
MERCURY	0.0324	0.035	0.0202	0.0218	0.0203
METALS (mg/kg)					
ARSENIC	2 U	2.11	2 U	2 U	2 U
BARIUM	30.2	49.7	22.3	36.8	36.2
CHROMIUM	6.78	5.55	15.4	8.39	91.2
LEAD	12.6	12.6	5.53	9.32	12.7
VOLATILE ORGANIC COMPOUNDS (mg/kg)					
2-BUTANONE (MEK)	0.037 J3	1 U	0.025 U	0.025 U	0.0966 J3
ACETONE	0.025 U	130 J3	0.581 J3	3.88 J3	174 J3
METHYL TERT-BUTYL ETHER	0.00113	0.04 U	0.001 U	0.00129	0.00146
TOLUENE	0.005 U	0.2 U	0.005 U	0.005 U	0.00773 B
XYLENES, TOTAL	0.0065 U	0.26 U	0.0065 U	0.0065 U	0.0261 B

Notes:

B	The same analyte is found in the associated blank
J3	The associated batch QC was outside the established quality control range for precision
mg/kg	Milligrams per kilogram
U	Not detected at the Reporting Limit/(or MDL where applicable)
Bold	The associated value was detected in the sample

ENCLOSURE 3
PHOTOGRAPHIC LOG OF RESPONSE ACTIVITIES
(Eight pages)





OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: Northeast

Date: May 17, 2018

Photographer: Todd Taylor, Tetra Tech, Inc.
Superfund Technical Assessment
and Response Team (START)

Witness: None

Subject: On Thursday, May 17, 2018, personnel from EPA and Tetra Tech START mobilized to the Adair Co. Drum Site, located at 285 Woodland Acre Columbia, Adair County, Kentucky to collect waste characterization grab and composite samples from drums and soil. Many of the drums were weathered and some were leaking.





OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: North

Date: May 17, 2018

Photographer: Todd Taylor, Tetra Tech START **Witness:** None

Subject: Abandoned drums along ditch line behind 285 Woodland Acre Columbia, Adair County, Kentucky.





OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: Southwest

Date: May 17, 2018

Photographer: Todd Taylor, Tetra Tech START

Witness: None

Subject: Tetra Tech START marked leaking drums that required overpacking.





OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: Northwest

Date: May 17, 2018

Photographer: Todd Taylor, Tetra Tech START

Witness: None

Subject: EPA's Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration LLC, provided site stabilization and overpacked leaking drums.





OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-092	Location:	Adair Co. Drum Site
Orientation:	Northwest	Date:	May 17, 2018
Photographer:	Todd Taylor, Tetra Tech START	Witness:	None
Subject:	ERRS staged 22 overpacked drums for Tetra Tech START to conduct waste characterization using HAZCAT field testing.		





OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: South

Date: May 18, 2018

Photographer: Todd Taylor, Tetra Tech START

Witness: Todd Taylor, Tetra Tech START

Subject: Tetra Tech START and EPA OSC Berry collected a soil sample from under a potentially leaking drum.





OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-092	Location:	Adair Co. Drum Site
Orientation:	South	Date:	May 18, 2018
Photographer:	Todd Taylor, Tetra Tech START	Witness:	None
Subject:	The ERRS contractor placed overpack drums at a secure location awaiting transport and disposal.		





OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-092

Location: Adair Co. Drum Site

Orientation: Not Applicable

Date: July 16, 2018

Photographer: Todd Taylor, Tetra Tech START **Witness:** None

Subject: Tetra Tech START provided oversight of the load out of the 24 drums. Tradebe Treatment and Recycling of TN transported the drums to their disposal facility in Millington, TN.



ENCLOSURE 4
START LOGBOOK
(Five sheets)





Rite in the Rain.

