

# REMOVAL ACTION REPORT

#### **FOR**

# WILCOX OIL RESIDENCE SITE REMOVAL (b) (6) BRISTOW, CREEK COUNTY, OKLAHOMA

Prepared for

# U.S. Environmental Protection Agency Region 6

Will LaBombard, Project Officer 1445 Ross Avenue Dallas, Texas 75202

Contract No. EP-S5-17-02
Technical Direction Document No. 0001/17-065
WESTON Work Order No. 20600.012.001.1065
NRC No. N/A
SEMS ID OK0001010917
FPN No. N/A
SSID A6GG
EPA OSC Steve Mason
START PTL Derrick Cobb

Prepared by

# Weston Solutions, Inc.

Cecilia H. Shappee, P.E., Program Manager 5599 San Felipe, Suite 700 Houston, Texas 77056 (713) 985-6600

December 2017



#### **EXECUTIVE SUMMARY**

The U.S. Environmental Protection Agency (EPA) Region 6 Superfund Technical Assessment Response Team (START) contractor Weston Solutions, Inc. (WESTON®) was tasked by EPA Region 6 Emergency Management Branch (EMB) under contract EP-S5-17-02, Technical Direction Document (TDD) 0001/17-065 to provide technical assistance with a residential removal action at the Wilcox Oil Superfund Site, located in Bristow, Creek County, Oklahoma. The Superfund Enterprise Management System (SEMS) Identification Number for the site is OK0001010917.

The focus of this removal action was to remove oily sludge and oily contaminated soils from the residential property identified as Property 006 during previous assessment activities conducted under Technical Direction Document (TDD) 5/WESTIB-042-15-004. Emergency and Rapid Response Services (ERRS) contractor Environmental Restoration LLC (ER) was responsible for the excavation/disposal of oily sludge and contaminated soil, and restoration activities at Property 006. The removal activities took place between 27 September and 11 October 2017. Removal activities and analytical results are summarized as follows:

- Removal and disposal of 1,349 tons (approximately 921 cubic yards) of oil impacted soils and sludge.
- Four five-point composite confirmation samples collected from the bottom of the excavation area, did not exceed the site-specific action level of 0.11 milligrams per kilograms (mg/kg) for benzo(a)pyrene.
- Restoration of the property and driveway to pre-removal conditions.

START compiled logbook and photographic documentation of the removal activities utilizing SCRIBE and Response Manager.

This Removal Action Report was prepared to describe the technical scope of work that was completed as part of the TDD No. 0001/17-065. The EPA On-scene Coordinator (OSC) was Steve Mason. The EPA Team Project Team Leader (PTL) was Derrick Cobb.

	The EPA Task Monitor did not provide final approval of this report prior to the
	completion date of the work assignment. Therefore, Weston Solutions, Inc. has
	submitted this report absent the Task Monitor's approval.
	The EPA Task Monitor has provided final approval of this report. Therefore, Weston
X	Solutions, Inc. has submitted this report with the Task Monitor's approval.

# TABLE OF CONTENTS

Se	ction		Page
EX	KECU'	TIVE SUMMARY	ES-I
1	INT	RODUCTION	1-1
	1.1	PROJECT OBJECTIVES	1-1
	1.2	SCOPE OF WORK	1-1
	1.3	REPORT FORMAT	1-2
2	SIT	E BACKGROUND	2-1
	2.1	SITE LOCATION AND DESCRIPTION	2-1
	2.2	OPERATIONAL AND REGULATORY HISTORY	2-2
	2.3	SUMMARY OF PREVIOUS INVESTIGATIONS	2-4
3	ACT	ΓΙΟΝS TAKEN	3-1
	3.1	SOIL REMOVAL	3-1
	3.2	CONFIRMATION SAMPLING	3-4
	3.3	SITE RESTORATION	3-4
	3.4	AIR MONITORING RESULTS	3-5
4	SAN	MPLE ANALYSES AND DATA EVALUATION	4-1
5	CIIN	MM A R.V	5_1

T	IST	$\mathbf{OE}$	$\Delta P$	PEN	IDI	CES
•	/ - 1 7 -	<b>\</b> / I ·				

Appendix A	Site Logbook
Appendix B	Digital Photographs
Appendix C	Waste Manifests
Appendix D	Pollution Reports
Appendix E	Data Validation Packages
Appendix F	Analytical Results
Appendix G	Technical Direction Document No. 0001/17-065

# LIST OF FIGURES

Figure 1-1	Site Location Map
Figure 2-1	Site Area Map
Figure 2-2	Site Property Map

# LIST OF TABLES

## 1 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 6 Superfund Technical Assessment Response Team (START) contractor, Weston Solutions, Inc. (WESTON®) was tasked by Region 6 EPA Emergency Management Branch (EMB) under Contract Number EP-S5-17-02 Technical Direction Document (TDD) No. 0001/17-065 (Appendix H) to provide technical assistance, contractor oversight, and documentation of on-site activities during the removal action at the Wilcox Oil Residence site. A Site Location Map is provided as Figure 1-1. The removal action included the excavation of oily impacted soils and sludge, confirmation sampling, and site restoration.

This removal action report describes the technical scope of work for removal activities at the Wilcox Oil Residence Site Removal conducted by Environmental Restoration LLC (ER), the Emergency and Rapid Response Services (ERRS) contractors. The EPA On-scene Coordinator (OSC) was Steve Mason. The EPA Team Project Team Leader (PTL) was Derrick Cobb. The EPA Superfund Enterprise Management System (SEMS) Identification number for the site is OK0001010917.

#### 1.1 PROJECT OBJECTIVES

The objective of this removal action was to eliminate the imminent threat and substantial endangerment to public health and welfare and the environment posed by on-site hazardous substances, pollutants, and contaminants at the Wilcox Oil Residence site. EPA accomplished the project objective through excavation and off-site disposal of oil impacted soils and sludge.

The objectives were achieved by excavation and off-site disposal of oily impacted soils, coordinating with EPA OSC Mason, and providing written and photographic documentation of site removal activities.

#### 1.2 SCOPE OF WORK

The Removal Action scope of work included the following activities:

• Excavated and disposed oily impacted soils and sludge off-site.

- Conducted ambient air monitoring during removal activities.
- Collected confirmation samples from the bottom of the excavation areas to document that oil impacted soils and sludge were removed.
- Conducted site restoration activities once confirmation soil results determined that removal action objectives were met.
- Provided oversight and documentation of removal activities.
- Coordinated with EPA OSC and ERRS contractors.

#### 1.3 REPORT FORMAT

This report has been organized as follows:

- Section 1 Introduction
- Section 2 Site Background
- Section 3 Actions Taken
- Section 4 Sample Analyses and Data Evaluation
- Section 5 Summary

Additional information is provided in the appendices following the text of this report. The appendices are as follows:

- Appendix A Site Logbook
- Appendix B Digital Photographs
- Appendix C Waste Manifests
- Appendix D Pollution Reports
- Appendix E Data Validation Packages
- Appendix F Analytical Results
- Appendix G Quality Assurance Sampling Plan
- Appendix H Technical Direction Document No. 0001/17-065

## 2 SITE BACKGROUND

This section presents a summary of background information for the Wilcox Oil Superfund Site including site location and description, operational and regulatory history, previous investigations, and sources of contamination.

#### 2.1 SITE LOCATION AND DESCRIPTION

The Wilcox Oil Residence Site (Property 006) is part of the Wilcox Oil Superfund Site, an abandoned oil refinery and associated tank farm located north of Bristow, Creek County, Oklahoma. The geographic coordinates of the site are approximately Latitude 35.842144° North and Longitude -96.381456° West. The former Lorraine Refinery, including an associated tank farm, operated under numerous companies from approximately 1915 to 1937 when the property was sold to Wilcox Oil and Gas Company. Wilcox Oil and Gas Company purchased refinery operations on the remaining acres east of the railroad tracks and operated as a crude oil refinery from the 1920s until the property was sold on 01 November 1963. The site encompasses approximately 140 to 150 acres. A Site Area Map is provided as Figure 2-1, and a Site Property Map is provided as Figure 2-2.

The Wilcox Oil Superfund site is bordered by Route 66 to the west; a residential area and Turner Turnpike to the northwest and north; Sand Creek to the southwest; and residential, agricultural, and wooded areas to the east and south. The topography in the vicinity of the site slopes to the south. Surface water runoff would follow the topography in the vicinity of the site. There are several fresh water ponds on the site, and some local residents indicated that, historically, fishing has occurred. Two intermittent streams drain the eastern and western portions of the site, and these streams flow south into Sand Creek.

The former Wilcox Oil Process Area is fenced while residential and agricultural properties on the site are partially fenced with barbed wire. A chain-link fence was installed around the former Lorraine Process Area during the Phase II Removal Assessment.

The Wilcox Oil Superfund site is divided into five major former operational areas: The Wilcox Refinery, the Lorraine Refinery, the North Tank Farm, the East Tank Farm, and the Loading Dock

Area. These five areas are described as follows:

- The former Wilcox Refinery Area is fenced and covers approximately 26 acres. Most of the equipment and storage tanks that remained on-site in 1963 were auctioned and have been salvaged for scrap iron by private land owners, and what remains are in ruins. Four aboveground storage tanks (ASTs) (12,500 gallons each) remain standing. In addition to a number of buildings, discarded vegetation, barren areas, and black tarry waste of a hydrocarbon nature are visible. A building in the northern part of the former refinery has been converted to a residence. An intermittent creek flows southward across the eastern portion of the refinery area through a small pond in the southeastern corner of the refinery area and into Sand Creek.
- The former Lorraine Refinery Area covers approximately 8 acres and includes the southwestern portion of the site, south of Refinery Road and west of the railroad. No refinery structures remain in the processing area. The First Assembly of God Church, a playground, and one residence are located here. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of hydrocarbon nature.
- The East Tank Farm was a large crude tank storage area/tank farm covering approximately 80 acres and contains pits, ponds, and a number of circular berms that surrounded tank locations. All of the tanks have been cut down and removed; however, remnants of the tank locations remain and are visible. Many of the berms surrounding the pits, ponds, and former tanks have been cut or leveled. An intermittent creek is located in the eastern portion of the tank farm and flows south to Sand Creek. A pumping or gas compressor station exists in the north-central portion of the site, and an active pipeline crosses from northwest to southeast across the middle of the site. There are four residences located on top of or directly next to former tank locations. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature. Waste was also observed in several drainage channels that empty into Sand Creek.
- The North Tank Farm was a crude and fuel oil storage area consisting of approximately 20 acres. No refinery structures remain in the product storage area, and all tanks have been cut down and removed. Remnants of the tank locations are not visible, and historic locations are difficult to pinpoint. One residence is located in this area.
- The Loading Dock Area is approximately 7 acres and was used for loading and unloading product by rail. Just a few refinery structures/supports remain and are generally located parallel to the existing rail lines. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature.

#### 2.2 OPERATIONAL AND REGULATORY HISTORY

A modern oil refining plant was constructed in 1929. The upgraded facility had an operating capacity of 4,000 barrels of crude oil per day. The main components of the system consisted of a skimming plant, cracking unit, and re-distillation battery with a vapor recovery system and

continuous treating equipment. The crude oil was brought directly from the field, eliminating storage and handling facilities, but resulting in crude oil with high sediment and water.

The Wilcox Oil and Gas Company and Lorraine Refining Company Sanborn Insurance Maps indicate that the properties contained approximately 80 storage tanks of various sizes, a cooling pond, and approximately 10 buildings housing refinery operations. The maps also indicate that crude oil, fuel oil, gas oil, distillate, kerosene, naptha, and benzene (petroleum ether) were all stored on the property.

After the refinery operations ceased and most of the tanks and buildings were demolished and sold for scrap, the property was sold to private interests. Beginning in 1975 with the construction of the church, private residences were constructed on 6 parcels of land that were part of the former refinery operations. The most recent being constructed in 2003/2004. One former building associated with the refinery was repurposed as a residence. As a result, there is a total of seven residences on the site, all of which are located on former tank or refinery operation locations. Three of the residences located in the eastern portion of the site are known to use water from domestic/private wells. The drainage pattern of the site is primarily toward Sand Creek that serves as the western and southwestern boundaries of the site. Two intermittent streams and several drainage channels cross the portion of the site east of the railroad and flow into Sand Creek.

The refinery waste source areas of concern include a backfilled oil waste pond and pit, a breached settling pond, a former pond apparently backfilled with solid refinery waste, and a number of former tank storage areas. The contaminants of concern are metals and organic compounds (Total Petroleum Hydrocarbons [TPH] and Polycyclic Aromatic Hydrocarbons [PAHs]). These potential contaminants of concern are found in soil, sediment, and waste material.

Specifically, Property 006 (subject to this removal action) is currently occupied by a family. During previous assessment activities, benzo(a)pyrene was found at concentrations that exceeded the residential screening value of 0.11 milligrams per kilogram (mg/kg) at depths ranging from the ground surface to 24-inches below ground surface (bgs). No other PAHs or TPH exceedances were reported for Property 006.

# 2.3 SUMMARY OF PREVIOUS INVESTIGATIONS

Multiple investigations have been performed on the Wilcox Oil site since 1994. These documents were used to summarize the site background and regulatory history described above.

- Preliminary Assessment (PA) was performed at the former Wilcox Refinery Site by the Oklahoma Department of Environmental Quality (ODEQ) in December 1994.
- Expanded Site Inspection (ESI) was performed at the former Wilcox Refinery Site for the EPA in March 1997.
- Site Assessment (SA) was performed at the former Wilcox Refinery Site by EPA in March 1999.
- PA was performed at the former Lorraine Refinery Site by ODEQ in September 2008.
- Site Inspection (SI) was performed at the former Lorraine Refinery Site by ODEQ in August 2009.
- ESI was performed at the former Lorraine Refinery Site by ODEQ in September 2010.
- ESI was performed at the former Wilcox Refinery Site by ODEQ in September 2011.
- Hazard Ranking System Package was completed in May 2013.

In 2014, the EPA ERRS contractor capped and locked an abandoned drinking water well located near the First Assembly of God Church (no longer operating at this location) to the west of the site. ERRS also installed a fence with signage around an oily sludge pit located on a residential property developed within the historical refinery boundary (Property 001).

In 2014 and 2015, WESTON, the EPA Region 6 START contractor, was tasked by EPA Region 6 to perform a Removal Assessment at the Wilcox Oil Refinery site under TDD No. 5/WESTON-042-15-004. Phase I was conducted from 08 through 11 December 2014, and Phase II was conducted 18 May through 12 June 2015. The field sampling strategy focused on collecting soil samples from residential properties that have been built on or are in close proximity to the Wilcox Oil Refinery Site.

Prior to initiating the sampling activities in Phase I, EPA gained access to one targeted residential property (Property 001) within the former Wilcox Oil Refinery Site boundary. As part of the assessment activities, the EPA Team collected 187 soil samples including duplicate, quality

assurance/quality control (QA/QC) samples from a total of 57 grids. Two samples were also taken at the request of the EPA OSC from soil on the bank of an on-site pond and soil that was affected with a tar-like substance from an unknown source.

Prior to initiating Phase II, EPA gained access to nine residential properties. The EPA Team collected a total of 240 soil samples (including duplicate, QA/QC samples) from a total of 52 grids from 9 properties on and around the Wilcox Oil Refinery Site (5 properties located on the former refinery site and 4 properties located adjacent to the former refinery). At the direction of the EPA OSC, select locations were pushed to deeper depths to visually investigate the presence of potential refinery waste. Based on the historical site operations and historical aerial photographs, selected grids were investigated below 24-inches bgs. These grids were identified on Properties 002, 006, 008, and 011. The center point of each grid was advanced to a maximum depth of 8 feet bgs or refusal (bedrock). Visual observations were noted. No analytical samples were collected from these at-depth soil investigation borings.

Results from previous investigations are presented in the EPA START-3 *Wilcox Oil Company Superfund Site Removal Assessment Report*, (TDD No. 5/WESTON-042-15-004) dated January 2016.

## 3 ACTIONS TAKEN

During this Wilcox Oil Residence Site Removal action, EPA removed sludge and oil impacted soil identified during the removal assessment and transported the material off-site for disposal. On 27 September 2017, ERRS, START, and EPA mobilized to Bristow, Creek County, Oklahoma, to begin preparing the site for removal activities that commenced on 28 September 2017. Preparations included identifying utility locations following mark-outs by the utility service providers, procuring equipment and materials required for removal activities, and setup of the Mobile Mini command post.

From 28 September through 11 October 2017, the EPA Team conducted the removal action that included the excavation area to depths between 6 inches and 48 inches. While on-site, the EPA Team provided written, photographic, and cost documentation for on-site activities. On-site activities included soil excavation, confirmation sampling, ambient air monitoring, site restoration, and communicating with the property owner. Additionally, START documented the excavation boundaries on Property 006, following excavation activities using a Geographic Information System (GIS) and handheld Geographic Positioning System (GPS) unit. The following components of this removal action were completed and are described in this section:

- Soil Removal
- Confirmation Sampling
- Ambient Air Monitoring
- Site Restoration

Pollution Reports (POLREPs) were written by the EPA Team to provide status updates regarding activities at the site and are presented in Appendix C. Site logbook notes are included in Appendix A. Digital photographs taken by the EPA Team of site-related activities are presented in Appendix B.

#### 3.1 SOIL REMOVAL

Prior to initiating the excavation activities, the Oklahoma One-Call System and local municipalities were called and utility mark-outs were performed by the utility service providers.

The area of excavation was excavated to the extent of no visible sludge remained. Confirmation samples were collected from the floor of the excavation following the completion of excavation. Excavation was considered complete when the confirmation sample results were reported below the site-specific action. All confirmation analytical results were reported at concentration below site-specific action level for benzo (a) pyrene (0.11 mg/kg); therefore further excavation was not required.

The excavation material was loaded directly into the dump trucks and transported by Yocham Trucking for off-site for disposal at the American Environmental Landfill, Inc. in Sand Springs, Oklahoma, as non-hazardous soil waste. A total of approximately 1,349 tons (approximately 921 cubic yards) of oil impacted soils and sludge were removed from the site during the removal action.

Table 3-1
Summary of Waste Disposal
Removal Report for Wilcox Oil Residence Site Removal
Bristow, Creek County, Oklahoma

Date	Designated Facility	Manifest Tracking	Waste Description	Col	Containers	Total Quantity
		Number		No.	Type	(tons)
10/27/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	9	DT	99.03
10/28/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	26	DT	418.02
10/29/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	33	DT	487.44
10/30/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	15	DT	241.19
11/2/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	3	DT	54.61
11/05/17	American Environmental Landfill, Inc.	MN520WIL01	Non-Hazardous Soil	3	DT	48.36

Notes: DT - Dump Truck

TDD No. 0001/17-065 SEMS ID OK0001010917

#### 3.2 CONFIRMATION SAMPLING

As part of the removal action support activities, confirmation soil samples were collected from each excavation area following the completion of removal activities. The EPA Team collected a total of five soil composite samples (including QA/QC samples) from a total of four excavation areas during the removal action. Excavation locations were established using GPS technology to obtain horizontal control of the sample locations.

Composite samples were collected from five points within the excavated area. The soil was homogenized in dedicated plastic bags then transferred to clean, unused, 8-ounce glass jars. Each sample was label, bagged, and placed in a cooler with ice. Sample coolers were shipped via FedEx to a subcontracted analytical laboratory.

The QA/QC samples were collected as part of the confirmation sample process. The EPA Team collected one blind field duplicate during the removal action. Analysis of the duplicate provides QA of sampling procedures and laboratory analytical data by evaluating reproducibility of results. Matrix spike samples were also collected to assist in the QA of the laboratory analytical procedures. One matrix spike sample was collected during the removal action. Other QA samples included temperature blanks placed in each cooler to evaluate the temperature of samples upon arrival at the laboratory. Analytical results are provided in Appendix F.

#### 3.3 SITE RESTORATION

Post-excavation activities included restoring Property 006 to previous conditions. Prior to excavation, photographs were used to document the existing property conditions. Clean soil (as confirmed with sampling data collected from the fill material) was used to replace the excavated soil. Gravel was utilized to restore the driveway. In addition, six trees selected by Property 006 owner were planted to replace the trees removed to facilitate excavation. Where clean soil was placed, the area was hydro-seeded. A final site walk was completed to document the site conditions prior to returning to the property owner. Additionally, ERRS provided hydro-seed and tree care guidance to the property owner prior to project completion.

## 3.4 AIR MONITORING RESULTS

The EPA Team utilized a Multi Rae to conduct ambient air monitoring for volatile organic compounds (VOCs) during removal activities. Ambient air monitoring was completed throughout the days during removal activities. No readings above background were detected.

## 4 SAMPLE ANALYSES AND DATA EVALUATION

Test America Laboratories, Inc. (Test America) in Nashville, Tennessee, conducted analytical analyses of the samples collected from Property 006. Data validation was performed by START as part of the removal action in accordance with the EPA Contract Laboratory Program *National Functional Guidelines for Organic Superfund Data Review – January 2017 (EPA-S40-R-014-002)*. These tasks were conducted in accordance with the EPA technical requirements, WESTON's Quality Assurance Program, and the site-specific Quality Assurance Sampling Plan (QASP) (Appendix G).

A standard data management system that includes using bound field logbooks, site photographs, sample management and tracking procedures, document control, and inventory procedures for the laboratory data was utilized. SCRIBE software was utilized to manage and track sample information for samples submitted to the laboratories, and store analytical results data.

Confirmation samples were analyzed only for the constituents that exceeded the site-specific action levels (benzo (a) pyrene) during the previous assessments for the respective area of Property 006. The following method of analysis was conducted:

• SW-846 – Method 8270D SIM – PAHs, benzo(a)pyrene

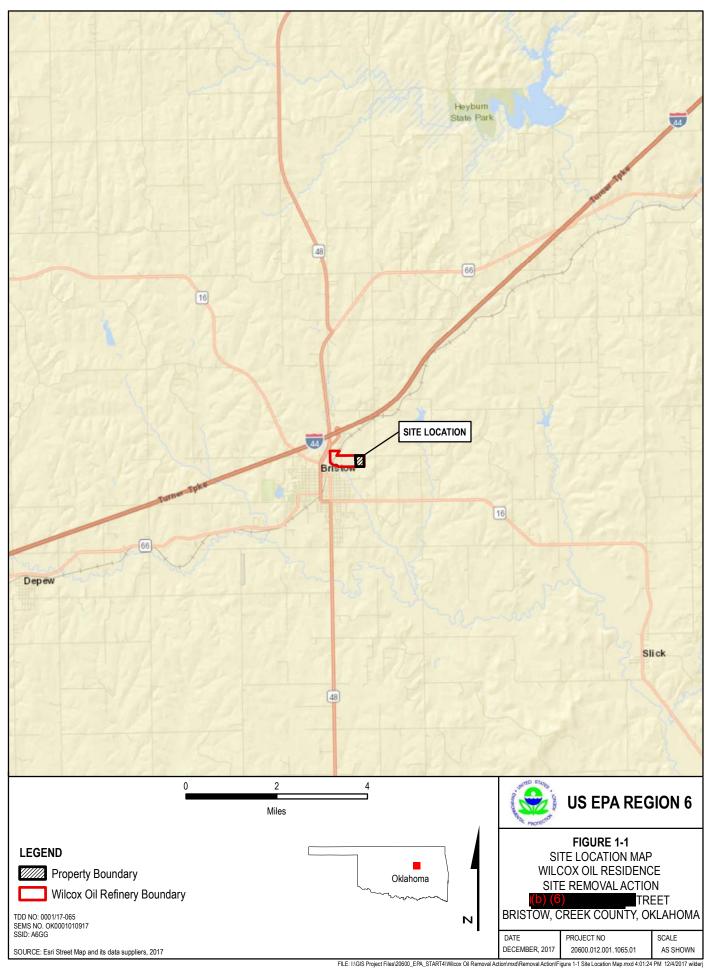
Test America provided data packages for each chain of custody submitted. The laboratory documentation in these data packages includes records of instrument readings, calculations, calibrations, and quality assurance checks. The data packages were reviewed to verify that they met the EPA technical requirements and QA guidelines established for the respective analytical methods. Analytical Results are provided as Appendix F, and the data validation packages are provided as Appendix E.

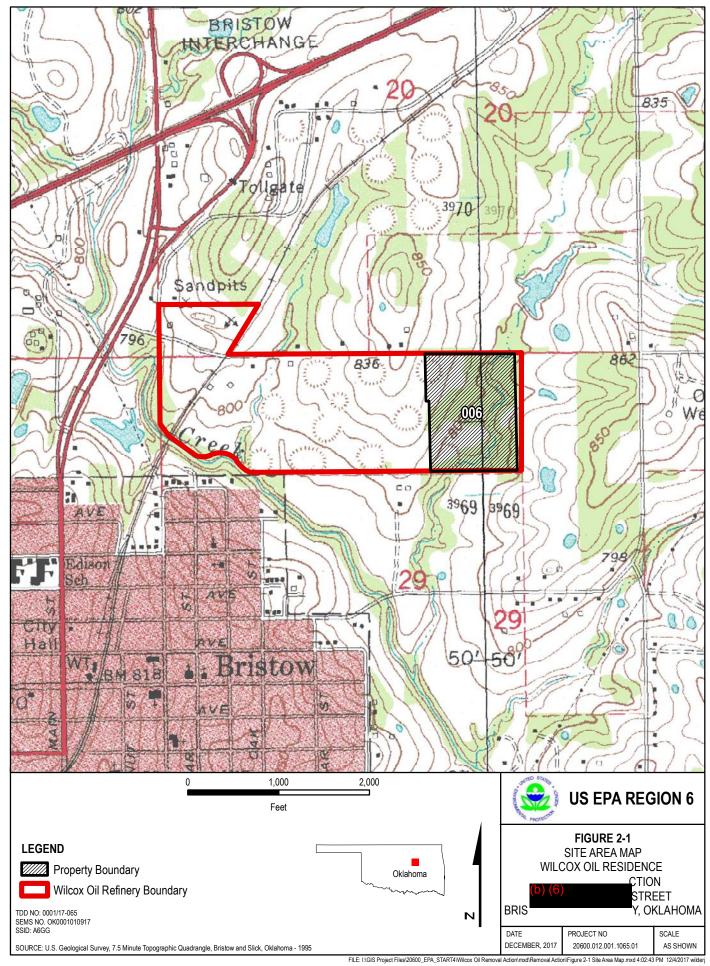
## 5 **SUMMARY**

From 27 September to 11 October 2017, EPA conducted and successfully completed the removal action at the Wilcox Soil Superfund Site, Property 006. Removal Actions consisted of the removal and disposal of 1,349 tons (approximately 921 cubic yards) of oil impacted soils and sludge and restoration of the property and driveway.

A total of five confirmation samples (including QA/QC samples) were collected and submitted for analyses for PAHs during the removal action and were submitted to Test America. The laboratory data results were validated by START, and analytical results were compared to the site-specific screening level established by the EPA in the Action Memo.

Excavated areas were backfilled with clean soil and hydro-seeded and the gravel driveway restored. On 12 October 2017, the EPA Team completed field activities and demobilized from the site.

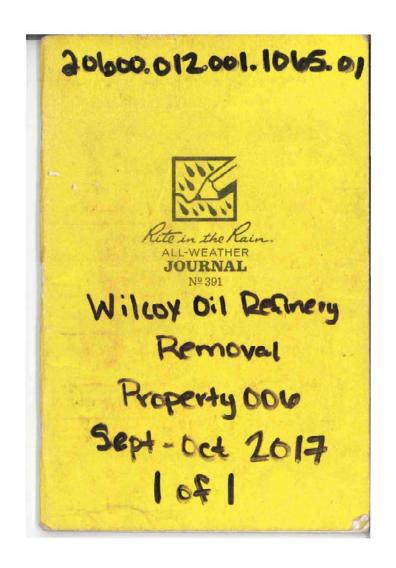






# APPENDIX A

SITE LOGBOOK



	DATE .		2.0	4	1	14			رم				-				
			2960 Fisher Creighten Dr.	C	200	CT13) 690- 4444 EXT 114	Church Combinedia - EPAL		MON' 20000, 012, 0001, 1065 01	-		7				- 2	0.00
CONTENTS	ACE.	allen	Crergh J 397	Soylo	PN Sachin Kudehad Kar	hhhh	chibi	in the	10.000.01		NE.						TANK STATE
CONTE	REFERENCE	Test America	Foster Ti	301-	is Ku	-069 (	Corobie	700 000 17-065	0,0000							-	*
6	1	Test &	2960 Neshui	(615)	Sech	C7/13	Sych	1000 d	10N:2					* .			A STATE OF
	PAGE	5			P.M.	7	5	F	3			-					
Rite in the Pain			Name Wilcox Oil Demova! Oversight	Address Brotow, OK	West 2213 Derinery Road	Phone 056 Mason - 114 - 405 - 3014										ocovers (Nem No. 30) are available for this style of notebook.	Helps protect your natebook from wear & tear. Contact your dealer or JL Darling LLC.

	disposal.  olisposal.  olispos	detections 1 ppm downwind of the excavations.  Excavations leads dump truck the off-site disposal.  Sod ERES loading dump truck for off-site disposal.  1515 ERES loading dump truck for off-site disposal.
Alleger Wilcox Oil Remotel Donnings of Alleger Wilcox Oil Remotel October on-site Health and School Operations meeting hosted by the ERRS Response Mainage Topics Covered Stipstrips/fells, Chemicals of Concern PRE Vehicle Traffic, Heavy Equipment Weather Cloudy 60° NNE wind @ 8	mph Hunidity 79 to High Near 74° 0715 ERRS Crew Insperting Equipment 0720 Coading dump truck for off site 0720 Coading dump truck for off site 0730 ERRS Crew Toading dump truck for off site 0750 ERRS Toading dump truck for off site 0800 ERRS Toading dump truck for off	site disposal. O site disposal. O site disposal. Site disposal. Site disposal. O site dispo

TODOODI 19-045. 30000.012.001.1063017 (Wilcox ON REMAIN) 9/29/17  OTO START-Cebb Wills arrive ensite Met A Schep Mee has ond Operations Meeting history has the EPIES Response Manager. Topics. Vehicle Traffic, Heavy	Continue Exercates of Concern. Continue Exercation of Oily Studge. Continue Exercation of Oily Studge. Vacher. Currently 65° Mostly Cludy. North wind 85 mph High Near 76° 0805 GPES loading dump fruck for off-site.	disposal deading dump truck he off-site offsolding dump truck he off site disposal disposal dump truck her off site disposal dump truck her off	Site of posal.  Site disposal.  Joad ERES loading dump truck for off  Site disposal.  Olspasal.  disposal.
GES OCCI 17-065 BOLE ON REMUEL!  GISPOSEL!  JEHOJ ERRS loads dump truck for  Official disposel.  1550 ERRS loads dump truck & offishe	disposal.  Site disposal  Site disposal  STARET Conducts perimeter air monitaring  Highest reading 2.7 ppm immediately  down wind of the excavations.  [1530] STARET collects Confirmation Soil Sample	Volume Collected for Laborating CA/OC 1709 GPPS continues excavation operations and leading tracks (1730) GPRS Secures the equipment and work area (1800) STANT departs the site	Feder END of Los DAY

1540 ERR lads dump truck for affired sols 1045.01  When Oil Remark affired all and truck for affired also sold sold sold sold sold sold sold s	1739 EPPS Crew Secures equipment and —  1739 EPPS Crew Secures equipment onthe 1749 START departs - Are site for Fed Ex-  1820 START departs - Are site for Fed Ex-  1820 START departs - Are site for Fed Ex-  END of Los DAY	Mahalir so ken
	1200 Break for lunch EPRS Crew Josephy and loading frucks.  Low house excavetion and loading frucks.  1300 ERRS Crew Josephy dump fruck Ro stress loading dump fruck Ro stress loading dump fruck Ro stress disposal.  1325 ERRS Crew loading dump fruck Ro stress site disposal.  1355 ERRS Crew loading dump fruck Ro stress site disposal.	disposal  1448 ERES loads dump truck for off site  disposal  1505 ERES loads dump truck for off site  disposal  Sist ERES loads dump truck for off site  disposal  Site disposal

TED OCCUPIATIONS SOLVED OF 2.001. 1065 01 WILCOK OIL REMOVED OF SILE SILES CROS loads dump fruck for Off-site 1125 CROS loads dump fruck for Off-site disposal 1146 CROS begins excavation west of the	orneway 1230 Reham han lunch. ERES continues with exercition operations and lowering trucks 1319 ERES loads dump truck for off-site disposal disposal disposal disposal	disposal  1350 START conducts per meter are mostlang  Nothing detected above background.  1430 ERES continues excavation operations  of the driveword and west of the driveword.  150 ERES sectioning equipment and excavation.  1538 START deports the site END of cool  OAK.
Attends the morrhing Health and Solety of Health While Trothe Residental Weller Trothe Residental Hear Charles Covered Weather PAE Hydrathen Vehicle Trothe Residental Hear Charles Covered was house the Hydrathen Vehicle Trothe Residental Hear Canthons Charles Organical Contract Canthons Can	Octobring Harry for offer, High New 81° off-site dispusal.  Off-site off-site  Off-site off-site  Off-site off-site  Off-site off-site  Off-site	disposal.  Ostalo STHET conducts perimeter air now tenny.  Nothing detected above background.  Osza ERRS looding dump truck for off-site disposal.  Off-site disposal disposal dump truck for off-site disposal.  Osyas ERRS fooding dump truck for off-site disposal.  Osyas ERRS looding dump truck for off-site disposal.

TOCOO! (19-065 200:00:013.001. 1065.01 38 W. Leey Cil Remaral 10/2/17 1035 Backfill dump truck arrives on-site 1100 Backfill dump truck arrive on-site 1105 Backfill dump truck arrive on-site 1005 Break for lunch ERES cartivues -	The same of the sa
100 0001 113-0105. 20000, 012.001. 1063.01. 1012117 Whey Cit Removed Open States-cabb and Willis arrive over Attend that the and Sabety   open thans neeting Complete Exception Open thans Receive Backfill. Health and Sabety PRE Vehicle Trathe Chemicals of Encern Weather 65° Clear Humidity 90%, Italy Near 81°	disposal oads dump truck he off-she disposal ones loads dump truck arrives on site of specal ones that hack he off-she of specal ones that hack arrives on site of specal states soil sample of specal states of the specal of the soil sample of specal states of the specal states of the specal of th

TODODOI / 19-065 DOGOO. DIE., OOI. 1065 DI UNICOX CII REMUNII Remue and ellatin OTOD START-CIEB and Wills Remue and te Attend morning then the and Safety I Continue Meeting Topics Courad. Weather Continue with Beckfill Operations. Weather 72° Cloudy SSE wind @ Toph, Hamiclity 9190 6076 Chance of late afternood stansers.	CATO ERRY WINNING to bockful Grid OCT.  OTES Backful domp truck Grive on-Site.  OTES Backful domp truck Grive on-Site.  OTES Backful domp truck Grives on-Site.  IOTES Backful domp truck Grives on-Site.
10/21/17 Wilcox OI Remodal 1650 Backfull dump truck arrives on-site. 1650 Backfull dump truck arrives sachering site and 1750 Depart the site. 1750 Depart the site. 1750 Depart the site. 1751 Depart the site. 1751 Depart the site.	M walls

101/Cox ()1 Demoved: 10/4/2017	CIONSTRET Will's arrive on-516. HHEAD	tracecting. Topics Covered - Weather, trecost	10% thomsersterms, high 74° and 10w	Thursessions in Porcess all day. No.	on rain. Dips Arrestalls be mindful	MONTH and (13 feet). ERES to oblain Dunis	to remove moter. Use ship sheer to remove inside over and were in back?!!	130 ERZS to object pump to dain pit. No	codd (2225 begins to pamp and the pain wenter	105 A green was choseved in the property para	Swarn devices from the excavation. Histogram measures were taken	erforce on stock impacied water was
TOD GOOT [13-045 SOLODO OF 2 OOT: 1065 01	1145 Brek for when ERRS continues bouts 11.09.	1205 Breezell down truck on Site.	1320 Compactor ourined ornight and unloaded.	1415 BOCKTIII domp truck on Site		From Tool Prom Tool Promy Tool Promy Tool	benzulejpyrene.	1675 Here Rental on-Site to Service dia	1500 Continue Composition Gris 009 and	1990 ERRS begins secoving the site and	Depart the dive. End of 10g day.	The Man of the last of the las

18 TDD 6001/19-065 - 200000 - 200 - 101/1900 CID	TODO CON 13-065 - 20600-012.001 1065 01 TO 0001 14-065 2 0400.013.001.1065.01
Indition Oil Removal 10/4/17	Willox Oil Removal 10/4/17
in vietnam of the pump.	residents have explayered capabilities.
JUSTS EDES personnel and START Viewing	1805 EDES SELVE Sire Points Placing Plywood
discharge,	1845 Deport give, that of log day.
1140) Demontering activities parted and absorber	
pode will be deployed to contin sheen,	
155 Bir are receveling howy rainfall.	
EDDS second die until Storm passes	
1220 Break for lunch.	5
1315 Review to Site	
1320 FRBS continues to place rood base for	are constitution of the co
Process by her drive access. Discuss	
with EPA EDDS Short "to deploy boon	3.00
around Sheen in excavation. Resume	مد
demonstring to ensure excavation doesn't	
Oversill With tain water.	10.
1350 ERR Continue dewatering. Area still	100
recieving dicody rain.	
(420) ERES Certinues de-Monteving process	
1516 6 RZS apply Dads to Sheen observed	
along Properly ook pand.	
LEAGERES continue de modeving activities.	
1730 START, FPA, ERRS discuss 3,4 Pgress	
for properly owners. De to the rain	
the main egress dies is very soft.	
ERRS will place plyward to ensure	
	Alto in the Rem

TES 5001/19-045 200000000000000000000000000000000000	TOD 0001/19-045" 20400. 012.001. 1065. 01
Walter Oil Removal 1015/2015	IN: 160x O.1 Removel 10/5/2017
OUSS STATET WITH DON'SHE. AHEND JOPEN	1000 4 truck of trackfill moderal delivered.
Meeting and Operations Meeting. Topics	1020 4 truck of backfu material delivered.
dovered. Sow Por today, Slips Hrips (Palls,	1048 1 truck of backful meterial delivered.
venicle treathe, mecoliher, heavy equipment,	104 2 truck of backful majeral delivered
Morkey to creeke a hard - base, Meditier	Well ERES (watering dump-truce of muddy top
Wind 585.3 mph Humidialy 95% low 670	loyer of traciality and albanton pads or
high 83° Chrise of voin 80%. Be	bouns for langfill disposal
minastel of modes ground.	1120 Breas for Inch.
0710 ERRS axin up six decerting lence and	12/30/ Deton to size.
remove absorbent parts from NW	(230 FRES continue backfilling
COUREY and Jami Strupping of the	1251 1 tribe of backlill moternal delivered.
John Modely portion of back? 11.	1303 1 truck of tackfill material delivered.
0795 (ERRY bein de voeleing activities of	1355 1 true of bacieful majeral delivered -
excavation to Property one pand.	135619 truck of backfill material delivered
0326 4 truck of road based gravel	1415 1 truck of backfill maverial deliveron:
delivered to site.	1430 1 truck of DOCININ momerical delivered -
1 free of read based glave decioned	1500 [FR2] (ONYING to HORCHTIN exception end
CRAST GERG Degin Skinning the Charle	Mark in New Pill Nown demp Pill impagled
pond Mith alosovient booms	m parau
CASO) I true of road bosed gravel delivered.	1530 1 truck of bockfill making delivered
eggo 4 truer of rood bosed gravel delivered	1540 1 truck of backill moterial delivered."
cours [ ERRY loaking during tree of mouth	11040 I truck of backfill moderies desireres -
10p layer for off-six disposon.	1930 Continue Excellent excession.
1 2950 1 truck of back Till gradevier delivered	1750 Bogn Selwing Bile.
COSS ] A truck of backing material delivered	186 Depart site, End of log day.
	ל מעל ביו ישל לעניים.

TOWORE (17.005 SOURCE OIL DOCT. 1045 CI 28  Villes Di Beneval (19.017)  The over west of the drive. Backing over the over the over the over the drive. Backing over the drive way the over the drive. Backing over the drive way the page of the off off off of the driving of the off off off off off off off off off of	vas	wall water the state of the sta	Riter, son Russian
22 TOD OOD [17-065 SCHOO 012: eccl. 106501  Wilcox Dis Demoval  OTOO STAPT Will arrive on 5-16. Attend do:19  Hed meeting and operations. dominate  re-voorzing tracks: 11 menterial. Wienher:  High 850 / Low (65" Winds 9 at 10-16 20  mph humatig 80%, 0% charce of	CELO VICEN WERE ONCE. De not appen to recieve reinafelle ERRA Masme booklilling and compaction activities.  CELOS 1 House of backful making delivered.  LEDS 1 House of backful making delivered.	MOOD DUCES NOWIN OF THE MOOD CLOSS CLOSS TO THE PACKET II. TO THE MOOD THE PACKET II. TO THE PACKET III. TO THE PACKET II. TO THE PACKET III. TO THE PACKET II. TO THE PACKET III. TO	1245 Retero to 3:16. BERS continues backfilling/ compaction of excavation.  1200 1 thore of backfill material delivered.  1220 1 thore of backfill material delivered.  1100 2 thore of backfill material delivered.

TEDODO(17 CN) REMODEL 1019/119  OLOGS STRET WILLS arrives of give.  ERES and STRET. Weeding with FAI  Low Sa , cloudy, NNN or 7 mph,  100% humidily. Sip received ro.n.  in early morning slips Hips Rolls  a concern. Harden 2 points of concerns  from excuration over and equipment. Be quient  Malking gate. Will pamp out writer  from excavation over and clean up	TED COCK   17-0105 SOUR COLUIZ OCCITIONES OF 1200 AHERA HES AND OLD MECHING WITH EPAI ERES AND STREET, WE CHINEY: High B30/LowSB", Sunny, Windo S B Mph, Homdyy 45% 2000 CREVER CHEER AND SOIL TO dry, TOP SOIL THE OVER WEST OF THE CHINES HENDED SOIL TO DAIL WEEK THE TOTAL HERE DIOUTED TOTAL CONTRACT.    200   WEEK   WASHING DOCK!!!   WEEK   WASHING CONTRACT.   1200   WEEK   WASHING DOCK!!!   WEEK   WASHING CONTRACT.   1200   WEEK   WASHING DOCK!!!   WEEK   WASHING CONTRACT.
Decerning to cercae and dry.  - 1200 ERRS begins parapine out exceletion.  - 5315 ERRS begins parapine out exceletion.  - 1200 ERRS begins begins out race along  - 1200 President driveway.  - 1200 Adving truck of tip soil delivered.  - 1200 Adving truck of tip soil delivered.	phologophic decementation of Stric againstines, phologophic decementation of Stric againstines, and ERES continue arresting excuention.  1530 ERES continue unortens in and smoothing topsoil these of divisioning topsoil these of divisioning topsoil these of divisioning topsoil these of divisioning topsoil on rights access of Property COV to restore to pre-excuation activities.  1300 Pepale six Erie of log dely.

	TDCOOO! 114-065 SOUCO. DOL. DOLS CY	TDD0001 17-045 SOVOC, CIB, 601, 1045, 0127
-	Willex OI Removed 10/9/17	Walter Oil Renseval 10/9/19
	clots STRET avrive on-site. Collect ges Gan.	1121) Regn compacing backful on excavation
	DUSTO FILL GES CENT for DO-BING - Notice generates.	1131 1 truck of bacifill meterial delivered to 8the -
	Ofto Strate FRES and EPM confered doing His	1142 1 thee of backly materal delivered to sire
	and operations meeting. Weather: then 88 /Low	1196) I truck of backfill material delivered to Bire.
	47° Severe t-dierms possible starting around	1210 Breeze Per lonen.
•	1300, wind the wings &7% humiding Sow	1240 Delvin to Bite.
1911	dentitive bacifilling to pull back to grade	1245 ERRS Centinues to work in boolifil meteriolitik
X	before swithing to lopasil. Agenda is to	1252 4 truck of backful modernal delivered to Brie - 7
	dompletery Fill time excovation before	1300 1 tuck of books. I make in delivered to site
1	rainfall	1305 4 truck of tomorphill motorinal delivered to 8 ie.
	OFIS EPRO COMING GENGING BACKS! II IN PIRED	1335 ERRS continues to work in bocietill meteral
		1405 ERRS Compacts the becking with the
	to sik.	Compactor and Excountrion Suit met folly
	GROOT THUCK OF BOCKFILL delivered to the Site.	compacting down ERPS winging free -
18	0805 12 trace of backfill delivered to the 3.te. 7	exocuted or improve compaction.
	0808 1 true of bookin derivered to the site	1500) FRES Commune compaction activities.
	CARD START down look photographic documentation	1600 BDD continues compaction activities.
	OBJE ERRY CARRING MOINING IN NEWS LOCKAP. 11	1300 ERES places poly over the two topseil -m
	WHO EXOLING DACEFULL	piles in preparedian for postential roundalling
	0930 1 FIM tuer or traces il delivered to the gite-	THE EDES SELVICE SINE
	0950 ERRS continues to More in New backfill	1800 Depart other Erna of log decy.
1	mosteral into the excavation.	2
	1221 ERRS continues to Mork the excaucation, -	Menger L. "
	1093] Thuce of bocutin delivered to the gite.	
	1637 I truer of bockers demarced to the gite.	N. 19 Jan. 12 Bloom
y		

10.2001, 13-065 3000, 012.0001, 1005 off	TOPCOO! H-045 30400,013.001.1062.01
Nation Oil Pernovel 1010/17	Wileox Oil Remover 10/10/17
OLOSS STRET WITH arrive on site.	115 CCC Mason deport give Will return on
STOO STRET ERES and EPA ENGIN HES and	10 11 17.
not receve	1131] I truck of topon delivered to the size. +
Nevoight. SOM is to Anish placing	1145 Brock Ser Luky
topson and plant trees Final grade	12K) Rejurn to Sinc.
exercusation . Wreather . Cloudy high of Sign	lace ERRY continues to restore Property OOU and
and low of 40° wine NW 14 mph,	Work in topsoil on the excountion.
humberly 104°10. Hazerds - cold I wind	1340) ERRS COMOVE STREETING OPPOUNDS TOTAL
Wechlier, gon exposore, Take breaks as	across excavation,
needed and use sunblack,	1349 ] I truck of typoil delivered to the site.
OFIO Vie	1510 1 truck of topsoil delivered to the gire
to day act. Unicover. Appaid piles	EAS ERRS CUATIONS grading the excavation -
DEED Begn grading excentation over	1010 EERS continues making in topsoil over
USW Chech up the dompocior and stage along the	the excounting in preparedion for hydro
main road for pictip.	decling anedwich for 10/11/17.
and stabilizing	1640 FRES begin to plant trees replacing
Ginder Blocks per d'irretion of OSC.	the ones removed - 3 Oxean Giant &
0528 Decusion between EPA EPRES and Striet	S Thuys
indicate conside pand removed alheen and	1430 Begn wordering the phople and re-
very associated With de-wollering Compate	installing the mailbox, moon yound
OPICS of those of topson delivered to the give -	the placement and concurred in
	170 ERPS alexaned up the divideuply and
1000 Eppe over up excendetor prior to remin return.	pocked up supplie.
1020 1 true of topsoil delivered to the out	1800) ERRS and Striket , depart give -
1051 ERRS REPORT REMOVE MHED OVER SUMMING	10.10.19
the excavation.	Trajum calor for anna

TOD COOM   12-0665 3000,013 001, 1065.01 31	1340 Noovue Coure porms applies the facifier of much to the tot pix area west of the	drive uses complet hydrograding and deport	HARY ERES COMMING to restore chare way and	1545) Three temporary restrooms tenored from	1603 FEPS continue to smooth prostore road.	1640 Test out the aprinkiers placed throughout	1700 1 look of gravel delivered and worked	chons	Property Nith (0) (6) 40 ersure	1940 Conduct past activity assessment and	1750 Depart sixe trib of lay day and	1	18 500 L 10 11. 17 House de Rome
30 TOCCOT 17-OUS 30600.012.001.10US.01	OFCO PHEED HES and Germians meeting Will	ERRY EPA, START WEALTON HIGH LOB / 10W 490.	SDW includes thisks deciding, fourhing up driveways, Six mail Winh Property owner,	c715 EPRS begins working on excavation. Watering	CROO ERRS continues traces. My vestoration	0933 EPPS (continues smoothing out vote	copses ERRS comparting and alecming up	Ogsal Nouve Cove Lawn Cove Hydrosveding	1163 I truck of gravel delived.	1110] Sees, tacifier, and motern applied ing	12.35 STAR & EPA Dreak for boon.	ine wood	Circle to pre-excovodion Condition,

#### APPENDIX B

#### **DIGITAL PHOTOGRAPHS**

(Will be included in final CD deliverable.)





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: NW

Photo Name: 2017-09-27\_IMG\_1529.JPG Date and Time: 9/27/2017 9:47:00 AM

Latitude: 35.842250 Longitude: -96.376883 Photographer: Derrick Cobb Witness: Steve Mason

Caption: Oily sludge/oily impacted soils.

Photo 1 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: W

Photo Name: 2017-09-27\_IMG\_1530.JPG Date and Time: 9/27/2017 9:50:00 AM

Latitude: 35.842175 Longitude: -96.376700 Photographer: Derrick Cobb Witness: Steve Mason

Caption: Loading dump truck with oily sludge and oily

impacted soils for off-site disposal.

Photo 2 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: E

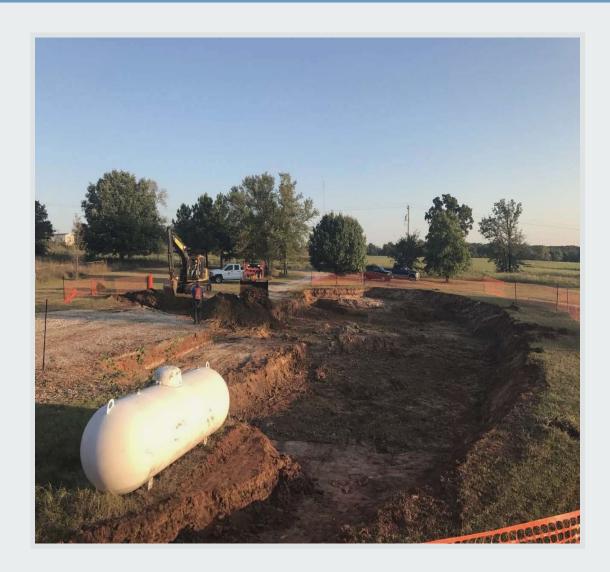
Photo Name: 2017-09-28\_IMG\_1534.JPG Date and Time: 9/28/2017 11:30:00 AM

Latitude: 35.842311 Longitude: -96.376838 Photographer: Derrick Cobb Witness: Steve Mason

Caption: Oily sludge/oily impacted soils.

Photo 3 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: N

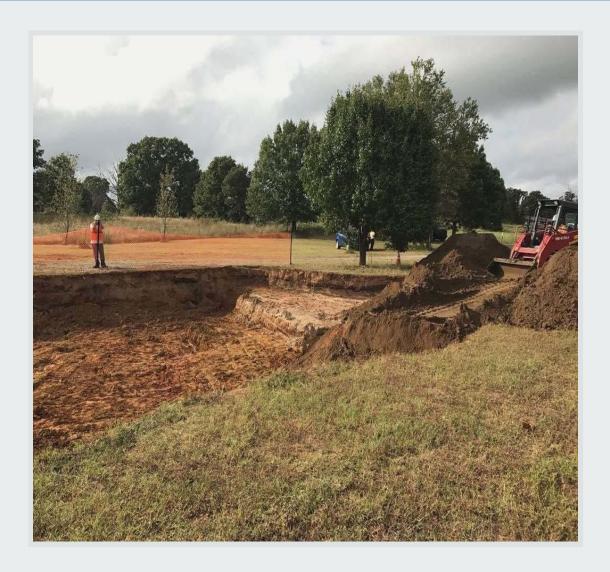
Photo Name: 2017-10-02\_IMG\_1537.JPG Date and Time: 10/2/2017 8:03:00 AM

Latitude: 35.841988 Longitude: -96.376852 Photographer: Derrick Cobb Witness: Meagan Willis

Caption: Overview of excavation.

Photo 4 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: NW

Photo Name: 2017-10-03\_IMG\_0523.JPG Date and Time: 10/3/2017 4:26:00 PM

Latitude: 35.842213 Longitude: -96.376769 Photographer: Meagan Willis Witness: Steve Mason

Caption: Backfilling of excavation

Photo 5 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: NW

Photo Name: 2017-10-10\_IMG\_0588.JPG Date and Time: 10/10/2017 4:09:00 PM

Latitude: 35.841888 Longitude: -96.376861

Photographer: Meagan Willis

Witness: Steve Mason

Caption: Completion of compaction and

backfilling operations.

Photo 6 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: SW

Photo Name: 2017-10-11\_IMG\_0596.JPG Date and Time: 10/11/2017 8:42:00 AM Latitude: (b) (6)

Longitud

Photographer: Meagan Willis

Witness: Steve Mason

Caption: Replanting of trees removed

during the removal operations.

Photo 7 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: SE

Photo Name: 2017-10-11\_IMG\_0601.JPG Date and Time: 10/11/2017 11:12:00 AM

Latitude: 35.842227 Longitude: -96.377044

Photographer: Meagan Willis

Witness: Steve Mason

Caption: Hydro-seeding of the excavated

area.

Photo 8 of 9





Incident Name: Removal Action (Property 006)

Event Name: Wilcox Oil Photo Type: Overview

Direction: N

Photo Name: 2017-10-11\_IMG\_0620.JPG Date and Time: 10/11/2017 5:38:00 PM

Latitude: 35.841913 Longitude: -96.376974 Photographer: Meagan Willis Witness: Steve Mason

Withess. Oteve Mason

Caption: Overview of final restored area.

Photo 9 of 9

#### **APPENDIX C**

WASTE MANIFESTS

	Non-Hazardous v	waste war	mest	1.21
Generator's Name: USEPA Region 6	/ Wilcox Oil Residence Site	Manifest Job No.	リン MN52 <del>0WI</del> L01	
Mailing Address: 1445 Ross Ave  Dallas City  Point of Generation	TX 75202 State Zip		Environmental R	estoration, LLC
Address: (b) (6)  Bristow City	OK 74010 State Zip	Contact:	St. Louis City Evan Wortman Name	MO 63026 State Zip (636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil	Lans			<u> </u>
Generator Authorized Agent Name  Transporter Name:	Signature		ne (Print): Kom	A Les
Address:  City, State Zip:	eking		Tag No. 700-14 DOT No. 030/6	High & State: OK
I hereby certify that the above material wa generator site listed above.	s picked up at the	I hereby certify to incident to the de	that the above named ma estination listed below.	terial was delivered without
Driver Signature	9-29-17 Ship Date	Driver Signature	fir	9 - 29 - 17 Delivery Date
A	Access of the Debits	:-15(8)\$90 max	Phone (018) 245 77	
212 N. 177 <sup>th</sup> W Sand Springs, O I bereby certify that the above named i	OK 74063		Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021  v knowledge the forego	74
White – Destination Retention	Yellow - Return to Bill to •	Pink – Transporte	er Retain • Goldenro	 od – Generator Retain

in Laisein 120						
Generator's Name: US		ox Oil Resider	ce Site	Manifest Job No.	MN520WIL01	
Mailing Address: 14	45 Ross Ave		<u>-</u>			-tti 110
<del>-</del>	allas City	TX State Zip	75202		Environmental Re	storation, LLG
Point of Generation		State Lip		Address.	1666 Fabick Drive	***************************************
Address:	·				St. Louis City	MO 63026 State Zip
	<b>istow</b> City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: St	eve Mason Name	(214) 789-18 Phone	71			
Common Name of Wast	e Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil						13:10 I
	+	Yar.	7			
described, classified and programmed to the control of the control	ackaged, and is in prop	per condition fo	r transpor	tation according to ap	plicable regulations.	Shipment Date
	ensol result		iz estak:	e de la company		
		The second se		-		and the second of the second o
Transporter Name	Yocham Trucking			Driver Nam	ie (Print):	V6 State: 04
Address					Tag No. 706-4	V6 State: 04
City, State Zip	"Courds O	4 )44.	27	US	DOT No. 030100;	5
I hereby certify that the ab- generator site listed above.	ove material was picke	•	ŕ		that the above named mate estination listed below.	erial was delivered without
1	$\sim$	G min	a	1		C 66 D
Driver Signature		Ship Date	71	Driver Signature		Delivery Date
	n ja			freite de Wester de		
and the state of t	American Environmer	ntal Landfill, In	c.	and the state of t	Phone: (918) 245-778	6
	212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 740	ŕ		\ Pej	Fax: (918) 245-7774 mit No: 3557021	
I hereby certify that the	above named materi	al has been ac	ccepted a	to the best of my	knowledge the foregoi	ing is accurate.
(/ )						9 391
Aura King Micki I Name of Authorized Agent	King Raven B		ignature			Receipt Date
	n Potentian . Valle					

	e proposition of the state of t	عالقا والعالم				
Generator's Name: USEPA Region 6	Wilcox Oil Res	idence Site	Manifest			
Mailing Address: 1445 Ross Ave			Job No.	MN520WIL01	=	
Dallas	TX	75202	Bill to Name:	Environmental F	Restoration, LL	<u>.C</u>
Point of Generation		Cip	Address:	1666 Fabick Drive		
Address: (b) (6)				St. Louis	MO	63026
Bristow	OK	74010	<b>a</b>	City		Zip
City		Cip	Contact:	Evan Wortman Name	(636) 23 Phone	27-7477
Contact: Steve Mason Name	(214) 789 Phone	-1871				
				Container	Total	
Common Name of Waste Material				No. Type	Quantity	Unit
Non-Hazardous Soil				DT	15100	4
\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.	てい	ans				
described, classified and packaged, and is in Company		Signature /	PERE			
Address:  City, State Zip:  Cowet	a 011 7	4419	US:	DOT N.		al_
I hereby certify that the above material was generator site listed above.			I hereby certify t	that the above named mestination listed below.	aterial was delivered	d without
Driver Signature	9 - <b>3</b> Ship Date	9-17	Driver Signature	latt	9-19 Delivery D	Date
		M Design	reirie) die en en		//	
American Environment 212 N. 177 <sup>th</sup> W A Sand Springs, Ol I hereby certify that the above named m	nmental Landfil Ave. K 74063	l, Inc.	Per	Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	786 774	
Jaura King Micki King Rave	en Blunt (	Signature			Receipt Date	Y117
White Destination Potention	Vallow Batus	m to Bill to	Pink Transport	D-t-la O-ld-u		4-1-

			NEW YEAR OF THE PROPERTY OF TH		
Generator's Name: USEPA	Region 6 / Wilcox O	il Residence Sit		V1 /	
Mailing Address: 1445 Ro	oss Ave		Job No.	MITOLOTTILOI	
Dallas	TX	7520	<u>/</u>	Environmental R	estoration, LLC
Point of Generation City	State	e Zip	Address:	1666 Fabick Drive	
Address:(b) (6)				St. Louis City	MO 63026 State Zip
<u>Bristow</u> City	State	7401 e Zip	O Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Name</u>	Mason (214 Phor	) <b>789-1871</b> ne			
Common Name of Waste Ma	terial		na.	Container No. Type	Total Quantity Unit
Non-Hazardous Soil				LDT	12/4
		6.51	211		1210
		101 )			
I hereby certify that the above na described, classified and package FA Generator Authorized Agent Name		ndition for trans	portation according to ap		Shipment Date
na en		unsausau b est	EISPEDICE E	En en la companya de	open a gradual contract of
	and the Maria and Maria and the Control of the Cont		view.≢	American desires in the control of the	$\mathcal{O}_{\mathcal{O}}}}}}}}}}$
	ham Trucking		Driver Nam		ican T. Vors
Address:			~	Tag No. 700-	149 State: 0K
City, State Zip:			US	DOT No	005
I hereby certify that the above m generator site listed above.	aterial was picked up	at the		that the above named ma estination listed below.	terial was delivered without
Le D'illiam Dol	<b>1</b> 0 Q	-20.17	1.1.1	in tools	0.29.17
Driver Signature	Shi	p Date	Driver Signature		Delivery Date
			<u>Jess)akk(e)akadaa</u>		
Amer	ican Environmental La	andfill, Inc.	ntektine e innin in konort (filozofi trode), nive e in n	Phone: (918) 245-778	
	I. 177 <sup>th</sup> W Ave. Springs, OK 74063	_	Pe	Fax: (918) 245-77° rmit No: 3557021	74
I have by certify that the above		s been accepte			oing is accurate.
			U/		mail
Aura King Micki King Name of Authorized Agent	Raven Blunt	Signatur			Receipt Date
White - Destination Ret	ention • Yellow –	Return to Bill t	o • Pink – Transport	er Retain • Goldenro	od – Generator Retain

Generator's Name: USE	PA Region 6 / W	ilcox Oil R	esidenc	e Site	Manifes		us'	e		
Mailing Address: 144	Ross Ave	-			Job No		520WH-0	L		
D <u>all</u>	as	TX		75202	Bill to Name			Restoratio	n, LL	<u>c</u>
Point of Generation C	ty	State	Zip		Address	1666 Fa	bick Drive			
Address: (b)	(6)					St. Loui City	s		MO tate	6302 Zip
B <u>ris</u> C	tow ty	OK State	Zip	74010	Contact	Evan We Name	ortman			27–7477
Contact: Stev	re Mason	(214) 7 Phone	89-187	1						
•	anc	Those				Cor	ıtainer	Tota	al	
Common Name of Waste	Material					No.	Туре	Quant	-	<b>Unit</b>
on-Hazardous Soil				1		1	DT	15	.9	ľ <u>/</u>
			(al							
			l							
I hereby certify that the above described, classified and pactors of the second	kaged, and is in pr	roper condi	ition for						has bee	
described, classified and pac	kaged, and is in pr	oper condi	ition for Sig	transport						
described, classified and pacter of the control of	kaged, and is in pr	oper condi	ition for Sig	transport	ation according to a	pplicable r	egulations.	Ship		
Generator Authorized Agent No.  Transporter Name: Address:	kaged, and is in pr	oper condi	ition for Sig	transport	ation according to a	pplicable r	egulations.	Ship	pment D	ate HA
described, classified and pacter of the second of the seco	kaged, and is in pr	oper condi	ition for Sig	transport	Driver Nar	pplicable r	egulations.	Ship	pment D	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip:	Kaged, and is in pr	Cy	Sig	transport	Driver Nat  I hereby certify	me (Print) Tag No	egulations.	Ship  () Q 10  18 2  0 100  naterial was o	nrs	ate HA
Generator Authorized Agent Name:  Address:  City, State Zip:	Kaged, and is in pr	Cy	Sig	transport	Driver Nat	me (Print) Tag No	egulations.	Ship  () Q 10  18 2  0 100  naterial was o	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.	Kaged, and is in pr	Cy	Sig	transport	Driver Nat  I hereby certify incident to the	me (Print) Tag No	egulations.	Ship  () Q 10  18 2  0 100  naterial was o	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip:	Kaged, and is in pr	Cy	Sig	transport	Driver Nat  I hereby certify	me (Print) Tag No	egulations.	Ship  () Q 10  18 2  0 100  naterial was o	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.	Kaged, and is in pr	Cy	Sig	gnature	Driver Nat  I hereby certify incident to the	me (Print) Tag No	egulations.	Ship  () Q 10  18 2  0 100  naterial was o	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.  Driver Signature	Yocham Trucking we material was pic	cked up at the Ship To	the	gnature	Driver Nar  US  I hereby certify incident to the order of	me (Print) Tag No SDOT No that the abdestination Phone:	egulations.  :  2  ove named is listed below  15  (918) 245-	Ship  () Q 10  18 2  () A 10  () A 10	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.  Driver Signature  A	Yocham Trucking we material was pic	Ship of	the	gnature	Driver Nar  US  I hereby certify incident to the order Signature	me (Print) Tag No SDOT No that the ab	egulations.  :  2  ove named is listed below	Ship  () Q 10  18 2  () A 10  () A 10	nrs	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.  Driver Signature  A	Yocham Trucking we material was pic merican Environm 12 N. 177 <sup>th</sup> W Ave and Springs, OK	Ship 1	the	gnature	Driver National Driver Signature	me (Print) Tag No SDOT No that the ab destination  Phone: Fax:	egulations.  :  2  over named a listed below  (918) 245- (918) 245- 3557021	Ship  182  100  100  100  100  100  100  100	State:	ate HA
Generator Authorized Agent No.  Transporter Name: Address: City, State Zip: I hereby certify that the above generator site listed above.  Driver Signature  A 2 5	Yocham Trucking we material was pic merican Environm 12 N. 177 <sup>th</sup> W Ave and Springs, OK ove named material	Ship 17	the	gnature	Driver National Driver Signature	me (Print) Tag No SDOT No that the ab destination  Phone: Fax:	egulations.  :  2  over named a listed below  (918) 245- (918) 245- 3557021	Ship  182  100  100  100  100  100  100  100	State:	ate HA

Generator's Name: USEPA Regio	n 6 / Wilcox Oil Residence Site	Manifest	use	
Mailing Address: 1445 Ross Av	/e	Job No.	MN52 <del>0WII</del> 01	
Dallas	TX 75202	Bill to Name:	Environmental R	estoration, LLC
Point of Generation City	State Zip	Address:	1666 Fabick Drive	
Address (b) (6)			St. Louis	MO 63026
Bristow	OK 74010	<b>a</b>	City	State Zip
City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: Steve Mason Name	(214) 789-1871 Phone			a selation and the selation
			Container	Total
Common Name of Waste Material		<b>~</b>	No. Type	Quantity Unit
Non-Hazardous Soil			<u> </u>	1110
	-Van)			
described, classified and packaged, and		$\frown$ ( $\bigvee$	-	0 10 17
Generator Authorized Agent Name	Signature	All		9-29-17 Shipment Date
Generator Authorized Agent Name				Shipment Date
Generator Authorized Agent Name  Transporter Name:	Signature		ne (Print): Zpg (	Shipment Date
Generator Authorized Agent Name	Signature  Frucking		ne (Print): 704	Shipment Date
Generator Authorized Agent Name  Transporter Name: Yocham J	Signature	Driver Nam	ne (Print): Zer /- Tag No. 704 DOT No. 03010	Shipment Date  SIDWAL  - / SOState: / ) K
Generator Authorized Agent Name  Transporter Name:  Yocham J  Address: 7.0 7	Signature  Frucking  Box  Ata, OK 74429	Driver Nam US	Tag No. 704 DOT No. 03010	Shipment Date  SIDWAL  - / SOState: / ) K
Generator Authorized Agent Name  Transporter Name:  Yocham I  Address:  City, State Zip:  I hereby certify that the above material	Frucking  Box  OHA, OHA 74429  was picked up at the	Driver Nam US	DOT No. $\bigcirc$ 3010 that the above named ma	Shipment Date  SPOWAL  - 18 Ostate: () K
Generator Authorized Agent Name  Transporter Name:  Yocham I  Address:  City, State Zip:  I hereby certify that the above material	Signature  Frucking  Box  Ata, OK 74429	Driver Nam US	DOT No. $\bigcirc$ 3010 that the above named ma	Shipment Date  SIDWAU  - / Signate: / ) K
Generator Authorized Agent Name  Transporter Name: Address: City, State Zip: I hereby certify that the above material generator site listed above.  Driver Signature	Frucking  Box  OHA, OHA 74429  was picked up at the	US.  I hereby certify tincident to the dispriver Signature	Tag No. 704 DOT No. 3010 that the above named maestination listed below.	Shipment Date  SIDWAU  - / Signate: / ) K
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material generator site listed above.  Driver Signature  American E	Signature  Frucking  Bdy  AAA, OH 74429  was picked up at the  9-29-17  Ship Date  Desail	US.  I hereby certify tincident to the dispriver Signature	Tag No. 704 DOT No. 3010 that the above named matestination listed below.  Thursday Phone: (918) 245-77	Shipment Date
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material generator site listed above.  Driver Signature  American E 212 N. 177 <sup>th</sup>	Signature  Frucking  Bdy  AAA, OH 74429  was picked up at the  9-29-17  Ship Date  Desail	Driver Nam  US.  I hereby certify to incident to the decoration of	Tag No. 704 DOT No. 3010 that the above named maestination listed below.	Shipment Date
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material generator site listed above.  American E 212 N. 177 <sup>th</sup>	Signature  Frucking  Box  174429  was picked up at the  174429  Ship Date  Part of the state of	Driver Nam  US.  I hereby certify to incident to the do  Priver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Shipment Date  Shipment Date
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  Out  I hereby certify that the above material generator site listed above.  American E 212 N. 177 <sup>th</sup> Sand Spring  I hereby certify that the above name	Signature  Frucking  OH 74429  was picked up at the  Part of August 1997  Ship Date  Notice of August 1997  Notice	Driver Nam  US.  I hereby certify to incident to the do  Priver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Shipment Date  Slow W  State: () K  DOS  Aterial was delivered without  Delivery Date  86 74
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  Out  I hereby certify that the above material generator site listed above.  American E 212 N. 177 <sup>th</sup> Sand Spring  I hereby certify that the above name	Signature  Frucking  Box  174429  was picked up at the  174429  Ship Date  Part of the state of	Driver Nam  US.  I hereby certify to incident to the do  Priver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Shipment Date  Shipment Date



				1.34
				W W W
Generator's Name: USEPA Region 6 / Wild	cox Oil Re <u>sidence Site</u>	Manifest	use	
Mailing Address: 1445 Ross Ave		Job No.	MN52 <del>0Wi</del> £01_	
<u>Dallas</u>	TX 75202		Environmental Re	storation, LLC
Point of Generation City	State Zip	Address:	1666 Fabick Drive	
Addre <mark>(b) (6)</mark>			St. Louis City	MO 63026 State Zip
B <u>ristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Ion-Hazardous Soil	1 - 6		DT	ann
	Harz		<i>─ +&gt;</i>	
Generator Authorized Agent Name	Signature Signature	Onecas		Shipment Date
	lemper		A CONTRACTOR OF THE PROPERTY O	The state of the s
Transporter Name: Yocham Trucking	<del></del> _	Driver Nam	LEE D	AD W.
Address: P.O. Box	745		Tag No. 704	State: OK
City, State Zip: Coweta,	DK 74427	US	DOT No. 0 30100	5
I hereby certify that the above material was pick generator site listed above.	ed up at the		that the above named mat estination listed below.	erial was delivered without
7.0 Bru. 0	9-19-17	1.0 Br	<b>n</b>	9.79-17
Driver Signature	Ship Date	Driver Signature	W.	Delivery Date
	FILE CONTRACTOR STATES	<u>ELECTRES DE LA COMPANION DE L</u>	e primario di vicio mendoni	
American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74		. Der	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	
I hereby certify that the above named mater		}		ing is accurate.
aura King Micki King Raven B	51t / H//			9911
aura King Micki King Raven E	Signature			Receipt Date
White - Destination Retention • Yell			Datala Oaldana	

	$\infty_{\Delta}$						
		era estatua				Albertaine Aid	
Generator's Name:	USEPA Region 6 / Wi	ilcox Oil Residen	ce Site	Manifest	use		
Mailing Address:				Job No.	MN520 <del>WIL</del> 01	-	
	Dallas	TX	75202		Environmental F	Restoration, LL	.C
Point of Generation	City (6)	State Zip		Address:	1666 Fabick Drive		
Address					St. Louis City	MO State	63026 Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman		27-7477
Contact:	Steve Mason Name	(214) 789-187 Phone	71		Name	Phone	
Common Name of W	aste Material		1		Container No. Type	Total Quantity	Unit
Non-Hazardous Soil		1 4	201		DT		
	· · · · · · · · · · · · · · · · · · ·	JUM 1	v			1	
		71			//. (	0]_	
. Thenen	d packaged, and is in pro		gnature	tation according to ap	plicable regulations.	9-29	
Generator Authorized Ago	ent Name	Si	gnature	10-		Shipment D	ate
Friedrick Company	and the stiff of the said	- Literatura Latin	Lesigh.	រុស្សសម្រាក់	era		
Transporter Na	ame:			Driver Nam	e (Print): KEN/ Tag No. 700-1	Hunkis	
Add	Yocham Trucking			211,011,011	Tag No.	WX Some	OK
City, State	Zip:			IIS.	DOT No. 0301	7005 State:	
I hereby certify that the generator site listed abo	above material was pic	ked up at the		I hereby certify t	hat the above named mestination listed below.		d without
		A - 20.	17	X.	X / //	4.2	19-17
Uriver Signature	ghr	Ship Date		Driver Signature	Night	Delivery D	
/_		York at	14.16				
	American Environm	Antonio (British Co. 42)	Alexander Carrier		Phone: (918) 245-7	786	en e
	212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 7	•		Per	Fax: (918) 245-7' mit No: 3557021		
I hereby eertify that t	he above named mate	rial has been ac	cepteria	nd to the best of my	knowledge the foreg	going is accurate.	an
Layra/King Mick Name of Authorized Agen	ki King Raven		edature			Receipt Date	7//
White - Destine	tion Retention • Ye	llow _ Potern to	Dill 40	. Dink Tennone-t	ar Dotoin a Coldani	rod Gonorator Da	toin



Site Manifest	MIEOMISC	
<u> 1202</u>		estoration, LLG
Address:		
<del></del>	St. Louis City	MO 63026 State Zip
Contact:	Evan Wortman Name	(636) 227-7477 Phone
	Container No. Type	Total Quantity Unit
	DT	13/1/
ature		Shipment Date
MIP DOME		^ _
Driver Nam	e (Print):	Dennis HAY
_	Tag No. 704	-1 \$ 2 State: 01
<del></del>		Jack.
USI	DOT No. ○ >	11005
I hereby certify t		erial was delivered without
I hereby certify t		1005-
I hereby certify the incident to the decoration	hat the above named mat	rerial was delivered without
I hereby certify t	hat the above named mat	1005
I hereby certify the incident to the decoration	hat the above named man estination listed below.	perial was delivered without  Delivery Date
I hereby certify the incident to the decoration	hat the above named matestination listed below.  And Hash Phone: (918) 245-778	perial was delivered without  Delivery Date
I hereby certify to incident to the de Driver Signature	hat the above named man estination listed below.	perial was delivered without  Delivery Date
I hereby certify to incident to the de Driver Signature	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	perial was delivered without  Delivery Date
I hereby certify to incident to the description of	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	perial was delivered without  Delivery Date
I hereby certify to incident to the description of	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	perial was delivered without  Delivery Date
I hereby certify to incident to the de Driver Signature  Per epted and to the best of my	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021 knowledge the forego	perial was delivered without  Delivery Date  Delivery Date  Receipt Date
7	Job No. Bill to Name: Address:  4010 Contact:  vaste as defined by 40 CFR Paransportation according to apparent.	Job No. MN520/101  Bill to Name: Environmental Reservation Address: 1666 Fabick Drive  St. Louis City  Contact: Evan Wortman Name  Container No. Type  1 DT  Asste as defined by 40 CFR Part 261 or any applicable ransportation according to applicable regulations.  Driver Name (Print):

_	ļ	Λ	3)
	L	$\coprod$	10

Generator's Name:	USEPA Region 6 / W	ilcox Oil Res	idence Site	Manifest		ul	<u>.</u>	
Mailing Address:				Job No.	MN	520WIL01		
	Dallas City	TX State 2	75202 Zip			onmental F	Restoration, L	LC
Point of Generation Address:	(b) (6)				St. Loui		MO State	6302 Zip
	Bristow City	OK State 2	74010 Cip	Contact:	Evan W Name	<u>ortman</u>	(636) Phone	227-7477
Contact:	Steve Mason Name	(214) 789 Phone	9-1871					
Common Name of W	aste Material				Con No. 1	tainer Type	Total Quantity	Unit
		1	(M)				13.81	T-
Transporter Na  Addr  City, State 2	me: Yocham Trucking		eed (rattis)	Driver Nam	ne (Print) Tag No DOT No	760 -	149 State	Q ( S == <del>O/(</del>
I hereby certify that the generator site listed abo	above material was pic	ked up at the	(4.1)		that the ab	ove named m	aterial was delive $oldsymbol{Q}$ .	red without $29 \cdot 1$
Driver Signature		Ship Date		Driver Signature			Delivery	Date
	American Environm 212 N. 177 <sup>th</sup> W Ave		l, Inc.	Par	Fax:	(918) 245-77 (918) 245-77 3557021		
	Sand Springs, OK 7 ne above named mate	rial has bee	n accepted an	_			oing is accurate	2911
							-	÷



Generator's Name: USEPA Region 6 / Wild	cox Oil Residence Site	Manifest Job No.	4,0	•
Mailing Address: 1445 Ross Ave			IIIIIOZOIAGEOI	
Dallas	TX 75202		Environmental Re	estoration, LLC
Point of Generation City	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)			St. Louis City	MO 63020 State Zip
Bristow	OK 74010	Contacts	•	•
City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: Steve Mason	(214) 789-1871			
Name	Phone			
C N CW . M. 11			Container	Total
Common Name of Waste Material	•	es.	No. Type	Quantity
Non-Hazardous Soil	1		DT	May
	Mar			
	71			
I hereby certify that the above named material is				· · · · · · · · · · · · · · · · · · ·
Generator Authorized Agent Name	Signature (	1 1	<b>八</b> —	9-27-19
Generator Authorized Agent Name	Signature			Shipment Date
Generator Authorized Agent Name	Signature C	DORTHER	one of the second	Shipment Date
Transporter Name:	- Access		ae (Print):	Shipment Date
Transporter Name:			ne (Print):	Shipment Date
Transporter Name:  Yocham Trucking  Address:		Driver Nam		Shipment Date  Coulter  3 State: 01
Transporter Name:		Driver Nam	Tag No. 704-1	Shipment Date  Coulter  3 State: 01
Transporter Name:  Address:  City, State Zip:  Cousta O  I hereby certify that the above material was picked.	2 24449	Driver Nam US	DOT No. <u>330/6</u> that the above named ma	Shipment Date  Coulter  3 State: 01
Transporter Name:  Address:  City, State Zip:  Cousta, O	2 24449	Driver Nam US	DOT No. 030/0	Shipment Date  Loulter  33 State: 014
Transporter Name:  Address:  City, State Zip:  Cousta O  I hereby certify that the above material was picked.	ed up at the	Driver Nam US	DOT No. <u>330/6</u> that the above named ma	Shipment Date  Loulter  33 State: 014
Transporter Name:  Address:  City, State Zip:  Cousta O  I hereby certify that the above material was picked.	2 24449	Driver Nam US	DOT No. <u>330/6</u> that the above named ma	Shipment Date  Loulter  33 State: 014
Transporter Name:  Address:  City, State Zip:  Cousets  I hereby certify that the above material was picked generator site listed above.  Coulomb Country  C	2 24449 ed up at the  9-29-17 Ship Date	Driver Nam  US.  I hereby certify to incident to the decention of the dece	DOT No. <u>330/6</u> that the above named ma	Shipment Date  Loulter  33 State: 016
Transporter Name:  Address:  City, State Zip:  Cousets  I hereby certify that the above material was picked generator site listed above.  Coulomb Country  C	ed up at the	Driver Nam  US.  I hereby certify to incident to the decention of the dece	DOT No. <u>330/6</u> that the above named ma	Shipment Date  Loulter  33 State: 016
Transporter Name:  Address:  City, State Zip:  Cousts  I hereby certify that the above material was pick generator site listed above.  Driver Signature  American Environment	2 24449 ed up at the 9-29-17 Ship Date	Driver Nam  US.  I hereby certify to incident to the decention of the dece	that the above named ma estination listed below.  Phone: (918) 245-778	Shipment Date  Coulter  3 State: 014  terial was delivered without  9-29-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  Conseta, O  I hereby certify that the above material was picked generator site listed above.  Driver Signature	ed up at the  9-29-17 Ship Date  ntal Landfill, Inc.	Driver Nam  US  I hereby certify a incident to the description of the	that the above named ma estination listed below.	Shipment Date  Coulter  3 State: 014  terial was delivered without  9-29-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  Conseta O  I hereby certify that the above material was picked generator site listed above.  Driver Signature  American Environment 212 N. 177th W Ave. Sand Springs, OK 74	ed up at the  9-29-17 Ship Date  LIGHTHIS	Driver Nam  US  I hereby certify tincident to the di  Driver Signature	that the above named ma estination listed below.  Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	Shipment Date  Coulter  3 State: 0/4  terial was delivered without  9-29-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was pick generator site listed above.  Driver Signature  American Environme 212 N. 177th W Ave.	ed up at the  9-29-17 Ship Date  LIGHTHIS	Driver Nam  US  I hereby certify tincident to the di  Driver Signature	that the above named ma estination listed below.  Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	Shipment Date  Coulter  3 State: 0/4  terial was delivered without  9-29-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  Coustle O  I hereby certify that the above material was picked generator site listed above.  Driver Signature  American Environment 212 N. 177th W Ave. Sand Springs, OK 74  I hereby certify that the above named material was picked above.	ed up at the  9-29-17 Ship Date  ntal Landfill, Inc.  1063 ial has been accepted a	Driver Nam  US  I hereby certify tincident to the di  Driver Signature	that the above named ma estination listed below.  Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	Shipment Date  Coulter  33 State: 0/4  terial was delivered without  9-29-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  Cousets  I hereby certify that the above material was picked generator site listed above.  Driver Signature  American Environment 212 N. 177th W. Ave. Sand Springs, OK 74  I hereby certify that the above named material was picked above.	ed up at the  9-29-17 Ship Date  ntal Landfill, Inc.  1063 ial has been accepted a	Driver Nam  US  I hereby certify tincident to the di  Driver Signature	that the above named ma estination listed below.  Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	Shipment Date  Coulter  33 State: Old  terial was delivered without  9-29-17  Delivery Date

			manus was Busines as a second of the w	
Generator's Name: USEPA Regio	n 6 / Wilcox Oil Residence Site	Manifest	usE	
Mailing Address: 1445 Ross Av	re	Job No.	MINOZOTILOT	
Dallas	TX 75202			estoration, LLC
Point of Generation (17)	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)			St. Louis City	MO 63026 State Zip
<u>Bristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Ion-Hazardous Soil			DT	15.001
	rans			
I hereby certify that the above named in described, classified and packaged, and				e state law, has been properly
11. 600 l	1.	. V (.		9-30-17
Generator Authorized Agent Name	Signature	y Lh		9-30-17 Shipment Date
	- Light Survey	Driver Nam	te (Print): KEN Tag No. 700-1	Hughes 43 State: OK
Transporter Name:  Address:	Frucking	Driver Nam  USI I hereby certify t	te (Print): KEN  Tag No. 700-1  DOT No. 03010	Hughes 43 State: OK
Transporter Name:  Address:  City, State Zip:  I hereby celtify that the above material	Frucking	Driver Nam  USI I hereby certify t	the (Print): KEIV Tag No. 700.1 DOT No. 03010 that the above named ma	Hughes 43 State: OK
Transporter Name:  Address: City, State Zip:  I hereby celtify that the above material generator ate listed above.  Driver Signature	was picked up at the  9 - 39 - 17  Ship Date	Driver Nam  USI  I hereby certify to incident to the do	the (Print): KEIV Tag No. 700 · J DOT No. 03010 that the above named maestination listed elow.	Hughes  State: OK  OS  deterial was delivered without
Transporter Name:  Address:  City, State Zip:  I hereby celtify that the above material generator rite listed above.  Driver Signature  American E 212 N. 177 <sup>th</sup>	was picked up at the  4-30-17 Ship Date  Design	Driver Nam  USI I hereby certify to incident to the do	the (Print): KEIV Tag No. 700 · J DOT No. 03010 that the above named maestination listed elow.	Hughes  When State: OK  OS  Atterial was delivered without  9-30-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  I hereby celtify that the above material generator rite listed above.  Driver Signature  American E 212 N. 177 <sup>th</sup> Sand Spring I hereby certify that the above name	was picked up at the  9 - 39 - 17 Ship Date  Design	Driver Nam  US)  I hereby certify t incident to the do  Driver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Hughes  43 State: OK  205  Atterial was delivered without  9-30-17  Delivery Date
Transporter Name:  Address:  City, State Zip:  I hereby celtify that the above material generator rite listed above.  Driver Signature  American E 212 N. 177 <sup>th</sup> Sand Spring I hereby certify that the above name	was picked up at the  9 · 30 · 17  Ship Date  A Peism  nvironmental Landfill, Inc. W Ave. s, OK 74063 ed material has been accepted an	Driver Nam  US)  I hereby certify t incident to the do  Driver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Hughes  State: OK  OS  Atterial was delivered without  9-30-17  Delivery Date  86  74  Delivery Date  87  Delivery Date

### **Non-Hazardous Waste Manifest**

61100/		`	
	jedietik/6		
Generator's Name: USEPA Region 6 / Wilcox Oil Residence	Site Manifest Job No.	USE MN520 <b>WIL</b> 01	
Mailing Address: 1445 Ross Ave			-tt! 110
<u>Point of Generation</u> Dallas TX 75  City State Zip	<u>5202</u>	Environmental Re 1666 Fabick Drive	storation, LLG
Address:(b) (6)		St. Louis City	MO 63026 State Zip
City State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason (214) 789-1871</u> Name Phone			
Common Name of Waste Material		Container No. Type	Total Quantity Unit
Non-Hazardous Soil	1	DT	1694
Trave	)		
Generator Authorized Agent Name Signa	ansponer		Shipment Date
Transporter Name:	Driver Name	e (Print): Zeel	320WAL
Address: Yocham Trucking P.D. Coweta 745 City, State Zip: Coweta DK 7442	<u>-</u> 9 usr	Tag No. 704 o	3 ROWN 180 State: OK
I hereby certify that the above material was picked up at the generator site listed above.	I hereby certify th		erial was delivered without
Ber Bran 9-30-17	1 -	sout)	9-30-1)
Driver Signature Ship Date	Driver Signature		Delivery Date
Series in the second	ejojaug kora (6) a languaga		
American Environmental Landfill, Inc. 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063		Phone: (918) 245-778 Fax: (918) 245-777 nit No: 3557021	
I hereby certify that the above named material has been acceptable.  Authorized Agent  Raven Blunt  Signal	1/1/1-	knowledge the foregoi	ng is accurate.  Receipt Date
White - Destination Retention • Yellow - Return to Bi	II to • Pink - Transporte	r Retain • Goldenro	d – Generator Retain

W					145	
	USEPA Region 6 / Wil	lcox Oil Resider	nce Site	Manifest Job No.		
Mailing Address:	1445 Ross Ave				MN520WIE01	
	<u>Dallas</u>	TX	75202		Environmental F	Restoration, LLC
Point of Generation	/II. \	State Zip		Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-18 Phone	371			
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil						15,401
		Trai	15			
	MASON L RESIN L ent Name			<sub>जि</sub> र्ग प्रतिक		9-36.17 Shipment Date
Transporter Na	Vocham Trucking			Driver Nam	e (Print): Colf	Coulker  State: OIL
Addr	ess:				Tag No. 704-19	13 State: 011
City, State 2	Zip: Coveta	OK 7442	9	US	DOT No. 030/0	205
I hereby certify that the generator site listed abo		ced up at the			that the above named mestination listed below.	aterial was delivered without
Colt Con	of the	9-30 -	17	Coll 1	la the	9-36-17 Delivery Date
Driver Signature		Ship Date		Driver Signature		Delivery Date
	and the state of the same		(P)(ES)(II	ntante) (Estate)		
	American Environme 212 N. 177 <sup>th</sup> W Ave.		ic.	Per	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	
	Sand Springs, OK 74	4063		1	1111t 110. 3337021	
I hereby certify that the laura King Mick Name of Authorized Ligent		rial has been a	ccepted ar			oing is accurate.  Receipt Date

					<i>W</i> -
Generator's Name:	USEPA Region 6 / Wild	ox Oil Residence Site	Manifest	usc	
Mailing Address:	1445 Ross Ave		Job No.	MITOZOTIZOT	
	<u>Dallas</u> City	TX 75202 State Zip		Environmental Re	estoration, LLC
Point of Generation		State Zip	Address:	1666 Fabiok Drive	NO 0000
Address:				St. Louis City	MO 63026 State Zip
	Bristow City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1871 Phone		ivaine	rnone
Common Name of W	aste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil				1DT	H160 I
		Trans			
described, classified and	above named material is if packaged, and is in projection of the second	per condition for transpo			state law, has been properly  9.30./7  Shipment Date
	ar er	in a server clarator	appinter e		
Transporter Na	ıme:		Driver Nan	ne (Print): ! \ \ \	1
Addr	Yooham Trucking			Tag No.	110 State: 0K
City, State	Zip:		US		501-
I hereby certify that the generator site listed abo	above material was pickeve.	ed up at the	I hereby certify		terial was delivered without
Driver Signature		9.30.17 Ship Date	Driver Signature	n Pools	October Date
		;;**%; <u>}</u> ३३, <b>७</b> ८५५	ighielelebie		
	American Environmer 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74	*	Pe	Phone: (918) 245-778 Fax: (918) 245-777 rmit No: 3557021	
Laura King Mick Name of Authorized Agent	ne above named materi	Blunt Signature	AL		9-30-/9 Receipt Date
White - Destinat	tion Retention • Yell	ow – Return to Bill to	<ul> <li>Pink – Transport</li> </ul>	er Retain • Goldenro	od – Generator Retain

	/ Wilcox Oil Residence Site	Manifest	NSE	
Mailing Address: 1445 Ross Ave		Job No.	MN520WIL 01	-
<u>Dallas</u>	TX 75202		Environmental F	Restoration, LLC
Point of Generation City	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)			St. Louis City	MO 63026 State Zip
<u>Bristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
			Container	Total
Common Name of Waste Material			No. Type	Quantity Unit
Non-Hazardous Soil			DT	10 20
	T Musc	***		171291
	110110			
Generator Authorized Agent Name	Signature			Shipment Date
Transporter Name:	Signature	کورو) بیتائی از	ne (Print):	11-6-5
	Signature	•	ne (Print): Ken Tag No. 700-	11-6-5
Transporter Name: Y <del>ocham Tru</del> k	Signature	Driver Nam	1164	Hughus 148 State: OK
Transporter Name:  Address:	Signature Signature	Driver Nam  US	Tag No. 700- DOT No. 0301	Hughus 148 State: OK
Transporter Name: Address: City, State Zip:  I hereby certify that the above material was generator lite listed above	cking s picked up at the	Driver Nam  US  I hereby certify to incident to the december 1	Tag No. 700- DOT No. 0301 that the above named m	Huches 148 State: OK
Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was	cking s picked up at the	Driver Nam  US	Tag No. 700- DOT No. 0301 that the above named m	Huches 148 State: OK
Transporter Name: Address: City, State Zip:  I hereby certify that the above material was generator attelisted above.  Driver Signature	s picked up at the  9-30-17 Ship Date	Driver Nam  US  I hereby certify to incident to the decoration of	Tag No. 700-DOT No. 030/	//whe's /48 State: OK /005  aterial was delivered without  9-30-17 Delivery Date
Transporter Name: Address: City, State Zip:  I hereby certify that the above material was generator attelisted above.  Driver Signature	s picked up at the  9-30-17 Ship Date  ronmental Landfill, Inc. Ave.	Driver Nam  US  I hereby certify incident to the description  Driver Signature	Tag No. 700-DOT No. 0101 that the above named mestination listed below.	//who? /48 State: OK /005 aterial was delivered without  9-30-17 Delivery Date
Transporter Name: Address: City, State Zip:  I hereby certify that the above material war generator attellisted above.  Driver Signature  American Envir 212 N. 177 <sup>th</sup> W	s picked up at the  A-30-17 Ship Date  ronmental Landfill, Inc. Ave. OK 74063	Driver Nam  US  I hereby certify to incident to the decention of the decent to the dec	Tag No. 700- DOT No. 030/ that the above named mestination fixed below.  Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Huche's  148 State: OK  1005  aterial was delivered without  9-30-17  Delivery Date