ALL-WEATHER
UNIVERSAL

Nº 371FX

103X902701092
Adair Co. Drum Site

10f1

MADE IN TACOMA

SINCE 1918

Rite in the Rain

— DEFYING MOTHER NATURE —

Todd Taylor
55 Evergreen Blvd.
Duluth GA

615-992-5656

103X902701092
Laird Co. Drum site



RiteintheRain.com

CONTENTS

PAGE

REFERENCE

DATE

1-6 Site activities 5-17-18 thru

5-18-18

5-17-18

5-18-18

7 Site activities drum cleanup

7/10/18

- Left for site (START)
- Site arrival - met with OSC and ER - we are over packing 21 drums sampling, staying collecting soil sample in creek ER - Bobcat, minix 2 trucks 2 trailers.
- Collecting down stream upstream sample.

collected composite sample along property line on creek bank

West Bank

2) 882 Jars

2) 402 Jars

Every 15 Feet

along Property line

WHRP 051720181425

Collect sample No#2

WHRP 051720181630

Grab at

37° 5' 41" N 85° 17' 36" W

Page
Composite
Tied
May 22, 2018

Tied 5/17/18

- 1) Solid
- 2) Solid
- 3) Liquid - Flan 6 Liquid F
- 4) Sludge non Flan 3 Liquid N
- 5) Sludge F
- 6) ~~bevel~~ Organic/solid
- 7) Solid
- 8) Solid TAT
- 9) Solid Solid Non Flan Sludge
- 10) Liquid F TAT
- 11) Liquid Non Flan Liquid Non F
- 12) Liquid non Flan
- 13) Solid Solid
- 14) Solid
- 15) Liquid F
- 16) Liquid F
- 17) Solid
- 18) Liquid F
- 19) Sludge F
- 20) Liquid F
- 21) Liquid Non Flan
- 22) Solid

108 Solid

1 Sludge Flan

2 Sludge non

6 Liquid F

3 Liquid N

F

Organic/solid

TAT

Non Flan Sludge

TAT

Liquid Non F

Non Flan

Liquid non Flan

Solid

Solid

Liquid F

Liquid F

Solid

Liquid F

Sludge F

Liquid F

Liquid Non Flan

Solid

Tied

5/17/18

Page
Tied
May 22, 2018

Scale: 1 square =

Rite in the Rain

11/2
 2 Drum Samples - Excavated
 Soil Composite
 - Left site
 at hotel
 - working on spreadsheet

[Handwritten scribble]
 5/18/17

5/18/17
 0530 - Left Hotel
 0630 START ARRIVES on site
 Setup to collect samples
 0730 - Composite waste Drum Sample
 Liquid F Drum 3, 5, 10, 15, 16, 18, 19, 20
 0800 - Composite waste Drum Sample
 4, 9, 11, 12, 21

WHRPD 051820180730 FL
 WHRPD 051820180800 LFI
 WHRPD 051820180830 Solid

0830 - Composite Solid
 Drums 1, 2, 6, 7, 8, 13, 14, 17
 and 22
 WHRPD 051820180830

0835 - Chuck Berry collected
 WHRPD 051820180835
 37° 5' 42" N Grab Sample From
 88° 17' 3" W down area after soil was
 Excavated

0900 Chuck Berry collected a Composite
 37° 5' 41" N Sample From the Man made
 88° 17' 3" ditch west of site. SAME N
 WHRPD 051820180900

Scale: 1 square = *[Signature]*

8/18

103K902781092

Collected
5 Point + Composite
Of Found Drum AREA
WHPRO 51820180910
37°5'42"N
89°17'17"W
30 - Left site
00 at Lab
00 at office

[Large handwritten signature/initials]

Page Caught
1000
May 22, 2018

1 square =

7/10/18

103K902781092

0600 - Left for site
10:00 - Arrived at site. Met with
ER at drum location. Was
on drum pickup.
11:30 - Transport Arrives on
site.
11:35 - Begin load out of
drums.
13:00 - all drums loaded
and Manifest Sign
13:00 - Leave site
15:30 - Arrive at Office
Clean truck & Van
16:00 Leave office.

[Handwritten signature/initials]

7/10/18

Page Caught
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7/13/18

Scale 1 square =

Rate in the

ATTACHMENT 1
LABORATORY DATA PACKAGES
(1,524 pages)