Generator's Name: USEPA Region 6 / N	Wilcox Oil Residence Site	Manifest	USE	
Mailing Address: 1445 Ross Ave		Job No.	MN520 <del>WIL</del> 01	
Dallas	TX 75202			estoration, LLC
City Point of Generation	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)			St. Louis City	MO 63026 State Zip
<u>Bristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	•
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil		1	T	15.77
I hereby certify that the above named materia		defined by 40 CFR Pa		
	proper condition for transport	ation according to ap	niicabie regulations.	
described, classified and packaged, and is in p	proper condition for transport	ation according to ap	plicable regulations.	
described, classified and packaged, and is in p	-1	ation according to ap	plicable regulations.	9-30-17_
described, classified and packaged, and is in p	-1	ation according to ap	plicable regulations.	9-30-/7 Shipment Date
described, classified and packaged, and is in p	Signature	M	plicable regulations.	9-30-17 Shipment Date
described, classified and packaged, and is in packaged.  Generator Authorized Agent Name	Signature	porter		9-20-17 Shipment Date
described, classified and packaged, and is in packaged.  Generator Authorized Agent Name  Transporter Name:  Yocham Truckin	Signature	porter	e (Print): <u>Lee E</u>	Shipment Date  ROWN
Generator Authorized Agent Name  Transporter Name:  Address:  Address:  Address:	Signature  745	Pivater  Driver Nam	e (Print): <u>Lee F</u> Tag No.	Shipment Date  SkowN  State:
described, classified and packaged, and is in packaged.  Generator Authorized Agent Name  Transporter Name:  Yocham Truckin	Signature  745	Pivater  Driver Nam	e (Print): <u>Lee E</u>	Shipment Data  Shipment Data  Shipment Data  Shipment Data  Shipment Data  Shipment Data
Generator Authorized Agent Name  Transporter Name:  Address:  Address:  Address:	Signature  Signature  745  7, 0 K 74429	Driver Nam  US)  I hereby certify t	e (Print): <u>LCC F</u> Tag No. 704 19 DOT No. 030100	Shipment Date  ROWN  State: Kerial was delivered without
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.	Signature  745 7, OK 74429  icked up at the	Driver Nam  USI  I hereby certify t incident to the de	e (Print): <u>Lee E</u> Tag No.  TO 4 19  DOT No. O 301 00  hat the above named manestination listed below.	State: OK terial was delivered without
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p	Signature  Signature  745  7, 0 K 74429	Driver Nam  USI  I hereby certify t incident to the de	e (Print): <u>Jee F</u> Tag No. 704 19 DOT No. 0301000 hat the above named mar	State: OK terial was delivered without
Generator Authorized Agent Name:  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.  Driver Signature	Signature  Signature  745  7, 0 K 74429  sicked up at the  9-30-17  Ship Date	Driver Nam  USI I hereby certify tincident to the de	e (Print): <u>Jeef</u> Tag No. <u>704</u> 19 DOT No. <u>030100</u> hat the above named man estination listed below.	State: OK terial was delivered without
Generator Authorized Agent Name:  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.  Driver Signature	Signature  Signature  Signature  745  7, 0 K 74429  sicked up at the  9-30-17  Ship Date  mental Landfill, Inc. ve.	Driver Nam  US)  I hereby certify t incident to the de	e (Print): <u>Jeef</u> Tag No. <u>704</u> 19 DOT No. <u>030100</u> hat the above named man estination listed below.	State:  terial was delivered without  9-30-7  Delivery Date
Generator Authorized Agent Name:  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.  Driver Signature  American Environ 212 N. 177th W Ax	Signature  Signature  745  7, 0 K 74429  icked up at the  9-30-17  Ship Date  mental Landfill, Inc.  ve.  74063	Driver Nam  US)  I hereby certify to incident to the decoration of	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	State: OK  terial was delivered without  9-30-77  Delivery Date

#### **Non-Hazardous Waste Manifest**

				NAMES OF STREET	unikan kenera	*j={2.57*************		
Generator's Name:	IISEDA Region 6 / 1	Wilcox Oil Reside	ance Site	Manifest	ι	ISE		
Mailing Address:		WILCOX OII NESIGE	silce oite	Job No.	MN520	VILO1		
g	Dallas	TX	75202	Bill to Name:	Environme	ntal Rest	toration, LL	_C
Point of Generation	City	State Zip		Address:	1666 Fabick I	Orive		
Address:		:			St. Louis		MO State	63026 Zip
	Bristow	OK State Zip	74010	Contact:	Evan Wortma	n ·		27-7477
Courterate	City	· · · · · · ·			Name		Phone	
Contact:	Steve Mason Name	(214) 789-1 Phone	871					
					Container		Total	
Common Name of W	aste Material				No. T	ype	Quantity	Unit
Non-Hazardous Soil					D <u>T</u>		dias	
		Tra	nS					<del></del>
		1 101	<u>'</u>				·	
described, classified and	MULLIN			$A = A \cap A$	plicable regulati	ions.	9-36 Shipment D	-17_
Generator Authorized Age	ent Name		Signature	j			Shipment D	ate
		ieżny powiejskie	a la considera	JUNE B				(19 a)
Transporter Na	me:			Driver Nam	ne (Print):	-11 (	2.14.	
Addr	Yocham Trucki ess:				re (Print): Tag No.	04-183	State:	6V
City, State 2	Zip: Coweta	OV. 744	129	US	نے کے DOT No.	30100	5c.	
I hereby certify that the generator site listed abo	above material was p			I hereby certify t	that the above na	amed materi		d without
Colt Cou	l <del>k</del>	9-30-1 Ship Date	7	Palt	Courte		9-3	6-17
Driver Signature		Ship Date		Driver Signature			9-3 Delivery I	Date
			ibjesiii	15) i (0) i (1)	1. 10 miles	ep a r	4	
STORY WAS A STORY	American Environ 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	mental Landfill, I			Phone: (918)	) 245-7786 ) 245-7774		
I hereby certify that the	ne above named ma	terial has been a	accepted	to the best of my	knowledge th	e foregoing	g is accurate.	0-10
Laura King Mick Name of Authorized Agent		n Blunt _	Signature	410			Receipt Date	e

Signature

White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain

Receipt Date

Generator's Name:	USEDA Region 6 /	Wileey Oil	Dasidar	an Sita	Manifest	, , , , , ,	v	
Mailing Address:		WIICOX OII	resider	ice Site	Job No.	113		
Maning Address.				75000	Bill to Name:	Environmental R	estoration, LLC	
Point of Generation	Dallas City	TX State	Zip	<u>75202</u>		1666 Fabick Drive		
Address:	(b) (6)					St. Louis	MO	63026
	Bristow	ок		74010	<b>G</b>	City	State Zip	
	City	State	Zip		Contact:	Evan Wortman Name	(636) 227-74 Phone	<del>!77</del>
Contact:	Steve Mason Name	(214) Phone	789 <u>–18</u>	71				
Common Name of W	anta Matarial					Container No. Type	Total	Tunis
Common Name of W	aste iviateriai					No. Type	Quantity 7	Jnit —
Ion-Hazardous Soil						<u>DT</u>	11001	
		TV	in					
		16		>				
						art 261 or any applicable	state law, has been prop	perly
described, classified and	packaged, and is in p	oroper cond	ition to	r transport	ation according to ap	plicable regulations.		
	SAA Roeman	1 -		-	. V - U		9.30.1	>
Generator Authorized Age	nt Name	<u> </u>	Si	gnature			Shipment Date	
	and the second second second second	is at a creating	ST 4		દાઇપ્રાસાય છે.			
	and the second s		a mana a man 🖻			A STATE OF THE STA	74 1/	
Transporter Na	me: Yocham Truckir	ng .			Driver Nam	ne (Print):	iam r. Oak.	_ ک
Addr						Tag No. 100-1	149 State: 0	15
City, State 2	Zip:				US	DOT No. <u>0301</u>	005	
I hereby certify that the generator site listed abo		cked up at	the			that the above named manestination listed below.	terial was delivered with	out
1101. 8	)alba	0	20	()	. 161.1	A).	0.20	.15
Driver Signature	J (832)	Ship I	Date	1/_	Driver Signature	millard	Delivery Date	
				Vestil	alaie (o) a was se			a a t
	American Environ 212 N. 177 <sup>th</sup> W Av	mental Lan	dfill, In	c.		Phone: (918) 245-778		
	Sand Springs, OK				Per	Fax: (918) 245-777 rmit No: 3557021	/4	
I hereby certify that th	e above named ma	terial has b	oeen ac	cepted and	d to the best of my	knowledge the forego	oing is accurate.	1.10
					AAA .		9-30-1	V)
aura King Migk Name of Authorized Agent	i King Raver	Blunt	- Si	gnatur	VI		Receipt Date	
, (					- 0		-	

THE XIII	ı						•
Oenerator's Name:	USEPA Region 6 / V	Vilcox Oil R	Residen	ce Site	Manifest	~~~	
Mailing Address:	1445 Ross Ave				Job No.		
	Dallas	TX_	77.	75202		Environmental F	Restoration, LLC
Point of Generation	City	State	Zip		Address:	1666 Fabick Drive	
Address:	(b) (6)					St. Louis City	MO 63020 State Zip
	Bristow City	OK State	Zip	74010	Contact:	Evan Wortman	(636) 227-7477
Contact:	Steve Mason Name	(214) 7 Phone	789–18	71		Name	Phone
Common Name of W	aste Material					Container No. Type	Total Quantity Unit
n-Hazardous Soil						<u>DT</u>	HOLL !
			1	rans			
	<del></del>			10/10			<del></del>
	above nameu material	is not a nac	zaruous				e state law, has been properly
	packaged, and is in p	roper condi	ition fo				
		roper condi	ition fo			plicable regulations.	9-30-17
		roper condi	ition fo			plicable regulations.	9-30-/7 Shipment Date
		croper condi	ition fo	r transportal	tion according to ap	plicable regulations.	9-30-/7 Shipment Date
Generator Authorized Age	mt Name	croper condi	ition fo	r transportal	tion according to ap	plicable regulations.	
Generator Authorized Age Transporter Na	me:	roper condi	ition fo	r transportal	tion according to ap	plicable regulations.	
Generator Authorized Age  Transporter Na  Addr	me: Yocham Truckir	roper condi	ition fo	r transportal	Driver Nam	ne (Print): KEN Tag No.	Hughis  State: OK
Generator Authorized Age Transporter Na	me: Yocham Truckir	roper condi	ition fo	r transportal	Driver Nam	plicable regulations.	Hughis  State: OK
Generator Authorized Age  Transporter Na  Addr	me: yocham Truckir ess: Zip: above material was pi	corper condi	sition fo	r transportal	Driver Nam  US I hereby certify to	ne (Print):  Tag No.  DOT No.  DOT No.	Hughis  State: OK
Generator Authorized Age  Transporter Na  Addr  City, State 2  hereby certify that the	me: yocham Truckir ess: Zip: above material was pi	oroper condi	sition fo	r transportal	Driver Nam  US I hereby certify to	that the above named m	Hughis  148 State: OK  1005
Generator Authorized Age  Transporter Na  Addr  City, State 2  hereby certify that the	me: yocham Truckir ess: Zip: above material was pi	oroper condi	sition fo	gnature	Driver Nam  US I hereby certify incident to the di	that the above named m	Hughis  148 State: OK  1005
Generator Authorized Age  Transporter Na  Addr  City, State 2  hereby certify that the	me: yocham Truckir ess: Zip: above material was pi	cked up at the Ship D	the	ignature a	Driver Nam  US I hereby certify incident to the di	that the above named m	All hcs  State: OK  OS  aterial was delivered without  G-30-17  Delivery Date
Transporter Na Addr City, State 2 hereby certify that the enerator site listed abo	me: yocham Truckir ess: Zip: above material was pi ve.  American Environt 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	cked up at the Ship Demental Lance.	the 30-	r transportal gnature a gnature c.	Driver Nam  US I hereby certify incident to the decention of the decention	Phone: (918) 245-77. Fax: (918) 245-77.	Aughes  48 State: OK  205  aterial was delivered without  9-30-17  Delivery Date
Transporter Na Addr City, State 2 hereby certify that the enerator site listed aboriver Signature	me: Yocham Truckir ess: Zip: above material was pi ve.  American Environt 212 N. 177 <sup>th</sup> W Av Sand Springs, OK the above named mate	cked up at the Ship Demental Lance.	the 30-	r transportal gnature a gnature c.	Driver Nam  US I hereby certify incident to the decention of the decention	Phone: (918) 245-77. Fax: (918) 245-77. Trait No: 3557021	Aughes  48 State: OK  205  aterial was delivered without  9-30-17  Delivery Date

			And Antonion of			00
Generator's Name:	USEPA Region 6 / Wil	cox Oil Reside	ence Site	Manifest		- ,
Mailing Address:	1445 Ross Ave			Job No.		
	Dallas	TX	75202		Environmental Re	storation, LLC
Point of Generation	City	State Zip		Address:	1666 Fabick Drive	*
Address:	(b) (6)				St. Louis City	MO 6302 State Zip
	Bristow	OK 7	74010	Contact:	Evan Wortman	(636) 227–7477
	City	State Zip		001	Name	Phone
Contact:	Steve Mason Name	(214) 789-1 Phone	871			
Common Name of W	acta Matarial				Container No. Type	Total Ouantity Unit
Common Name of w	aste iviateriai				No. Type	Quantity Unit
Non-Hazardous Soil					<u>DT</u>	111461
described, classified and	above named material is dipackaged, and is in pro	per condition	for transpor			state law, has been properly  9-30-/7  Shipment Date
				DISTRICTOR'S		J'
Transporter Na			XIUIIL	<b>4</b>	o (Print):	
Addı	Yocham Trucking			Driver Nam	Tag No. 704 18	SCON
City, State	FO GOX	74			12g No. 704 18	State: OK
City, State	coweta,	OK 744	127_	US	DOT No. 0-30-100	9 <del>5</del>
I hereby certify that the generator site listed abo	above material was pick ve.	ted up at the			that the above named mat estination listed below.	erial was delivered without
7. B.		9.20-1	7	Driver Signature	01.14	9.20 5
Driver Signature		Ship Date		Driver Signature		Delivery Date
			s Waste	are to to be the fire		
en en fan De gebrûne in skein ûn it de fan de f	American Environme	ental Landfill,	Inc.	en i i i i i i i i i i i i i i i i i i i	Phone: (918) 245-778	6
	212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74	1063		Dav	Fax: (918) 245-777 rmit No: 3557021	
I hereby certify that the	· ·		accepted &	f .	knowledge the forego	ing is accurate
I hereby certify that the	le active named mater	iai nas occii	accepied/a	die jest of my	A RIGHTCUSC IIIC TOTOSO.	1271
Laura King Mick Name of Authorized Agen	ki King Raven I	Blunt	Signature			Receipt Date
		*				

Generator's Name: USEPA Region 6 / Wilcox Oil Residence Site Mailing Address: 1445 Ross Ave Dallas TX 75202 City State Zip Coint of Generation Address: 1760  Bristow OK 74010 City State Zip Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Ommon Name of Waste Material  Difference of Waste Material  Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Unit Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Container No. Type Quantity Contact: Steva Mason (214) 788-1871 Phone  Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 Phone Contact: Steva Mason (214) 788-1871 P				بمستنسستهم						
Mailing Address: 1445 Ross Ave Dallas  TX TS202 Point of Generation Address: 150 G Bristow City State City State City State City Contact: 150 G Bristow Contact: 150 G City Contact: 150 G						1474 Sante	i esca (del Estato)		· · · · · · · · · · · · ·	Q
Dallas TX 75202  Dallas TX 75202  Point of Generation  Address: 1846 Fasigk Drive  State Zip  Contact: Stave Mason (214) 789–1871  Phone  Contact: Stave Mason (214) 789–1871  Name  Contact: Stave Mason (214) 789–1871  Phone  Contact: Stave Mason (214) 789–1871  Name  Contact: Stave Mason (214) 789–1871  No. Type (214) 789–1871  No.	Generator's Name:	USEPA Region 6 / \	Wilcox Oil F	Residence	Site					A read
Point of Generation  Address:    Did   State   Zip   Contact:	Mailing Address:	1445 Ross Ave								ard.
Point of Generation Address: D16  Bristow OK 74010 City State Zip Contact: Stave Mason (214) 788–1871 Phone Phone  Contact: Stave Mason Phone Name Phone  Contact: Stave Mason Phone Name Phone  Contact: Stave Mason (214) 788–1871 Phone  Contact: Stave Mason Phone Name Phone  Container No. Type Quantity Unit  Container No. Type Quantity Phone  Container No. Type Operating Variable state law, has been properly scribed, classified and packaged, and is in proper condition for transportation according to applicable regulations.  Transporter Name: Address: City, State Zip: Cowella Olk 74449  Container  Transporter Name: Address: City, State Zip: Cowella Olk 74449  USDOT No. 0701005  Thereby certify that the above material was picked up at the nerator site listed above.  Thereby certify that the above named material was delivered without incident to the destination listed below.  American Environmental Landfill, Inc. 212 N. 17716 Wave. Signature  Phone: (918) 245-7786 Fax: (918) 245-7774  Permit No: 3557021  Are King Micki King Raven Blunt  Signature  Receipt Date  Receipt Date  Receipt Date					5202		(≇		ration, LLC	
Bristow OK State Zip City State Zip Contact: Stave Mason (214) 788–1871 Phone  Contact: Stave Mason Name Phone  Contact: Stave Mason Name Phone  Contact: Stave Mason Name Phone  Contact: Stave Mason Phone  Container No. Type  Container  Total  Container No. Type  Container  Container No. Type  Container  Container No. Type  Total No. Type  Container No. Type  Total No. Type  Total No. Type  Container No. Type  Total No. Type Total No. Type  Total No. Type  Total No. Type Total No. Type		١ - ١	State	Zip		Address:	1666 Fabick	Drive		
Contact: Stave Mason (214) 789–1871 Name  Contact: Stave Mason (214) 789–1871 Phone  Contact: Stave Mason (214) 789–1871 Name  Contact: Stave Mason (214) 789–1871 Phone  Container No. Type  Total  Container No. Total  Contai	Address:	(b) (6)								6302
Contact: Steve Mason Name (214) 789–1871 Phone  Immon Name of Waste Material  Phone  Container No. Type  Quantity  Unit  Hazardous Soil  PT  Total Quantity  Unit  Hazardous Soil  PT  Transporter Name  Address:  City, State Zip:  Courte OIL 74/H29  Bereby certify that the above material was picked up at the nerator site listed above.  Transporter Name  Address:  City, State Zip:  Courte OIL 74/H29  Briver Signature  And Signature  Tag No.  Coff Couffer  Tag No.  OJBOT N					1010	Contact:	Evan Wortm	an		7477
Transporter Name:  Address:  City, State Zip:  Cousta OK 744439  Bereby certify that the above material was picked up at the nerator site listed above.  American Environmental Landfill, Inc.  212 N. 177th WANE.  Signature  American Environmental Landfill, Inc.  212 N. 177th WANE.  Sand Springs, OK 74063  American Environmental Landfill, Inc.  212 N. 177th WANE.  Sand Springs, OK 74063  Evereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  To Driver Name (Print):  Colt Coulker  Tag No.  701-183  State:  OX 0701-183  State:	Contact:	Steve Mason Name	(214) Phone	789–1871			Name		Phone	
ereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly scribed, classified and packaged, and is in proper condition for transportation according to applicable regulations.    Part	ommon Name of W	aste Material								Unit
Transporter Name: Address: City, State Zip: Low sto OIK 74HA9 Lereby certify that the above material was picked up at the nerator site listed above.  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063 Lereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  Alteredy certify that the above named material was picked up at the nerator site listed above.  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063 Lereby certify that the above named material was delivered without incident to the destination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774 Permit No: 3557021  Lara King Mcki King Raven Blunt  Receipt Date  Receipt Date	Hazardous Soil						_ <del>D</del>	<u> </u>	W101-	<u> </u>
Transporter Name: Address: City, State Zip:  Level 2 Coult 1449  Level 2 Coult 1449  Level 3 Coult 1449  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063  Level 3 Coult 144 Aven Blunt Signature  Driver Name (Print):  Colf Coulfer  Tag No. 749-183 State: OK  USDOT No. 0381005  I hereby certify that the above named material was delivered without incident to the destination listed below.  Phone: (918) 245-7786  Fax: (918) 245-7774  Permit No: 3557021  Level 3 Coult 144 Aven Blunt Signature  Phone: (918) 245-7774  Permit No: 3557021  Level 3 Coult 144 Aven Blunt Signature  Receipt Date		<del></del>	MINS							
Transporter Name: Address: City, State Zip:  Level 2 Coult 1449  Level 2 Coult 1449  Level 3 Coult 1449  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063  Level 3 Coult 144 Aven Blunt Signature  Driver Name (Print):  Colf Coulfer  Tag No. 749-183 State: OK  USDOT No. 0381005  I hereby certify that the above named material was delivered without incident to the destination listed below.  Phone: (918) 245-7786  Fax: (918) 245-7774  Permit No: 3557021  Level 3 Coult 144 Aven Blunt Signature  Phone: (918) 245-7774  Permit No: 3557021  Level 3 Coult 144 Aven Blunt Signature  Receipt Date								<del></del>		
Transporter Name: Address: City, State Zip: Cow to OK 74/439  Driver Name (Print): Colt Coulter Tag No. Tag No	enerator Authorized Age	ent Name		Signa	ture /				Shipment Date	
City, State Zip:  Cow to olk 744439  USDOT No.  USDOT N				1180	ansp	onier -				
City, State Zip:  Cow to olk 744439  USDOT No.  USDOT N	Transporter Na	ame:				Driver Nam	e (Print):	Call 1	Pacities	
City, State Zip: Low to 014 74449  Bereby certify that the above material was picked up at the nerator site listed above.  Colt Coulds  Fiver Signature  American Environmental Landfill, Inc. 212 N. 177th W Ave. Sand Springs, OK 74063  Permit No: 3557021  Bereby certify that the above named material was delivered without incident to the destination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774 Send Springs, OK 74063  Permit No: 3557021  Bereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  Fax: (918) 245-7774  Fa		Yooham Truckii	ng -				Tag No t	7017 0	ouper	
American Environmental Landfill, Inc.  212 N. 177th W Ave.  Sand Springs, OK 74063  Permit No: 3557021  Are liver Signature  American Environmental has been accepted and to the best of my knowledge the foregoing is accurate.  American Environmental has been accepted and to the best of my knowledge the foregoing is accurate.  American Environmental Landfill, Inc.  212 N. 177th W Ave.  Sand Springs, OK 74063  Permit No: 3557021  Receipt Date  Receipt Date							rug III.	1041-182	State	OK
American Environmental Landfill, Inc.  Phone: (918) 245-7786 212 N. 177th W Ave. Sand Springs, OK 74063  Permit No: 3557021  Pereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  Phone: (918) 245-7786 Fax: (918) 245-7774 Sand Springs, OK 74063  Permit No: 3557021  Receipt Date	City, State	Zip: Cowata	2 014	74429	<del>-</del>					OK
American Environmental Landfill, Inc.  Phone: (918) 245-7786 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063  Permit No: 3557021  Preserved Agent  Phone: (918) 245-7786 Preserved	nereby certify that the	above material was p	•		<u>}</u>	USI I hereby certify t	OOT No(	named material	5"	
American Environmental Landfill, Inc.  Phone: (918) 245-7786 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063  Permit No: 3557021  Pereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  Phone: (918) 245-7786 Fax: (918) 245-7774  Signature  Permit No: 3557021  Receipt Date	ereby certify that the	above material was p	oicked up at	the		USI I hereby certify t	OOT No(	named material	was delivered w	rithout
212 N. 177th W Ave. Sand Springs, OK 74063  Permit No: 3557021  ereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  ITA King Micki King Raven Blunt  Signature  Receipt Date	ereby certify that the nerator site listed abo	above material was p	oicked up at	the		I hereby certify t incident to the de	OOT No(	named material	was delivered w	ithout
212 N. 177th W Ave. Sand Springs, OK 74063  Permit No: 3557021  ereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.  ITA King Micki King Raven Blunt  Signature  Receipt Date	ereby certify that the nerator site listed abo	above material was p	oicked up at	the 30-17 Date		I hereby certify t incident to the de Driver Signature	OOT No(	named material	was delivered w	ithout
tra King Micki King Raven Blunt  Signature  Signature  Signature  Receipt Date	ereby certify that the nerator site listed abo	above material was prove.  American Environ	Ship D	30 -17 Date		I hereby certify t incident to the de Driver Signature	hat the above estination liste	named material d below.	was delivered w	ithout
ra King Micki King Raven Blunt Signature Receipt Date	ereby certify that the nerator site listed abo	American Environ 212 N. 177 <sup>th</sup> W Av	Ship D	30 -17 Date		I hereby certify to incident to the description.  Driver Signature	phone: (91) Fax: (91)	named material d below.  8) 245-7786 8) 245-7774	was delivered w	ithout
me of Authorized Afent Signature Receipt Date	ereby certify that the nerator site listed about the court of the cour	American Environ 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Ship E	30 -17 Date	S S E E E E	I hereby certify to incident to the description.  Driver Signature  Per	hat the above estination liste with the above estination liste with the second process of the second process o	named material d below.  8) 245-7786 8) 245-7774 7021	was delivered wa	ithout
	ereby certify that the nerator site listed about the court of the cour	American Environ 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Ship E	30 -17 Date	S S E E E E	I hereby certify to incident to the description.  Driver Signature  Per	hat the above estination liste with the above estination liste with the second process of the second process o	named material d below.  8) 245-7786 8) 245-7774 7021	was delivered wa	ithout
White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain	ereby certify that the nerator site listed about the list	American Environ. 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Ship D Ship D Imental Landve. 74063	30 -17 Date  dfill, Inc.	oted and	I hereby certify to incident to the description.  Driver Signature  Per	hat the above estination liste with the above estination liste with the second process of the second process o	named material d below.  8) 245-7786 8) 245-7774 7021	was delivered w  9-30-  Delivery Date  s accurate.	ithout
	ereby certify that the herator site listed about the list	American Environ. 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Ship D Ship D Imental Landve. 74063	30 -17 Date  dfill, Inc.	oted and	I hereby certify to incident to the description.  Driver Signature  Per	hat the above estination liste with the above estination liste with the second process of the second process o	named material d below.  8) 245-7786 8) 245-7774 7021	was delivered w  9-30-  Delivery Date  s accurate.	ithout

### **Non-Hazardous Waste Manifest**

		and the Maria			and the Santa Control of the second	
W	i periodelli il				_	AND THE REAL PROPERTY OF THE PARTY OF THE PA
Generator's Name:	USEPA Region 6 / V	Vilcox Oil Resid	ence Site	Manifest		
Mailing Address:	1445 Ross Ave		<u> </u>	Job No.	MINDZOTTILOT	
	Dallas	TX State Zip	75202		Environmental R	lestoration, LLC
Point of Generation		State Zip	•	Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman	(636) 227-7477
Contact:	Steve Mason Name	(214) 789- Phone	1871		Name	Phone
Common Name of W	aste Material			~	Container No. Type	Total Quantity Unit
Non-Hazardous Soil					1DT	10117 (
		-	<u> </u>			:
			ムシ			<u> </u>
described, classified and	· Much	_	for transport	ation according to ap	pplicable regulations.	9.30./7
4-1-4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		0.07490.42180			and the second second	
Transporter Na	Yocham Truckin			Policer  Driver Nan	Will	am POaks
City, State				US	Tag No. 700 - 1	149 State: <u>OK</u> 1005
I hereby certify that the		cked up at the				aterial was delivered without
generator site listed abo	ve.	0. 20		incident to the	estination listed below.	0.20.0
William Ho	wo	<u>4.30</u>	).//	Willia	10elo	<u> 4.30.17</u>
Driver Signature		Ship Date		Driver Signature		Delivery Date
			jb/esin	STREETS AND A STREET		
	American Environi 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	e.	Inc.	Pe	Phone: (918) 245-77 Fax: (918) 245-77 rmit No: 3557021	
I hereby certify that the	le above named mat	erial has been	accepted a	d to the best of my	knowledge the foreg	oing is accurate.
aura King Mick Name of Authorized Agent	Raver	Blunt -	Signature			Receipt Date

White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain

Generator's Name:	USEPA Region 6 / W	Icox Oil Reside	nce Site	Manifest	USE	
Mailing Address:	1445 Ross Ave			Job No.	MN520WIL01	
	Dallas	TX	75202		Environmental Re	estoration, LLC
Point of Generation		State Zip	APPENDING S	Address:	1666 Fabick Drive	
Address:	(b) (6)		i-		St. Louis City	MO 63026 State Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1 Phone	871			
Common Name of W	aste Material				Container No. Type	Total Unit
Non-Hazardous Soil					DT	13/40
		-	<u>γυ/&lt;</u>			
described, classified and	I packaged, and is in pr イントントーハー マート・ハー・	oper condition i				9 - 30 - / 7 Shipment Date
		and the second	Lungis	arania anda an		
					1	11 /
Transporter Na	Yocham Trucking			Driver Nam	e (Print):	Hughts  Y8 State: O/C
Addr	•					•
City, State 2	Zip:			USI	DOT No. <u>030</u>	1005
I hereby certify that the generator site listed abo	above material was pic ve.	ked up at the			that the above named matestination listed below.	erial was delivered without
Kenth	Live	9.30	-17	Per	- Hale	9-30-17
Driver Signature	7	Ship Date		Driver Signature	1	Delivery Date
A CONTRACTOR		(Tree States and Tree	E E SIE	to take the second		
	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7		inc.	Per	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	
I hereby certify that th	ne above named mate	rial has been a	accepted an	to the best of my	knowledge the forego	ing is accurate.
aura King Mick	i King Raven	Blunt	Signature	16		Receipt Date
White Dealine	tion Potentian . Vo	llow - Peturn	to Bill to	Pink - Transports	er Retain • Goldenro	d - Generator Petain

Generator's Name: USEPA Region 6 / W	lilcox Oil Residence Sit	te Manifest	use	
Mailing Address: 1445 Ross Ave		Job No.	MN520WIL01	
Dallas	TX 7520	Bill to Name:	Environmental R	estoration, LLC
City Point of Generation	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)		•	St. Louis	MO 63026
Bristow	OK 7401	Ontact:	City	State Zip
City	State Zip	Contact.	Evan Wortman Name	(636) 227-7477 Phone
Contact: Steve Mason Name	(214) 789-1871 Phone	<u> </u>		,*
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Ion-Hazardous Soil			LDT	140.7
	TVans			
described, classified and packaged, and is in proceedings of the second	Signatur			9-30-1 Shipment Date
		i Mayonan		
				and the second of the second o
Transporter Name: Yocham Trucking	g	Driver Nam	ie (Print): Zee	KROWN 180 State: OK
Address: Po Box.	745	<u> </u>	Tag No. 704	/80 State: 0K
City, State Zip: Coweta	-OK 74424	_ US	DOT No. 03010	ــــــــــــــــــــــــــــــــــــــ
I hereby certify that the above material was pic generator site listed above.	cked up at the		that the above named matestination listed below.	aterial was delivered without
2	9/25	1 7		9/20
Driver Signature	Ship Date	Driver Signature	rain	Delivery Date
	Description and the control of the second		A Commence of the second	
American Francisco	antal Landfil Jac		Dhone: (019) 245 77	94
American Environn 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	e.	Per	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	
I hereby certify that the above named mate	erial has been accepte	ed and to the best of my	knowledge the foreg	oing is accurate.
		1/1/A		G-7)-17
aura King Micki King Raven	Rlunt	///		
aura King Micki King Raven	Signatur	e V V V		Receipt Date

### **Non-Hazardous Waste Manifest**

		u de production de	Little on State			
Generator's Name:	USEPA Region 6 / W	/ilcox Oil Resid	ence Site	Manifest	USF	
Mailing Address:	1445 Ross Ave			Job No.	MITOLOTIZOT	-
	Dallas	TX	75202			Restoration, LLC
Point of Generation		State Zip	)	Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State Zir	74010	Contact:	Evan Wortman	(636) 227–7477
Contact	Steve Mason	(214) 789-			Name	Phone
Contact.	Name	Phone	18/1			
- \\					Container	Total
Common Name of W	aste Material				No. Type	Quantity Unit
Non-Hazardous Soil					DT	150
			'-			
						le state law, has been properly
described, classified and		roper condition	for transpo	rtation according to ap	plicable regulations.	
		-	Me	$X\Lambda$		9-36-17
Generator Authorized Age	ent Name	-	Signature			9-36-17 Shipment Date
i ta da santa a santa		and the second	. S wokak	antine		
				A. A. S. C. C. C. S.		
Transporter Na	ame: Yocham Trucking ress:	<u></u>		Driver Nam	ne (Print): _Co/1	+ Coulter
7100				V <sub>1</sub>	Tag No. DOM	+ Coulter -183 State: OL
City, State	Zip:			US	DOT No. <u>636</u> /	005
I hereby certify that the generator site listed abo		cked up at the			that the above named mestination listed below.	naterial was delivered without
Calt 1	as the	9-3	0-17	Polt	Coutte	9-30-17
Driver Signature	<del></del>	9-3 Ship Date		Driver Signature	0.00	Delivery Date
Venda (1995)		este di sis	( EAST	\$\$ <b>::</b> \$\$\\\$\\$\\$\\$\\$\\$\\$\\$		
	American Environn 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	ė.	Inc.	Per	Phone: (918) 245-7 Fax: (918) 245-7 rmit No: 3557021	
I hereby certify that t	. •		accepted a	ind to the best of my	knowledge the fores	going is accurate.
	i King Raven		Signature			Receipt Date

White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain



Generator's Name: USEPA Region 6 / V	Wilcox Oil Reside	ence Site	Manifest Job No.	<i>いど</i> MN52044L01		
Mailing Address: 1445 Ross Ave	·	<del></del>		Environmental R	estoration IIC	
<u>Dallas</u> City	TX State Zip	75202		1666 Fabick Drive	estoration, LLO	
Point of Generation	State Esp		Address.			
Address: (b) (6)		<del></del>		St. Louis City	MO State Zip	63026
B <u>ristow</u> City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227- Phone	7477
Contact: <u>Steve Mason</u> Name	(214) 789-1 Phone	871				
Common Name of Waste Material				Container No. Type	Total Quantity	Unit
Non-Hazardous Soil				T <b></b>		
1	1				HILL	21
+a	5/1/				1170	
			1 1	1		
Generator Authorized Agent Name	n 6	Signature	71		9-29-1 Shipment Date	7
-1 900 Ae.		Signature Signature	) 1 d		9-29-1 Shipment Date	7
Generator Authorized Agent Name				e (Print):	9-29-1 Shipment Date	7
Generator Authorized Agent Name  Transporter Name:  Yocham Truckir			Driver Nam		Shipment Date  Arold	
Generator Authorized Agent Name  Transporter Name:			Driver Nam	e (Print): Tag No. DOT No. 03010	9-29-1 Shipment Date  And  446 State:	7 ok
Generator Authorized Agent Name  Transporter Name:  Address:	0 N 74		Driver Nam US	Tag No. 700.	Shipment Date  Arobb  446 State:	бĸ
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p	0 N 74		Driver Nam US	Tag No. OSOIC that the above named m	Shipment Date  Arobb  446 State:	бĸ
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.	0 N 74	429	Driver Nam  US)  I hereby certify t incident to the dependent to the depen	Tag No. OSOIC that the above named m	Shipment Date  Arobb  446 State:	бĸ
Generator Authorized Agent Name  Transporter Name: Address: City, State Zip: I hereby certify that the above material was p generator site listed above.  Driver Signature	ong  Oh 74  icked up at the  Ship Date	427	Driver Nam  US)  I hereby certify t incident to the dependent to the depen	Tag No. OC. DOT No. O301C that the above named mestination listed follow.	Shipment Date  Arold  446 State:  200  aterial was delivered w  Q-29  Delivery Date	бĸ
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.	icked up at the  Ship Date  mental Landfill,	427	Driver Nam  USI  I hereby certify t incident to the decoration of	Tag No. OSOIC that the above named m	Shipment Date  Arold  446 State:  200  aterial was delivered w  Delivery Date	бĸ
Generator Authorized Agent Name  Transporter Name:  Address:  City, State Zip:  I hereby certify that the above material was p generator site listed above.  Driver Signature  American Environ 212 N. 177th W Av	icked up at the  Ship Date  mental Landfill, i.e. 74063	429 1)	Driver Nam  US  I hereby certify t incident to the description  Driver Signature	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	Shipment Date  Arold  446 State:  Delivery Date	бĸ

Generator's Name: USEPA Region 6	/ Wilcox Oil Residence Site	Manifest	USE	
Mailing Address: 1445 Ross Ave		Job No.	MN520WIT 01	
Dallas	TX 75202	Bill to Name:	Environmental R	estoration, LLC
Point of Generation City	State Zip	Address:	1666 Fabick Drive	
Address: (b) (6)			St. Louis City	MO 63026 State Zip
B <u>ristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	* •
Contact: <u>Steve Mason</u> Name	(214) 789–1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil		1		191201
I hereby certify that the above named mat described, classified and packaged, and is	in proper condition for transporta	lefined by 40 CFR Patition according to app	art 261 or any applicable olicable regulations.	e state law, has been properly  9-19-/7  Shipment Date
	્રા ભાગમાં આવેલા ક	<u>્રાક) દુધના</u> જેવા		
Transporter Name:	•	Driver Name	e (Print):	. P 14
Yocham True	sking		Tag No.	t Coulter -183 State: OK
Address:  City, State Zip:	te OK. 74429		OOT No. <u>630/</u>	
I hereby certify that the above material wagenerator site listed above.	•		hat the above named ma estination listed below.	terial was delivered without
Colt Louth	9-29-/7 Ship Date	Driver Signature	Coult	9-39-17 Delivery Date
	nantinaurian <b>Eis</b> nai			
<b>₹</b>	ironmental Landfill, Inc.		Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	86
I hereby certify that the above named	en Blunt	d to the best of my	knowledge the forego	42911
Name of Antinorized Agent	Signature			Receipt Date
White - Destination Retention	• Yellow – Return to Bill to •	Pink – Transporte	er Retain • Goldenro	od – Generator Retain

			A CONTRACTOR		A CONTRACTOR OF THE PROPERTY O	And the second s
Generator's Name:	USEPA Region 6 / Wild	ox Oil Reside	nce Site	Manifest	USE	
Mailing Address:	1445 Ross Ave			Job No.	MN520WH_01	
	Dallas	TX	75202		Environmental Re	estoration, LLC
Point of Generation	City	State Zip		Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis	MO 63026 State Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-18 Phone	371			
Common Name of Wa	aste Material				Container No. Type	Total Quantity Unit
Von-Hazardous Soil		f	5 AVI		DT	1100 1
		YUM	<del>\\'</del>			
Generator Authorized Age Transporter Na	ent Name			វិស្តិសុស្ត្រ (ខាត្តាក់ក្រុង)	ne (Print):	Shipment Date  MTravis Person State: Chila.
•	Yocham Trucking Tess: 201(0) 5, 90	215+ W. A.	10		Tag No. Y36165	State: Chila
City, State 2				US	DOT No. 2642	542 State C.
I hereby certify that the generator site listed abo	above material was picke	ed up at the			that the above named matestination listed below.	terial was delivered without
J	···	9/29,	117	July		9/29/17
Driver Signature		Ship Date		Driver Signature		Delivery Date
				11815(e2543666)		
Company of the second of the s	American Environmer 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 740	•	nc.	Per	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	
arura King Mick Name of Authorized Agent	·····	Blunt_ (_s	Signific .		knowledge the forego	Receipt Date

we we	The state of the s	garaga di kabanasa sa	075004				NEW TOWNSON	
Generator's Name:	USEPA Region 6 / V	Wilcox Oil R	esidenc	e Site	Manifest		UE	- [
Mailing Address:					Job No.		1520 <del>WIL</del> 01	
	Dallas	TX		75202	Bill to Name:	Envir	onmental F	Restoration, LLC
Point of Generation	City	State	Zip		Address:	1666 F	abick Drive	
Address:						St. Lou	is	MO 6302
	Bristow	ок		74010	Contact	City		State Zip
	City	State	Zip		Contact:	Evan W Name	ortman	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 7: Phone	89–1871					
Common Name of Wa	aste Material					Cor No.	ntainer Type	Total Quantity Unit
	aste Material					110.	Type	10 com
Non-Hazardous Soil	-1		<del> </del>			1	DT	1500+
		(,	0					
	<del></del>	1917	160	۲				
I hereby certify that the described, classified and	d packaged, and is in p	is not a haz roper condit	ardous v tion for t	waste as transport	defined by 40 CFR P ation according to ap	art 261 or oplicable i	r any applicable regulations.	le state law, has been properly
Generator Authorized Age	ion 6			13.	1 V			9-29 17 Shipment Date
Generator Authorized Age	nt Name		Sign	nature				Shipment Date
	La companya da la co		Sec. of t	gright		1,115		
Transporter Na	ıme:				Driver Nam	ne (Print)	· .	
Addr	Yocham Truckin ess:	g				Tag No	) <u>541</u>	GOY State: 6 15
City, State 2	Zip:	· .			US	DOT No	CAF	604 State 8 15
I hereby certify that the generator site listed above		cked up at th	he			that the al	bove named m	naterial was delivered without
		- /	) <i>a</i> .		1	1	1	<b>7</b>
Driver Suprature	Charges.	Ship Ba	ate	17	Driver Signature	1 Ch	uto	9-19 Toelivery Pate
					rosele) t Empleon			
and September of Lands Angeles (1995)	American Environ	nental Land		- gir san tirranian	iki (gargan) se mpangapapapak penerikiki samuntur b	Phone:	(918) 245-77	786
	212 N. 177 <sup>th</sup> W Av Sand Springs, OK	e.	<i>'</i> .		Per	Fax:	(918) 245-77 3557021	
I hereby certify that th			een acco	epted ar	nd to the best of my	knowle	dge the foreg	going is accurate
Aura King Micki Name of Authorized Agent	i King Raven	Blunt_	Sign	diure			,	Receipt Date
White - Destinat	tion Retention • Y	ellow - Ret	urn to E	Bill to	Pink – Transport	er Retair	• Goldeni	rod – Generator Retain

		S. J. S. Warranton		
Generator's Name: USEPA Region 6 / V	Vilcox Oil Residence Site	Manifest Job No.	MN520WH-01	•
Mailing Address: 1445 Ross Ave			Environmental Re	estoration IIC
<u>Dallas</u> City	TX 75202 State Zip		1666 Fabick Drive	Storadon, LLO
Point of Generation  Address: (b) (6)			St. Louis	MO 63026
Bristow	OK 74010	_	City	State Zip
City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
			Container	Total
Common Name of Waste Material			No. Type	Quantity Unit
Non-Hazardous Soil			DT	16.78
-Vans (	211			101701
Generator Authorized Agent Name  Transporter Name:  Address:	Signature Signature	Driver Nam		N N 15 HAS
City, State Zip:		USI	DOT No. 030	1005
I hereby certify that the above material was pigenerator site listed above.	cked up at the		hat the above named mat estination listed below.	erial was delivered without
Menus AAsh Driver Signature	9/29 Ship Date	Driver Signature	unos And	h J-29 Delivery Date
	in same tierbesing	GIELONE TO		
The second section of the second section is a second secon	mental Landfill, Inc. e.		Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	6
Thereby certify that the above named mat	erial has been accepted and	to the best of my	knowledge the forego	ing is accurate.
aura King Micki King Raver	Blunt Signature	/		Receipt Date
White Destination Potentian a V	Allow Poturn to Pili to	<u></u>		

Generator's Name: USEPA Region 6 / Wilcox Oil Residence Site	Manifest	WE
Mailing Address: 1445 Ross Ave	Job No. MN52	OWIL 01
Dallas TX 75202		mental Restoration, LLC
Point of Generation City State Zip	Address: 1666 Fabio	k Drive
Address: (b) (6)	St. Louis City	MO 63026 State Zip
Bristow OK 74010 City State Zip	Contact: Evan Wort Name	
Contact: Steve Mason (214) 789-1871 Name Phone		
Common Name of Waste Material	Contai No.	<b>m</b>
		" 1/4/2
lon-Hazardous Soil		
transport		
I hereby certify that the above named material is not a hazardous waste as described, classified and packaged, and is in proper condition for transpor	defined by 40 CFR Part 261 or an ation according to applicable regu	y applicable state law, has been properly lations.
2. Che wash	C 1	9.29.17
Generator Authorized Agent Name Signature	lihr	Shipment Date
		ompilion data
tid on the first of the second se	porter ******	
Transporter Name:	Driver Name (Print):	Williamt. Vals
Address:	Tag No.	700-149 State: OL
City, State Zip:	USDOT No.	0301005
I hereby certify that the above material was picked up at the generator site listed above.	I hereby certify that the above incident to the destination like	e named material was delivered without
$\sim 10^{\circ}$	1.1.01: +3-1	9.29.17
Driver Signature Ship Date	Driver Signature	Delivery Date
	ECILIL/II	(中国) 1940年 (中国) 1
American Environmental Landfill Inc	Phone: (C	018) 245-7786
American Environmental Landfill, Inc. 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063	Fax: (9	918) 245-7786 918) 245-7774 557021
212 N. 177 <sup>th</sup> W Ave.	Fax: (9 Permit No: 3	918) 245-7774 557021
212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063 I hereby certify that the above named material has been accepted at	Fax: (9 Permit No: 3	918) 245-7774 557021
212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063	Fax: (9 Permit No: 3	918) 245-7774 557021

The Wall of the Same of the Same	· Parket services		Y
Generator's Name: USEPA Region 6 /	Wilcox Oil Residence Site	Manifest usE	
Mailing Address: 1445 Ross Ave		Job NoMN520441_01	<b></b>
Dallas	TX 75202	Bill to Name: Environmental R	lestoration, LLC
Point of Generation	State Zip	Address: 1666 Fabick Drive	
Address(b) (6)		St. Louis City	MO 63026 State Zip
B <u>ristow</u> City	OK 74010 State Zip	Contact: Evan Wortman Name	(636) 227-7477 Phone
Contact:S <u>teve Mason</u> Name	(214) 789-1871 Phone		
Common Name of Waste Material		Container No. Type	Total Quantity <u>Unit</u>
Non-Hazardous Soil		1 DT	16/101
I hereby certify that the above named materi described, classified and packaged, and is in	ial is not a hazardous waste as	defined by 40 CFR Part 261 or any applicab	le state law, has been properly
THEREIN MASIM	-	A	2 22 -
Generator Authorized Agent Name	(_ )	. X h	9-29-17
Generator Authorized Agent Name	Signature		Shipment Date
	Server with the server best into	poner	
Transporter Name:	<b>S</b> .	Driver Name (Print): 1.88	Renial
Address: Yocham Truckin	N 7UK	Driver Name (Print): LEE  Tag No. 704	DACIONAL AK
City, State Zip:	- NUMUUNG	USDOT No. 6201	180 Dance - OIL
Cowera	4, UN 1770	USDOT No. 0301	
I hereby certify that the above material was generator site listed above.	picked up at the	I hereby certify that the above named mincident to the destination listed below.	
7R m. n	9-29-17	2 R	9-29-17
Priver Signature	Ship Date	Oriver Signature	Delivery Date
	والمراجع والمراز والمعرب وراجي	Store (e) a broom on the real of the control	
212 N. 177 <sup>th</sup> W A Sand Springs, OK	X 74063	Phone: (918) 245-7 Fax: (918) 245-7 Permit No: 3557021	774
I hereby certify that the above named ma	aterial has been accepted ar	parto the best of my knowledge the fores	going is accurate.
Aurra King Micki King Raver Name of Authorized Agent	n Blunt Signature		Receipt Date

Generator's Name: U	ISEPA Region 6 / V	Vilcox Oil R	esidence Site	Manifest		USE		
Mailing Address: 1	445 Ross Ave			Job No.				
D	allas	TX	75202				storation, LL	<u>C</u>
Point of Generation	City	State	Zip	Address:	1666 Fal	oick Drive		
Address:	0) (6)				St. Louis	<b>S</b>	MO State	63020 Zip
В	City	OK State	<b>74010</b> Zip	Contact:	Evan Wo	ortman	(636) 22 Phone	
Contact: S	Name	(214) 7 Phone	89-1871					
Common Name of Was	ste Material				Con No.	tainer Type	Total Quantity	Unit
on-Hazardous Soil				1	1	DT	15,12	1
	+x60	Spor	1			<del></del>	100	4
I hereby certify that the al	bove named materia	l is not a haz	zardous waste a	s defined by 40 CFR P	art 261 or	any applicable	state law, has bee	n properly
described, classified and p								
				•				
- The year				$\cap$ $\emptyset$		7	0 0	
~ ( )			Signature	, RL			9-29 Shipment D	7-17
Generator Authorized Agent			Signature				9-29 Shipment D	7-17 ate
~ ( )			Signature				9-29 Skipment D	7 - 17 ate
Generator Authorized Agent	oc pro 6			agnerae se	r Zonovi	J	Snipment D	3 - 17 ate
~ ( )	ne:	*	estanti Egicy		ne (Print):	KEN	Hughies	ate
Generator Authorized Agent	ne: Yooham Truokin	*	estanti Egicy	SPURE Driver Nam	r Zonovi	KEN 700-	Hughies	7-17 ate OK
Generator Authorized Agent Transporter Nam Addre	ne: Yooham Truckin ss: ip: bove material was pi	8	manul (c) 9	Driver Nam  US	ne (Print): Tag No DOT No that the ab	KEN 700- 030	Hughi 5	OK.
Generator Authorized Agent  Transporter Nam  Addre  City, State Z  I hereby certify that the algenerator site listed above	ne: Yooham Truckin ss: ip: bove material was pi	8	manul (c) 9	Driver Nam  US  I hereby certify incident to the d	ne (Print): Tag No DOT No that the ab	KEN 700- 030	Shipment D	OK.
Generator Authorized Agent  Transporter Nam  Addre  City, State Z  I hereby cerafify that the a	ne: Yooham Truckin ss: ip: bove material was pi	8	manul (c) 9	Driver Nam  US	ne (Print): Tag No DOT No that the ab	KEN 700- 030 ove named mat disted below.	Shipment D  Hughi S  148 State: 1005  terial was delivere  9-2  Delivery D	OK d without
Generator Authorized Agent Transporter Nam Addre City, State Z I hereby certify that the algenerator site listed above Daver Signature	ne: Yooham Truckin ss: ip: bove material was pi	icked up at t	the 29-17	Driver Nam  US  I hereby certify incident to the d  Driver Signature	ne (Print): Tag No DOT No that the ab	KEN 700- 030 ove named mat disted below.	Shipment D	OK d without
Generator Authorized Agent Transporter Nam Addre City, State Z I hereby certify that the algenerator lite listed above Diver Signature	t Name  ne: Yooham Truckin sss: ip: bove material was pie. American Environ	icked up at the Ship D	the 29-17 Pate	Driver Nam  US  I hereby certify incident to the d  Driver Signature	ne (Print): Tag No DOT No that the ablestination	(918) 245-778	Shipment D  Hught S  148 State: 1005  terial was delivere  Pelivery E	OK d without
Generator Authorized Agent Transporter Nam Addre City, State Z I hereby certify that the al generator site listed above	American Environa 212 N. 177th W Av	icked up at the Ship D	the 29-17 Pate	Driver Nam  US  I hereby certify incident to the d  Driver Signature	Tag No DOT No that the ab	KEN 700- 030 ove named mat disted below.	Shipment D  Hught S  148 State: 1005  terial was delivere  Pelivery E	OK_
Generator Authorized Agent  Transporter Nam Addre City, State Z  I hereby certify that the algenerator lite listed above Diver Signature	American Environic 212 N. 177th W Av Sand Springs, OK	icked up at the Ship Demonstrate Lance.	the 29-17 Pate Strill, Inc.	Driver Nam  US  I hereby certify incident to the d  Driver Signature	Phone: Fax: rmit,No:	(918) 245-778 (918) 245-777 3557021	Shipment D  Hught S  148 State: 1005  terial was delivere  Pelivery D	OK_
Generator Authorized Agent  Transporter Nam Addre City, State Z  I hereby certify that the algenerator lite listed above Diver Signature	American Environic 212 N. 177th W Av Sand Springs, OK	icked up at the Ship Demental Lance. 74063	the 29-17 Pate Strill, Inc.	Driver Nam  US  I hereby certify incident to the d  Driver Signature	Phone: Fax: rmit,No:	(918) 245-778 (918) 245-777 3557021	Shipment D  Hught S  148 State: 1005  terial was delivere  Pelivery D	OK_

Generator's Name: USEPA Region 6 /	Wilcox Oil Residence Site	Manifest	YSE	
Mailing Address: 1445 Ross Ave		Job No.	MN520WIL01	
Dallas City Point of Generation	TX 75202 State Zip		Environmental Re 1666 Fabick Drive	estoration, LLC
Address: (b) (6)			St. Louis City	MO 63026 State Zip
<u>Bristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Ouantity 1 1 mit
Non-Hazardous Soil		4	<del>DT</del>	10/04/
	Manspirt			<u> </u>
Generator Authorized Agent Name	Signature	h		9-29-17 Shipment Date
	Eagle March (1915)	oloritàre		
Transporter Name: Yocham Trucki Address:	ng	Driver Nam	Tag No. 706-4	ARNOLP  UL State: OK
City, State Zip:	DK 74424	US	DOT No. 03010	50.5
I hereby certify that the above material was generator site listed above.	picked up at the		that the above named ma estination listed below.	terial was delivered without
Driver Signature	9-29-17 Ship Date	Driver Signature	el	9-29-17 Delivery Date
		CONTRACTOR		
American Enviro 212 N. 177 <sup>th</sup> W A Sand Springs, Ok		) Fer	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	
I hereby certify that the above named management in a larger Micki King Raver Name of Authorized Agent		d to the best of my	knowledge the forego	oine is accurate.  Receipt Date



	Salah Panggaran Salah		W. Segue	SEASON STATE		
Generator's Name:	USEPA Region 6 / V	Vilcox Oil Res	idence Site	Manifest	USE	
Mailing Address:				Job No.	MN520WIC01	_
	Dallas	TX	75202	Bill to Name:	Environmental F	Restoration, LLC
Point of Generation	City		ip		1666 Fabick Drive	
Address:					St. Louis	MO 63026
	Bristow	ок	74010	_	City	State Zip
	City		ip	Contact:	Evan Wortman Name	(636) 227~7477 Phone
Contact:	Steve Mason Name	(214) 789 Phone	-1871			
					Container	Total
Common Name of W	aste Material				No. Type	Quantity Unit
Non-Hazardous Soil				4	DT	12 AT
		<b></b>				1341
		Van	Rost			
Lhereby certify that the	ahove named material		V	lefined by 40 CFR P	art 261 or any applicab	le state law, has been properly
described, classified and						ie state taw, has been property
STEENEN.	musm		-7	l (/		<i>a</i>
Generator Authorized Age	Region 6		Signature			<u> </u>
Generator Authorized Age	ent Name		Signature			Shipment Date
		varalista (1	SEPTONES	oniër - E		
Transporter Na	ıme'		-	Driver Nam	e (Print): 1 / //	7 2
•	Vashana Turrakin	g		Bilver Nam	Tag No. VIII	in Tinvis Peason  State: Ch
City State	Zip: Brotow 1	4015 W.	Ave		1 ag No. 36 16	State: <b>CM</b>
City, State	Zip. Bristow 1	My 74	010	USI	DOT No. 264	<u> ۲۲۷۸                                  </u>
I hereby certify that the generator site lighted abo		cked up at the			hat the above named mestination listed below.	aterial was delivered without
The		9/24/1	<b>-</b> 7	1-12		9/29/17
Driver Signature		Ship Date		Driver Signature		Delivery Date
		. His or Said	45. 6 15. 15. 1			
THE RESERVE OF THE PERSON NAMED IN		Mary and American Section 1997	saying the second		DI (010) 045 7	
	American Environ	nental I andfil	Inc			786
	American Environt 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	e.	l, Inc.	Per	Phone: (918) 245-7' Fax: (918) 245-7' amit No: 3557021	
I hereby certify that th	212 N. 177 <sup>th</sup> W Av Sand Springs, OK	e. 74063		1 /	Fax: (918) 245-7' anit No: 3557021	774
Laura King ) Mick	212 N. 177 <sup>th</sup> W Av Sand Springs, OK ne above named mat	e. 74063 erial has been		1 /	Fax: (918) 245-7' anit No: 3557021	going is accurate.
. [/ )	212 N. 177 <sup>th</sup> W Av Sand Springs, OK ne above named mat	e. 74063 erial has been		1 /	Fax: (918) 245-7' anit No: 3557021	774

				and a state of the con-	1 MARK 1	. ABA.s		2
(00)		Anna ann an Anna an Anna	*********					
Generator's Name:	USEPA Region 6 /	Wilcox Oil Resider	nce Site	Manifest		use		
Mailing Address:	1445 Ross Ave			Job No.	<u>MN52</u>			
	Dallas	тх	75202				toration, LLC	<u> </u>
Point of Generation		State Zip		Address:	1666 Fabio	k Drive		
Address:	(b) (6)				St. Louis City		MO State Z	63026
	Bristow City	OK State Zip	74010	Contact:	Evan Wort	man	(636) 22 Phone	7-7477
Contact:	Steve Mason Name	(214) 789-18 Phone	71					
Common Name of W	aste Material				Contai No.	ner Type	Total Quantity	Unit
Non-Hazardous Soil				1		DT		
	1 66	·s Chel	<b>/</b>					
	+74	15 port					<del></del>	
I hereby certify that the described, classified and	d packaged, and is in	proper condition for	s waste as d or transporta	lefined by 40 CFR Partition according to app	art 261 or an plicable regu	y applicable st lations.	ate law, has been	properly
- 4	n Mado	_		( (			0 10	12
Generator Authorized Age	ent Name	<u></u>	ignature	N.M.			9-19- Shipment Dat	te
			N. A. V.					
			namas	omer.			2	talental en en 2012 (1994)
Transporter Na	ame: <del>Yocham Truck</del>	ing		Driver Nam	e (Print):	Colt	Coulter	
Addı	ress:	-			Tag No.	704-18	Cou/Fer  State:	OK
City, State	Zip: Cowe	to, 04.24	1429			630100		
I hereby certify that the generator site listed abo	above material was p			I hereby certify t incident to the de			ial was delivered	without
Polt	Cont	9-19-	/2	Colt	Port		9-29	-17
Driver Signature		9-29- Ship Date		Driver Signature	<u> </u>		9-29 Delivery Da	nte
				Later De Fréguese			Residence	
	American Enviror 212 N. 177 <sup>th</sup> W A Sand Springs, OK		ic.	Per	Fax: (9	918) 245-7786 918) 245-7774 557021	£ .	
Litereby certify that the	he above named ma		ccepted an	1.			g is accurate.	
		7	( b		S	Ü	~ 9V	317
Laura King Mick Name of Authorized Agen	ki King Rave	en Blunt 3	ignature				Receipt Date	<u>//                                    </u>
White Deather	tion Retention •	Vallow - Batus to	Dill to	Pink - Transport	or Potoin	Goldonad	- Congretor Pet	ain 7
winte - Destina	nou vereunou	renow - Return to	DIN TO	riiik - Transporte	ei Kergili .	GUIGERIO	- deliciator Kei	Latii

## American Environmental Landfill, Inc.

				vironmental Complia	ance		
		Non-Hazard	V auot	Vaste Man	nifest	. /	
				(2140)18 <sub>00</sub> 3622333	and the state of the		
Generator's Name:	USEPA Region 6 / V	Nilcox Oil Residenc	e Site	Manifest	wE		
Mailing Address:	1445 Ross Ave		4.	Job No.	MN520W1L01	<del>-</del>	
	Dallas City	TX State Zip	75202		Environmental F	Restoration, LLC	
Point of Generation Address:	- •			riddi 055.	St. Louis	MO	63026
	Bristow City	OK State Zip	<u>74010</u>	Contact:	City  Evan Wortman  Name	State Zip (636) 227-74 Phone	<del>1</del> 77
Contact:	Steve Mason Name	(214) 789-187 Phone	1		Ŷ	2.40.40	
Common Name of Wa					Container No. Type	Total Quantity I	Unit
Non-Hazardous Soil				1		710-11	
	trans	RA					
described, classified and	Mussa	-	~ 1	Un according to app		9-29-1 Shipment Date	17.
			स्वाह्य	OKUM FA			
Transporter Na	ime: Vocham Truckin	.g		Driver Name	e (Print): Sul	ar CLAYX 6-604 State: 6	'ᄾ
Addr	ress:	8			Tag No. CAF	- 664 State: _ 6	> K
City, State 2	Zip:			USI	DOT No.		
I hereby certify that the generator site listed above		cked up at the			hat the above named mestination listed below.	naterial was delivered with	hout
Drivet Signature	chyl	Ship Date	4-17	Driver Signature	ch &	<b>9 - 29</b> Delivery Date	1
		Special Special Land	:4 <del>4-</del> 31814	aje(ejjj) aciok			
~ · · · · · · · · · · · · · · · · · · ·	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK			$\overline{}$	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021		
I hereby certify that th	ne above named mat	erial has been ace	epted and	the best of my	knowledge the foreg	going is accurate	1
Name of Arthorized Agent		Sig	marur			Receipt Date	
White - Destinat	tion Retention • Y	'ellow – Return to	Bill to •	Pink - Transporte	er Retain 🔹 Golden	rod – Generator Retain	

		Wilcox Oil Resider	nce Site	Manifest Job No.	U)E	
Mailing Address:	1445 Ross Ave				MN520 <del>WIL</del> 01	
	Dallas	TX	75202		Environmental R	estoration, LLC
Point of Generation		State Zip	•	Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 630 State Zip
	Bristow City	OK State Zip	7 <u>4</u> 010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-18 Phone	371			
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
on-Hazardous Soil					LDT	MAT
	11		1			11011
	+/0	115px(	7		-/	
described, classified and	MASM Lever	• •	n transporta	Ton according to ap	pheasic regulations.	9.29.1
Generator Authorized Ag	ent Name	<u> </u>	ignature			Shipment Date
Generator Authorized Ag	ent Name		ignature			
Generator Authorized Ag  Transporter Na	ent Name	<b></b>		Driver Nam	e (Print):	
Generator Authorized Ag	ent Name	<b></b>			Tan Na Will	Shipment Date
Generator Authorized Age Transporter Na	ame: Yocham Truck	<b></b>		Driver Nam	Tag No. 700 -	Shipment Date
Transporter Na Add City, State	ame: Yocham Truck ress: Zip:	ing		Driver Nam	Tag No. 700 - DOT No. 030	Shipment Date  CLAIP Ook 5  149 State: OK  1005
Transporter Na Add City, State I hereby certify that the	ame: Yocham Truck ress: Zip: above material was	ing		Driver Nam US:	Tag No. 700 - DOT No. 030	Shipment Date
Transporter Na Add City, State I hereby certify that the	ame: Yocham Truck ress: Zip: above material was	ing		Driver Nam US:	Tag No. $\frac{700}{700}$ .  DOT No. $\frac{030}{030}$ .  that the above named ma	Shipment Date  CLAIP Ook 5  149 State: OK  1005
Transporter Na Add City, State I hereby certify that the	ame: Yocham Truck ress: Zip: above material was	ing		Driver Nam US:	Tag No. $\frac{700}{700}$ .  DOT No. $\frac{030}{030}$ .  that the above named ma	Shipment Date  CLAIP Ook 5  149 State: OK  1005
Transporter Na Add City, State I hereby certify that the generator site listed above	ame: Yocham Truck ress: Zip: above material was	picked up at the  Original Ship Date	,1>	Driver Nam  US.  I hereby certify to incident to the domain of the domai	Tag No. $\frac{700}{700}$ .  DOT No. $\frac{030}{030}$ .  that the above named ma	Shipment Date  CLAIP Ook 5  149 State: OK  1005
Transporter Na Add City, State  I hereby certify that the generator site listed about	ame: Yocham Truck ress: Zip: above material was	picked up at the  Ship Date	)> )>	Driver Nam  US.  I hereby certify to incident to the domain of the domai	Tag No. 700- DOT No. 030 that the above named ma estimation listed below.	Shipment Date  Ooks  149 State: Ok  100.5  Iterial was delivered without  929.17  Delivery Date
Transporter Na Add City, State I hereby certify that the generator site listed about	ame: Yocham Truck ress: Zip: e abole material was	picked up at the  Ship Date	)> )>	Driver Nam  US.  I hereby certify to incident to the domain of the domai	Tag No. 700 - DOT No. 030 chat the above named ma estimation listed below.  Phone: (918) 245-77	Shipment Date  Ooks  149 State: OK  100.5  Iterial was delivered without  929.17  Delivery Date
Transporter Na Add City, State I hereby certify that the generator site listed above. Driver Signature	American Enviro	picked up at the Ship Date  nmental Landfill, Ir.ve.	.1> .1> .1>	Driver Nam  US.  I hereby certify to incident to the do  Driver Signature	Tag No. 700 - DOT No. 030  that the above named ma estimation listed below.  Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	Shipment Date  Ooks  149 State: OK  100.5  Iterial was delivered without  Page 17  Delivery Date
Transporter Na Add City, State I hereby certify that the generator site listed above.  Driver Signature	American Enviro	picked up at the Ship Date  nmental Landfill, Ir.ve.	.1> .1> .1>	Driver Nam  US.  I hereby certify to incident to the do  Driver Signature	Tag No. 700 - DOT No. 030  that the above named matestimation listed below.  Phone: (918) 245-77: Fax: (918) 245-77:	Shipment Date  Ooks  149 State: OK  100.5  Iterial was delivered without  Page 17  Delivery Date
Transporter Na Add City, State I hereby certify that the generator site listed about Driver Signature	American Enviro 212 N. 177 <sup>th</sup> W A Sand Springs, Ok he above named m	picked up at the Ship Date  nmental Landfill, Inve. 74063 aterial has been a	.1> .1> .1>	Driver Nam  US.  I hereby certify to incident to the do  Driver Signature	Tag No. 700 - DOT No. 030  that the above named ma estimation listed below.  Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	Shipment Date  Ooks  149 State: OK  100.5  Iterial was delivered without  Page 17  Delivery Date
Transporter Na Add City, State I hereby certify that the generator site listed about the Driver Signature	American Enviro 212 N. 177th W A Sand Springs, Ok the above named m.  ki King Raye	picked up at the Ship Date  nmental Landfill, Inve. 74063 aterial has been a	.1> .1> .1>	Driver Nam  US.  I hereby certify to incident to the do  Driver Signature	Tag No. 700 - DOT No. 030  that the above named ma estimation listed below.  Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	Shipment Date  Ooks  149 State: OK  100.5  Iterial was delivered without  Page 17  Delivery Date

			105
Generator's Name: USEPA Region 6 / Wilcox Oil Residence	e Site Manifest	ISE	
Mailing Address: 1445 Ross Ave	Job No.	MN520WH-01	•
	75202 Bill to Name:	Environmental Rest	oration, LLC
City State Zip Point of Generation		1666 Fabick Drive	·
Address: (b) (6)		St. Louis City	MO63026
	74010 Contact:		State Zip
City State Zip	Contact.	Evan Wortman Name	(636) 227-7477 Phone
Contact: Steve Mason (214) 789-187 Name Phone	1		
		Container	Total
Common Name of Waste Material		No. Type	Quantity Unit
Non-Hazardous Soil		DT	6124
+1ans 20/1			
Generator Authorized Agent Name  Sig	natùre		Shipment Date
	. Gettis]Edvickettisese		
Transporter Name:	Driver Nam	e (Print):	1/4
Yocham Trucking Address:		Tag No. 707-18	State:
City, State Zip:	USI	DOT No. 030 1	005
I hereby certify that the above material was picked up at the generator site listed above.	I hereby certify t	hat the above named materia	l was delivered without
Day day of a			$\Delta / \Delta a$
Driver Signature Shift Date	Driver Signature	ms // for	Delivery/Date 2
qup 5110 1			
American Environmental Landfill, Inc 212 N. 177 <sup>th</sup> W Ave.		Phone: (918) 245-7786 Fax: (918) 245-7774	
Sand Springs, OK 74063	·	mit No: 3557021	
I hereby certify that the above named material has been co	eprecand to the best of my	knowledge the foregoing	is accurate.
aura King Micki King Raven Blunt			4811
	nature		Receipt Date
Mileton Destination Detection Village	Dul 4a - Dini	- Datala - Oalta -	Onnerta Patric
White - Destination Retention • Yellow - Return to	Bill to • Pink - Transporte	er Ketain • Goldenrod -	Generator Retain

Generator's Name:	USEPA Region 6 / \	Vilcox Oil Resider	nce Site	Manifest		
Mailing Address:				Job No.	MN520WIL01	
S	Dallas	TX	75202	Bill to Name:	Environmental Re	storation, LLC
Point of Generation	City	State Zip	70202	Address:	1666 Fabick Drive	
Address:					St. Louis	MO 63026
	Bristow	0К	74010		City	State Zip
	City	State Zip	71019	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-18 Phone	71			- 1010
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil	·				LDT	1000
described, classified and	d packaged, and is in p	proper condition for				state law, has been properly  7- 29  Shipment Date
	an Alban - Turk and Marine		Lighting	oYk ya ki≘odi zawasa		
			- rusio l		(D. )	
Transporter Na	Vocham Trucki	ng	·	Driver Nam	e (Print): Zee Pi	201.76
	ress:PD POV	745			Tag No. 70	State: OK
City, State	Zip: Coweta	L.OK		US	DOT NO 30100	5
I hereby certify that the generator site listed abo		icked up at the			that the above named mat estination listed below.	erial was delivered without
7 Z		/7 10 ·		1 7		7 26 1
Driver Signature	/	Ship Date	<del></del>	Driver Signature	(rup)	7-29-/ Delivery Date
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ووفارتجال	maio) (i see		Andrew Company of the
The second secon	American Environ 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	e.	ıc.	' Pei	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021	
I hereby certify that the	he above named ma	terial has been ac	cepted and	the best of my	knowledge the forego	ing is accurate.
Laura King Micl Name of Authorized Agen	ki King Ravei	n Blunt - s	ignature			Receipt Date
White - Destina	tion Retention • \	ellow – Return t	Bill to •	Pink – Transport	er Retain • Goldenro	d – Generator Retain

The state of the s	
Generator's Name: USEPA Region 6 / Wilcox Oil Residence	u <i>v</i>
Mailing Address: 1445 Ross Ave	Job No. MN520WH-01
	Bill to Name: Environmental Restoration, LLC
Point of Generation City State Zip	Address: 1666 Fabick Drive
Address: (b) (6)	<u>St. Louis</u> <u>MO 63026</u> City State Zip
B <u>ristow OK 74</u> City State Zip	4010 Contact: Evan Wortman (636) 227-7477 Name Phone
Contact: Steve Mason (214) 789-1871 Name Phone	<u></u>
Common Name of Waste Material	Container Total No. Type Quantity Unit
Non-Hazardous Soil	
Transpir	
Generator Authorized Agent Name Signa	ature Shipment Date
Transporter Name:	Driver Name (Print): Syste Acodo
Yocham Trucking Address:	Tag No.
City, State Zip: Careto O4 7441_0	USDOT No. USDOT No.
I hereby certify that the above material was picked up at the generator site listed above.	I hereby certify that the above named material was delivered without incident to the destination listed below.
1 -1 9-28-1	7 / 2 / 2 20-12
Driver Signature Ship Date	Driver Signature  9 9 9 1  Delivery Date
	GGETERIC (CIETAL CONTRACTOR CONTR
American Environmental Landfill, Inc. 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063	Phone: (918) 245-7786 Fax: (918) 245-7774 Permit No: 3557021
	epted and to the best of my knowledge the foregoing is accurate.
Laura King Micki King Raven Blunt Signa	apre Receipt Date
White - Destination Retention • Yellow - Return to B	ill to • Pink – Transporter Retain • Goldenrod – Generator Retain

Generator's Name:	USEPA Region 6 /	Wilcox Oil Re	esidence Site	Manifest	UCE	٦
Mailing Address:				Job No.	u ~	L
S	Dallas	TX	75202	Bill to Name:	Environmental I	Restoration, LLC
Point of Generation	City	State	Zip	Address:		
Address:				-	St. Louis City	MO 63026 State Zip
	Bristow	<u>ok</u>	74010	- Contact·	•	•
_	City	State	Zip	Contact	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 78 Phone	39-1871	-		
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil					1—— DT——	11107
						161101
		+	(anspo	4		
Generator Authorized Age	ent Name	<u>cr</u>	Signature	John		9-29-17 Shipment Date
	and the second second	and the second		id and the first sections	n a marin a marin a transfera	
TN-		energi seperativa (j. s.).	end ones and sections			11/10
Transporter Na Addı	Yocham Truckin	g		Driver Nam	Tea No	Hughis State: OK
City, State						148 State: 0/C
City, State		<del></del>	<del></del>	US	DOT No	1003
I hereby certify that the generator site listed abo	above material was p	icked up at th	ne		that the above named mestination listed below.	naterial was delivered without
Ken Luce		9-2	9-17	6- '	Un De	Q-19-17
Driver Signature		Ship Da	te	Driver Signature	8	Delivery Date
	de formation of the desire	1 <b>(4)</b> (4) (5 (4)	es Elebi			
	American Environ		ill, Inc.		Phone: (918) 245-7	
	212 N. 177 <sup>th</sup> W Av Sand Springs, OK			Per	Fax: (918) 245-7' rmit No: 3557021	774
I hereby certify that the			en accepted	and to the best of my	knowledge the fores	going is accurate.
						4791
Aura King Mick Name of Authorized Agen	i King Raven	Blunt_	Signatura			Receipt Date
(/				-		1
		/.U. D.	As Dill As	. Diet. Transport	er Retain • Golden	

Generator's Name:	USEPA Region 6 /	Wilcox Oil R	esidence Site	Manifest	U	s/=		
Mailing Address:	1445 Ross Ave			Job No.	WINDZUM	<u># 01</u>		
	Dallas	TX	75202		Environmen		tion, LLC	
Point of Generation	City	State	Zip	Address:	1666 Fabick Dr	ve		
Address:	(b) (6)		,		St. Louis City		MO State Zip	63026
	Bristow	OK_	74010	Contact:	Evan Wortman			
	City	State	Zip		Name		(636) 227- Phone	-/4//
Contact:	Steve Mason Name	(214) 7 Phone	89-1871					
					Container	т	otal	
Common Name of W	aste Material				No. Ty		antity,	Unit
Non-Hazardous Soil				1	DT		142	
					—— <del>VI</del>	+-		
	Torus	15701	+			-		
	1100	13701	1					
Transporter Na	nme:			Driver Nam	ne (Print): Tag No.		an the	
Addr	Yocham Truck ress:	-			Tag No.	<u> </u>	State:	<u> </u>
City, State	Zip: Cowel	6. CK 7	NH19	US	<u>محر</u> 2 <u>0</u> DOT No.	01005	_ = = = = = = = = = = = = = = = = = = =	<i>U</i> 11
I hereby certify that the generator site listed abo	above material was	•		I hereby certify t	that the above nan	ned material w		vithout
Cost Con	14	G - 1	6-17	111	Conte		G 49.7	9
Driver Signature	alks.	<b>9-2</b> Ship D	rate	Driver Signature	LOWIN		Delivery Date	:
Section 1981		n est el el como	الازنجاط معيد	7.18:010		ar anii Chillia		alarini 1971
A CONTRACTOR OF THE STATE OF TH	American Enviro	- B. Daniel Salasi	A STATE OF THE PROPERTY OF THE	an and a state of the state of	Phone: (918)	245-7786	rate and series of series	
	212 N. 177 <sup>th</sup> W A Sand Springs, Ol	Ave.	/ /	Per	` ,	245-7774		
I hereby certify that the	he above named m	aterial has b	een accepted/an	to the best of my	knowledge the	foregoing is	accurate.	~ <i>/</i>
aura King Micki	King Rave	n Blunt_	Signature				Receipt Date	1//
						n see		
White - Destinat	tion Retention •	Yellow - Re	turn to Bill to •	Pink - Transport	26 12		nerator Reta	in

		use de la company						
Generator's Name:	USEPA Region 6 / Wilco	ox Oil Residen	ce Site	Manifest		USE		
Mailing Address:	1445 Ross Ave			Job No.		20 <del>WIL</del> 01		0
	Dallas City	TX State Zip	75202		1666 Fabi		estoration, LL	
Point of Generation Address:		D.p		radiess.	St. Louis	ICK DIIVE		63026
Address.	Bristow	OK	74010		City			Zip
	City	State Zip	74010	Contact:	Evan Wor Name	tman	(636) 2 Phone	27-7477
Contact:	Steve Mason Name	(214) 789-18 Phone	71					
Common Name of W	aste Material				Conta No.	Type	Total Quantity	Unit.
TOTAL TIBE AT TOOLS SOIL							<del></del>	-
	Trav	SPOR	Ŧ					
described, classified and	above named material is r f packaged, and is in prop	er condition fo	r transpor	rtation according to ap			9 /24 Shipment D	110 =
And the second second			Menni	រុស្តីពីមេខ មេខ				
Transporter Na	nme: Yocham Trucking			Driver Nam	ne (Print):	Willia	m Travis Res	* ISON
Addı	ress: 20401 5.	4015+ h	1. Ave		Tag No.		438165 State:	Oh.
City, State	Zip: Bristow,	Okla. 741	010	US	DOT No.	26423	48	
I hereby certify that the generator site listed abo	above material was picke	d up at the		I hereby certify tincident to the d			terial was delivere	ed without
Jack		9/29/	17	Junk			92	9/17
Driver Signature		Ship Date		Driver Signature		1	Delivery I	Date
ovi terminati	Christia Profesiologica di	and the state of t	Desi.	i transa (A) ki ili sanaan	en detaile e	katenien (hidei	Vicinity of the second	
	American Environmen 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 740		c.	Per	Fax: (	(918) 245-778 (918) 245-777 3557021		
I hereby certify that th	ne above named materia	al has been ac	cepted	and to the best of my	knowledg	ge the forego	ing is accurate.	
Laura King Micl	ki King Raven B	dunt /	11				9)	917
Name of Authorized Agen	t thing travelle	Munic S	granure				Receipt Dat	e / /
White - Destina	tion Retention • Yello	w – Return to	Bill to	Pink - Transport	er Retain	• Goldenro	d - Generator P	etain 7
Time - Destilla	rotondon - Tent	itstaint	W	i iiin Transport	nvani	GOIGEIN	- wondrator N	

٠,						
Generator's Name: US	SEPA Region 6 / Wild	ox Oil Res	idence Site	Manifest	USE	
Mailing Address: 14	45 Ross Ave			Job No.	MN520WIL01	
	illas	TX	75202		Environmental R	lestoration, LLC
Point of Generation	City	State Z	ip	Address:	1666 Fabick Drive	
Address: (b	) (6)		· · · · · · · · · · · · · · · · · · ·	•	St. Louis City	MO 63026 State Zip
The state of the s	istow	OK 7	74010	Contact:	Evan Wortman	(636) 227–7477
	City	State Z	ip		Name	Phone
Contact: St	eve Mason Name	(214) 789 Phone	-1871			
•	· ····································	1110110			Container	Total
Common Name of Wast	e Material				No. Type	Quantity Unit
on-Hazardous Soil				4	DT	
OIT Hazardous Sull				<del></del>	DT.	7
	1/2000		,,			001
	+/ansp					
I hereby certify that the abo	ove named material is	not a hazare	dous waste as d	efined by 40 CFR Pa	art 261 or any applicabl	e state law, has been properly
described, classified and pa	ackaged, and is in prop	per conditio	n for transporta	tion according to ap	plicable regulations.	
		,	~	$\gamma $ ( $V$		0 10.17
Generator Authorized Agent	n recor		Signature	han		Shipment Date
Generator Authorized Agent i	Name		Signature			Simplifient Date
			e reins	onier -	a sa i de la compania	
			er une nombre 🖷		o (Drint), 1 11	1. 0 1/4
Transporter Name	Yocham Trucking			Driver Nam	- 0011	ham Jaks
Address		·			Tag No. 700 ·	149 State: 0K
City, State Zip	): 			US	DOT No	1805
I hereby certify that the abo	ove material was picke	ed up at the		I hereby certify t	hat the above named ma	aterial was delivered without
generator site listed above.	, , , , , , , , , , , , , , , , , , ,	or up at the			estination listed below.	
1 1.00. 1	١.	G 20	3.15	1101.	$\lambda \lambda \lambda$	9.29.17
Driver Signature	MO	Ship Date	1.1/	Driver Signature	~10000	Delivery Date
*		•				
	Karani den jarin a	i se e e e e e e e e e e e e e e e e e e	علقالعان القاشا			
	American Environmen	ntal Landfil	l, Inc.		Phone: (918) 245-77	
	212 N. 177 W Ave. Sand Springs, OK 74	063		Per	Fax: (918) 245-77 mit No: 3557021	774
Thereby certify that the			n accepted an	1	/	oing is accurate
hereby certify that the	acove named materi	iai iias occi	accepted all	Joseph Sest of Phy	Miowiedge me miege	
aura King Micki k	King Raven B	llunt				7 2711
Name of Authorized Agent			Signature			Receipt Date
Name of Authorized Agent			Signature			Receipt Date

Ganaratar's Name:	LISEDA Parion 6 / V	Wiles Oil Desid	C:+-	Manifest	uve .	
Mailing Address:	USEPA Region 6 / V	VIICOX OII Reside	nce Site	Job No.	MN520WIL01	
Maning Address.			75000	Bill to Name:	Environmental Re	estoration, LLC
Daint of Communication	Dallas City	TX State Zip	75202		1666 Fabick Drive	
Point of Generation Address:	3 <u>4</u> (b) (6)				St. Louis	MO 6302
	Bristow	OK	74010		City	State Zip
	City	State Zip		Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1 Phone `	871			
Common Name of W	aste Material				Container No. Type	Total Quantity Tunit
Ion-Hazardous Soil						10:17
	transi	sort				
described, classified and			or transporta	n ()	plicable regulations.	9-29-17
Generator Authorized Age	int Name	o priest de la compassa de la compas	Signature			Snipment Date
			g by resigner	porter		
Transporter Na	ame:			Driver Nam	ne (Print): 100 A	Rowal  State: OK
Addı	ress: Yocham Truckin	5745			Tag No. 704	IGA State:
City, State	Zip: Coureta	NV 744	29	US	DOT No.() 3()/00	<del></del>
I hereby certify that the generator site listed abo	above material was pi	, ,	<del></del>	I hereby certify t	-00,000	terial was delivered without
		0.10	, —	^		0 -0.15
Driver Signature		Ship Date	<u>/ /                                  </u>	Driver Signature	(s.n.	7-29-/ ) Delivery Date
vi se e e e e e e e e e e e e e e e e e e	\$2	Count (michael (misserten)	S. C. A. Andrew			•
			A. T. T. T. SAN SAN	Carles (#) En en en en	N (010) 045 77	
	American Environi		nc.		Phone: (918) 245-778 Fax: (918) 245-777	
	212 N. 177 <sup>th</sup> W Av Sand Springs, OK		_	Per	rmit No: 3557021	, <del>,</del>
I hereby certify that the	Sand Springs, OK	74063	accepted ar	<b>)</b>		
	Sand Springs, OK he above named mat	74063 erial has been a	accepted ar	<b>)</b>	rmit No: 3557021	

Transmission (4)	a wy and be an	Sant 1987 (And 1989)	syd <b>t</b> eritoria	grade de la companya		we V
•	USEPA Region 6 / W	filcox Oil Resider	nce Site	Manifest Job No.	MANERONALION	
Mailing Address:	1445 Ross Ave		<u>_</u>		MN520 <del>WIL</del> 01	
	Dallas	TX	75202		Environmental Re	storation, LLC
Point of Generation	City	State Zip		Address:	1666 Fabick Drive	
Address:	(b) (6)			, i	St. Louis	MO 63026
	Bristow	ок	74010	, C	City	State Zip
	City	State Zip		Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-18 Phone	71			
					Container	Total
Common Name of W	aste Material				No. Type	Perantity - Unit
Non-Hazardous Soil			<u> </u>		DT	1 280 1
,		1.				•
	+lans A	W/X				
I hereby certify that the described, classified and the described of the d	d packaged, and is in pr	roper condition fo	s waste as o	defined by 40 CFR Pa	art 261 or any applicable s	Shipment Date
era (var. 18. oktober 18.			i ecials:	લું છા દ્વારા સામાના મુખ્ય		
Transporter Na	me.		., .	Driver Nam	e (Print):	1600
Addr	Yocham Truckin	g		Dity Ci I vani		MINIS IT HISK
			<u>_</u>		Tag No. 704-	182 State:
City, State	Zip:			USI	DOT №	1005
I hereby certify that the	above material was pic	cked up at the		I hereby certify t	hat the above named mate	rial was delivered without
generator site listed abo	ve.	1	_	incident to the de	estination listed below.	0.7 -
· Dann	a Hold	- 9/5	29	<i>Qa</i>	mared HARL	1 4/59
Driver Signature	0 1/10	Ship Date	—	Driver Signature	1/110	Delivery Date
		(18 au este et 2005)	b <sub>e</sub> sjin	(1-15(6)) (2-16-24)		
	American Environn 212 N. 177 <sup>th</sup> W Ave		c.	<i>)</i>	Phone: (918) 245-7786 Fax: (918) 245-7774	
	Sand Springs, OK			Per	mit No: 3557021	* ***
I hereby certify that th	ne above named mate	erial has been ac	cepted 2	to the best of my	knowledge the foregoin	ng is accurate.
Laura King Mick	ki King Raven		N	/		92917
Name of Authorized Agent		Si	griature		••	Receipt Date
White - Destinate	tion Retention • Yo	ellow – Return to	Bill to	Pink – Transporte	er Retain • Goldenrod	I – Generator Retain

### **Non-Hazardous Waste Manifest**

Generator's Name:	USEPA Region 6 / '	Wilcox Oil Residence Site	Manifest	USE	
Mailing Address:	1445 Ross Ave		Job No.		
	Dallas	TX 75202			estoration, LLC
Point of Generation	City	State Zip	Address:	1666 Fabick Drive	
Address:		· ·		St. Louis	MO 630
	Bristow	OK74010		City	State Zip
	City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason	(214) 789-1871		Name	Phone
	Name	Phone			
				Container	Total
Common Name of Wa	aste Material			No. Type	Quantity Unit
n-Hazardous Soil		•		L DI	1011
II					13601
		Hanson		<del></del>	/·
		10n) 2014			
14 700	Region 6	<b>X</b> 2	\ \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		9-78-11
	ent Name	Signature	P		9-38-17 Shipment Date
Generator Authorized Age	ent Name		-		
	ame.	Signature	-		· ·
Generator Authorized Age  Transporter Na  Addr	ame: Yocham Truckir ress:	Signature  ***********************************	-		· ·
Generator Authorized Age  Transporter Na  Addr	ame: Yocham Truckir ress:	Signature  ***********************************	Driver Nam	e (Print):	+ Coalter State: OK
Generator Authorized Age  Transporter Na  Addre  City, State 2	ame: Yocham Truckir ress: Zip: <u>Cowete</u> above material was p	Signature  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Driver Nam US. I hereby certify t	e (Print): Col1 Tag No. 714/83 DOT No. 030/0	+ Coalter State: OK
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	ame: Yocham Truckir ress: Zip: Cowete above material was prove.	Signature  Profits  P	Driver Nam US. I hereby certify t	the (Print):	+ Coalter  State: OK  205  Aterial was delivered without
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	ame: Yocham Truckir ress: Zip: Cowete above material was prove.	Signature  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Driver Nam US. I hereby certify t	the (Print):	+ Coalter State: OK
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	ame: Yocham Truckir ress: Zip: Cowete above material was prove.	Signature  Profits  P	Driver Nam  US:  I hereby certify to incident to the decention.	the (Print):	State: OK  State: White the state of the sta
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	Ame: Yocham Truckir ress: Zip: Cowete above material was pove.	Signature  OK. 74439  icked up at the  9-38-17  Ship Date	Driver Nam  US:  I hereby certify to incident to the decention.	the (Print): Colfiction of the	State: OK  State: OK  Delivery Date
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	American Environ	Signature  OK. 74439  vicked up at the  9-28-17  Ship Date	Driver Nam  US:  I hereby certify to incident to the decention.	the (Print): Colling No. 714/83  DOT No. 030/Contact the above named material in listed below.  Could Phone: (918) 245-77	State: OK  State: OK  State: OK  Delivery Date
Transporter Na Addre City, State 2 I hereby certify that the generator site listed above	Ame: Yocham Truckir ress: Zip: Cowete above material was pove.	Signature  OK. 74439  vicked up at the  9-38-17  Ship Date	Driver Nam  US:  I hereby certify tincident to the de	the (Print): Colfiction of the	State: OK  State: OK  State: OK  Delivery Date
Transporter Na Addre City, State 2  I hereby certify that the generator site listed above Driver Signature	American Environg 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Signature  OK. 74439  Dicked up at the  9-38-17  Ship Date  Jamental Landfill, Inc. ve. 74063	Driver Nam  US.  I hereby certify to incident to the decention of the dece	Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	State: OK  State: OK  Delivery Date  86 74
Transporter Na Addre City, State 2  I hereby certify that the generator site listed above Driver Signature	American Environg 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Signature  OK. 74439  vicked up at the  9-38-17  Ship Date	Driver Nam  US.  I hereby certify to incident to the decention of the dece	Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	State: OK  State: OK  Delivery Date  86 74
Transporter Na Addr City, State 2  I hereby certify that the generator site listed abov Driver Signature  I hereby certify that the generator site listed above the signature of	American Environg 212 N. 177 <sup>th</sup> W Av Sand Springs, OK	Signature  OK. 74439  oicked up at the  9-28-17  Ship Date  mental Landfill, Inc.  ve. 74063  tterial has been accepted at	Driver Nam  US.  I hereby certify to incident to the decention of the dece	Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	State: OK  State: OK  Delivery Date  86 74
Transporter Na Addr City, State 2  I hereby certify that the generator site listed abov Driver Signature	American Environs 212 N. 177th W Av Sand Springs, OK the above named ma	Signature  OK. 74439  oicked up at the  9-28-17  Ship Date  mental Landfill, Inc.  ve. 74063  tterial has been accepted at	Driver Nam  US.  I hereby certify to incident to the decention of the dece	Phone: (918) 245-77: Fax: (918) 245-77: mit No: 3557021	State: OK  State: OK  Delivery Date  86 74

**;**)

Generator's Name:	: USEPA Region 6 /	/ Wilcox Oil I	Residen	ce Site	Manifest	USEC	-1
Mailing Address:					Job No.		•
	Dallas	TX		75202	Bill to Name:	Environmental Re	estoration, LLC
Point of Generation	City	State	Zip	70202	Address:	1666 Fabick Drive	
Address		l <u></u>				St. Louis	MO 63026
	Bristow	ок		74010	Contacts	City	State Zip
	City	State	Zip		Contact.	Evan Wortman Name	(636) 227-7477 Phone
Contact	Steve Mason Name	(214) Phone	789-187	71			
Common Name of W	aste Material					Container No. Type	Total Quantity Unit
Non-Hazardous Soil						1 DT	17250
		<u> </u>					11101
		7000	)SF	<u> さく</u>			
described, classified an	d packaged, and is in	n proper cond					state law, has been properly  Q -28./>
described, classified an	d packaged, and is in	n proper cond	ition for	transporta	etion according to ap	plicable regulations.	Shipment Date
described, classified an  Generator Authorized Ag  Transporter Na	d packaged, and is in  N  R  ent Name  Yocham Truck	n proper cond	Signal Si	gnatur	tion according to ap	ne (Print):	Shipment Date
Generator Authorized Ag  Transporter Na  Add	d packaged, and is in the packaged of the pack	n proper cond	Signal Si	gnatur	etion according to ap	plicable regulations.	Shipment Date  A Q M Oo K S  149 State: O K
described, classified an  Generator Authorized Ag  Transporter Na	d packaged, and is in the packaged of the pack	n proper cond	Signal Si	gnatur	Driver Name	ne (Print): William Tag No.	Shipment Date
Generator Authorized Ag  Transporter Na  Add	d packaged, and is in  A A A A A A A A A A A A A A A A A A A	n proper cond	Sit	gnatur	Driver Nam  US. I hereby certify t	ne (Print): Will Tag No. 700. DOT No. 0301	9.28.17 Shipment Date  1.9 M Ooks 149 State: OK
described, classified an  Generator Authorized Ag  Transporter Na  Add  City, State  I hereby certify that the	d packaged, and is in  A A A A A A A A A A A A A A A A A A A	king picked up at	Sit	gnature	Driver Nam  US. I hereby certify t	ne (Print):	9.28.17 Shipment Date  19 M Ooks 149 State: OK 005
Generator Authorized Ag  Transporter Na  Add  City, State  I hereby certify that the generator site listed about the control of the control o	d packaged, and is in the packaged and is in	r proper cond  sking  picked up at  Ship E	the Date	gnatur	Driver Nam  US  I hereby certify tincident to the deliberation according to appropriate to the deliberation of the deliberatio	ne (Print):  Tag No.  DOT No.  DOT No.  that the above named ma estination listed below.	Shipment Date  A Q M OoKS  149 State: OK  OOF  terial was delivered without  9.28.17  Delivery Date
Generator Authorized Ag  Transporter Na  Add  City, State  I hereby certify that the generator site listed about the content of the content o	d packaged, and is in  A A A A A A A A A A A A A A A A A A A	picked up at  Ship E	the	gnature >	Driver Nam  US.  I hereby certify to incident to the do	ne (Print):	Shipment Date  A Q M Oo K S  149 State: O K  OO 5  terial was delivered without  9.28.17  Delivery Date

Alexander de la companya de la comp		Andreas Sector	atur . V. Carrier		The second second second second second	
				A STATE OF THE STA		ps/
Generator's Name:	USEPA Region 6 / W	lilcox Oil Res	sidence Site	Manifest Job No.	MN520WIEDI	
Mailing Address:	1445 Ross Ave					
	Dallas City	TX State 2	75202 Zip		Environmental Res	toration, LLG
Point of Generation	•	State 2	-1 <b>p</b>	Address.	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State 2	74010 Zip	Contact:	Evan Wortman	(636) 227-7477
Contact:	Steve Mason	(214) 789	-		Name	Phone
Contact.	Name	(214) 789 Phone	<u>-1871</u>			
					Container	Total
Common Name of W	aste Material				No. Type	Quantity Unit
lon-Hazardous Soil						K271
					/_	), DI
	Trans:	trod			•	į.
I handry contify that the	•	1	doug uneto es d	lafined by 40 CEP Pr	art 261 or any applicable sta	eta law has been preperly
described, classified and	d packaged, and is in pr	roper condition	on for transporta	tion according to app	plicable regulations.	ate raw, has occur property
	Ornem -		4/1	f = f = 0		
For 38	22 Regim	<u>(</u>	-OY	2 K.K.		9-28-17
Generator Authorized Age	ent Name		Signature /			Shipment Date
in the second	e de la companya del companya de la companya del companya de la co		Carle Maria	ejouganizada.		
	한 문화 : 1997년 -	er uder 11 modellativ mådeligte brade u	eur in eine zwei Sentitik nas	•	<b>.</b> 2	Λ-\
Transporter Na	Yocham Trucking	g		Driver Nam	VINIM	H167
Addı					Tag No.	State:
City, State	Zip: Courcts	ok 1'	1429	USI	DOT No. <u>036/605</u>	
I hereby certify that the	above material was pic	cked up at the			hat the above named materi	ial was delivered without
generator site listed abo	ve.			incident to the de	estination listed below.	
154.		9-28	(-17	Daia	/ll	9.28.17
Driver Signature		Ship Date		Driver Signature		Delivery Date
. Turkey		4.54	12 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	in a classical	e de la companya de	
	American Environn	0 1 3 Car 3 Cara A 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Phone: (918) 245-7786	
	212 N. 177 <sup>th</sup> W Ave	<b>:</b> .	ii, iiic.		Fax: (918) 245-7774	
	Sand Springs, OK		1		mit No: 3557021	
I hereby certify that the	ne above named mate	erial has bee	n accepted an	d to the best of my	knowledge the foregoin	g is accurate.
aura King Mick	ki King Raven	Bluet	$I_{\ell}$	1/1/1-		4-78-19
Name of Authorized Agen		—بالبياني-	Signature U	VV		Receipt Date
White - Dectina	tion Retention . V	ellow - Retu	rn to Bill to	Pink - Transporte	er Retain • Goldenrod	- Generator Retain

Generator's Name: 1	JSEPA Region 6 / Wild	ox Oil Resid	ence Site	Manifest	ust		
Mailing Address:		ox on resid	choc orce	Job No.	- •	1	
	Dallas	TX.	75202	Bill to Name:	Environmental	Restoration, LL0	2
Point of Generation	City	State Zip			1666 Fabick Drive		
Address:	(b) (				St. Louis	MO	63026
I	Bristow	OK	74010	Contact:	City  Evan Wortman	State Z	•
_	City	State Zip		contact.	Name	(636) 22 Phone	1-1411
Contact:	Steve Mason Name	(214) 789-1 Phone	1871				
					Container	Total	
Common Name of Wa	ste Material				No. Type	Quantity	Unit
Ion-Hazardous Soil					1DT	-	10
						-/-/	45
	1ansport						
I hereby certify that the a	hove named material is:	not a hazardo	ous waste as de	efined by 40 CFR P	art 261 or any applicat	ole state law, has been	properly
	packaged, and is in prop					ne state law, has been	property
TETALE.V	Mason		-27	$\prime$ $\prime$ $\prime$ $\prime$		0	
TENTEN SPE	RAILY	<u>t</u> .	Signature	Cha-		9-28 Shipment Dat	-17
TETATE.V	RAILY	<u>L:</u>	Signature			9-28 Shipment Dat	<u>-17</u>
TENTEN SPE	RAILY	<u>L</u>	Signature Signature	one.		9-28 Shipment Dat	-17 e
Generator Authorized Agen	t Name	<u>.                                    </u>			ne (Print):	9-28 Shipment Dat	-17 e
Generator Authorized Agen Transporter Nam	t Name		e keraba	Driver Nam		1 Hoghes	
Generator Authorized Agen  Transporter Nam  Addre	t Name  t Name  Trucking  SS:		e keraba	Driver Nam	Tag No. 700-	Hughes 148 State:	
Generator Authorized Agen Transporter Nam	t Name  t Name  Trucking  SS:		e keraba	Driver Nam		Hughes 148 State:	
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a	t Name  ne: Yocham Trucking ss: ip: bove material was picke		e keraba	Driver Nam  US.  I hereby certify	Tag No. 700- DOT No. 0301 that the above gamed n	Hoshes  148 State:  DOS  naterial was delivered	OK
Generator Authorized Agen  Transporter Nam  Addre  City, State Z	t Name  ne: Yocham Trucking ss: ip: bove material was picke	ed up at the	# NEW 1839	Driver Nam  US.  I hereby certify	Tag No. <b>700</b> -DOT No. <b>030</b> 1	Hoghes 148 State: 005 naterial was delivered	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a generator site listed above	t Name  ne: Yocham Trucking ss: ip: bove material was picke	ed up at the	# NEW 1839	Driver Nam  US  I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above gamed n	Hoghes 148 State: 005 naterial was delivered	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a	t Name  ne: Yocham Trucking ss: ip: bove material was picke	ed up at the	# NEW 1839	Driver Nam  US.  I hereby certify	Tag No. 700- DOT No. 0301 that the above gamed n	Hoshes  148 State:  DOS  naterial was delivered	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a generator site listed above	t Name  ne: Yocham Trucking ss: ip: bove material was picke	ed up at the	# NEW 1839	Driver Nam  US  I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above gamed n	Hoghes 148 State: 005 naterial was delivered	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a generator site listed above	t Name  Trucking  ss:  ip:  bove material was pickee.  American Environmer	ed up at the  9.28 Ship Date	-17	Driver Nam  US  I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above named nestination listed below.  Phone: (918) 245-7	Hogh CS.  148 State:  DOS  naterial was delivered  G-28-  Delivery Da	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a generator site listed above	t Name  Trucking  ss:  ip:  bove material was pickee.	ed up at the  9.78 Ship Date  atal Landfill,	-17	US I hereby certify incident to the d Driver Signature	Tag No. 700- DOT No. 0301 that the above named nestination listed below.	Hogh CS.  148 State:  DOS  naterial was delivered  G-28-  Delivery Da	OK without
Generator Authorized Agen  Transporter Nam  Addre  City, State Z  I hereby certify that the a generator site listed above	American Environmer 212 N. 177th W Ave. Sand Springs, OK 740	ed up at the  9.28 Ship Date  atal Landfill,	-17	US I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above named nestination listed below.  Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	State:  Do S  naterial was delivered  Polivery Da  2786	OK without
Generator Authorized Agen  Transporter Nam Addre City, State Z  I hereby certify that the a generator site listed above  Driver Signature	American Environmer 212 N. 177th W Ave. Sand Springs, OK 740	ed up at the  9.28 Ship Date  atal Landfill,	-17	US I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above named nestination listed below.  Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	State:  Do S  naterial was delivered  Polivery Da  2786	OK without
Generator Authorized Agen  Transporter Nam Addre City, State Z  I hereby certify that the a generator site listed above  Driver Signature	American Environmer 212 N. 177th W Ave. Sand Springs, OK 740	ed up at the  9.28 Ship Date  ntal Landfill, 063 al has been	-17 Inc.	US I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above named nestination listed below.  Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	State:  OOS  naterial was delivered  Price of the state o	OK without
Generator Authorized Agen  Transporter Nam Addre City, State Z  I hereby certify that the a generator site listed above  Driver Signature	American Environmer 212 N. 177th W Ave. Sand Springs, OK 740 e above named material	ed up at the  9.28 Ship Date  ntal Landfill, 063 al has been	-17	US I hereby certify incident to the d	Tag No. 700- DOT No. 0301 that the above named nestination listed below.  Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	State:  Do S  naterial was delivered  Polivery Da  2786	OK without

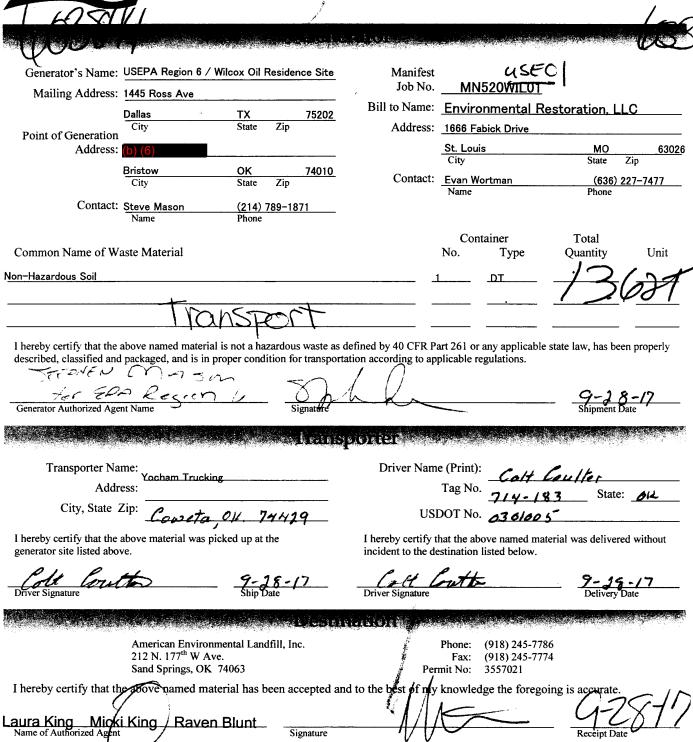
Generator's Name:	USEPA Region 6 / W	filcox Oil F	residence	Site	Manifest Job No.		500MBI 04			1
Mailing Address:	1445 Ross Ave			<del></del>			520WIL01			
	Dallas	TX		202	Bill to Name:			Restorat	ion, LLC	<b>`</b>
Point of Generation	City	State	Zip		Address:	1666 Fa	bick Drive			
Address:	(b) (6)			<del></del>		St. Loui	s		MO State Z	6302
	Bristow City	OK State	Zip	010	Contact:	Evan We	ortman		(636) 22 Phone	_
Contact:	Steve Mason Name	(214) 7 Phone	/89-1871							
Common Name of W	aste Material					Con No.	tainer Type	Tot Quar		Unit
on-Hazardous Soil					<u> </u>	<u></u>	DT	18	20	27
	· · · · · · · · · · · · · · · · · · ·	is not a har	zardous wa	ste as define		 art 261 or	any applicab	le state law	has been	nroperly
I hereby certify that the	above named material	is not a naz	Laiuous wa	sic as ucinic	a by 40 CFR P		any applicati		,	properry
described, classified and	l packaged, and is in pr	roper condi	ition for tra	Insportation	according to ap	plicable re	egulations.	0		
I hereby certify that the described, classified and	d packaged, and is in pr	roper condi	ition for tra	insportation	according to ap	plicable re	egulations.	9.	-28-1	
described, classified and	d packaged, and is in pr	roper condi	ition for tra	ture Tr	according to ap	plicable re	egulations.			 ה
described, classified and	d packaged, and is in pr	roper condi	tion for tra	ture and a state of the state o	according to ap	pplicable re	egulations.	Sh	-28-1 Daipment Dat	
described, classified and	I packaged, and is in property of the control of th	roper condi	tion for tra	ture	according to ap	pplicable re	egulations.	Sh	-28-1 Daipment Dat	7 e
described, classified and	me:	roper condi	Signat	ture Ture	Driver Nam	plicable re	egulations.	3R0U 180	-28-1 Daipment Dat	7 e
described, classified and the N Section Authorized Age  Transporter Na Addr	me: Yocham Trucking ess: PO BOX Zip: Cowelc above material was pic	745	Signal	ansportation ture ansportation	Driver Nam	ne (Print): Tag No. DOT No. that the ab	egulations. $ \frac{2ee}{704} $ C3010  ove named m	BROW 180	ipment Dat	7 0K
Generator Authorized Age  Transporter Na  Addr  City, State  I hereby certify that the generator site listed abo  Representation of the property of the proper	me: Yocham Trucking Zip: Cou) e+C above material was picye.	745	Signat	ansportation anspie	Driver Nam  US hereby certify	ne (Print): Tag No. DOT No. that the ab	egulations. $ \frac{2ee}{704} $ C3010  ove named m	BROW 180	ipment Dat	OK without
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo	me: Yocham Trucking Zip: Cou) e+C above material was picye.	745 7 OK	Signat	ansportation anspie	Driver Nam  US hereby certify incident to the d	ne (Print): Tag No. DOT No. that the ab	egulations. $ \frac{2ee}{704} $ C3010  ove named m	BROW 180	State:	OK without
Generator Authorized Age  Transporter Na  Addr  City, State  I hereby certify that the generator site listed abo	me: Yocham Trucking Zip: Cou) e+C above material was picye.	745 745 745 745 745 745 745 745 745 745	Signat  7446  Che  B-17  Pate	ansportation anspie	Driver Nam  US  hereby certify incident to the decorriver Signature	ne (Print): Tag No. DOT No. that the ab	2egulations.  2eC 704 C3010  ove named m listed below.	3000 180 005 naterial was	State:	OK without
Generator Authorized Age  Transporter Na  Addr  City, State  I hereby certify that the generator site listed abo	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	745 745 Ship D	Signate  Signate  Authorities  Authorities	ansportation  ansport  anspie	Driver Nam  US hereby certify neident to the d  Driver Signature	plicable reference (Print): Tag No. DOT No. that the absention  Phone: Fax: rmit No:	204 704 23010 ove named m listed below. (918) 245-7' (918) 245-7' 3557021		State:	OK without

Generator's Name:	USEPA Region 6 / V	Vilcox Oil Re	sidence Site	Manifest	USE	01
Mailing Address:	1445 Ross Ave			Job No.	MN520WIL01	
-	Dallas	TX	75202	Bill to Name:	Environmental R	estoration, LLC
Point of Generation	City	State	Zip	Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State	74010 Zip	Contact:	Evan Wortman	(636) 227–7477
Contact:	Steve Mason Name	(214) 78 Phone	9-1871		Name	Phone
Common Name of Wa	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil		<del></del>			DT	16191
			~ 1			14/1
	1/0	<u>INSPO</u>				
Generator Authorized Age  Transporter Na  Addr  City, State 2	me: Yocham Truckin		Signatúre	Driver Name	(D: ) O	9 28 Phipment Date  182 State: 0F 1005
I hereby certify that the generator site listed about Driver Signature		Ship Dat	28/17		hat the above named ma estination listed below.	terial was delivered without  Delivery Date
			en Preside,	(स्वर्क)हरू अस्ति।		
I hereby certify that th aura King Mick Name of Authorized Agent	i King Raven	e. 74063 erial has be		7	Phone: (918) 245-778 Fax: (918) 245-779 mit No: 3557021 knowledge the forego	74
White - Destinat	ion Retention • Y	ellow – Retu	ırn to Bill to •	Pink – Transporte	er Retain • Goldenro	od – Generator Retain

### American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

### Non-Hazardous Waste Manifest



White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain

	•						
Generator's Name:		Wilcox Oil R	Residence Sit	e Manifest Job No.			
Mailing Address:	1445 Ross Ave				Environmental F	='	C
	Dallas City	TX State	7520 Zip	<u> </u>	1666 Fabick Drive	restoration, Li	
Point of Generation		State	ΣΙΡ	Addiess.	_	MO	63026
Address:	(6) (6)			_	St. Louis City		Zip
	Bristow City	OK State	7401 Zip	Ontact:	Evan Wortman		27-7477
Contact:	Steve Mason Name	(214) 7 Phone	/89-1871	<del></del>	Name	Phone	
Common Name of W	aste Material				Container No. Type	Total Quantity	Unit
on-Hazardous Soil					1 DT	-	
				-		$f \rightarrow f$	)
						100	
described, classified and	packaged, and is in	al is not a haz proper condi	zardous waste tion for trans	as defined by 40 CFR F portation according to ap	Part 261 or any applicab oplicable regulations.	le state law, has bee	en properly
	<b>₩</b>						
E 014.01	114		-	0		0 21	15
September 2014 NO	Ferman	c	Signal	LK-	·	9.28	.17
Generator Authorized Age	P (Fe and (	, .c	Signatur	el k		9,28 Shipment D	oate
Generator Authorized Age	P (Secure)		Signatu	DESOREIA		9 28 Shipment D	ate
Generator Authorized Age Transporter Na	nt Name		Signatu	nsponter Driver Nam	ne (Print): [a];	Shipment D	Pate
Generator Authorized Age	me: Yocham Truck		Signatu	_		Shipment D	Sate
Generator Authorized Age Transporter Na	me: Yocham Truck		Signatu	Driver Nan		Shipment D	Pate
Generator Authorized Age  Transporter Na  Addr	me: Yocham Truck ess: Zip: above material was	ing		Driver Nam US	Tag No. 700 -	Shipment D	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo	me: Yocham Truck ess: Zip: above material was	ing		Driver Nam  US  I hereby certify incident to the d	Tag No. 700 - 300 Month of the above named m	Shipment D	Seate
Generator Authorized Age  Transporter Na Addr City, State A	me: Yocham Truck ess: Zip: above material was	ing		Driver Nam US	Tag No. 700 - 300 Month of the above named m	Shipment D	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo	me: Yocham Truck ess: Zip: above material was	picked up at t	the 23.17	Driver Nam  US  I hereby certify incident to the d	Tag No. 700 - 300 Month of the above named m	Shipment D	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo	me: Yocham Truck ess: Zip: above material was pose.  American Environ	picked up at t	the 23.17 ate	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Tag No. 700 - 300 Month of the above named m	Shipment D  19 Ook 199 State: 1005  Delivery I	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo	me: Yocham Truck ess: Zip: above material was pove.  American Environ 212 N. 177th W A	picked up at t	the 23.17 ate	US  I hereby certify incident to the department of the department	Tag No. 700 - 100	Shipment D  I Q M Ook  149 State:  1005  Delivery I	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo  Driver Signature	me: Yocham Truck ess: Zip: above material was pove.  American Enviror 212 N. 177 <sup>th</sup> W A Sand Springs, OK	picked up at t Ship D mmental Land ve.	the  23.17 ate  Ifill, Inc.	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Phone: (918) 245-7' Fax: (918) 245-7' mit No: 3557021	Shipment D  I Q M Ook  149 State:  1005  Delivery I  786  774	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo	me: Yocham Truck ess: Zip: above material was pove.  American Enviror 212 N. 177 <sup>th</sup> W A Sand Springs, OK	picked up at t Ship D mmental Land ve.	the  23.17 ate  Ifill, Inc.	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Phone: (918) 245-7' Fax: (918) 245-7' mit No: 3557021	Shipment D  I Q M Ook  149 State:  1005  Delivery I  786  774	Seate
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the generator site listed about the signature of the signat	me: Yocham Truck ess: Zip: above material was posses.  American Enviror 212 N. 177th W A Sand Springs, OK the above named material was posses.	picked up at t Ship D mmental Land ve.	the  23.17 ate  Ifill, Inc.	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Phone: (918) 245-7' Fax: (918) 245-7' mit No: 3557021	Shipment D  I C M Ook  149 State:  Delivery I  786  774  going is accurate.	As $\frac{1}{28}$
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the	me: Yocham Truck ess: Zip: above material was posses.  American Enviror 212 N. 177th W A Sand Springs, OK the above named material was posses.	picked up at the Ship Dominental Landave. 74063 aterial has b	the  23.17 ate  Ifill, Inc.	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Phone: (918) 245-7' Fax: (918) 245-7' mit No: 3557021	Shipment D  I Q M Ook  149 State:  1005  Delivery I  786  774	As $\frac{1}{28}$
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the generator site listed about the signature of Authorized Agent	me: Yocham Truck ess: Zip: above material was posses.  American Enviror 212 N. 177th W A Sand Springs, OK the above named material was posses.	picked up at to Ship D  mmental Land ve. 74063 aterial has ben Blunt	Ifill, Inc. een accepte	Driver Nam  US  I hereby certify incident to the deposition of the	Phone: (918) 245-7' Fax: (918) 245-7' mit No: 3557021	Shipment D  19	Solution of the second of the

	USEPA Region 6 / Wil	cox Oil Res	idence Site	Manifest			,
Mailing Address:	1445 Ross Ave			Job No.	WINTOEGTVIEGT	_	
	Dallas	TX	75202		Environmental F	Restoration, LLC	
Point of Generation	City	State Z	ip	Address:	1666 Fabick Drive		
Address:	(b) (6)				St. Louis City	MO State Zip	63026
	Bristow City	OK State Z	74010 ip	Contact:	Evan Wortman Name	(636) 227 Phone	<del>-7477</del>
Contact:	Steve Mason Name	(214) 789 Phone	-1871				
Common Name of Wa	aste Material				Container No. Type	Total Quantity	Unit
Non-Hazardous Soil					DT		
					<u> </u>	2 A/1	
						) <u>09</u> 1	
Generator Authorized Ager  Transporter Nar			į.	Driver Nam	Tag No.	Shipment Date	
Addre	ess:	4	* <u></u>		Tag No.	State:	-
City, State 2	Couleta	ok '	74014	US	DOT No. 030/	005	
I hereby certify that the		ed up at the			that the above named m	aterial was delivered v	without
generator site listed above the priver Signature	§	Ship Date	8//	Bries Driver Signature	estination listed below.	9-28-1 Delivery Date	7
Terretyznie et sz	Frankling state	(FE) (1) 14	an Musiki				
	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74		l, Inc.	Per	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021		
	e above named mater	rial has bee	n accepted an	d to the best of my	knowledge the foreg	going is accurate.	)/-

Generator's Name: Mailing Address:		Wilcox Oil	Resider	nce Site	Manifest Job No.	MN52ŐWILO	1	
Maning Address.		TV		75202	Bill to Name:	Environmental	Restoration, L	LC
Point of Generation	<u>Dallas</u> City	TX State	Zip	75202		1666 Fabick Drive		· · · · · · · ·
Address:	(b) (6)					St. Louis	МО	63026
	Bristow	ок		74010	Contact:	City	\ State	Zip
	City	State	Zip		contact.	Evan Wortman Name	Phone	227-7477
Contact:	Steve Mason Name	(214) Phone	789-18	371				
Common Name of W	aste Material					Container No. Type	Total Quantity	Unit
on-Hazardous Soil					<u> </u>	1DT		
							1/02	7
							(V). O	<u>/</u>
described, classified and	l packaged, and is in	proper cond	zardou lition fo	s waste as d or transporta	efined by 40 CFR P	art 261 or any applicab plicable regulations.	ole state law, has be	en properly
	I packaged, and is in	proper cond	lition fo	or transporta	efined by 40 CFR P	art 261 or any applicab plicable regulations.		
described, classified and	I packaged, and is in	proper cond	lition fo	s waste as dor transporta	efined by 40 CFR P	art 261 or any applicab plicable regulations.	ole state law, has be	
described, classified and	I packaged, and is in	proper cond	lition fo	or transporta	tion according to ap	plicable regulations.	9-2 Shipment	8-17 Date
described, classified and	I packaged, and is in	proper cond	lition fo	or transporta	tion according to ap	plicable regulations.	9-2 Shipment	8-17 Date
described, classified and	nt Name	proper cond	lition fo	or transporta	ation according to ap	plicable regulations.	9-2 Shipment	8-17 Date
described, classified and second seco	nt Name  Yooham Truck	proper cond	lition fo	or transporta	Driver Nam	plicable regulations.	9-2 Shipment  Hughe	8-17 Date
Generator Authorized Age  Transporter Na  Addr	nt Name  Yooham Truck ess:  Zip:  above material was	proper cond	lition fo	or transporta	Driver Nam  US	ne (Print):  Tag No.	Shipment  Hugh =  148 State  100  naterial was deliver	8-17 Date S e: OK
Generator Authorized Age  Transporter Na  Addr  City, State	nt Name  Yooham Truck ess:  Zip:  above material was	proper cond א ( a	lition fo	or transporta	Driver Nam  US	the (Print):  Tag No.  DOT No.  DOT No.  that the above named n	Shipment  Hugh =  148 State  100  naterial was deliver	8-17 Date S e: OK
Generator Authorized Age  Transporter Na  Addr  City, State	nt Name  Yooham Truck ess:  Zip:  above material was	proper cond א ( a	the	or transporta	Driver Nam  US	the (Print):  Tag No.  DOT No.  DOT No.  that the above named n	Shipment  Hugh =  148 State  100  naterial was deliver	8-17 Date S e: OK
Generator Authorized Age  Transporter Na  Addr  City, State	nt Name  Yooham Truck ess:  Zip:  above material was	proper cond	the	or transporta	Driver Nam  US	the (Print):  Tag No.  DOT No.  DOT No.  that the above named n	Shipment  Hugh =  148 State  100  naterial was deliver	8-17 Date S e: OK
Generator Authorized Age  Transporter Na  Addr  City, State	nt Name  Yooham Truck ess:  Zip:  above material was	picked up at  Ship I	the . 28	ignatur	Driver Nam  US  I hereby certify incident to the d	the (Print):  Tag No.  DOT No.  DOT No.  that the above named n	Shipment  Hugh = 148 State  100 State  Delivery	8-17 Date S e: OK
Generator Authorized Age  Transporter Na  Addr  City, State	American Enviro 212 N. 177th W A Sand Springs, Ok	proper cond  A ( )  ting  picked up at  Ship I  numental Lan  ve.  74063	the Date	ignatus	Driver Nam  US  I hereby certify incident to the d	Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	Shipment  Hugh =  148 State  100 Delivery  786	Date  Se: OK  red without  28-17  Date
Generator Authorized Age  Transporter Na Addr City, State I hereby certify that the generator site risted abo  Driver Signature	American Environ 212 N. 177th W A Sand Springs, Okae above named m.	proper cond  A ( )  ting  picked up at  Ship I  numental Lan  ve.  74063	the Date	ignatus	Driver Nam  US  I hereby certify incident to the d	Phone: (918) 245-7 Fax: (918) 245-7 mit No: 3557021	Shipment  Hugh =  148 State  100 Delivery  786	Date  Se: OK  red without  28-17  Date

A45 Ross Ave  allas  City  (6)	TX State	75202 Zip	Job No. Bill to Name:		520WIL01		
City ) (6)			Bill to Name:	Enviro			
) (6)	State	Zip			inmental R	estoration, Ll	_C
, ,		r		1666 Fa	bick Drive		
istow			_	St. Loui	s	MO.	6302
	ок	74010		City		State	Zip
City	State	Zip	Contact:	Evan W	ortman	(636) 2 Phone	27-7477
eve Mason		39-1871	_				
Name	Phone					i	
a Material						Total	Unit
e iviateriai				140.	Турс	Quantity	Omt
Server				<b></b>	DT.		
					<u> </u>	4 = 1	$\mathcal{I}$
	MAN	STONY	·			ノ. ノ.	ン/_
Yocham Trucking	سرار د		and the second of the second o		DC.7	BROWN	
"Cometa" c "Bo Rox	745 K 7	14429	US			_	OK
ove material was picke	d up at th	ne				terial was delivere	d without
<del></del>	9-2 Ship Da	8·17	Bel BRO Briver Signature	unl		9-28 Delivery I	3-17 Date
		(A) Past	Ciginis (a) Wednesday		ger <del>a Lodinsk fo</del> rt i		\$ 16 2 <b>6</b> 15 5 5 6
212 N. 177 <sup>th</sup> W Ave.		fill, Inc.	Per	Fax:	(918) 245-77		
			and to the best of my	knowled	lge the forego	- 9-9	28/1
		Signature	1			Keceipt Dat	e
	e Material  Tove named material is inckaged, and is in proposition of the control	Tycyonove named material is not a hazackaged, and is in proper condit.  Yocham Trucking  Yocham Trucking  P. D. Box 745  Over material was picked up at the solution of the proper condit.  American Environmental Landa 212 N. 177th W Ave.  Sand Springs, OK 74063	e Material  Transport  Ove named material is not a hazardous waste ackaged, and is in proper condition for transport  Name  Signature  Signature  Signature  Note that of the proper condition for transport  Name  Signature  Signature  Note that of the proper condition for transport  Signature  Sig	Driver Name  Signature  Driver Name  Driver Name  Signature  Driver Name  Signature  Driver Name  Driver Name  Signature  Driver Name  Driver Name  Driver Name  Signature  Driver Name  Driver Name	Con No.  1  TWSPC  Townspect  Ove named material is not a hazardous waste as defined by 40 CFR Part 261 or ackaged, and is in proper condition for transportation according to applicable responsible to applicable responsible to applicable responsible to the destination of the property o	Container No. Type  Trust  Ove named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable ackaged, and is in proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order of the proper condition for transportation according to applicable regulations.  Order o	Container No. Type Quantity  DT  TYPE  Ove named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been ackaged, and is in proper condition for transportation according to applicable regulations.  PARTITION OF Signature  Driver Name (Print):  Yocham Trucking  Signature  Driver Name (Print):  Tag No. 704 180 State:  USDOT No. 0201005  Deliver I hereby certify that the above named material was delivered incident to the destination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774 Permit No: 3557021  Phone: (918) 245-7774 Permit No: 3557021  Prove named material has been accepted and to the best of my knowledge the foregoing is accounted.

1,09						100
						www.
Generator's Name:	USEPA Region 6 / V	Vilcox Oil Reside	ence Site	Manifest	٠,٥٥	(0)
Mailing Address:	1445 Ross Ave	·		Job No.	MINOZOFILOI	
	Dallas	TX State Zip	75202			Restoration, LLC
Point of Generation	City	State Zip		Address:	1666 Fabick Drive	
Address:					St. Louis City	MO 63026 State Zip
	Bristow City	OK State Zip	74010	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1 Phone	871			1
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil						- 107 FM
	Trans	>Port				JU. 3 1 1
I hereby certify that the described, classified and for the first state of the described of	I packaged, and is in p	roper condition f				Shipment Date
		10 m 130 3 m 130 m 1 m 1	e le garries	JURIUS WES	eren sustant et et i	
Transporter Na Addr	Yocham Truckin	g		Driver Nam	Tag No.	182 State: O
City, State	Zip:	·		US	DOT No.	1/00 5
I hereby certify that the generator site listed abo		cked up at the			that the above named ma estination listed below.	aterial was delivered without
Driver Signature	Hach	Ship Date	88	Driver Signature	Dennis H	Delivery Date
<b>H</b>				INTERESTRUCTURE		
	American Environr 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	nental Landfill, I e.			Phone: (918) 245-77 Fax: (918) 245-77 rmit No: 3557021	
I hereby certify that th			ccepted/ag			oing is accurate.
aura King Mick Name of Authorized Agent	i King Raven	Blunt -	Signature	11		Receipt Date
White – Destinat	tion Retention • Y	ellow – Return	to Bill to •	Pink – Transport	er Retain • Goldenr	od – Generator Retain
						* **

		+ 1 200 CO (12 20 CO )		AND RESERVED AND ADDRESS OF THE PARTY OF THE	ステム こうきょうしんほうごと 最後に終めた しょう	and the first the contract of	State of the state of
		instantation is a self-Will behave fair and as of a		vation of the state of			
Generator's Name:	USEPA Region 6 / Wi	lcox Oil Reside	nce Site	Manifest	USE	61	
Mailing Address:	1445 Ross Ave			Job No.	HINOZOGILO	- 1	
	Dallas	TX	75202	Bill to Name:	<b>Environmental F</b>	Restoration, LLC	
Point of Generation	City	State Zip		Address:	1666 Fabick Drive		
Address:					St. Louis	МО	63026
	Bristow	ОК	74010	<b>G</b>	City	State Zip	
	City	State Zip		Contact:	Evan Wortman Name	(636) 227- Phone	-7477
Contact:	Steve Mason Name	(214) 789-18 Phone	371				
	Name	THORE			Container	Total	
Common Name of W	aste Material				No. Type	Quantity	Unit
Non-Hazardous Soil					DT	100	_
						1500	7
	Trans	STEAT		<del></del>			
I beneficiated the	-1			lefeed by 40 CER R			
I hereby certify that the described, classified and						ie state iaw, nas been p	roperty
TEDHEN	Musm	•	_ </td <td>S // 1/</td> <td></td> <td>_</td> <td>_</td>	S // 1/		_	_
For EP	FReiml	2		ht h		9.20	7.17
Generator Authorized Age	ent Name	S	Signature			Shipment Date	
		pangesse strag	b Made Lade	e Ye Velik - Lebense and	and the second second second second		
				261461			
Transporter Na	me: Yocham Trucking ess:			Driver Nam	ne (Print):	liam Oaks	•
A .1.1.	Dunam Trucking						`
Addi	ess:				Tag No. 700		
City, State				US	_/00.	149 State: _	
City, State	Zip:				DOT No. 330	149 State:	OK
	Zip:above material was pick			I hereby certify t	_/00.	149 State:	OK
City, State	Zip:above material was pick			I hereby certify t	DOT No. 330 that the above named m	149 State:	OK
City, State  I hereby certify that the generator site listed abo	Zip:above material was pick	sed up at the	8.17	I hereby certify to incident to the de	DOT No. 330 that the above named m	149 State:	OK
City, State	Zip:above material was pick		<u> </u>	I hereby certify t	DOT No. 330 that the above named m	149 State:	OK
City, State  I hereby certify that the generator site listed abo	above material was pick ve.	sed up at the	8.17	I hereby certify to incident to the do	DOT No. 330 that the above named m	149 State:	OK
City, State  I hereby certify that the generator site listed abo	above material was pick ve.  American Environme	ced up at the  Order  Ship Date	8-17	I hereby certify to incident to the do	DOT No. 330 that the above named mestination listed below.  Phone: (918) 245-77	State:  100.5  aterial was delivered w  Delivery Date	OK
City, State  I hereby certify that the generator site listed abo	American Environme 212 N. 177 <sup>th</sup> W Ave.	Ship Date	8-17	I hereby certify to incident to the de Driver Signature	Phone: (918) 245-77 Fax: (918) 245-77	State:  100.5  aterial was delivered was del	OK
City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 76	Ship Date  Characteristics  Ship Date  Characteristics  Ship Date  Characteristics  Ship Date	8·17	I hereby certify to incident to the domain of the domain o	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	State:State:	OK
City, State  I hereby certify that the generator site listed abo	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 76	Ship Date  Characteristics  Ship Date  Characteristics  Ship Date  Characteristics  Ship Date	8·17	I hereby certify to incident to the domain of the domain o	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	State:State:	OK
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the aura King Micking Micking The state of	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74	Ship Date  Cental Landfill, Ir  4063  rial has been as	8·17	I hereby certify to incident to the domain of the domain o	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	State:State:	OK
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74	Ship Date  Can be ship Date  C	8·17	I hereby certify to incident to the domain of the domain o	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	State:State:	OK
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that  aura King Mick Name of Authorized Agent	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74 to above named material King Raven E	Ship Date  Contal Landfill, In 14063  Contal has been as Shunt Shund Shu	3.17  ac.  accepted an accepted are accepted an accepted are accepted an accepted are accepted as a accepted as a accepted are accepted as a accepted	I hereby certify to incident to the de Driver Signature  Per d to the best of my	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021 r knowledge the foreg	State:  100.5  aterial was delivered w  Delivery Date  786 774  going is accurate.  Receipt Date	0K without 8.17
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that  aura King Mick Name of Authorized Agent	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74	Ship Date  Contal Landfill, In 14063  Contal has been as Shunt Shund Shu	3.17  ac.  accepted an accepted are accepted an accepted are accepted an accepted are accepted as a accepted as a accepted are accepted as a accepted	I hereby certify to incident to the de Driver Signature  Per d to the best of my	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021 r knowledge the foreg	State:  100.5  aterial was delivered w  Delivery Date  786 774  going is accurate.  Receipt Date	0K without 8.17
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that  aura King Mick Name of Authorized Agent	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74 to above named material King Raven E	Ship Date  Contal Landfill, In 14063  Contal has been as Shunt Shund Shu	3.17  ac.  accepted an accepted are accepted an accepted are accepted an accepted are accepted as a accepted as a accepted are accepted as a accepted	I hereby certify to incident to the de Driver Signature  Per d to the best of my	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021 r knowledge the foreg	State:  100.5  aterial was delivered was del	0K without 8.17
City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that  aura King Mick Name of Authorized Agent	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74 to above named material King Raven E	Ship Date  Contal Landfill, In 14063  Contal has been as Shunt Shund Shu	3.17  ac.  accepted an accepted are accepted an accepted are accepted an accepted are accepted as a accepted as a accepted are accepted as a accepted	I hereby certify to incident to the de Driver Signature  Per d to the best of my	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021 r knowledge the foreg	State:  100.5  aterial was delivered w  Delivery Date  786 774  going is accurate.  Receipt Date	0K without 8.17

					***		E	
Generator's Name:	USEPA Region 6 /	Wilcox Oil F	Residen	ice Site	Manifest	usec	<b>V</b>	
Mailing Address:	1445 Ross Ave				Job No.	MN520WILOT	•	
_	Dallas	TX		75202	Bill to Name:	Environmental Res	storation, LLC	
Point of Generation	City	State	Zip		Address:	1666 Fabick Drive		
Address:						St. Louis	MO	63026
	Bristow	ок		74010	_	City	State Zip	
	City	State	Zip	7.10.10	Contact:	Evan Wortman Name	(636) 227-747 Phone	77
Contact:	Steve Mason Name	(214) Phone	789-18	71				
Common Name of W	aste Material					Container No. Type	Total Quantity U	nit
Non-Hazardous Soil						<u>DT</u> ,	1000	1
						/	コル	
**************************************		TCIV	K2	tra	-	7		
			- 1		1. C. 11. 40. CEP. P.			
described, classified and	d packaged, and is in	proper cond	zardous ition fo	s waste as r transport	defined by 40 CFR P tation ageording to ap	art 261 or any applicable supplicable regulations.	tate law, has been prope	erly
STERMEN	Masm			-	$1/I^{\prime}$			
	1 Resign			204	Who ha		9-28-/7 Shipment Date	7
Generator Authorized Age	ent Name		Si	ignature /	/ 🗸		Shipment Date	<del></del>
art in a said an	e a la companya da Carante de Car				The state of the s			
Transporter Na					Driver Nam	ne (Print):	Hughes	
Addr	Y <del>ocham Trucki</del> ress:	ng —		<del></del>		Tag No. 700-14	Hughes 8 State: 01	
City, State								
	Zip:				~ US			
I hereby certify that the	above material was p	oicked up at	the		I hereby certify	DOT No	05	out
I hereby certify that the generator site listed abo	above material was p	sicked up at	the		I hereby certify	DOT No	05	out
	above material was p	picked up at	the 28 -	 !7_	I hereby certify	DOT No	rial was delivered with	out 17
	above material was p	oicked up at  Ship E	28 -	17_	I hereby certify	DOT No	05	out /7
generator site listed abo	above material was p	9.	28 -	17	I hereby certify incident to the d	DOT No	rial was delivered with	out 17_
generator site listed abo	above material was p	9 - Ship D	28 -	17_	I hereby certify incident to the d	that the above named mater estination listed below.	rial was delivered without the second	out /7
generator site listed abo	above material was p	Ship E	28 -	17 	I hereby certify incident to the d	that the above named mater estination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774	rial was delivered without the second of the	out 17
generator site listed abo	American Environ 212 N. 177 <sup>th</sup> W As	Ship E Ship E mmental Lane ve. 74063	28 - Pate		I hereby certify incident to the d	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	rial was delivered without the second	out 17
generator site listed abo	American Environ 212 N. 177 <sup>th</sup> W As	Ship E Ship E mmental Lane ve. 74063	28 - Pate		I hereby certify incident to the d	that the above named mater estination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774	rial was delivered without the second	17
Driver Signature  I hereby certify that the	American Environ 212 N. 177 <sup>th</sup> W As Sand Springs, OK the above named ma	Ship E mental Landve. 74063 aterial has b	28 - Pate		I hereby certify incident to the d	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	rial was delivered without the second	17
Driver Signature  I hereby certify that the	American Environ 212 N. 177 <sup>th</sup> W As Sand Springs, OK the above named ma	Ship E Ship E mmental Lane ve. 74063	28 - Pate dfill, In		I hereby certify incident to the d	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	rial was delivered without the second	17
Driver Signature  I hereby certify that the	American Environ 212 N. 177 <sup>th</sup> W As Sand Springs, OK the above named ma	Ship E mental Landve. 74063 aterial has b	28 - Pate dfill, In	ecepted ar	I hereby certify incident to the d	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	rial was delivered without the property of the	17
Driver Signature  I hereby certify that the saura King Mick Name of Authorize Agent	American Environ 212 N. 177 <sup>th</sup> W As Sand Springs, OK the above named ma	Ship D Ship D mmental Land ve. 74063 nterial has b	28 - Pate  dfill, In Peen ac	gnature	I hereby certify incident to the d	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	rial was delivered without the property of the	17

1 (00	2.1				1.51
22 mar // 1 mar (m.)	A STATE OF THE STA		Section 2	• moltunes sich wie	Same Same Use and
	USEDA D.: 6 / NE	0.18 11 0.5	Manifest	uSt	· 1
	USEPA Region 6 / Wilc	ox Oil Residence Site	Job No.	MN520WILO1	
Mailing Address:		TV 77000	Bill to Name:	Environmental F	Restoration LLC
Division of	<u>Dallas</u> City	TX 75202 State Zip	_	1666 Fabick Drive	, <u> </u>
Point of Generation Address:				St. Louis	MO 63020
	Bristow	OK 74010	_	City	State Zip
	City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact	Steve Mason Name	(214) 789-1871 Phone	-		
Common Name of W	aste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil				1	15897
		Truca			
		LIMISH	<u> </u>		
Generator Authorized Age		Signature	MM		9 Storpfrent Date
		55.00 A	ស្រួលផ្សេងទាំងក	er er en	
Transporter Na	Yocham Trucking		Driver Nam	ne (Print):	Δ1-
	ress:	· •		Tag No. <b>DR197</b> DOT No. <b>O30/0</b>	State:
City, State	Zip: (oweth c	X 74014	US	DOT №. <u>O3O/C</u>	205
I hereby certify that the generator site listed abo	above material was picke	d up at the		that the above named mestination listed below.	aterial was delivered without
Driver Signature	9	Ship Date	Druct Signature	Alf	9 Date 7
	est productions (supers)	ki kaja kaja kaja Bija Sija Sija Sija Sija Sija Sija Sija S	57 <b>6</b> (5 <b>16(6)16</b> 536666		
	American Environmen 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 740	•	Per	Phone: (918) 245-77 Fax: (918) 245-77 mit No: 3557021	
I hereby certify that the	he above named materia	al has been accepted	and to the best of my	knowledge the foreg	oing is accurate.
aura King Mick Name of Authorited Agen	ki King Raven B	Signature	WIVA		Receipt Date
White - Destina	tion Retention • Yello	w – Return to Bill to	Pink - Transport	er Retain • Goldenr	od – Generator Retain

			36 10	166	<b>~</b> 1
		Wilcox Oil Residence Site	Manifest Job No.	11 1 1	7
Mailing Address:	: 1445 Ross Ave			MINOZOTHEOT	storation, LLC
	Dallas - City	TX 75202 State Zip		1666 Fabick Drive	
Point of Generation	ı		radicis.		
Address				St. Louis City	MO 63026 State Zip
	Bristow City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact	Steve Mason Name	(214) 789-1871 Phone			
Common Name of W	aste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil				1 DT	15687
	<u> </u>	Transport			
described, classified an	d packaged, and is in	Il is not a hazardous waste as proper condition for transpo	rtation according to ap		state law, has been properly
Generator Authorized Ag	ent Name	Signature /		-	9-28-17 Shipment Date
		· ·			
		edecision <sup>e de l</sup> everal de Califo	ត្រូវបានដែរ <u>ម៉</u> ាក់ក		
Transporter Na	ame:	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		ne (Print): Catt	Coulter
- Add	ame: Yocham Truckir ress:	ng		ne (Print): Colf Tag No. 744-18	Coulter  3 State: Oll
- Add	ame: Yocham Truckir ress:	ng	Driver Nam	ne (Print): <u>Colf</u> Tag No. 714-18 DOT No. 030/00	Coulter 3 State: OIL
Add	ame: Yocham Truckir ress: Zip: Count of e above material was p	, ON 74429	Driver Nam US I hereby certify	DOT No. <u>030/00</u>	Coulter  3 State: OIL  erial was delivered without
Add City, State  I hereby certify that the generator site listed about	ame: Yocham Truckir ress: Zip: Count of e above material was p	, ON 74429	Driver Nam  US  I hereby certify incident to the d	DOT No. <u>030/00</u> that the above named mate	erial was delivered without
Add City, State I hereby certify that the	ame: Yocham Truckir ress: Zip: Count of e above material was p	, ON 74429	Driver Nam  US  I hereby certify incident to the d	that the above named mate estination listed below.	75
Add City, State  I hereby certify that the generator site listed about	ame: Yocham Truckir ress: Zip: Count of e above material was p	oicked up at the  9-18-17 Ship Date	Driver Nam  US  I hereby certify incident to the d	that the above named mate estination listed below.	erial was delivered without
Add City, State  I hereby certify that the generator site listed about	American Environ 212 N. 177th W Av	icked up at the  9-18-17 Ship Date  mental Landfill, Inc.	US I hereby certify incident to the d Driver Signature	that the above named matelestination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774	erial was delivered without  9-28-/7  Delivery Date
Add City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environ 212 N. 177 <sup>th</sup> W As	icked up at the  9-18-17 Ship Date  mental Landfill, Inc. ve. 74063	Driver Nam  US  I hereby certify incident to the description of the de	that the above named mate estination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774 rmit No: 3557021	erial was delivered without  9-25-17  Delivery Date
Add City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that t	American Environ 212 N. 177th W As Sand Springs, OK the above named ma	oicked up at the  9-18-77 Ship Date  mental Landfill, Inc. ve. 74063 tterial has been accepted a	Driver Nam  US  I hereby certify incident to the description of the de	that the above named mate estination listed below.  Phone: (918) 245-7786 Fax: (918) 245-7774 rmit No: 3557021	erial was delivered without  9-25-17  Delivery Date
Add City, State  I hereby certify that the generator site listed about the component of the	American Environ 212 N. 177 <sup>th</sup> W As Sand Springs, OK the above named ma	y 74439  picked up at the  9-18-77  Ship Date  mental Landfill, Inc.  ve.  74063  atterial has been accepted a	Driver Nam  US  I hereby certify incident to the dependent to the dependent to the dependent to the dependent to the best of my	that the above named mate estination listed below.  Phone: (918) 245-7786  Fax: (918) 245-7774  rmit No: 3557021  y knowledge the foregoi	erial was delivered without  9-38-19 Delivery Date  6 4  Ing is accurate. Receipt Date



Generator's Name:	USEPA Region 6 / W	lilcox Oil F	Residen	ce Site	Manifest	( -	<del>-</del> 0/
Mailing Address:	1445 Ross Ave				Job No.	MITOZOTTILOT	
	Dallas	ŢX		75202			Restoration, LLC
Point of Generation	City	State	Zip		Address:	1666 Fabick Drive	
Address:	(b					St. Louis City	MO 6302 State Zip
	Bristow City	OK State	Zip	74010	Contact:	Evan Wortman	(636) 227–7477
<b>G</b>	•		•			Name	Phone
Contact:	Steve Mason Name	(214) 7 Phone	789-187	71			
						Container	Total
Common Name of W	aste Material					No. Type	Quantity Unit
on-Hazardous Soil		<del></del>				1 DT	16827
		10	ins.	Dal			
		1/0	1110	10,1			
17 / W.	Pa. 110 1-		<		, (/ V		9-18-17
Generator Authorized Age	Mission Lent Name	***************************************	Si <sub>1</sub>	gnature	2 / 1		9-28-17 Shipment Date
Generator Authorized Age			4. 1 (	"	genter		9-28-17 Shipment Date
Transporter Na	me:		4. 1 (	"	-	ne (Print): 7££	Shipment Date
Transporter Na Addr	ime: <del>Yocham Trucking</del> ess: P.O. Dox	745	4. 1 (	"	-	ne (Print): <u>Zt t</u> Tag No. 704 18	Shipment Date
Transporter Na Addr		745	4. 1 (	"	Driver Nam	ne (Print): <u>ZEE</u> Tag No. <u>704</u> 18 DOT No. <u>030</u> 10	Shipment Date  BROWN  State: OK
Transporter Na Addr	rme: Yocham Trucking Pess: P.O. Box Zip: Coweta above material was pic	745 OK		"	Driver Nam  US.  I hereby certify t	DOT No. <u>0301</u> 0	Shipment Date  BROWN  State: OK
Transporter Na Addr City, State	rme: Yocham Trucking Pess: P.O. Box Zip: Coweta above material was pic	745 OK		"	US.  I hereby certify tincident to the di	that the above named mestination listed below.	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without
Transporter Na Addr City, State 2 I hereby certify that the generator site listed abo	rme: Yocham Trucking Pess: P.O. Box Zip: Coweta above material was pic	745 OK Cked up at 1	the 8-1-	"	Driver Nam  US.  I hereby certify to incident to the discount	DOT No. <u>03010</u>	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without
Transporter Na Addr City, State	rme: Yocham Trucking Pess: P.O. Box Zip: Coweta above material was pic	745 OK Oked up at t 9-28 Ship D	the 8-1-	)	US.  I hereby certify tincident to the di	that the above named mestination listed below.	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without  9-28-17  Delivery Date
Transporter Na Addr City, State 2 I hereby certify that the generator site listed abo	rme: Yocham Trucking Pess: P.O. Box Zip: Coweta above material was pic	745 OK cked up at t 9-28 Ship D	the		US.  I hereby certify incident to the dispriver Signature	that the above named mestination listed below.	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without  P-28-17  Delivery Date
Transporter Na Addr City, State 2 I hereby certify that the generator site listed abo	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	745 OK Cked up at the Ship D ship D nental Lances. 74063	the B- / Date	(remis)	Driver Nam  US  I hereby certify tincident to the di  Periver Signature	that the above named mestination listed below.  Phone: (918) 245-77  Fax: (918) 245-77  mit No: 3557021	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without  9-28-17  Delivery Date
Transporter Na Addr City, State I hereby certify that the generator site listed abo Driver Signature I hereby certify that the	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	745 OK Cked up at the serial Lance: 74063 erial has be	the B- / Date	(remis)	Driver Nam  US  I hereby certify tincident to the di  Periver Signature	that the above named mestination listed below.  Phone: (918) 245-77  Fax: (918) 245-77  mit No: 3557021	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without  9-28-17  Delivery Date
Transporter Na Addr City, State I hereby certify that the generator site listed abo Driver Signature I hereby certify that the	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	745 OK Cked up at the serial Lance: 74063 erial has be	the B-   Date	(remis)	Driver Nam  US  I hereby certify tincident to the di  Periver Signature	that the above named mestination listed below.  Phone: (918) 245-77  Fax: (918) 245-77  mit No: 3557021	Shipment Date  BROWN  State: OK  DOS  aterial was delivered without  9-28-17  Delivery Date

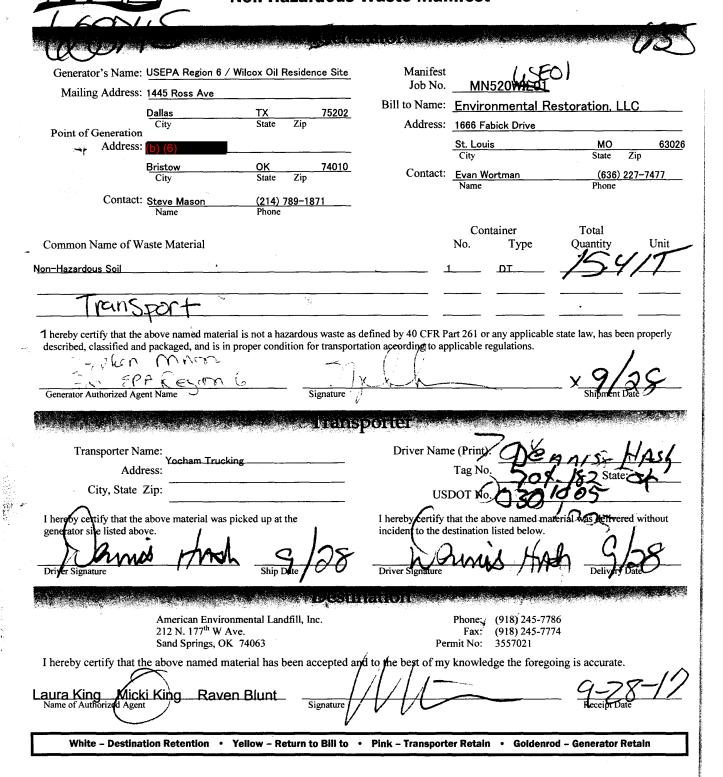
		and the second			
Generator's Name:	USEPA Region 6 / W	ilcox Oil Residence Site	Manifest	us	EOI
Mailing Address:	1445 Ross Ave		Job No.	MN520 <del>WIL 0</del>	± '
	Dallas	TX 75202	Bill to Name:	Environmental	Restoration, LLC
Daint of Communica	City	State Zip		1666 Fabick Drive	
Point of Generation Address:				St. Louis	MO 63026
	Bristow	OK 74010	,	City	State Zip
	City	OK 74010 State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1871 Phone			
				Container	Total
Common Name of W	aste Material			No. Type	Quantity Unit
lon-Hazardous Soil					<u> </u>
					, ,
		ransport			
I hereby certify that the	above named material	is not a hazardous waste as	defined by 40 CFR P	art 261 or any applica	ble state law, has been properly
described, classified and	packaged, and is in pr	oper condition for transpor	tation according to ap	plicable regulations.	
In SPA	Rousela		Lelha		./ 9 0
Generator Authorized Age	ent Name	Signature	1800		9-28-/7 Shipment Date
_					
	474			The Charleston Area was	
Maria de la composition della		Laborator and Little	्रे <b>धका स्टब्स</b>		Lagrada ya 1997 wa 1997 wa 1997
Transporter Na	ıme:	and the state of t			
Transporter Na Addr	ime: Yocham Trucking ress:	and the state of t			
Transporter Na Addr City, State	me: Yocham Trucking ress: Zip:	and the second s	Driver Nam	ne (Print):	t Coulter 183 State: OK
City, State	Coweta,	NK 74429	Driver Nam US	Tag No. 704-	t Coulter 183 State: OK
Transporter Na Addr City, State	above material was pic	NK 74429	Driver Nam  US  I hereby certify	Tag No. 704-	State: OK Material was delivered without
I hereby certify that the generator site listed abo	above material was pic	2/4 74429 ked up at the	Driver Nam  US  I hereby certify	Tag No. 704- DOT No. 0301 that the above named	State: OK
I hereby certify that the	above material was pic	NK 74429	Driver Nam  US  I hereby certify	Tag No. 704- DOT No. 0301 that the above named	State: OK Material was delivered without
I hereby certify that the generator site listed abo	above material was pic	2/4 74429 ked up at the	Driver Nam  US  I hereby certify incident to the december 1.	Tag No. 704- DOT No. 0301 that the above named	State: OK
I hereby certify that the generator site listed abo	above material was pic ve.  American Environm	ked up at the  9-28-17 Ship Date  ental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the december 1.	Tag No. 704- DOT No. 0301 that the above named estination listed below	State: OK  183 State: OK  1005  material was delivered without  1.  9-28-/7  Delivery Date
I hereby certify that the generator site listed abo	above material was pic ve.  American Environm 212 N. 177 <sup>th</sup> W Ave	ked up at the  9-28-17 Ship Date  ental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the dependent to the dependen	Tag No. 704- DOT No. 0300 that the above named restination listed below Phone: (918) 245- Fax: (918) 245-	State: OK  183 State: OK  1005  material was delivered without  1.  9-28-/7  Delivery Date
I hereby certify that the generator site listed abo	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7	ked up at the  9-28-17 Ship Date  ental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- mit No: 3557021	State: OK  183 State: OK  2005  material was delivered without  29-28-17  Delivery Date
I hereby certify that the generator site listed abo	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7	ked up at the  9-28-17 Ship Date  ental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- mit No: 3557021	State: OK  183 State: OK  2005  material was delivered without  29-28-17  Delivery Date
I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7	ked up at the  9-28-/7 Ship Date  ental Landfill, Inc. 4063 rial has been accepted as	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- mit No: 3557021	State: OK  183 State: OK  2005  material was delivered without  29-28-17  Delivery Date
I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7 ne above named mate	ked up at the  9-28-/7 Ship Date  ental Landfill, Inc. 4063 rial has been accepted as	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- mit No: 3557021	State: OK  183 State: OK  2005  material was delivered without  29-28-17  Delivery Date
I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the aura King Mick	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7 ne above named mate	ked up at the  9-28-/7 Ship Date  ental Landfill, Inc. 4063 rial has been accepted as	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- mit No: 3557021	State: OK  183 State: OK  2005  material was delivered without  29-28-17  Delivery Date
I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the aura King Mick Name of Authorized Agent	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7 ne above named material was pictured.	ked up at the  9-28-/7 Ship Date  ental Landfill, Inc. 4063 rial has been accepted as	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- grait No: 3557021  A rag No. 704-  Port No. 0300  Phone: (918) 245- Fax: (91	material was delivered without  9-28-/7 Delivery Date  7786 7774  egoing is accurate.  Receipt Date
I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the aura King Mick Name of Authorized Agent	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7 ne above named material was pictured.	ked up at the  9-28-/7 Ship Date  ental Landfill, Inc. 4063 rial has been accepted at Signature	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245- Fax: (918) 245- grait No: 3557021  A rag No. 704-  Port No. 0300  Phone: (918) 245- Fax: (91	material was delivered without  9-28-/7 Delivery Date  7786 7774  egoing is accurate.  Receipt Date

				a 1
Generator's Name: USEPA Region 6 / W	ilcox Oil Residence Site	Manifest	USE	$\mathcal{O}$
Mailing Address: 1445 Ross Ave		Job No.	MN520WIL01	
Dallas	TX 75202		Environmental Re	storation, LLC
City Point of Generation	State Zip	Address:	1666 Fabick Drive	<del></del>
Address: (b) (6)			St. Louis City	MO 630 State Zip
Bristow	OK 74010	Contact	Evan Wortman	
City	State Zip	Contact.	Name	(636) 227-7477 Phone
Contact: Steve Mason Name	(214) 789-1871 Phone			
Common Name of Waste Material			Container No. Type	Total Quantity Unit
Non-Hazardous Soil		1	DT	10rXX
				1 40 0
rans:	tan			
described, classified and packaged, and is in pr	_	rtation according to app	olicable regulations.	9-27-17 Shipment Date
Generator Aumonized Figure Maine				Simplified Balle
	3. T. P. C. T. C. S. B. C. S. D. C. S.	alognaer, ma		
Transporter Name:	" " a way		a (Print): <b>Q</b>	A.1
Transporter Hame.	* N	Driver Name	C (I IIIII).	11.16.
Yocham Trucking Address:		Driver Name	Tag No.	Ailey State:
Yocham Trucking	OK 74429		Y WHAT	All6y State:
Address:  City, State Zip:  Thereby certify that the above material was pice.	ok 74429	USI I hereby certify tl	Tag No. OOT No. O30/O	
Address: Yocham Trucking Address: City, State Zip:	ok 74429	USI I hereby certify tl	Tag No. 030100	0.5
Address:  City, State Zip:  Thereby certify that the above material was pice.	ok 74429	USI I hereby certify tl	Tag No. OOT No. O30/O	0.5
Address:  City, State Zip:  Thereby certify that the above material was pice.	ok 74429	USI I hereby certify tl	Tag No. OOT No. O30/O	0.5
Address:  City, State Zip:  Courts  I hereby certify that the above material was pic generator site listed above.	ok 74429	USI I hereby certify the incident to the definition of the definit	Tag No. OOT No. O30/O	0.5
Address:  City, State Zip:  Out to the state of the state	ok 74429  Sked up at the  937-17  Ship Date	USI I hereby certify the incident to the definition of the definit	Tag No.  DOT No. 30/00  hat the above named mate estination lighted below.	erial was delivered without  9-28-17  Delivery Date
Address:  City, State Zip:  Charts  I hereby certify that the above material was pic generator site listed above.	cked up at the  939-17 Ship Date	USI I hereby certify the incident to the definition of the definit	Tag No.  DOT No. 30/00  that the above named mate estination lifted below.	erial was delivered without  9-28-17  Delivery Date
Address:  City, State Zip:  Couch  I hereby certify that the above material was pic generator site listed above.  Driver Signature  American Environm 212 N. 177 <sup>th</sup> W Ave	cked up at the  927-17 Ship Date  mental Landfill, Inc.	USI I hereby certify the incident to the description between Driver Signature Periods	Tag No.  DOT No. 30/00  hat the above named mate estination lifted below.  Phone: (918) 245-778  Fax: (918) 245-777  mit No: 3557021	erial was delivered without  9-28-17  Delivery Date
Address:  City, State Zip:  I hereby certify that the above material was pic generator site listed above.  Driver Signature  American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7	cked up at the  932-17 Ship Date  mental Landfill, Inc. 274063 erial has been accepted a	USI I hereby certify the incident to the description between Driver Signature Periods	Tag No.  DOT No. 30/00  hat the above named mate estination lifted below.  Phone: (918) 245-778  Fax: (918) 245-777  mit No: 3557021	erial was delivered without  9-28-17  Delivery Date

	USEPA Region 6 / W	ilcox Oil Residence S			:01	
Mailing Address:	1 <u>445 Ross Ave</u>		Job No.			
	Dallas		.02	Environmental R	destoration, LLG	<del></del>
Point of Generation		State Zip	Address:	1666 Fabick Drive		0000
Address:	(b) (6)			St. Louis City	MO State Zip	6302
	Bristow City	OK 740 State Zip	O10 Contact:	Evan Wortman	(636) 227-	
<b>C</b>	•			Name	Phone	
Contact:	Steve Mason Name	(214) 789-1871 Phone		-		
Common Name of W	aste Material			Container No. Type	Total Quantity	J'niy
lon-Hazardous Soil				1 <u>DT</u>	100	
	+-^-		-			
	Tran	isport				
Generator Authorized Age	A Reyork				Shipment Date	
	and the contract of the	and the second of the		CARLES AND AND ADDRESS OF THE PERSON OF THE		
		A CONTRACTOR OF THE PROPERTY OF	ing plante makes			Marian Value
Transporter Na	ame:			ne (Print): Zec	BROWN	1
Transporter Na Addr	Yooham Truckin	v 745		ne (Print): Lec Tag No. 704	BROWN 180 State:	L DY
•	ress: Yocham Truckin	x 745 OK 744.	Driver Nan		BROWN 180 State: 005	J OK
Addr	ress: P. D. D. D. Zip: Coweta  above material was pic	x 745 OK 744.	Driver Nan  US  I hereby certify	Tag No. 4704		DK vithout
Addr City, State	ress: P. D. D. D. Zip: Coweta  above material was pic	x 745 OK 744.	Driver Nan  US  I hereby certify	Tag No. $\frac{704}{0301}$ that the above named m		JOK vithout
Addr City, State	ress: P. D. D. D. Zip: Coweta  above material was pic	2 745 OK 744 cked up at the  9 - 28 - 1  Ship Date	Driver Nan  US  I hereby certify	Tag No. $\frac{704}{0301}$ that the above named m		J DK vithout
Addr City, State  I hereby certify that the generator site listed abo  The Brown  Oriver Signature	American Environm 212 N. 177 <sup>th</sup> W Ave	Cked up at the  9-28-7  Ship Date  mental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the of the priver Signature	Tag No. 704  SDOT No. 0301  that the above named m destination listed below.  Phone: (918) 245-77  Fax: (918) 245-77	27-28- Delivery Date	J DK vithout
Addr City, State  I hereby certify that the generator site listed abo  Siver Signature	American Environme 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	Ship Date  Ship Date  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Driver Nam  US  I hereby certify incident to the decention of the decentio	Tag No. 704 SDOT No. 0301 that the above named m destination listed below.  Phone: (918) 245-77 Fax: (918) 245-77 armit No: 3557021	9-28- Delivery Date	JOK vithout
Addr City, State  I hereby certify that the generator site listed abo  City State  I hereby certify that the generator site listed abo  City Signature	American Environme 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK	Ship Date  Ship Date  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Driver Nam  US  I hereby certify incident to the of the priver Signature	Tag No. 704 SDOT No. 0301 that the above named m destination listed below.  Phone: (918) 245-77 Fax: (918) 245-77 armit No: 3557021	9-28- Delivery Date	JOK vithout

### American Environmental Landfill, Inc. Leading the Industry in Environmental Compliance **Non-Hazardous Waste Manifest**





Generator's Name:	USEPA Region 6 / Wi	lcox Oil Residence S	ite Manifest	i usë		
Mailing Address:			Job No.		_	
Maning Hadi Usb.	Dallas	TX 752	Bill to Name:	Environmental F	Restoration, LL	.c
Point of Generation	City	State Zip		1666 Fabick Drive		·
Address:				St. Louis City	MO State	63026
	Bristow City	OK 740 State Zip	10 Contact:	Evan Wortman		27-7477
Contact:	Steve Mason	(214) 789–1871		Name	Phone	
	Name	Phone	<del></del>			
Common Name of W	aste Material			Container No. Type	Total Quantity	Unit
on-Hazardous Soil		<u> </u>		1 DT		
					021	Y
	-Janspo	4		10	831	
I hereby certify that the	4		te as defined by 40 CFR_F	Part 261 or any annlicabl	le state law has hee	n properly
described, classified and	packaged, and is in pro		sportation according to a		e state law, has bee	ar property
			A 1: 1:	1		
	Masa	,	FA V V		(3.3)	> 1>
		Signatu	re A		× 9.2	7.17
Generator Authorized Age		Signatu	re		Snipment D	7.17 Pate
			re suspenser		Snipment D	7.1) Pate
Generator Authorized Age	Resim 6				Snipment	are
Generator Authorized Age	the Strate Control Con		કારાજ્ય (સુધ્યુપ્ત (સુધ્યુપ્ત સ્થાપ		Snipment	are
Generator Authorized Age	me: Yocham Trucking		Driver Nan	ne (Print): W:\\ Tag No. 700-	ian Oak 149 State:	are
Generator Authorized Age  Transporter Na  Addr  City, State	me: Yocham Trucking ess: Zip:		Driver Nan	ne (Print): W:\\\ Tag No. 700- SDOT No. 030	ian Oak 144 State:	(SOK
Generator Authorized Age  Transporter Na  Addr	me: Yocham Trucking ess: Zip: above material was picl		Driver Nam  US  I hereby certify	ne (Print): W:\\ Tag No. 700-	ian Oak 144 State:	(SOK
Generator Authorized Age  Transporter Na  Addr  City, State	me: Yocham Trucking ess: Zip: above material was picl		Driver Nam  US  I hereby certify	ne (Print):  Tag No.  DOD No.  that the above named m	ian Oak 144 State:	(SOK
Generator Authorized Age  Transporter Na  Addr  City, State	me: Yocham Trucking ess: Zip: above material was picl		Driver Nam  US  I hereby certify	ne (Print):  Tag No.  DOD No.  that the above named m	ian Oak 144 State:	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo	me: Yocham Trucking ess: Zip: above material was picl		Driver Nam  US  I hereby certify incident to the d	ne (Print):  Tag No.  DOD No.  that the above named m	iam Oak 149 State: 1005 aterial was delivere	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo	the Yocham Trucking ress:  Zip:  above material was picking.	ked up at the  Q.27.17 Ship Date	Driver Nam  US  I hereby certify incident to the d	ne (Print):  Tag No.  DOD  SDOT No.  that the above named melestimation listed below.	Shipment Diversity of the state:    149	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo	American Environme 212 N. 177th W Ave.	ked up at the  Q.2 .17  Ship Date  ental Landfill, Inc.	Driver Nam  US  I hereby certify incident to the description of the de	rne (Print):  Tag No.  D30  that the above named m destination listed below.  Phone: (918) 245-77  Fax: (918) 245-77	Snipment Diagram Oak 149 State: aterial was delivere Q. Delivery I	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 7	ked up at the  Q.27.17 Ship Date  ental Landfill, Inc.  4063	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245-77 Fax: (918) 245-77 ermit No: 3557021	Shipment Day Oak  149 State:  aterial was delivered  Delivery I	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 7	ked up at the  Q.27.17 Ship Date  ental Landfill, Inc.  4063	Driver Nam  US  I hereby certify incident to the description of the de	Phone: (918) 245-77 Fax: (918) 245-77 ermit No: 3557021	Shipment Day Oak  149 State:  aterial was delivered  Delivery I	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 7 ne above named mate	ked up at the  Q.2 .17 Ship Date  ental Landfill, Inc. 4063 rial has been accept	Driver Nam  US  I hereby certify incident to the decoration of the	Phone: (918) 245-77 Fax: (918) 245-77 ermit No: 3557021	Shipment Day of the Color of th	d without $28.17$
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo  Driver Signature	American Environme 212 N. 177th W Ave. Sand Springs, OK 7 ne above named material was picked.	ked up at the  Q.2 .17 Ship Date  ental Landfill, Inc. 4063 rial has been accept	Driver Nam  US  I hereby certify incident to the decoration of the	Phone: (918) 245-77 Fax: (918) 245-77 ermit No: 3557021	Shipment Day Oak  149 State:  aterial was delivered  Delivery I	Sed without 28.17
Generator Authorized Age  Transporter Na Addr City, State  I hereby certify that the generator site listed abo  Driver Signature  I hereby certify that the generator site listed Agent	American Environme 212 N. 177th W Ave. Sand Springs, OK 7 the above named material was picked.	ked up at the  Q.2).17 Ship Date  ental Landfill, Inc. 4063 rial has been accept Signature	Driver Nam  US  I hereby certify incident to the decoration of the	Phone: (918) 245-77 Fax: (918) 245-77 ermit No: 3557021 y Linowledge the foreg	Shipment Day  I M Oak  I M State:  1005  State:  Delivery I  786  774  going is accurate.  Receipt Day	SSOK  OK  ed without  28.17  Date

Generator's Name	USEPA Region 6 / W	ilooy Oil Pesidence S	ite Manifest	usE	
Mailing Address:		iloox on residence o	Job No.	•	
maning radioss.		TV 750	Bill to Name:	Environmental R	estoration, LLC
Point of Generation	<u>Dallas</u> City	TX 752 State Zip	.02	1666 Fabick Drive	
Address:				St. Louis	MO 63026
	Bristow	OK 740	 110 -	City	State Zip
	City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 789-1871 Phone			
				Container	Total
Common Name of W	aste Material			No. Type	Quantity Unit
Non-Hazardous Soil				1 DT	1.1100
					14651
+1	ansport				11.40
Generator Authorized Age  Transporter Na Addr City, State	ame: Yocham Trucking ess: Zip: above material was pic		Driver Nam  US  I hereby certify	Tag No. 700- DOT No. 03010 that the above named ma	Shipment Date  Hughe's  State: OK  aterial was delivered without
Driver Signature	h	<b>9-28-17</b> Ship Date	Driver Signature	estination listed below.  - Wylington	9-28-17 Delivery Date
	in a company of the		STEEL LINE CANED STREET		
	American Environm 212 N. 177 <sup>th</sup> W Ave Sand Springs, OK 7	. 1	Per	Phone: (918) 245-77 Fax: (918) 245-77 rmit No: 3557021	
I hereby certify that the Laura King Mick Name of Authorized Agent			ed and to the best of my	knowledge the foreg	oing is accurate 28 / Receipt Date
White - Destina	tion Retention • Ye	llow – Return to Bill	to • Pink – Transport	er Retain • Goldenr	od – Generator Retain

								W/	<b>₹</b> ' )
Generator's Name:	USEPA Region 6 /	Wilcox Oil Resid	ence Site	Manifest		use			
Mailing Address:	1445 Ross Ave		<del></del>	Job No.			-		
	Dallas City	TXState Zip	75202	Bill to Name:			Restoration	on, LLC	<u></u>
Point of Generation	1	State Zip	•	Address:	1666 Fabi				
Address:		014	74040		St. Louis City			MO ate Zij	63026 P
	Bristow City	OK State Zip	74010	Contact:	Evan Wort	man	PI	(636) 227 hone	-7477
Contact:	Steve Mason Name	(214) 789-1 Phone	1871						
					Conta		Tota	_	
Common Name of W	aste Material				No.	Type	Quant	ity C1	Tonit
Non-Hazardous Soil					1	DT	1.71		<u> </u>
	trans	21						<del></del>	
	, ,	U						<del></del>	
I hereby certify that the described, classified and	above named materi	al is not a hazardo	ous waste as o	lefined by 40 CFR P	Part 261 or ar	ny applicablulations.	e state law,	has been p	properly
< TOKON	Minson				pproducto reg.				
Generator Authorized Age	Region to			1 h		-	XShir	9.27	-17
Generator Authorized Age	ent Name			<del>V</del>					
		- 1000 -	Signature				Ship	ment Date	
Title Commence Com			Signature				ini erkir y		7.00
Transporter Na	ame:		a keta j		ne (Print):		ini erkir y		7.00
Transporter Na Add	ame: Y <del>ocham Truck</del> ress:		a keta j		ne (Print): Tag No.		ini erkir y		7.00
_	Y <del>ocham Truck</del> ress: 		a keta j	Driver Nam		KEN 700-11	Hugh.		7.00
Add	Yocham Truck ress: Zip: above material was	ing	a keta j	Driver Nam	DOT No.	KEN 700-14 03010	Hugh. 48	<b>State:</b> _	OK
Add City, State  I hereby certify that the	Yocham Truck ress: Zip: above material was	ing	a keta j	Driver Nam  US.  I hereby certify	DOT No.	KEN 700-14 03010	Hugha 48 205 aterial was d	State: _	OK without
Add City, State  I hereby certify that the	Yocham Truck ress: Zip: above material was	ing	a keta j	Driver Nam  US.  I hereby certify	DOT No.	KEN 700-14 03010	Hugha 48 205 aterial was d	State: _	OK without
Add City, State I hereby certify that the generator site listed abt	Yocham Truck ress: Zip: above material was ove.	picked up at the  G · 2 <sup>-</sup> Ship Date	7-17	US I hereby certify incident to the decention of the dece	that the above lestination lis	KEN 700-19 03.010 we named mated below.	Hugha  48  005  aterial was o	State:	OK without
Add City, State I hereby certify that the generator site listed abt	Yocham Truck ress: Zip: above material was ove.	picked up at the  Ship Date	7-17	Driver Nam  US  I hereby certify incident to the di	that the above destination list	KEN 700-14 03010 we named masted below.	Hugha 48 005 aterial was o	State:	OK without
Add City, State I hereby certify that the generator site listed abt	American Enviro	picked up at the  Ship Date  nmental Landfill, ave.	7-17	Driver Nam  US.  I hereby certify incident to the decention of the decenti	that the above destination list	700-14 0301 ( re named mated below. 918) 245-77 918) 245-77	Hugh a	State:	OK without
Add: City, State  I hereby certify that the generator site listed abt  Driver Signature	American Enviro 212 N. 177 <sup>th</sup> W. A Sand Springs, Ob	picked up at the  Ship Date  nmental Landfill, tye.	Inc.	Driver Nam  US.  I hereby certify incident to the divident to the divident Period Peri	Phone: (9 Fax: (9 rmit No: 3	Ve named mated below.	Hugha  Was atterial was a  December 1986	State:	OK without
Add City, State I hereby certify that the generator site listed abt	American Enviro 212 N. 177 <sup>th</sup> W. A Sand Springs, Ob	picked up at the  Ship Date  nmental Landfill, tye.	Inc.	Driver Nam  US.  I hereby certify incident to the divident to the divident Period Peri	Phone: (9 Fax: (9 rmit No: 3	Ve named mated below.	Hugha  Was atterial was a  December 1986	State:	OK without
Add City, State  I hereby certify that the generator site listed about the priver Signature  I hereby certify that the aura King Mick	American Enviro 212 N. 177th W. A Sand Springs, Oh he above named m	picked up at the  Ship Date  nmental Landfill, tye.	Inc.	Driver Nam  US.  I hereby certify incident to the divident to the divident Period Peri	Phone: (9 Fax: (9 rmit No: 3	Ve named mated below.	Hugh 2005  aterial was of the coing is accompany to the coing is accom	State:	OK without
Add City, State  I hereby certify that the generator site listed about the priver Signature  I hereby certify that the generator site listed about the priver Signature	American Enviro 212 N. 177th W. A Sand Springs, Oh he above named m	picked up at the  Ship Date  Inmental Landfill, tve.  74063  aterial has been	Inc.	Driver Nam  US.  I hereby certify incident to the divident to the divident Period Peri	Phone: (9 Fax: (9 rmit No: 3	Ve named mated below.	Hugh 2005  aterial was of the coing is accompany to the coing is accom	State:	OK without
Add City, State  I hereby certify that the generator site listed abt  Driver Signature  I hereby certify that the generator site listed abt  Additional control of the cont	American Enviro 212 N. 177th W. A Sand Springs, Oh he above named m	picked up at the  Ship Date  nmental Landfill, tve. 74063 aterial has been	Inc. accepted an	Driver Nam  US.  I hereby certify incident to the description of the d	Phone: (9 Fax: (9 rmit No: 3	700-19 70	Hugh 2005  aterial was of the coing is accompany to the coing is accom	State:	OK without

1 21		···				$ \langle \dot{\Omega} \dot{\Omega} \rangle$
Generator's Name:	USEPA Region	6 / Wilcox Oil F	Residence Site	Manifest	us <b>e</b>	
Mailing Address:	1445 Ross Ave			Job No.	MN520WIL0	<del></del>
	Dallas	TX	75202			Restoration, LLC
Point of Generation		State	Zip	Address:	1666 Fabick Drive	
Address:	(b) (6)				St. Louis City	MO 63026 State Zip
	Bristow City	OK State	74010 Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact:	Steve Mason Name	(214) 7 Phone	789-1871			
Common Name of W	aste Material				Container No. Type	Total Quantity Unit
Non-Hazardous Soil					<u> DT</u>	11161 1-
	+161	nsport	-			
I hereby certify that the described, classified and the second of the se	I packaged, and is	in proper condi				Shipment Date
Generator Authorized Age	ne Name		Signature			Simplified Date
			are dibitati	anortar.		
Transporter Na	me: <del>Yocham Tri</del>	. alcine		Driver Nam	ne (Print):	cm Maks
Addr	ess:	JOKING			Tag No. 700.	149 State: 0 K
City, State 2	Zip:			US	DOT No. 030	1005
I hereby certify that the generator site listed abo		as picked up at t	27.17		that the above named nestination listed below.	naterial was delivered without  Output  Delivery Date
				434 363 43 Englisher	Name of the State	
	American Env 212 N. 177 <sup>th</sup> W Sand Springs,		Ifill, Inc.	Per	Phone: (918) 245-7 Fax: (918) 245-7 rmit No: 3557021	
I hereby certify that the Aura King Mick Name of Auriorized Agent	i King Ra	material has b	een accepted a	and to the best of my	knowledge the fore	going is accurate.  Receipt Date
White - Destinat	tion Retention	• Yellow - Re	turn to Bill to	• Pink - Transport	er Retain • Golden	rod – Generator Retain
		<del></del>				

	SOME PROPERTY			16021
Generator's Name: USEPA Region 6 /	Wilcox Oil Residence Site	Manifest	USEL	
Mailing Address: 1445 Ross Ave		Job No.	MN520WIL01	
Dallas	TX 75202	Bill to Name:	Environmental Re	storation, LLC
City Point of Generation	State Zip	Address:	1666 Fabick Drive	P-,
Address: (b) (6)			St. Louis	MO 63026
Bristow	OK 74010	G	City	State Zip
City	State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone
Contact: <u>Steve Mason</u> Name	(214) 789-1871 Phone			
			Container	Total
Common Name of Waste Material			No. Type	Quantity Unit
Non-Hazardous Soil			I DT	13,001
I hereby certify that the above named materia described, classified and packaged, and is in Elm Control Contro	proper condition for transpor	defined by 40 CFR Partation according to ap	art 261 or any applicable plicable regulations.	A · 27 - 2017 Shipment Date
	acus and community of the state	alemaine in the second		
Transporter Name:		Driver Nam	ne (Print): KEN	Hughis  18 State: OK
Y <del>ocham Truck</del> Address:	ıng		Tag No. 700-14	State: OK
City, State Zip:		US	DOT No	
I hereby certify that the above material was p generator site listed above.	picked up at the		that the above named mate estination list of below.	erial was delivered without
Driver Signature	9-27-17 Ship Date	Driver Signature	Xigh	9 · 27 · 17  Delivery Date
Siver organization	The state of the s	The state of the s		Servery Suite
		San		
American Enviror 212 N. 177 <sup>th</sup> W A Sand Springs, OK		Per	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	
I hereby certify that the above named ma		_		Receipt Date

### **Non-Hazardous Waste Manifest**

		gigaes en de Perso	Gosta and Artist			and the second second		
Generator's Name:	USEPA Region 6 /	Wilcox Oil Re	sidence Site	Manifest				
Mailing Address:	1 <u>445 Ross Ave</u>			Job No.	MN520WILOT Environmental Restoration, LLC			
	Dallas	TX	75202			Restoration, LLG		
Point of Generation		State	Zip	Address:	1666 Fabick Drive	20000		
Address:	(b) (6)				St. Louis City	MO 63026 State Zip		
	Bristow City	OK State	74010 Zip	Contact:	Evan Wortman	(636) 227-7477		
<b>O</b> -1-1-1	•		•		Name	Phone		
Contact:	Steve Mason Name	(214) 78 Phone	39-1871					
					Container	Total		
Common Name of W	aste Material				No. Type	Quantity D Init		
Non-Hazardous Soil					1 DT	235/1		
+10	insport							
	γ							
I hereby certify that the described, classified and						le state law, has been properly		
	11 Hom	FF	~^		<b>,</b>			
Generator Authorized Ago	2 12 Equal (	a a	7	nd the		9.27.17		
Generator Authorized Age	ent Name		Signature			Shipment Date		
	i de la companya de	Transport	Second Factor	<u> វិស្សិស្តិសិក្សិសិក្</u>				
Transporter Na	ame.			Driver Nam	ne (Print):       \	in a Onle		
Add	Vochem Truck	ing			Tag No.	WA TOWNS		
City, State					<u> 700:</u>	149 State: OK		
City, State		<del></del>		US	DOT No. <u>030 1</u>	<u> </u>		
I hereby certify that the		oicked up at th	ne			aterial was delivered without		
generator site listed abo	<i>\</i> \	^		incident to the d	estination listed below.	A .		
William	K John .	<u> </u>	27.1)	Willia	aux bas	<u> </u>		
Driver Signature		Ship Da	ite	Driver Signature		Delivery Date		
		(Kabapatèné	A 100 10 10 10 10 10 10 10 10 10 10 10 10	15 (41 E (9) (1 Page 14) 2 E	and the second second			
	American Enviro	nmental Landi	fill, Inc.	and it seems were seed the comments of the	Phone: (918) 245-7	786		
	212 N. 177 <sup>th</sup> W A	ve.	,		Fax: (918) 245-7			
The land of	Sand Springs, OK			/	rmit No: 3557021			
I hereby certify that the	ne above named ma	iteriai nas be	en accepted	and to the best of my	knowledge the foreg	going is accurate.		
Thurs Kind Mis	eki Kina Pave	n Blunt	(/	W/ /		1011		
Pame of Authorized Agen	ki King Kave	<del>on Diunt</del>	Signature	N		Receipt Date		

White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain

Company of the second			and the North Assessment	darpiet.		
Generator's Name: USEPA Region	6 / Wilcox Oil	Residence	Site Ma	nifest	USE	ø1 · () )
Mailing Address: 1445 Ross Ave				ob No.	MN520WILO	_
	TX	75	Bill to	Name:	Environmental F	Restoration, LLC
<u>Dallas</u> City	State	Zip		ldress:	1666 Fabick Drive	
Point of Generation Address: (b) (6)					St. Louis	MO 63026
	-\ OK	7/	1010		City	State Zip
B <u>ristow</u> City	State	Zip	Co	ontact:	Evan Wortman Name	(636) 227-7477
Contact: Steve Mason Name	(214) Phone	789- <u>1871</u>	<u>_</u>		Name	Phone
					Container	Total 🛕
Common Name of Waste Material	44.				No. Type	Quantity . Unit
Non-Hazardous Soil			MARK TO THE REST OF THE PERSON		1 DT	
		*,				13,537
						1200 1
I hereby certify that the above named madescribed, classified and packaged, and						le state law, has been properly
STEPHEN MAN	is in proper con	*,	anoperation decorate		 	
10 FPARELIEN	10	1	7000	/ \		9.27-17
Generator Authorized Agent Name	10	Signa	ture	<b>→</b>		Shipment Date
ere de la compania d	C. T. Commercial and State Commercial Commer	alwan Dick to		e de la companya de		
			endable) visit		_	remarkation of the control of the co
Transporter Name:			Drive	er Nam	ne (Print):	1 Ooks
Y <del>ocham Ti</del> Address:	rucking	<del></del>	<del></del>		Tag No. 7001-	149 State: 0K
City, State Zip:			-	TIC		· <del></del>
			<del></del>	US	DOT No. <u>030</u>	1005
I hereby certify that the above material v	was picked up at	the				naterial was delivered without
generator site listed above.	_		incident	o the a	lestidation listed below.	0.02
Letilloin Kooks	Q_	27.1	$\sum_{i}  \mathcal{V}_{i} ^2$	Her	~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>
Driver Signature	Ship	Date	Driver Sig	nature	,	Delivery Date
in the state of th	enter en en en en	de de deservir es de	worself actions to	aran da	. Name of the state of the state of the	
	The second secon	Colorado de La Santo	Likeline Hacille and Line and Line Sh	and the state of	and the second s	
American En	vironmental I ar	dfill Inc			Phone: (918) 245-7	786
2 ½ N. 177 <sup>th</sup> '	vironmental Lar W Ave.	dfill, Inc.			Phone: (918) 245-7 Fax: (918) 245-7	
	W Ave.	dfill, Inc.		Pei		
2 ½ N. 177 <sup>th</sup> Said Springs, I hereby certify that the above named	W Ave. , OK 74063 d material has	been acce	oted and to the bes		Fax: (918) 245-7 tmit No: 3557021	774
2 ½ N. 177 <sup>th</sup> Said Springs, I hereby certify that the above named	W Ave. , OK 74063	been acce			Fax: (918) 245-7 tmit No: 3557021	774
2 ½ N. 177 <sup>th</sup> Said Springs, I hereby certify that the above named	W Ave. OK 74063 I material has	been acce	ydre V	t of my	Fax: (918) 245-7 rmit No: 3557021 y knowledge the fore	going is accurate



Acceptance of the property of	De mes		aga Salak		(551) V. Handerson		ika iliye e soverbe	de ser de la	
Caracter 2 Name of the		01.0	• 1	6.1	Manifest		1100		<i>7</i>
Generator's Name: USEPA		ox Oil Re	siden	ce Site	Job No.	MN	520 WIST	1	ŧ
Mailing Address: 1445 F					Bill to Name:	: Environmental Restoration, LLC			
<b>D<u>allas</u></b> City		TX State	Zip	75202	Address:	1666 Fa	bick Drive		
Point of Generation Address: (b) (6)						St. Loui	s	МО	63026
(5) (5)	,					City		State	Zip
<b>Bristo</b> City		OK State	Zip	74010	Contact:	Evan W Namé	ortman	(636) 22 Phone	27-7477
Contact: Steve Nam	Mason e	(214) 78 Phone	39 <u>–</u> 18	71			j.		
C N CW . N	c . • 1						ntainer	Total	T T ta
Common Name of Waste M	laterial				12 * 1	No.	Type	Quantity	Unit
Non-Hazardous Soil						1		14,16	1-
								11110	
+/1	ansport								
I hereby certify that the above	named material is	not a haza	ardous	s waste as	defined by 40 CFR P	art 261 o	any applicabl	e state law, has bee	n properly
described, classified and packa	ged, and is in prop	ber condit	1011 10	r transpor	ation according to ap	pricable	eguiations.		
ten Person	n 6 EPH				hUV		5	9.77	-17
Generator Authorized Agent Nam	e		Si	ignature	10mm			9-27 Shipment Da	ate
		of charles				Complete State			
		7		Biants	bouter		. /	. 1	September 2
Transporter Name:			1		Driver Nam	ne (Print)	: Kin	Hughes	
Address: 4	ooham Trucking	7.0				Tag No	700.	State:	OK
City, State Zip:		and the same of			US	DOT No	. 030		
I hereby certify that the above	material was picke	ed up at th	1e					aterial was delivere	d
generator site listed above.	7		*		incident to the d	estination	listed below.		
Les Lucla		9.2	7-1	7	Ken	V.	ha	9.7	27.47
Driver Signature		Ship Da	ite		Driver Signature	0		Delivery D	ate
and the second second		<b>,</b> 200 (100 (100 (100 (100 (100 (100 (100	Majors)	B. 600 11	ELECTRICATE CONTRACTOR	d entre de			facility (
	erican Environmer	ntal Landi	fill, In	c.		Phone:	(918) 245-7		1
	N. 177 <sup>th</sup> W Ave. d Springs, OK 74 <sup>th</sup>	063			Per	Fax: rmit No:	(918) 245-77 3557021	774	
I hereby certify that the above	ve named materi	al has be	en ag	ceptedi di	d to the best of my	knowle	dge the foreg	going is accurate.	
Laura King Micki Kir	ng Raven I	3lunt	( <u>f</u>	gature				Receipt Date	7/7
White Destination De	etention • Yell	ow – Ret	turn to	Bill to	Pink - Transport	er Retair	• Goldeni	rod - Generator Re	etain

	Non-Hazardous V	Vaste Man	ifest	ne ne
60/160	Gener	ator	· ·	63
Generator's Name: USEPA Region 6 Mailing Address: 1445 Ross Ave	/ Wilcox Oil Residence Site	Manifest Job No.	USE MN520 <del>WI</del> C01	
<u>Dallas</u> City	TX 75202 State Zip		Environmental Res	storation, LLC
Point of Generation Address: (b)	<u> </u>		St. Louis City	MO 63026 State Zip
B <u>ristow</u> City	OK 74010 State Zip	Contact:	Evan Wortman Name	=300 MeV. 947 MeV
Contact: Steve Mason Name	(214) 789-1871 Phone			
Common Name of Waste Material		4	Container No. Type	Total Quantity Unit
* "% #4	Trans		/	7.10
I hereby certify that the above named mate described, classified and packaged, and is full for the second s	n proper condition for transportation for transport	ion according to app	art 261 or any applicable s olicable regulations.	tate law, has been properly  10-2-(7 Shipment Date
Transporter Name:	Transp	Driver Name	e (Print): KENN	Hughes
Address:  City, State Zip:			Tag No. 700-14 DOT No. 03010	8 State: <b>D</b> K
I hereby certify that the above material was generator site listed above.	s picked up at the	I hereby certify the incident to the de	nat the above named mater stination listed below.	rial was delivered without
Driver Signature	10-2-17 Ship Date	Driver Signature	Solv	Delivery Date
	Destin	ation		,
212 N. 177 <sup>th</sup> W Sand Springs, C	OK 74063	Perr	Phone: (918) 245-7786 Fax: (918) 245-7774 mit No: 3557021	
I hereby certify that the above named raura King Micki King Rav	naterial has been accepted and en Blunt Signature	to the best of my	knowledge the foregoin	ng is accurate.  10-2-10  Receipt Date
White - Destination Retention •	Yellow - Return to Bill to •	Pink - Transporte	r Retain • Goldenrod	- Generator Retain

# American Environmental Landfill, Inc.

	Leading the In	ndustry in En	vironmental Compli	iance			
N	on-Haza	rdous V	Vaste Mar	nifest			1-
(041)2		Gener	ator			l	Do
Generator's Name: USEPA Region 6 / Wi Mailing Address: 1445 Ross Aye	loox Oil Reside	ence Site	Manifest Job' No.	LCS MN52044	€ <u>=01</u>		
Dallas City Point of Generation	TX State Zip	75202		Environment		on, LLC	
Address: (b) (6)  Bristow City  Contact: Steve Mason Name	OK State Zip (214) 789-1. Phone	74010 871	Contact:	St. Louis City Evan Wortman Name	S	MO tate Zip (636) 227-7	63026 7477
Common Name of Waste Material				Container No. Typ	Tota e Quant		Unit
	TRO	INS			_ ''		
I hereby certify that the above named material is described, classified and packaged, and is in prosperior of the packaged of	pper condition fo	is waste as de or transportat	fined by 40 CFR Prion according to ap	art 261 or any appl plicable regulation	s	O -2 -	
		Transp	orter				
Transporter Name:  Address:  City, State Zip:			Driver Nam USI	Tag No. 70	111emt.	Ooks State: 0	K
I hereby certify that the above material was pick generator site listed above	ced up at the		I hereby certify t incident to the de	that the above name estination listed bel	ed material was o	elivered wi	thout
Driver Signature	Ship Date	17	Driver Signature	mplab	De	lo 2.	12
	170	Destin	ation	,			
American Environme 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 7-		nc.	Per	Phone: (918) 24 Fax: (918) 24 mit No: 355702	15-7774		
I hereby certify that the above named mater		ccepted and	to the best of my	knowledge the f	oregoing is acc	firate.	1-17
aura King Micki King Raven Name of Authorized Agent	Biunt -s	ignature	UV		Reco	eipt Date	

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain •

Goldenrod - Generator Retain

### **Non-Hazardous Waste Manifest**

TIDAS								100
HOD)			Gene	rator			(	03/
Generator's Name: USEPA Region 6 / Wi Mailing Address: 1445 Ross Ave	Icox Oil F	Residenc	e Site	Manifest Job No.		4SC 520,44L01		
V- 1201				Bill to Name:	Enviro	nmental Re	storation, LLC	)
Dallas City	State	Zip	75202		1666 Fal			
Point of Generation Address (b) (6)					St. Louis	5	МО	63026
Bristow City	OK State	Zip	74010	Contact;	City Evan Wo	ortman	(636) 22	ip 7-7477
Contact: Steve Mason	(214) Phone	789–187	1		Name	;	Phone	
Common Name of Waste Material	Thone				Con No.	tainer	Total	Unit
Common Name of waste Material					140.	Type	Quantity	Om
on-Hazardous Soil					1	DT	100	7_
	TIY	ins				/	7.8.	37
I hereby certify that the above named material described, classified and packaged, and is in professional forms of the second of	roper con	dition fo	r transport	ation according to a	pplicable r	any applicable egulations.	10 - 2 Shipment Da	
9			Trans	porter		1,		
Transporter Name:  Address:  City, State Zip:	g			Driver Nar	Tag No	100		OK
I hereby certify that the above material was pigenerator site listed above.	cked up a	t the		I hereby certify incident to the	that the al	oove named ma listed below.	terial was delivered	without
Drive Signature Jahr		0-2-7 Date	7	Driver Signature	Ly	h/	Delivery D	2-17 ate
		P4.	Desti	nation				
American Environ 212 N. 177 <sup>th</sup> W Av Sand Springs, OK I hereby certify that the <u>abo</u> ve named mat	e. 74063			1 // 1	Phone: Fax: ermit No: ay knowle	(918) 245-77 (918) 245-77 3557021 dge the forego	74	- /^
			•	1/1/1 7	-		117	741)

White - Destination Retention • Yellow - Return to Bill to • Pink - Transporter Retain • Goldenrod - Generator Retain

		Non-Haza	ardous \	<b>Vaste Mar</b>	ilfest	j	10	1
COUP?	3		Gener	rator			0-2	<del> </del> :
Generator's Name: Mailing Address:	1445 Ross Ave			Manifest Job No. Bill to Name:	MN520		ration II(	3
Point of Generation Address:		TX State Zi			1666 Fabick I St. Louis City		MO State Zi	63026
Contact:	City  Steve Mason Name	OK State Zi (214) 789- Phone		Contact:	Evan Wortma Name	in <sub>i</sub>	(636) 22 Phone	7-7477
Common Name of W	aste Material				Containe No. T	ype Q	Total uantity	Unit
- 4	d packaged, and is in Nash Resimi	n proper condition					aw, has been	
. Transporter Na	Yocham Truc	king	Transp	oorter Driver Nam	1	KEN Hug	hes	
Addi City, State				US	Tag No. 7 DOT No. 6	301005	State:	DIC_
I hereby certify that the generator site listed about the Driver Signature		picked up at the	-17	I hereby certify incident to the d	that the above nestination listed	named material ville below.	post delivered	-17
ſ			Destir	nation		<del></del>		
I bereav certify that to aura King Mic. Name of Authorized Agen	212 N. 177 <sup>th</sup> W Sand Springs, O he above named r	K 74063		/. )	Fax: (918 rmit No: 355	8) 245-7786 8) 245-7774 7021 he foregoing is	s accurate.  Receipt Date	5 <i>L</i> )
White - Destina	tion Retention •	Yellow - Retur	n to Bill to •	Pink - Transport	ter Retain •	Goldenrod - G	enerator Re	tain

# American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance							
Non-Hazardous	Waste Man	ifest					
60 480 Gene	rator		631				
Generator's Name: USEPA Region 6 / Wilcox Oil Residence Site	Manifest Job No.	MN520WIL01	T				
Mailing Address: 1445 Ross Ave  Dallas TX 75202	Bill to Name:	Environmental Re	storation, LLC				
Point of Generation State Zip	Address:	1666 Fabick Drive					
Address: (b) (6)		St. Louis City	MO 63026 State Zip				
Bristow OK 74010 City State Zip	Contact:	Evan Wortman Name	(636) 227-7477 Phone				
Contact: Steve Mason (214) 789-1871 Name Phone							
Common Name of Waste Material		Container No. Type	Total Quantity Unit				
on–Hazardous Soil	1	T	101000				
I hereby certify that the above named material is not a hazardous waste as described, classified and packaged, and is in proper condition for transport.  Stephen Masm  Generator Authorized Agent Name  Signature			state law, has been properly  10-5-17  Shipment Date				
Trans	porter						
Transporter Name:	Driver Nam	e (Print):	Hughes				
Address: City, State Zip:		Tag No. 700 -/	48 State: OK				
		DOT No <b>0301</b>					
I hereby certify that the above material was picked up at the generator site listed above		that the above named mat estination listed below.	erial was delivered without				
Driver Signature 10-5-17 Ship Date	Driver Signature	Lylor	Delivery Date				
Destin	nation		7				
American Environmental Landfill, Inc. 212 N. 177 <sup>th</sup> W Ave. Sand Springs, OK 74063	7	Phone: (918) 245-778 Fax: (918) 245-777 mit No: 3557021					
I Kindy and if that the above newed metarial has been a facuted at	11/	r knowledge the fares	ina ia aamurata				
Libereby certify that the above named material has been a cepted a laura King Micki King Raven Blunt lignature	11/	knowledge the forego	ring is acgurate.				

BALL TI		Leading the i	noustry in Env	viroumentai Compili	ance		
4015	<b>]</b>	Non-Haza	rdous V	Vaste Mar	ifest	,	
100489	9		Gener	rator		6	3/
Generator's Name: Mailing Address:		Wilcox Oil Reside	ence Site	Manifest Job No.	MN520WIL0	1.	
	Dallas City	TX State Zip	75202		Environmental	Restoration, LL0	<u> </u>
Address:	(b) (6) Bristow	ОК	74010	Contant	St. Louis City		6302
Contact:	City Steve Mason Name	State Zip (214) 789-1 Phone		Contact:	Evan Wortman Name	(636) 22 Phone	<u>1-1411</u>
Common Name of Wa	3 1000 112	,,,,,,,			Container No. Type	Total Quantity	Unit
lon-Hazardous Soil					1 DT	1005	r_
I hereby certify that the described, classified and the following the following the following that the described classified and the de	packaged, and is in NASCA Recorde	al is not a hazardo proper condition	for transporta	efined by 40 CFR P	art 261 or any applica pplicable regulations.	ble state law, has been ble state law, ble state law, has been ble state law,	properly
			Transp	oorter		1,	
Transporter Na	Yocham Truck	ing		Driver Nan	ne (Print): KE	N Hughes	7)//
City, State				US	SDOT No030	1005 State:	_OR
I hereby certify that the generator situ listed abo	above material was	picked up at the			that the above pained lestination listed belov		) without
Driver Signature	gro	Ship Date	-17	Driver Signature	Light	Delivery D	/7 late
			Destir	nation			
	American Enviro 212 N. 177 W. / Sand Springs, Ol		Inc.	) 126	Phone: (918) 245- Fax: (918) 245- ermit No: 3557021		

Photoby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Laura King Micki King Raven Blunt

White - Destination Retention . Yellow - Return to Bill to . Pink - Transporter Retain . Goldenrod - Generator Retain

#### APPENDIX D

### **POLLUTION REPORTS**

### U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Wilcox Oil Refinery Site Residential Removal - Removal Polrep Initial Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #1

Initial -- Site Visit & Assessment

Wilcox Oil Refinery Site Residential Removal

Bristow, OK

**To:** Loree Boyanton, ODEQ

Craig Carroll, EPA Region 6 Reggie Cheatham, EPA HQ

From: Steve Mason, OSC

**Date:** 7/14/2017 **Reporting Period:** 07/06/2017

#### 1. Introduction

#### 1.1 Background

Site Number: 06GG Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Time-Critical

Response Lead: EPA Incident Category: Removal Assessment

NPL Status: NPL Operable Unit:

Mobilization Date: 7/6/2017 Start Date: 7/6/2017

Demob Date: Completion Date:

CERCLIS ID: OK0001011917 RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

#### 1.1.1 Incident Category

Time-Critical

#### 1.1.2 Site Description

Wilcox Oil Company is an inactive and abandoned oil refinery located in Bristow, Creek County, Oklahoma. The site consists of contaminated areas and surface water bodies due to releases from the former Wilcox and Lorraine Refineries. Wilcox Oil Company operated as a crude oil refinery from the 1920s until 1963. The main components of the facility consisted of a skimming plant, cracking unit, storage tanks and treatment equipment. Currently, several residents are located within the former refinery boundaries, half of which utilize ground water from private wells. Homes are located in areas of former waste operations.

#### 1.1.2.1 Location

The Wilcox Refinery Site is located northeast of the City of Bristow, Creek County, Oklahoma, at West 221st Street/Refinery Road, just east of U.S. Highway 66 (35.840804N, 96.380193W)

#### 1.1.2.2 Description of Threat

In 2014, community members expressed concerns about public access to oily sludge areas. The results of an expanded Site Inspection (ESI) by ODEQ in 2011 indicated high concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) in oily sludge waste at numerous locations on site, including the residential property at (b) (6) Street.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The site was included on the EPA National Priorities List (NPL) in December, 2013. In addition, oily sludge leaching from the ground was observed during a site assessment conducted by an EPA OSC in March, 2014. From May 22 to June 04, EPA conducted soil sampling (Phase 2) at several residences on the site. A review of sampling analytical results indicated benzo(a)pyrene is present at the residence in the soil above the EPA Removal Management Levels. In addition, during the sampling, visible oily sludge was observed in the samples, as well as small amounts on the ground surface.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

On July 6, 2017, EPA along with ODEQ met with (b) (6) and and conducted a site walk of the area around their residence. Hydrocarbon sludge was observed at or near the surface during the site walk. A general area of contamination was noted, including evidence of areas where oily liquid has surfaced and a small hole in the ground where oily liquid has surfaced recently. A brief discussion was held with (b) (6) regarding the potential of a Removal Action at the Site.

#### 2.1.2 Response Actions to Date

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Enforcement has determined there are no viable PRPs at this time.

#### 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

#### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Maps delineating the area of contamination have been developed and can be found in the Documents Section, https://response.epa.gov/sites/12277/files/0713171257%20FIGURE%202.pdf

#### 2.2.1.1 Planned Response Activities

The removal program will develop an action memo to conduct a removal action at the Site. The proposed action will remove and dispose of hydrocarbon sludges from impacted areas. The sludge material will be replaced with clean soil and the areas re-vegetated. Confirmation samples will be taken to confirm the area is below the established Residential Screening Level (RSL) for benzo(a)pyrene.

#### 2.2.1.2 Next Steps

The removal program will continue coordinating removal activities with the EPA remedial program, ODEQ, local officials, and the resident.

#### **2.2.2** Issues

#### 2.3 Logistics Section

No information available at this time.

#### 2.4 Finance Section

#### 2.4.1 Narrative

No information available at this time.

#### **Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining			
Extramural Costs							
TAT/START	\$30,000.00	\$0.00	\$30,000.00	100.00%			
Intramural Costs	Intramural Costs						
Total Site Costs	\$30,000.00	\$0.00	\$30,000.00	100.00%			

<sup>\*</sup> The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

#### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

No information available at this time.

#### 2.5.2 Liaison Officer

#### 2.5.3 Information Officer

#### 3. Participating Entities

#### 3.1 Unified Command

No information available at this time.

#### 3.2 Cooperating Agencies

#### 4. Personnel On Site

2 EPA OSCs

1 START Personnel

3 ODEQ Personnel

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

#### 6.1 Internet location of additional information/report

No information available at this time.

#### 6.2 Reporting Schedule

#### 7. Situational Reference Materials

No information available at this time.

### U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Wilcox Oil Refinery Site Residential Removal - Removal Polrep Final Removal Polrep



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #2

Final

Wilcox Oil Refinery Site Residential Removal

Bristow, OK

To: Loree Boyanton, ODEQ

Craig Carroll, EPA Region 6 Reggie Cheatham, EPA HQ

From: Steve Mason, OSC

**Date:** 10/25/2017 **Reporting Period:** 9/27 - 10/11/17

#### 1. Introduction

#### 1.1 Background

Site Number: 06GG Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Time-Critical

Response Lead: EPA Incident Category: Removal Assessment

NPL Status: NPL Operable Unit:

 Mobilization Date:
 7/6/2017
 Start Date:
 7/6/2017

 Demob Date:
 10/11/2017
 Completion Date:
 10/11/2017

CERCLIS ID: OK0001011917 RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

#### 1.1.1 Incident Category

Time-Critical

#### 1.1.2 Site Description

Wilcox Oil Company is an inactive and abandoned oil refinery located in Bristow, Creek County, Oklahoma. The site consists of contaminated areas and surface water bodies due to releases from the former Wilcox and Lorraine Refineries. Wilcox Oil Company operated as a crude oil refinery from the 1920s until 1963. The main components of the facility consisted of a skimming plant, cracking unit, storage tanks and treatment equipment. Currently, several residents are located within the former refinery boundaries, half of which utilize ground water from private wells. Homes are located in areas of former waste operations.

#### 1.1.2.1 Location

The Wilcox Refinery Site is located northeast of the City of Bristow, Creek County, Oklahoma, at West 221st Street/Refinery Road, just east of U.S. Highway 66 (35.840804N, 96.380193W)

#### 1.1.2.2 Description of Threat

In 2014, community members expressed concerns about public access to oily sludge areas. The results of an expanded Site Inspection (ESI) by ODEQ in 2011 indicated high concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) in oily sludge waste at numerous locations on site, including the residential property at (b) (6) Street.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The site was included on the EPA National Priorities List (NPL) in December, 2013. In addition, oily sludge leaching from the ground was observed during a site assessment conducted by an EPA OSC in March, 2014. From May 22 to June 04, EPA conducted soil sampling (Phase 2) at several residences on the site. A review of sampling analytical results indicated benzo(a)pyrene is present at the residence in the soil above the EPA Removal Management Levels. In addition, during the sampling, visible oily sludge was observed in the samples, as well as small amounts on the ground surface.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

On July 6, 2017, EPA along with ODEQ met with (b) (6) and and conducted a site walk of the area around their residence. Hydrocarbon sludge was observed at or near the surface during the site walk. A general area of contamination was noted, including evidence of areas where oily liquid has surfaced and a small hole in the ground where oily liquid has surfaced recently. A brief discussion was held with (b) (6) are regarding the potential of a Removal Action at the Site.

#### 2.1.2 Response Actions to Date

On 27 September 2017 EPA, ODEQ, START and ERRS mobilized to the site to conduct a time critical removal action. Removal activities included the excavation of oily sludge and oily impacted soils, confirmation sampling, and site restoration. Approximately 1,350 tons of oily sludge and oily impacted soils were excavated and transported off-site to American Environmental Landfill, Inc. located in Sand Springs, Oklahoma. Upon receipt of confirmation sample analytical data documenting benzo(a)pyrene results were below the EPA Region 6 Residential Screening Levels, the excavation was backfilled and the property was restored to pre-removal conditions.

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Enforcement has determined there are no viable PRPs at this time.

#### 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

#### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Maps delineating the area of contamination have been developed and can be found in the Documents Section, https://response.epa.gov/sites/12277/files/0713171257%20FIGURE%202.pdf

#### 2.2.1.1 Planned Response Activities

No additional response activities are planned at this time.

#### 2.2.1.2 Next Steps

#### **2.2.2** Issues

#### 2.3 Logistics Section

No information available at this time.

#### 2.4 Finance Section

#### 2.4.1 Narrative

No information available at this time.

#### **Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining			
Extramural Costs							
TAT/START	\$30,000.00	\$0.00	\$30,000.00	100.00%			
Intramural Costs	Intramural Costs						
Total Site Costs	\$30,000.00	\$0.00	\$30,000.00	100.00%			

<sup>\*</sup> The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

#### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

No information available at this time.

#### 2.5.2 Liaison Officer

#### 2.5.3 Information Officer

#### 3. Participating Entities

#### 3.1 Unified Command

No information available at this time.

#### 3.2 Cooperating Agencies

#### 4. Personnel On Site

- 1 EPA OSC
- 1 START Personnel
- 1 ODEQ Personnel
- 5 ERRS Personnel

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

#### 6.1 Internet location of additional information/report

No information available at this time.

#### 6.2 Reporting Schedule

#### 7. Situational Reference Materials

No information available at this time.

### APPENDIX E

### **DATA VALIDATION PACKAGES**

# 1A-IN INORGANIC ANALYSIS DATA SHEET METALS

Client	Sample :	ID:	Top Soil	Lab Sample ID:	490-137586-1
--------	----------	-----	----------	----------------	--------------

Lab Name: TestAmerica Nashville Job No.: 490-137586-1

Matrix: Solid Date Sampled: 09/27/2017 16:30

Reporting Basis: DRY Date Received: 09/28/2017 09:25

% Solids: 81.9

SDG ID.:

CAS No.	Analyte	Result	RL	MDL	Units	С	Q	DIL	Method
7429-90-5	Aluminum	12100	5.81	2.33	mg/Kg	T	1	1	6020A
7440-36-0	Antimony	0.233	0.581	0.233	mg/Kg	·U		1	6020A
7440-38-2	Arsenic	2.57	0.581	0.233	mg/Kg			1	6020A
7440-39-3	Barium	79.7	0.581	0.233	mg/Kg			1	6020A
7440-41-7	Beryllium	0.451	0.581	0.233	mg/Kg	₫ <b>J</b> Ø	<b>&gt;</b>	1	6020A
7440-43-9	Cadmium	0.233	0.581	0.233	mg/Kg	U		1	6020A
7440-70-2	Calcium	1890	58.1	29.1	mg/Kg			1	6020A
7440-47-3	Chromium	16.8	0.581	0.233	mg/Kg			1	6020A
7440-48-4	Cobalt	4.45	0.581	0.233	mg/Kg			1	6020A
7440-50-8	Copper	4.35	0.581	0.233	mg/Kg			1	6020A
7439-89-6	Iron	8860	5.81	2.33	mg/Kg			1	6020A
7439-92-1	Lead	7.44	0.581	0.233	mg/Kg			1	6020A
7439-95-4	Magnesium	1330	58.1	29.1	mg/Kg				6020A
7439-96-5	Manganese	242	0.581	0.233	mg/Kg			1	6020A
7440-02-0	Nickel	8.87	0.581	0.233	mg/Kg			1	6020A
7440-09-7	Potassium	1930	58.1	29.1	mg/Kg			1	6020A
7782-49-2	Selenium	0.233	0.581	0.233	mg/Kg	Ü		1	6020A
7440-22-4	Silver	0.116	0.581	0.116	mg/Kg	Ü	<u> </u>	1	6020A
7440-23-5	Sodium	155	58.1	29.1	mg/Kg			1	6020A
7440-28-0	Thallium	0.233	0.581	0.233	mg/Kg	U		1	6020A
7440-62-2	Vanadium	19.8	0.581	0.233	mg/Kg			1	6020A
7440-66-6	Zinc	26.4	5.81	2.33	mg/Kg	+		1	6020A
7439-97-6	Mercury	0.0380	0.121	0.0363	mg/Kg	* 10	<b>5</b>	1	7471B

83 10KH

# 1A-IN INORGANIC ANALYSIS DATA SHEET METALS

Client Sample ID: Backfill Lab Sample ID: 490-137586-2

Lab Name: TestAmerica Nashville Job No.: 490-137586-1

SDG ID.:

Matrix: Solid Date Sampled: 09/27/2017 16:35

Reporting Basis: DRY Date Received: 09/28/2017 09:25

% Solids: 88.0

CAS No.	Analyte	Result	RL	MDL	Units	С	Q	DIL	Method
7429-90-5	Aluminum	11300	5.61	2.25	mg/Kg	1	- -	1	6020A
7440-36-0	Antimony	0.225	0.561	0.225	mg/Kg	U		1	6020A
7440-38-2	Arsenic	3.47	0.561	0.225	mg/Kg		ļ ———	1	6020A
7440-39-3	Barium	66.7	0.561	0.225	mg/Kg		<u> </u>	1	6020A
7440-41-7	Beryllium	0.404	0.561	0.225	mg/Kg	J 36	•	1	6020A
7440-43-9	Cadmium	0.225	0.561	0.225	mg/Kg	U	/	1	6020A
7440-70-2	Calcium	1300	56.1	28.1	mg/Kg			1	6020A
7440-47~3	Chromium	14.0	0.561	0.225	mg/Kg			1	6020A
7440-48-4	Cobalt	3.30	0.561	0.225	mg/Kg			1	6020A
7440-50-8	Copper	3.17	0.561	0.225	mg/Kg			1	6020A
7439-89-6	Iron	7230	5,61	2.25	mg/Kg			1	6020A
7439-92-1	Lead	6.64	0.561	0.225	mg/Kg			1	6020A
7439-95-4	Magnesium	1140	56.1	28.1	mg/Kg			1	6020A
7439-96-5	Manganese	170	0.561	0.225	mg/Kg			1	6020A
7440-02-0	Nickel	6.66	0.561	0.225	mg/Kg			1	6020A
7440-09-7	Potassium	1860	56.1	28.1	mg/Kg			1	6020A
7782-49-2	Selenium	0.225	0.561	0.225	mg/Kg	.U		1	6020A
7440-22-4	Silver	0.112	0.561	0.112	mg/Kg	U		1	6020A
7440-23-5	Sodium	99.4	56.1	28.1	mg/Kg			1	6020A
7440-28-0	Thallium	0.225	0.561	0.225	mg/Kg	U		1	6020A
7440-62-2	Vanadium	17.7	0.561	0.225	mg/Kg			1	6020A
7440-66-6	Zinc	25.6	5.61	2.25	mg/Kg			1	6020A
7439-97-6	Mercury.	0.149	0.113	0.0339	mg/Kg			1	7471B

& PKH

Lab Name: TestAmerica Nashville Job No.: 490-137586-1 SDG No.: Client Sample ID: Top Soil Lab Sample ID: 490-137586-1 Lab File ID: 092817-024.D Matrix: Solid Analysis Method: 8270D SIM Date Collected: 09/27/2017 16:30 Extract. Method: 3550C Date Extracted: 09/28/2017 11:27 Sample wt/vol: 30.55(g) Date Analyzed: 09/28/2017 21:04 Con. Extract Vol.: 1.00(mL) Dilution Factor: 1 Level: (low/med) Low Injection Volume: 3(uL) % Moisture: 18.1 GPC Cleanup: (Y/N) N Analysis Batch No.: 463781 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.00264	U	0.00396	0.00264
208-96-8	Acenaphthylene	0.00216	Ũ	0.00396	0.00216
120-12-7	Anthracene	0.00156	Ũ	0.00396	0.00156
56-55-3	Benzo[a]anthracene	0.00156	J JQ	0.00396	0.00144
50-32-8	Benzo[a]pyrene	0.00230	F JQ	0.00396	0.00156
205-99-2	Benzo[b]fluoranthene	0.00400	7.	0.00396	0.00264
191-24-2	Benzo[g,h,i]perylene	0.00168	U	0.00396	0.00168
207-08-9	Benzo[k]fluoranthene	0.00216	Ū	0.00396	0.00216
218-01-9	Chrysene	0.00369	JQ	0.00396	0.00144
53-70-3	Dibenz(a,h)anthracene	0.00180	U	0.00396	0.00180
206-44-0	Fluoranthene	0.00288	y JQ	0.00396	0.00168
86-73-7	fluorene	0.00420	U	0.00600	0.00420
193-39-5	Indeno[1,2,3-cd]pyrene	0.00192	Ū	0.00396	0.00192
91-20-3	Naphthalene	0.00264	Ŭ	0.00396	0.00264
85-01-8	Phenanthrene	0.00204	Ũ	0.00396	0.00204
129-00-0	Pyrene	0.00372	8 JQ	0.00396	0.00180
91-57-6	2-Methylnaphthalene	0.00252	U	0.00396	0.00252
90-12-0	1-Methylnaphthalene	0.00216	Ü	0.00396	0.00216

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	64		29-120
4165-60-0	Nitrobenzene-d5	54		27-120
1718-51-0	Terphenyl-d14	60		13-120

ds 10/5/17

Lab Name: TestAmerica Nashville Job No.: 490-137586-1

SDG No.:

Client Sample ID: Backfill Lab Sample ID: 490-137586-2

Matrix: Solid Lab File ID: 092817-025.D

Analysis Method: 8270D SIM Date Collected: 09/27/2017 16:35

Extract. Method: 3550C Date Extracted: 09/28/2017 11:27

Sample wt/vol: 30.83(g) Date Analyzed: 09/28/2017 21:25

Con. Extract Vol.: 1.00(mL) Dilution Factor: 1

Injection Volume: 3(uL) Level: (low/med) Low

% Moisture: 12.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 463781 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.00243	U	0.00365	0.00243
208-96-8	Acenaphthylene	0.00199	U	0.00365	0.00199
120-12-7	Anthracene	0.00144	U	0.00365	0.00144
56-55-3	Benzo[a]anthracene	0.00327	8 JQ	0.00365	0.00133
50-32-8	Benzo[a]pyrene	0.00397		0.00365	0.00144
205-99-2	Benzo[b]fluoranthene	0.00689		0.00365	0.00243
191-24-2	Benzo[g,h,i]perylene	0.00218	8 JQ	0.00365	0.00155
207-08-9	Benzo[k]fluoranthene	0.00267	310	0.00365	0.00199
218-01-9	Chrysene	0.00555	- 29	0.00365	0.00133
53-70-3	Dibenz(a,h)anthracene	0.00166	Ü	0.00365	0.00166
206-44-0	Fluoranthene	0.00692		0.00365	0.00155
86-73-7	Fluorene	0.00387	U	0.00553	0.00387
193-39-5	Indeno[1,2,3-cd]pyrene	0.00177	U	0.00365	0.00177
91-20-3	Naphthalene	0.00243	U	0.00365	0.00243
85-01-8	Phenanthrene	0.00273	2 JQ	0.00365	0.00188
129-00-0	Pyrene	0.00833	1	0.00365	0.00166
91-57-6	2-Methylnaphthalene	0.00232	U	0.00365	0.00232
90-12-0	l-Methylnaphthalene	0.00199	Ū	0.00365	0.00199

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	71		29-120
4165-60-0	Nitrobenzene-d5	94		27-120
1718-51-0	Terphenyl-d14	61		13-120

Job No.: 490-137671-1

SDG No.:

Client Sample ID: WOR006-48-170928-56

Lab Sample ID: 490-137671-1

Matrix: Solid

Lab File ID: 092917-020.D

Analysis Method: 8270D SIM Date Collected: 09/28/2017 16:30

Extract. Method: 3550C Date Extracted: 09/29/2017 17:32 Sample wt/vol: 30.03(g) Date Analyzed: 09/29/2017 23:34

Con. Extract Vol.: 1.00(mL) Dilution Factor: 5

Injection Volume: 3(uL) Level: (low/med) Low

% Moisture: 15.9 GPC Cleanup: (Y/N) NANALYSIS Batch No.: 464267 Units: mg/Kg

Lab Name: TestAmerica Nashville

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.0271	45	0.0196	0.0131
208-96-8	Acenaphthylene	0.0129	3 JOH	0.0196	0.0107
120-12-7	Anthracene	0.00772	D-7611	0.0196	0.00772
56-55-3	Benzo[a]anthracene	0.00713	U	0.0196	0.00713
50-32-8	Benzo[a]pyrene	0.00772	U	0.0196	0.00772
205-99-2	Benzo[b]fluoranthene	0.0131	U	0.0196	0.0131
191-24-2	Benzo[g,h,i]perylene	0.00831	U	0.0196	0.00831
207-08-9	Benzo[k]fluoranthene	0.0107	Ū	0.0196	0.0107
218-01-9	Chrysene	0.00713	Ū	0.0196	0.00713
53-70-3	Dibenz(a,h)anthracene	0.00891	U .	0.0196	0.00891
206-44-0	Fluoranthene	0.00986	20H	0.0196	0.00831
86-73-7	Fluorene	0.0208	USAL	0.0297	0.0208
193-39-5	Indeno[1,2,3-cd]pyrene	0.00950	U	0.0196	0.00950
91-20-3	Naphthalene	0.0205	TH	0.0196	0.0131
85-01-8	Phenanthrene	0.0569	JH	0.0196	0.0101
129-00-0	Pyrene	0.0178	8 JOH	0.0196	0.00891
91-57-6	2-Methylnaphthalene	0.126	PIJK	0.0196	0.0125
90-12-0	1-Methylnaphthalene	0.119	PI JV	0.0196	0.0107

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	121	Х	29-120
4165-60-0	Nitrobenzene-d5	129	X	27-120
1718-51-0	Terphenyl-d14	92		13-120

de 10/10/P

Lab Name: TestAmerica Nashville Job No.: 490-137762-1

SDG No.:

Client Sample ID: WOR006-010-48-170929-56 Lab Sample ID: 490-137762-1

Matrix: Solid Lab File ID: 100317-004.D

Analysis Method: 8270D SIM Date Collected: 09/29/2017 16:35

Extract. Method: 3550C Date Extracted: 09/30/2017 16:38

Sample wt/vol: 30.31(g) Date Analyzed: 10/03/2017 09:39

Con. Extract Vol.: 1.00(mL) Dilution Factor: 5

Injection Volume: 3(uL) Level: (low/med) Low

% Moisture: 13.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 464885 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.0453	P# J#	0.0189	0.0126
208-96-8	Acenaphthylene	0.0272	711	0.0189	0.0103
120-12-7	Anthracene	0.00746	U	0.0189	0.00746
56-55-3	Benzo[a]anthracene	0.00689	U	0.0189	0.00689
50-32-8	Benzo[a]pyrene	0.00877	210	0.0189	0.00746
205-99-2	Benzo[b]fluoranthene	0.0129	8 JQ	0.0189	0.0126
191-24-2	Benzo[g,h,i]perylene	0.00803	U	0.0189	0.00803
207-08-9	Benzo[k]fluoranthene	0.0103	U	0.0189	0.0103
218-01-9	Chrysene	0.0444		0.0189	0.00689
53-70-3	Dibenz(a,h)anthracene	0.00861	U	0.0189	0.00861
206-44-0	Fluoranthene	0.0141	FID	0.0189	0.00803
86-73-7	Fluorene	0.0201	U EX	0.0287	0.0201
193-39-5	Indeno[1,2,3-cd]pyrene	0.00918	U PI	0.0189	0.00918
91-20-3	Naphthalene	0.0126	U PI	0.0189	0.0126
85-01-8	Phenanthrene	0.178	EX JH	0.0189	0.00976
129-00-0	Pyrene	0.0422		0.0189	0.00861
91-57-6	2-Methylnaphthalene	0.621	JL	0.0189	0.0121
90-12-0	1-Methylnaphthalene	0.431	ゴト	0.0189	0.0103

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	65		29-120
4165-60-0	Nitrobenzene-d5	260	Х	27-120
1718-51-0	Terphenyl-d14	70		13-120



Job No.: 490-137762-1

Analysis Method: 8270D SIM Date Collected: 09/29/2017 16:40

Extract. Method: 3550C Date Extracted: 09/30/2017 16:38

 Sample wt/vol: 30.47(g)
 Date Analyzed: 10/03/2017 10:39

 Con. Extract Vol.: 1.00(mL)
 Dilution Factor: 5

Injection Volume: 3(uL) Level: (low/med) Low

Units: mg/Kg

% Moisture: 14.2 GPC Cleanup:(Y/N) N

Lab Name: TestAmerica Nashville

Analysis Batch No.: 464885

CAS NO. COMPOUND NAME RESULT Q RL MDL 83-32-9 Acenaphthene 0.159 0.0189 0.0126 208-96-8 Acenaphthylene 0.0571 0.0189 0.0103 120-12-7 Anthracene 0.00746 U 0.0189 0.00746 56-55-3 Benzo[a]anthracene 0.00688 U 0.0189 0.00688 0.0117 JOH 0.00746 50-32-8 Benzo[a]pyrene 0.0189 0.0189 - 11 0.0189 0.0126 205-99-2 Benzo[b]fluoranthene 0.0114 Jak 191-24-2 Benzo[g,h,i]perylene 0.0189 0.00803 0.0103 + W 0.0189 0.0103 207-08-9 Benzo[k]fluoranthene 0.00688 U 0.0189 0.00688 218-01-9 Chrysene 0.00860 -<del>U "</del> W 53-70-3 0.0189 0.00860 Dibenz(a,h)anthracene 0.00803 206-44-0 0.0309 0.0189 Fluoranthene 86-73-7 0.0201 0.0201 Fluorene 0.0287 193-39-5 0.00980 0.0189 0.00918 Indeno[1,2,3-cd]pyrene 91-20-3 0.0126 Naphthalene 0.0189 0.0126 85-01-8 Phenanthrene 0.449 0.0189 0.00975 129-00-0 0.0650 0.0189 0.00860 Pvrene 91-57-6 2-Methylnaphthalene 1.63 0.0189 0.0120 90-12-0 l-Methylnaphthalene 1.27 0.0189 0.0103

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	104		29-120
4165-60-0	Nitrobenzene-d5	607	X	27-120
1718-51-0	Terphenyl-d14	103		13-120

& 19/19

Client Sample ID: West-01 Lab Sample ID: 490-137889-3

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG ID.:

Matrix: Solid Date Sampled: 10/02/2017 14:10

Reporting Basis: DRY Date Received: 10/03/2017 10:05

% Solids: 98.5

						1			
CAS No.	Analyte	Result	RL	MDL	Units	С	Q.	DIL	Method
7429-90-5	Aluminum	1810	4.76	1.91	mg/Kg		1	1	6020A
7440-36-0	Antimony	0.241	0.476	0.191	mg/Kg	18	28 V	B 1	6020A
7440-38-2	Arsenic	1.63	0.476	0.191	mg/Kg	1	- · · ·	1	6020A
7440-39-3	Barium	20.7	0.476	0.191	mg/Kg			1	6020A
7440-41-7	Beryllium	0.191	0.476	0.191	mg/Kg	Ū	<del></del>	1	6020A
7440-43-9	Cadmium	0.191	0.476	0.191	mg/Kg	U		1	6020A
7440-70-2	Calcium	228	47.6	23.8	mg/Kg			1	6020A
7440-47-3	Chromium	4.46	0.476	0.191	mg/Kg			, 1	6020A
7440-48-4	Cobalt	6.56	0.476	0.191	mg/Kg			1	6020A
7440-50-8	Copper	3.96	0.476	0.191	mg/Kg			1	6020A
7439-89-6	Iron	10500	4.76	1.91	mg/Kg		B	1	6020A
7439-92-1	Lead	11.5	0.476	0.191	mg/Kg			1	6020A
7439-95-4	Magnesium	130	47.6	23.8	mg/Kg			1	6020A
7439-96-5	Manganese	1020	2.38	0.953	mg/Kg	1		5	6020A
7440-02-0	Nickel	5.69	0.476	0.191	mg/Kg			1	6020A
7440-09-7	Potassium	181	47.6	, 23.8	mg/Kg			1	6020A
7782-49-2	Selenium	0.953	2.38	0.953	mg/Kg	U	1	5	6020A
7440-22-4	Silver	0.0953	0.476	0.0953	mg/Kg	U		1	6020A
7440-23-5	Sodium	68.8	47.6	23.8	mg/Kg		,	1	6020A
7440-28-0	Thallium	0.191	0.476	0.191	mg/Kg	U		1	6020A
7440-62-2	Vanadium	10.2	0.476	0.191	mg/Kg			1	6020A
7440-66-6	Zinc ·	43.6	23.8	9.53	mg/Kg			5	6020A
7439-97-6	Mercury	0.0355	0.0975	0.0292	mg/Kg	7 3	S)	1	7471B

& policial &

Client Sample ID: West-02 Lab Sample ID: 490-137889-4

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG ID.:

Matrix: Solid Date Sampled: 10/02/2017 14:20

Reporting Basis: DRY Date Received: 10/03/2017 10:05

% Solids: 98.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	3480	5.07	2.03	mg/Kg	1		1	6020A
7440-36-0	Antimony	0.300	0.507	0.203	mg/Kg	1	FR	υ <b>8</b> 1	6020A
7440-38-2	Arsenic	2.19	0.507	0.203	mg/Kg		7	1	6020A
7440-39-3	Barium	35.3	0.507	0.203	mg/Kg	-		1	6020A
7440-41-7	Beryllium	0.214	0.507	0.203	mg/Kg	1	10	1	6020A
7440-43-9	Cadmium	0.253	0.507	0.203	mg/Kg	ستنر	JQ	1	6020A
7440-70-2	Calcium	1010	50.7	25.4	mg/Kg		7	1	6020A
7440-47-3	Chromium	5.74	0.507	0.203	mg/Kg			1	6020A
7440-48-4	Cobalt	2.36	0.507	0.203	mg/Kg			1	6020A
7440-50-8	Copper	4.53	0.507	0.203	mg/Kg			1	6020A
7439-89-6	Iron	7690	5.07	2.03	mg/Kg		P	1	6020A
7439-92-1	Lead .	36.9	0.507	0.203	mg/Kg			1	6020A
7439-95-4	Magnesium	431	50.7	25.4	mg/Kg			1	6020A
7439-96-5	Manganese	90.5	0.507	0.203	mg/Kg			1	6020A
7440-02-0	Nickel	3.80	0.507	0.203	mg/Kg			1	6020A
7440-09-7	Potassium	337	50.7	25.4	mg/Kg			1	6020A
7782-49-2	Selenium	0.337	0.507	0.203	mg/Kg	1	JQ	1	6020A
7440-22-4	Silver	0.101	0.507	0.101	mg/Kg	U	77	1	6020A
7440-23-5	Sodium	736	50.7	25.4	mg/Kg			1	6020A
7440-28-0	Thallium	0.203	0.507	0.203	mg/Kg	U		1	6020A
7440-62-2	Vanadium	14.7	0.507	0.203	mg/Kg			1	6020A
7440-66-6	Zinc	31.9	5.07	2.03	mg/Kg			1	6020A
7439-97-6	Mercury	0.0385	0.100	0.0301	mg/Kg	J.	JQ	1	7471B

Re 10/12/12

Client Sample ID: North Lab Sample ID: 490-137889-5

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG ID.:

Matrix: Solid Date Sampled: 10/02/2017 14:30

Reporting Basis: DRY Date Received: 10/03/2017 10:05

% Solids: 98.4

CAS No.	Analyte	Result	RL	MDL	Units	С	Q	DIL	Method
7429-90-5	Aluminum	2000	4.98	1.99	mg/Kg	<del>                                     </del>	<del> </del>	1	6020A
7440-36-0	Antimony	0.314	0.498	0.199	mg/Kg	1	10	UB 1	6020A
7440-38-2	Arsenic	1.41	0.498	0.199	mg/Kg	†	7	1	6020A
7440-39-3	Barium	28.1	0.498	0.199	mg/Kg	1	1	1	6020A
7440-41-7	Beryllium	0.199	0.498	0.199	mg/Kg	U		1	6020A
7440-43-9	Cadmium	0.199	0.498	0.199	mg/Kg	U		1	6020A
7440-70-2	Calcium	281	49.8	24.9	mg/Kg			1	6020A
7440-47-3	Chromium	4.13	0.498	0.199	mg/Kg	<b>†</b>		1 1	6020A
7440-48-4	Cobalt	1.14	0.498	0.199	mg/Kg			1	6020A
7440-50-8	Copper	2,71	0.498	0.199	mg/Kg			1	6020A
7439-89-6	Iron	5260	4.98	1.99	mg/Kg		1	1	6020A
7439-92-1	Lead	24.9	0.498	0.199	mg/Kg			1	6020A
7439-95-4	Magnesium	203	49.8	24.9	mg/Kg			1	6020A
7439-96-5	Manganese	42.2	0.498	0.199	mg/Kg			1	6020A
7440-02-0	Nickel	2.13	0.498	0.199	mg/Kg		1	1	6020A
7440-09-7	Potassium	198	49.8	24.9	mg/Kg		<b>†</b>	1	6020A
7782-49-2	Selenium	0.218	0.498	0.199	mg/Kg	سند ا	JO	1	6020A
7440-22-4	Silver	0.0996	0.498	0.0996	mg/Kg	Ū	7.7	1	6020A
7440-23-5	Sodium	24.9	49.8	24.9	mg/Kg	Ū	1	1	6020A
7440-28-0	Thallium	0.199	0.498	0.199	mg/Kg	U .	1	1	6020A
7440-62-2	Vanadium	10.0	0.498	0.199	mg/Kg		<del> </del>	1	6020A
7440-66-6	Zinc	16.2	4.98	1.99	mg/Kg		+	1	6020A
7439-97-6	Mercury	0.0482	0.100	0.0301	mg/Kg	J	JO	1	7471B

& Works

Client Sample ID: South	Lab Sample ID: 490-137889-6
Lab Name: TestAmerica Nashville	Job No.: 490-137889-1
SDG ID.:	
Matrix: Solid	Date Sampled: 10/02/2017 14:45

Date Received: 10/03/2017 10:05

% Solids: 97.8

Reporting Basis: DRY

CAS No.	Analyte	Result	RL	MDL	Units	. C -	Q	DIL	Method
7429-90-5	Aluminum	3610	5.09	2.04	mg/Kg				1 6020A
7440-36-0	Antimony	0.351	0.509	0.204	mg/Kg	<u>چر</u>	JA	UB	1 6020A
7440-38-2	Arsenic	2.53	0.509	0.204	mg/Kg				1 6020A
7440-39-3	Barium	71.1	0.509	0.204	mg/Kg				1 6020A
7440-41-7	Beryllium	0.252	0.509	0.204	mg/Kg	J	JP		1 6020A
7440-43-9	Cadmium	0.212	0.509	0.204	mg/Kg	<i>1</i> 3-	JO		1 6020A
7440-70-2	Calcium	425	50.9	25.4	mg/Kg		Cist		1 6020A
7440-47-3	Chromium	6.05	0.509	0.204	mg/Kg				1 6020A
7440-48-4	Cobalt	2.18	0.509	0.204	mg/Kg				1 6020A
7440-50-8	Copper	4.97	0.509	0.204	mg/Kg				1 6020A
7439-89-6	Iron	10500	5.09	2.04	mg/Kg		B		1 6020A
7439-92-1	Lead	36.4	0.509	0.204	mg/Kg				1 6020A
7439-95-4	Magnesium	302	50.9	25.4	mg/Kg				1 6020A
7439-96-5	Manganese	53.7	0.509	0.204	mg/Kg				1 6020A
7440-02-0	Nickel	3.07	0.509	0.204	mg/Kg			-	1 6020A
7440-09-7	Potassium	358	50.9	25.4	mg/Kg				1 6020A
7782-49-2	Selenium	0.373	0.509	0.204	mg/Kg	سلند	<b>JQ</b>		1 6020A
7440-22-4	Silver	0.102	0.509	0.102	mg/Kg	U			1 6020A
7440-23-5	Sodium	25.4	50.9	25.4	mg/Kg	Ü			1 6020A
7440-28-0	Thallium	0.204	0.509	0.204	mg/Kg	U	-		1 6020A
7440-62-2	Vanadium	13.2	0.509	0.204	mg/Kg				1 6020A
7440-66-6	Zinc	20.6	5.09	2.04	mg/Kg				1 6020A
7439-97-6	Mercury	0.0539	0.100	0.0301	mg/Kg	-	JØ		1 7471B

of 10/6/43

Lab Name: TestAmerica Nashville Job No.: 490-137889-1 SDG No.: Client Sample ID: WOR006-012-36-171002-56 Lab Sample ID: 490-137889-1 Matrix: Solid Lab File ID: 100317-025.D Analysis Method: 8270D SIM Date Collected: 10/02/2017 08:00 Extract. Method: 3550C Date Extracted: 10/03/2017 12:54 Sample wt/vol: '30.35(g) Date Analyzed: 10/03/2017 17:26 Con. Extract Vol.: 1.00(mL) Dilution Factor: 10 Injection Volume: 3(uL) Level: (low/med) Low % Moisture: 9.9 GPC Cleanup: (Y/N) N Analysis Batch No.: 464885 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-73-7	Fluorene	0.308		0.0549	0.0384
208-96-8	Acenaphthylene	0.0198	U	0.0362	0.0198
85-01-8	Phenanthrene	0.644		0.0362	0.0187
120-12-7	Anthracene	0.0143	U	0.0362	0.0143
91-57-6	2-Methylnaphthalene	1.60		0.0362	0.0230
129-00-0	Pyrene	0.364		0.0362	0.0165
91-20-3	Naphthalene	0.269		0.0362	0.0241
206-44-0	Fluoranthene	0.0889		0.0362	0.0154
90-12-0	1-Methylnaphthalene	0.983		0.0362	0.0198
56-55-3	Benzo[a]anthracene	0.148		0.0362	0.0132
218-01-9	Chrysene	0.335		0.0362	0.0132
83-32-9	Acenaphthene	0.228	· ·	0.0362	0.0241

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	109		29-120
4165-60-0	Nitrobenzene-d5	247	X	27-120
1718-51-0	Terphenyl-d14	85		13-120

FORM I 8270D SIM

Page 325 of 1022

019145.154

Job No.: 490-137889-1 Lab Name: TestAmerica Nashville SDG No.: Client Sample ID: WOR006-012-36-171002-56 Lab Sample ID: 490-137889-1 Lab File ID: 100417-004.D Matrix: Solid Analysis Method: 8270D SIM Date Collected: 10/02/2017 08:00 Extract. Method: 3550C Date Extracted: 10/03/2017 12:54 Sample wt/vol: 30.35(g) Date Analyzed: 10/04/2017 10:26 Con. Extract Vol.: 1.00(mL) Dilution Factor: 25 Injection Volume: 3(uL) Level: (low/med) Low % Moisture: 9.9 GPC Cleanup: (Y/N) N Analysis Batch No.: 465270 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.0934		0.0905	0.0357
191-24-2	Benzo[g,h,i]perylene	0.0541	7.70	0.0905	0.0384
207-08-9	Benzo[k]fluoranthene	0.0494	U	0.0905	0.0494
53-70-3	Dibenz(a,h)anthracene	0.0412	U	0.0905	0.0412
193-39-5	Indeno[1,2,3-cd]pyrene	0.0439	U.	0.0905	0.0439
205-99-2	Benzo[b]fluoranthene	0.146		0.0905	0.0604

& phyla

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: WOR006-011-36-171002-56 Lab Sample ID: 490-137889-2

Matrix: Solid

Lab File ID: 100317-026.D

Analysis Method: 8270D SIM Extract. Method: 3550C

Date Collected: 10/02/2017 08:20 Date Extracted: 10/03/2017 12:54

Sample wt/vol: 30.05(g)

Date Analyzed: 10/03/2017 17:46

Con. Extract Vol.: 1.00(mL)

Dilution Factor: 10

Injection Volume: 3(uL)

Level: (low/med) Low

GPC Cleanup: (Y/N) N

% Moisture: 12.3 Analysis Batch No.: 464885

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
86-73-7	Fluorene	0.141		0.0569	0.0398
208-96-8	Acenaphthylene	0.0205	Ü	0.0376	0.0205
85-01-8	Phenanthrene	0.316		0.0376	0.0193
120-12-7	Änthracene	0.0148	Ū	0.0376	0.0148
91-57-6	2-Methylnaphthalene	0.158		0.0376	0.0239
129-00-0	Pyrene	0.179		0.0376	0.0171
91-20-3	Naphthalene	0.0250	Ū	0.0376	0.0250
206-44-0	Fluoranthene	0.0658		0.0376	0.0159
90-12-0	1-Methylnaphthalene	0.145		0.0376	0.0205
56-55-3	Benzo[a]anthracene	0.0638		0.0376	0.0137
218-01-9	Chrysene	0.226		0.0376	0.0137
83-32-9	Acenaphthene	0.0250	Ū	0.0376	0.0250

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	97		29-120
4165-60-0	Nitrobenzene-d5	255	Х	27-120
1718-51-0	Terphenyl-d14	95		13-120

& phyly

Lab Name: TestAmerica Nashville Job No.: 490-137889-1
SDG No.:

Matrix: Solid Lab File ID: 100417-005.D

Analysis Method: 8270D SIM Date Collected: 10/02/2017 08:20

Extract. Method: 3550C Date Extracted: 10/03/2017 12:54

Sample wt/vol: 30.05(g) Date Analyzed: 10/04/2017 10:46

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 3(uL) Level: (low/med) Low

% Moisture: 12.3 GPC Cleanup: (Y/N) N

Analysis Batch No.: 465270 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.0370	U	0.0939	0.0370
191-24-2	Benzo[g,h,i]perylene	0.0398	U	0.0939	0.0398
207-08-9	Benzo[k]fluoranthene	0.0512	U	0.0939	0.0512
53-70-3	Dibenz(a,h)anthracene	0.0427	U	0.0939	0.0427
193-39-5	Indeno[1,2,3-cd]pyrene	0.0455	U	0.0939	0.0455
205-99-2	Benzo[b]fluoranthene	0.0739	4. DD	0.0939	0.0626

Job No.: 490-137889-1 Lab Name: TestAmerica Nashville SDG No.: Client Sample ID: West-01 Lab Sample ID: 490-137889-3 Matrix: Solid Lab File ID: 100317-027.D Analysis Method: 8270D SIM Date Collected: 10/02/2017 14:10 Extract. Method: 3550C Date Extracted: 10/03/2017 12:54 Sample wt/vol:.30.11(g) Date Analyzed: 10/03/2017 18:06 Con. Extract Vol.: 1.00(mL) Dilution Factor: 10 Injection Volume: 3(uL) Level: (low/med) Low % Moisture: 1.5 GPC Cleanup:(Y/N) N Analysis Batch No.: 464885 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.118	/ JH	0.0334	0.0132
86-73-7	Fluorene	0.0474	J- 300	0.0506	0.0354
208-96-8	Acenaphthylene	0.0182	U	0.0334	0.0182
191-24-2	Benzo[g,h,i]perylene	0.132	~ JH	0.0334	0.0142
85-01-8	Phenanthrene	0.386		0.0334	0.0172
207-08-9	Benzo[k]fluoranthene	0.0335	-JH	0.0334	0.0182
120-12-7	Anthracene	0.0132	U	0.0334	0.0132
91-57-6	2-Methylnaphthalene	0.0655		0.0334	0.0212
129-00-0	Pyrene	0.315		0.0334	0.0152
53-70-3	Dibenz(a,h)anthracene	0.0466	~ JH	0.0334	0.0152
91-20-3	Naphthalene	0.0223	U	0.0334	0.0223
206-44-0	Fluoranthene	0.0547		0.0334	0.0142
90-12-0	1-Methylnaphthalene	0.0182	Ū	0.0334	0.0182
56-55-3	Benzo[a]anthracene	0.124		0.0334	0.0121
193-39-5	Indeno[1,2,3-cd]pyrene	0.106	-JH	0.0334	0.0162
218-01-9	Chrysene	0.396		0.0334	0.0121
83-32-9	Acenaphthene	0.0223	U	0.0334	0.0223
205-99-2	Benzo[b]fluoranthene	0.144	777	0.0334	0.0223

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	19	Х	29-120
4165-60-0	Nitrobenzene-d5	32		27-120
1718-51-0	Terphenyl-d14	15		13-120

& tolpyla

Lab Name: TestAmerica Nashville Job No.: 490-137889-1 SDG No.: Client Sample ID: West-02 Lab Sample ID: 490-137889-4 Matrix: Solid Lab File ID: 100317-028.D Analysis Method: 8270D SIM Date Collected: 10/02/2017 14:20 Extract. Method: 3550C Date Extracted: 10/03/2017 12:54 Sample wt/vol: 30.15(g) Date Analyzed: 10/03/2017 18:26 Dilution Factor: 10 Con. Extract Vol.: 1.00(mL) Level: (low/med) Low Injection Volume: 3(uL) % Moisture: 1.4. GPC Cleanup: (Y/N) N Analysis Batch No.: 464885 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.0731	- JN	0.0333	0.0131
86-73-7	Fluorene	0.0353	U	0.0505	0.0353
208-96-8	Acenaphthylene	0.0247	7 IB	0.0333	0.0182
191-24-2	Benzo[g,h,i]perylene	0.136	1 JUE .	0.0333	0.0141
85-01-8	Phenanthrene	0.0318	JQ -	0.0333	0.0172
207-08-9	Benzo[k]fluoranthene	0.0395	1 LC ~	0.0333	0.0182
120-12-7	Anthracene	0.0131	U	0.0333	0.0131
91-57-6	2-Methylnaphthalene	0.0212	U	0.0333	0.0212
129-00-0	Pyrene	0.0959		0.0333	0.0151
53-70-3	Dibenz(a,h)anthracene	0.0151	4 tr	0.0333	0.0151
91-20-3	Naphthalene	0.0222	U	0.0333	0.0222
206-44-0	Fluoranthene	0.0624		0.0333	0.0141
90-12-0	1-Methylnaphthalene	0.0182	U	0.0333	0.0182
56-55-3	Benzo[a]anthracene	0.0570		0.0333	0.0121
193-39-5	Indeno[1,2,3-cd]pyrene	0.0954	~2H	0.0333	0.0162
218-01-9	Chrysene	0.195	311	0.0333	0.0121
83-32-9	Acenaphthene	0.0222	U	0.0333	0.0222
205-99-2	Benzo[b]fluoranthene	0.139	111	0.0333	0.0222

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	19	X	29-120
4165-60-0	Nitrobenzene-d5	17	Х	27-120
1718-51-0	Terphenyl-d14	20		13-120

B 10/10/19

Lab Name: TestAmerica Nashville Job No.: 490-137889-1 SDG No.: \_\_\_\_ Client Sample ID: North Lab Sample ID: 490-137889-5 Matrix: Solid Lab File ID: 100317-029.D Analysis Method: 8270D SIM Date Collected: 10/02/2017 14:30 Extract. Method: 3550C Date Extracted: 10/03/2017 12:54 Sample wt/vol: 30.27(g) Date Analyzed: 10/03/2017 18:46 Con. Extract Vol.: 1.00(mL) Dilution Factor: 25 Injection Volume: 3(uL) Level: (low/med) Low % Moisture: 1.6 GPC Cleanup: (Y/N) N Analysis Batch No.: 464885 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.0363	- JO	0.0831	0.0327
86-73-7	Fluorene	0.0881	U	0.126	0.0881
208-96-8	Acenaphthylene	0.0453	U	0.0831	0.0453
191-24-2	Benzo[g,h,i]perylene	0.0613	2JQ	0.0831	0.0352
85-01-8	Phenanthrene	0.0428	U	0.0831	0.0428
207-08-9	Benzo[k]fluoranthene	0.0453	U	0.0831	0.0453
120-12-7	Anthracene	0.0327	Ū	0.0831	0.0327
91-57-6	2-Methylnaphthalene	0.0529	U	0.0831	0.0529
129-00-0	Pyrene	0.0474	PJQ	0.0831	0.0378
53-70-3	Dibenz(a,h)anthracene	0.0378	U	0.0831	0.0378
91-20-3	Naphthalene	0.0554	U	0.0831	0.0554
206-44-0	Fluoranthene	0.0352	U	0.0831	0.0352
90-12-0	1-Methylnaphthalene	0.0453	Ū	0.0831	0.0453
56-55-3	Benzo[a]anthracene	0.0302	Ü	0.0831	0.0302
193-39-5	Indeno[1,2,3-cd]pyrene	0.0458	P do	0.0831	0.0403
218-01-9	Chrysene	0.105	7	0.0831	0.0302
83-32-9	Acenaphthene	0.0554	U	0.0831	0.0554
205-99-2	Benzo[b]fluoranthene	0.0739	PLA	0.0831	0.0554

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	6	Х	29-120
4165-60-0	Nitrobenzene-d5	5	X	27-120
1718-51-0	Terphenyl-d14	8	X	13-120

& Malon &

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: South Lab Sample ID: 490-137889-6

Matrix: Solid

Lab File ID: 100317-030.D Analysis Method: 8270D SIM Date Collected: 10/02/2017 14:45

Extract. Method: 3550C

Date Extracted: 10/03/2017 12:54

Sample wt/vol: 30.18(g)

Date Analyzed: 10/03/2017 19:06

Con. Extract Vol.: 1.00(mL)

Dilution Factor: 25

Injection Volume: 3(uL)

Level: (low/med) Low

% Moisture: 2.2

GPC Cleanup: (Y/N) N

Analysis Batch.No.: 464885

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	0.223		0.0838	0.0330
86-73-7	Fluorene	0.0889	Ŭ	0.127	0.0889
208-96-8	Acenaphthylene	0.104		0.0838	0.0457
191-24-2	Benzo[g,h,i]perylene	0.281		0.0838	0.0356
85-01-8	Phenanthrene	0.0458	x 30	0.0838	0.0432
207-08-9	Benzo[k]fluoranthene	0.131	•	0.0838	0.0457
120-12-7	Anthracene	0.0613	10 ×	0.0838	0.0330
91-57-6	2-Methylnaphthalene	0.0533	U	0.0838	0.0533
129-00-0	Pyrene	0.218		0.0838	0.0381
53-70-3	Dibenz(a,h)anthracene	0.0620	10	0.0838	0.0381
91-20-3	Naphthalene	0.0559	U	0.0838	0.0559
206-44-0	Fluoranthene	0.169		0.0838	0.0356
90-12-0	1-Methylnaphthalene	0.0457	Ū	0.0838	0.0457
56-55-3	Benzo[a]anthracene	0.0305	U	0.0838	0.0305
193-39-5	Indeno[1,2,3-cd]pyrene	0.249		0.0838	0.0406
218-01-9	Chrysene	0.0305	U	0.0838	0.0305
83-32-9	Acenaphthene	0.0559	U	0.0838	0.0559
205-99-2	Benzo[b]fluoranthene	0.389		0.0838	0.0559

CAS NO.	· SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	14	X	29-120
4165-60-0	Nitrobenzene-d5	13	Х	27-120
1718-51-0	Terphenyl-d14	17		13-120

of plans

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: West-01 Lab Sample ID: 490-137889-3

Matrix: Solid Lab File ID: 100317-031.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:10

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.02(g) Date Analyzed: 10/03/2017 23:50

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.5 GPC Cleanup: (Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	4.29	Ü	8.45	4.29
58-90-2	2,3,4,6-Tetrachlorophenol	4.59	U	8.45	4.59
95-95-4	2,4,5-Trichlorophenol	5.53	U	8.45	5.53
88-06-2	2,4,6-Trichlorophenol	4.87	U	8.45	4.87
120-83-2	2,4-Dichlorophenol	4.44	U	8.45	4.44
105-67-9	2,4-Dimethylphenol	8.50	U	17.0	8.50
51-28-5	2,4-Dinitrophenol	6.37	U	8.45	6.37
121-14-2	2,4-Dinitrotoluene	5.28	Ü	8.45	5.28
606-20-2	2,6-Dinitrotoluene	5.66	U	8.45	5.66
91-58-7	2-Chloronaphthalene	5.30	U	8.45	5.30
95-57-8	2-Chlorophenol	4.85	U	8.45	4.85
91-57-6	2-Methylnaphthalene	0.660	Ū	1.70	0.660
88-74-4	2-Nitroaniline	5.25	Ū	8.45	5.25
95-48-7	2-Methylphenol	5.48	U	8.45	5.48
88-75-5	2-Nitrophenol	6.16	Ū	8.45	6.16
15831-10-4	3 & 4 Methylphenol	5.15	U	8.45	5.15
91-94-1	3,3'-Dichlorobenzidine	5.18	U	17.0	5.18
99-09-2	3-Nitroaniline	5.84	U	17.0	5.84
534-52-1	4,6-Dinitro-2-methylphenol	5.81	U	8.45	5.81
101-55-3	4-Bromophenyl phenyl ether	5.20	Ū	8.45	5.20
59-50-7	4-Chloro-3-methylphenol	4.26	U	8.45	4.26
106-47-8	4-Chloroaniline	5.76	U	8.45	5.76
7005-72-3	4-Chlorophenyl phenyl ether	5.10	U	8.45	5.10
100-01-6	4-Nitroaniline	6.04	U	17.0	6.04
100-02-7	4-Nitrophenol	9.69	Ü	17.0	9.69
83-32-9	Acenaphthene	0.812	Ū	1.70	0.812
208-96-8	Acenaphthylene	0.736	U	1.70	0.736
98-86-2	Acetophenone	4.72	U	8.45	4.72
120-12-7	Anthracene	0.736	U	1.70	0.736
1912-24-9	Atrazine	4.26	Ü	8.45	4.26
56-55-3	Benzo[a]anthracene	0.761	U	1.70	0.761
50-32-8	Benzo[a]pyrene	0.685	Ū	1.70	0.685
205-99-2	Benzo[b]fluoranthene	0.710	U	1.70	0.710
191-24-2	Benzo[g,h,i]perylene	0.837	U	1.70	0.837

FORM I 8270D

as playa

Page 230 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.: Lab Sample ID: 490-137889-3

Matrix: Solid Lab File ID: 100317-031.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:10

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.02(g) Date Analyzed: 10/03/2017 23:50

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.5 GPC Cleanup: (Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	0.685	U	1.70	0.685
100-52-7	Benzaldehyde	6.44	4 15x	17.0	6.44
111-91-1	Bis(2-chloroethoxy)methane	5.07	U	8.45	5.07
92-52-4	Biphenyl	4.79	U	8.45	4.79
111-44-4	Bis(2-chloroethyl)ether	5.40	U	8.45	5.40
108-60-1	bis (2-chloroisopropyl) ether	5.02	U	8.45	5.02
85-68-7	Butyl benzyl phthalate	5.45	U	8.45	5.45
117-81-7	Bis(2-ethylhexyl) phthalate	5.25	U	8.45	5.25
86-74-8	Carbazole	5.25	U	8.45	5.25
105-60-2	Caprolactam	3.93	U	8.45	3.93
218-01-9	Chrysene	0.939	U	1.70	0.939
53-70-3	Dibenz(a,h)anthracene	0.812	U	1.70	0.812
132-64-9	Dibenzofuran	5.33	Ū	8.45	5.33
84-66-2	Diethyl phthalate	5.38	Ū	8.45	5.38
131-11-3	Dimethyl phthalate	5.25	U	8.45	5.25
84-74-2	Di-n-butyl phthalate	5.35	U	8.45	5.35
86-73-7	Fluorene	0.736	Ū	1.70	0.736
117-84-0	Di-n-octyl phthalate	4.52	U	8.45	4.52
118-74-1	Hexachlorobenzene	6.34	U	8.45	6.34
87-68-3	Hexachlorobutadiene	4.24	U	8.45	4.24
77-47-4	Hexachlorocyclopentadiene	3.81	でけど	8.45	3.81
67-72-1	Hexachloroethane	4.59	U	8.45	4.59
193-39-5	Indeno[1,2,3-cd]pyrene	0.736	U	1.70	0.736
78-59-1	Isophorone	4.77	Ü	8.45	4.77
91-20-3	Naphthalene	0.736	Ū	1.70	0.736
98-95-3	Nitrobenzene	5.10	U	8.45	5.10
621-64-7	N-Nitrosodi-n-propylamine	4.92	U	8.45	4.92
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	1.34	U	8.45	1.34
87-86-5	Pentachlorophenol	6.75	U	17.0	6.75
85-01-8	Phenanthrene	0.863	Ū	1.70	0.863
108-95-2	Phenol	5.15	U	8.45	5.15
129-00-0	Pyrene	0.863	U	1.70	0.863
206-44-0	Fluoranthene	0.863	U	1.70	0.863
120-82-1	1,2,4-Trichlorobenzene	4.59	U	8.45	4.59

FORM I 8270D

83 10/12/17

Page 231 of 1022

Job No.: 490-137889-1

GPC Cleanup: (Y/N) N

SDG No.: Client Sample ID: West-01 Lab Sample ID: 490-137889-3 Lab File ID: 100317-031.D Matrix: Solid Analysis Method: 8270D Date Collected: 10/02/2017 14:10

Date Extracted: 10/03/2017 12:58 Extract. Method: 3550C

Sample wt/vol: 30.02(g) Date Analyzed: 10/03/2017 23:50

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

Analysis Batch No.: 465063 Units: mg/Kg

Lab Name: TestAmerica Nashville

% Moisture: 1.5

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-50-1	1,2-Dichlorobenzene	4.82	Ü	8.45	4.82
541-73-1	1,3-Dichlorobenzene	4.82	Ü	8.45	4.82
106-46-7	1,4-Dichlorobenzene	4.97	U	8.45	4.97
92-87-5	Benzidine	5.18	-# UJK	8.45	5.18
100-51-6	Benzyl alcohol	4.92	U	8.45	4.92
62-75-9	N-Nitrosodimethylamine	0.507	U	8.45	0.507

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	84		10-120
321-60-8	2-Fluorobiphenyl (Surr)	40		29-120
367-12-4	2-Fluorophenol (Surr)	45		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	41		27-120
4165-62-2	Phenol-d5 (Surr)	33		10-120
1718-51-0	Terphenyl-d14 (Surr)	43		13-120

FORM I 8270D S phalf

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: West-02 Lab Sample ID: 490-137889-4

Matrix: Solid Lab File ID: 100317-032.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:20

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.19(g) Date Analyzed: 10/04/2017 00:09

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

	· · · · · · · · · · · · · · · · · · ·					
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL	
95-94-3	1,2,4,5-Tetrachlorobenzene	4.26	U	8.39	4.26	
58-90-2	2,3,4,6-Tetrachlorophenol	4.56	U	8.39	4.56	
95-95-4	2,4,5-Trichlorophenol	5.49	U	8.39	5.49	
88-06-2	2,4,6-Trichlorophenol	4.84	U	8.39	4.84	
120-83-2	2,4-Dichlorophenol	4.41	Ū.	8.39	4.41	
105-67-9	2,4-Dimethylphenol	8.44	U	16.9	8.44	
51-28-5	2,4-Dinitrophenol	6.33	U	8.39	6.33	
121-14-2	2,4-Dinitrotoluene	5.24	U	8.39	5.24	
606-20-2	2,6-Dinitrotoluene	5.62	U	8.39	5.62	
91-58-7	2-Chloronaphthalene	5.27	U	8.39	5.27	
95-57-8	2-Chlorophenol	4.81	U	8.39	4.81	
91-57-6	2-Methylnaphthalene	0.655	Ü	1.69	0.655	
88-74-4	2-Nitroaniline	5.22	U	8.39	5.22	
95-48-7	2-Methylphenol	5.44	U	8.39	5.44	
88-75-5	2-Nitrophenol	6.12	Ū	8.39	6.12	
15831-10-4	3 & 4 Methylphenol	5.12	Ū	8.39	5.12	
91-94-1	3,3'-Dichlorobenzidine	5.14	U	16.9	5.14	
99-09-2	3-Nitroaniline	5.80	U	16.9	5.80	
534-52-1	4,6-Dinitro-2-methylphenol	5.77	U	8.39	5.77	
101-55-3	4-Bromophenyl phenyl ether	5.17	U	8.39	5.17	
59-50-7	4-Chloro-3-methylphenol	4.23	Ū	8.39	4.23	
106-47-8	4-Chloroaniline	5.72	U	8.39	5.72	
7005-72-3	4-Chlorophenyl phenyl ether	5.07	U	8.39	5.07	
100-01-6	4-Nitroaniline	6.00	Ü	16.9	6.00	
100-02-7	4-Nitrophenol	9.63	Ū	16.9	9.63	
83-32-9	Acenaphthene	0.806	U	1.69	0.806	
208-96-8	Acenaphthylene	0.731	Ū	1.69	0.731	
98-86-2	Acetophenone	4.69	U	8.39	4.69	
120-12-7	Anthracene	0.731	U	1.69	0.731	
1912-24-9	Atrazine	4.23	Ü	8.39	4.23	
56-55-3	Benzo[a]anthracene	0.756	Ū	1.69	0.756	
50-32-8	Benzo[a]pyrene	0.680	Ū	1.69	0.680	
205-99-2	Benzo[b] fluoranthene	0.706	U	1.69	0.706	
191-24-2	Benzo[g,h,i]perylene	0.832	Ü	1.69	0.832	

FORM I 8270D

& lokalm

Page 236 of 1022

Job No.: 490-137889-1

SDG No.:

Client Sample ID: West-02 Lab Sample ID: 490-137889-4

Matrix: Solid Lab File ID: 100317-032.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:20

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.19(g) Date Analyzed: 10/04/2017 00:09

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.4 GPC Cleanup: (Y/N) N M M M GPC Cleanup: (Y/N) N M Units: mg/Kg

Lab Name: TestAmerica Nashville

CAS NO. COMPOUND NAME RESULT Q RLMDL 0.680 U 1.69 207-08-9 Benzo[k]fluoranthene 0.680 Benzaldehyde 6.40 JUSK 100-52-7 16.9 6.40 111-91-1 Bis(2-chloroethoxy)methane 5.04 U 8.39 5.04 92-52-4 4.76 Ü 8.39 4.76 Biphenyl 111-44-4 Bis(2-chloroethyl)ether 5.37 U 8.39 5.37 bis (2-chloroisopropyl) ether 108-60-1 4.99 U 8.39 4.99 85-68-7 Butyl benzyl phthalate 5.42 Ü 8.39 5.42 117-81-7 Bis(2-ethylhexyl) phthalate 5.22 Ū 8.39 5.22 86-74-8 Carbazole 5.22 U 8.39 5.22 105-60-2 Caprolactam 3.91 U 8.39 3.91 218-01-9 Chrysene 0.932 U 1.69 0.932 53-70-3 Dibenz (a, h) anthracene 0.806 U 1.69 0.806 132-64-9 Dibenzofuran 5.29 8.39 5.29 84-66-2 Diethyl phthalate 5.34 8.39 5.34 U 131-11-3 Dimethyl phthalate 5.22 Ū 8.39 5.22 84-74-2 Di-n-butyl phthalate 5.32 U 8.39 5.32 86-73-7 Fluorene 0.731 U 1.69 0.731 117-84-0 8.39 Di-n-octyl phthalate 4.49 U 4.49 118-74-1 6.30 6.30 Hexachlorobenzene U 8.39 87-68-3 Hexachlorobutadiene 4.21 U 8.39 4.21 77-47-4 Hexachlorocyclopentadiene 3.78 8.39 3.78 - VJK 67-72-1 Hexachloroethane 4.56 8.39 4.56 193-39-5 Indeno[1,2,3-cd]pyrene 0.731 1.69 0.731 78-59-1 Isophorone 4.74 Ū 8.39 4.74 91-20-3 Naphthalene 0.731 0.731 1.69 8.39 98-95-3 Nitrobenzene 5.07 U 5.07 621-64-7 N-Nitrosodi-n-propylamine 4.89 8.39 4.89 86-30-6 n-Nitrosodiphenylamine (as 1.34 U 8.39 1.34 diphenylamine) 87-86-5 Pentachlorophenol 6.70 U 16.9 6.70 85-01-8 Phenanthrene 0.857 1.69 0.857 108-95-2 Phenol 5.12 8.39 5.12 129-00-0 Pyrene 0.857 U 1.69 0.857 206-44-0 Fluoranthene 0.857 U 1.69 0.857 120-82-1 1,2,4-Trichlorobenzene 4.56 U 8.39 4.56

FORM I 8270D PORTA

Page 237 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: West-02 Lab Sample ID: 490-137889-4

Matrix: Solid Lab File ID: 100317-032.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:20

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.19(g) Date Analyzed: 10/04/2017 00:09

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	· COMPOUND NAME	RESULT	Q	RL	MDL
95-50-1	1,2-Dichlorobenzene	4.79	U	8.39	4.79
541-73-1	1,3-Dichlorobenzene	4.79	U .	8.39	4.79
106-46-7	1,4-Dichlorobenzene	4.94	U	8.39	4.94
92-87-5	Benzidine	5.14	+VTV-	8.39	5.14
100-51-6	Benzyl alcohol	4.89	U	8.39	4.89
62-75-9	N-Nitrosodimethylamine	0.504	U	8.39	0.504

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	67		10-120
321-60-8	2-Fluorobiphenyl (Surr)	10	Х	29-120
367-12-4	2-Fluorophenol (Surr)	16		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	12	Х	27-120
4165-62-2	Phenol-d5 (Surr)	9	X	10-120
1718-51-0	Terphenyl-d14 (Surr)	13		13-120

50RM I 8270D

Lab File ID: 100317-033.D

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: North Lab Sample ID: 490-137889-5

Matrix: Solid

Analysis Method: 8270D Date Collected: 10/02/2017 14:30

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.14(g) Date Analyzed: 10/04/2017 00:29

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.6 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	4.27	U	8.42	4.27
58-90-2	2,3,4,6-Tetrachlorophenol	4.58	U	8.42	4.58
95-95-4	2,4,5-Trichlorophenol	5.51	U	8.42	5.51
88-06-2	2,4,6-Trichlorophenol	4.85	U	8.42	4.85
120-83-2	2,4-Dichlorophenol	4.42	U	8.42	4.42
105-67-9	2,4-Dimethylphenol	8.47	U	16.9	8.47
51-28-5	2,4-Dinitrophenol	6.34	U	8.42	6.34
121-14-2	2,4-Dinitrotoluene	5.26	U	8.42	5.26
606-20-2	2,6-Dinitrotoluene	5.64	U	8.42	5.64
91-58-7	2-Chloronaphthalene	5.28	U	8.42	5.28
95-57-8	2-Chlorophenol	4.83	U	8.42	4.83
91-57-6	2-Methylnaphthalene	0.657	U	1.69	0.657
88-74-4	2-Nitroaniline	5.23	Ü	8.42	5.23
95-48-7	2-Methylphenol	5.46	U-	8.42	5.46
88-75-5	2-Nitrophenol	6.14	U	8.42	6.14
15831-10-4	3 & 4 Methylphenol	5.13	U	8.42	5.13
91-94-1	3,3'-Dichlorobenzidine	5.16	Ü	16.9	5.16
99-09-2	3-Nitroaniline	5.81	U	16.9	5.81
534-52-1	4,6-Dinitro-2-methylphenol	5.79	U	8.42	5.79
101-55-3	4-Bromophenyl phenyl ether	5.18	Ü	8.42	5.18
59-50-7	4-Chloro-3-methylphenol	4.25	U .	8.42	4.25
106-47-8	4-Chloroaniline	5.74	U	8.42	5.74
7005-72-3	4-Chlorophenyl phenyl ether	5.08	U	8.42	5.08
100-01-6	4-Nitroaniline	6.02	U	16.9	6.02
100-02-7	4-Nitrophenol	9.66	U	16.9	9.66
83-32-9	Acenaphthene	0.809	U	1.69	0.809
208-96-8	Acenaphthylene	0.733	U	1.69	0.733
98-86-2	Acetophenone	4.70	Ū	8.42	4.70
120-12-7	Anthracene	0.733	U	1.69	0.733
1912-24-9	Atrazine	4.25	Ü	8.42	4.25
56-55-3	Benzo[a]anthracene	0.758	U	1.69	0.758
50-32-8	Benzo[a]pyrene	0.683	U	1.69	0.683
205-99-2	Benzo[b]fluoranthene	0.708	U	1.69	0.708
191-24-2	Benzo[q,h,i]perylene	0.834	U	1.69	0.834

FORM I 8270D

as popula

Page 244 of 1022

Lab File ID: 100317-033.D

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: North Lab Sample ID: 490-137889-5

Matrix: Solid

Analysis Method: 8270D Date Collected: 10/02/2017 14:30

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.14(g) Date Analyzed: 10/04/2017 00:29

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 1.6 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	0.683	U	1.69	0.683
100-52-7	Benzaldehyde	6.42	0 V5V	16.9	6.42
111-91-1	Bis(2-chloroethoxy)methane	5.06	U	8.42	5.06
92-52-4	Biphenyl	4.78	U	8.42	4.78
111-44-4	Bis(2-chloroethyl)ether	5.38	U	8.42	5.38
108-60-1	bis (2-chloroisopropyl) ether	5.01	U	8.42	5.01
85-68-7	Butyl benzyl phthalate	5.43	U	8.42	5.43
117-81-7	Bis(2-ethylhexyl) phthalate	5.23	U	8.42	5.23
86-74-8	Carbazole	5.23	U	8.42	5.23
105-60-2	Caprolactam	3.92	U	8.42	3.92
218-01-9	Chrysene	0.935	Ü	1.69	0.935
53-70-3	Dibenz(a,h)anthracene	0.809	U	1.69	0.809
132-64-9	Dibenzofuran	5.31	U	8.42	5.31
84-66-2	Diethyl phthalate	5.36	U	8.42	5.36
131-11-3	Dimethyl phthalate	5.23	U	8.42	5.23
84-74-2	Di-n-butyl phthalate	5.33	U	8.42	5.33
86-73-7	Fluorene	0.733	Ü	1.69	0.733
117-84-0	Di-n-octyl phthalate	4.50	Ŭ	8.42	4.50
118-74-1	Hexachlorobenzene	6.32	Ū	8.42	6.32
87-68-3	Hexachlorobutadiene	4.22	U	8.42	4.22
77-47-4	Hexachlorocyclopentadiene	3.79	4,02x	8.42	3.79
67-72-1	Hexachloroethane	4.58	U	8.42	4.58
193-39-5	Indeno[1,2,3-cd]pyrene	0.733	U	1.69	0.733
78-59-1	Isophorone	4.75	U	8.42	4.75
91-20-3	Naphthalene	0.733	U	1.69	0.733
98-95-3	Nitrobenzene	5.08	U	8.42	5.08
621-64-7	N-Nitrosodi-n-propylamine	4.90	Ū	8.42	4.90
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	1.34	Ū	8.42	1.34
87-86-5	Pentachlorophenol	6.72	U	16.9	6.72
85-01-8	Phenanthrene	0.859	U	1.69	0.859
108-95-2	Phenol	5.13	U	8.42	5.13
129-00-0	Pyrene	0.859	U	1.69	0.859
206-44-0	Fluoranthene	0.859	Ü	1.69	0.859
120-82-1	1,2,4-Trichlorobenzene	4.58	U	8.42	4.58

FORM I 8270D

& POPULA

Page 245 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: North Lab Sample ID: 490-137889-5

Matrix: Solid Lab File ID: 100317-033.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:30

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.14(g) Date Analyzed: 10/04/2017 00:29

Con. Extract Vol.: 1.00(mL) Dilution Factor: 25

Injection Volume: 1(uL) Level: (low/med) Low
% Moisture: 1.6 GPC Cleanup: (Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	. COMPOUND NAME	RESULT	Ω	RL	MDL
95-50-1	1,2-Dichlorobenzene	4.80	U	8.42	4.80
541-73-1	1,3-Dichlorobenzene	4.80	U	8.42	4.80
106-46-7	1,4-Dichlorobenzene	4.95	U	8,42	4.95
92-87-5	Benzidine	5.16	- UTV	8.42	5.16
100-51-6	Benzyl alcohol	4.90	U	8.42	4.90
62-75-9	N-Nitrosodimethylamine	0.506	U	8.42	0.506

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	58		10-120
321-60-8	2-Fluorobiphenyl (Surr)	3	Х	29-120
367-12-4	2-Fluorophenol (Surr)	9	X	10-120
4165-60-0	Nitrobenzene-d5 (Surr)	3	Х	27-120
4165-62-2	Phenol-d5 (Surr)	4	X	10-120
1718-51-0	Terphenyl-dl4 (Surr)	5	Х	13-120

FORM I 8270D

& lother

Page 246 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: South Lab Sample ID: 490-137889-6

Matrix: Solid Lab File ID: 100317-034.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:45

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.42(g) Date Analyzed: 10/04/2017 00:48

Con. Extract Vol.: 1.00(mL) Dilution Factor: 200

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 2.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-94-3	1,2,4,5-Tetrachlorobenzene	34.1	U	67.1	34.1
58-90-2	2,3,4,6-Tetrachlorophenol	36.5	U	67.1	36.5
95-95-4	2,4,5-Trichlorophenol	43.9	Ū	67.1	43.9
88-06-2	2,4,6-Trichlorophenol	38.7	U	67.1	38.7
120-83-2	2,4-Dichlorophenol	35.3	U	67.1	35.3
105-67-9	2,4-Dimethylphenol	67.5	U	135	67.5
51-28-5	2,4-Dinitrophenol	50.6	U	67.1	50.6
121-14-2	2,4-Dinitrotoluene	41.9	U	67.1	41.9
606-20-2	2,6-Dinitrotoluene	45.0	U	67.1	45.0
91-58-7	2-Chloronaphthalene	42.1	U	67.1	42.1
95-57-8	2-Chlorophenol	38.5	U	67.1	38.5
91-57-6	2-Methylnaphthalene	5.24	U	13.5	5.24
88-74-4	2-Nitroaniline	41.7	U	67.1	41.7
95-48-7	2-Methylphenol	43.5	Ū	67.1	43.5
88-75-5	2-Nitrophenol	49.0	U	67.1	49.0
15831-10-4	3 & 4 Methylphenol	40.9	U	67.1	40.9
91-94-1	3,3'-Dichlorobenzidine	41.1	Ū	135	41.1
99-09-2	3-Nitroaniline	46.4	U	135	46.4
534-52-1	4,6-Dinitro-2-methylphenol	46.2	Ū	67.1	46.2
101-55-3	4-Bromophenyl phenyl ether	41.3	U	67.1	41.3
59-50-7	4-Chloro-3-methylphenol	33.9	U	67.1	33.9
106-47-8	4-Chloroaniline	45.8	U	67.1	45.8
7005-72-3	4-Chlorophenyl phenyl ether	40.5	U	67.1	40.5
100-01-6	4-Nitroaniline	48.0	Ū	135	48.0
100-02-7	4-Nitrophenol	77.0	U	135	77.0
83-32-9	Acenaphthene	6.45	U	13.5	6.45
208-96-8	Acenaphthylene	5.85	Ü	13.5	5.85
98-86-2	Acetophenone	37.5	U	67.1	37.5
120-12-7	Anthracene	5.85	Ū	13.5	5.85
1912-24-9	Atrazine	33.9	U	67.1	33.9
56-55-3	Benzo[a]anthracene	6.05	U	13.5	6.05
50-32-8	Benzo[a]pyrene	5.44	Ū	13.5	5.44
205-99-2	Benzo[b]fluoranthene	5.64	U	13.5	5.64
191-24-2	Benzo[g,h,i]perylene	6.65	U	13.5	6.65

FORM I 8270D

Elmfol &

Page 256 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: South Lab Sample ID: 490-137889-6

Matrix: Solid Lab File ID: 100317-034.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:45

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.42(g) Date Analyzed: 10/04/2017 00:48

Con. Extract Vol.: 1.00(mL) Dilution Factor: 200

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 2.2 GPC Cleanup: (Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	5.44	U	13.5	5.44
100-52-7	Benzaldehyde	51.2	JUN	135	51.2
111-91-1	Bis(2-chloroethoxy)methane	40.3	U	67.1	40.3
92-52-4	Biphenyl	38.1	U	67.1	38.1
111-44-4	Bis(2-chloroethyl)ether	42.9	U	67.1	42.9
108-60-1	bis (2-chloroisopropyl) ether	39.9	U	67.1	39.9
85-68-7	Butyl benzyl phthalate	43.3	U	67.1	43.3
117-81-7	Bis(2-ethylhexyl) phthalate	41.7	U	67.1	41.7
86-74-8	Carbazole	41.7	U	67.1	41.7
105-60-2	Caprolactam	31.2	U	67.1	31.2
218-01-9	Chrysene	7.46	U	13.5	7.46
53-70-3	Dibenz(a,h)anthracene	6.45	U	13.5	6.45
132-64-9	Dibenzofuran	42.3	U	67.1	42.3
84-66-2	Diethyl phthalate	42.7	U	67.1	42.7
131-11-3	Dimethyl phthalate	41.7	U	67.1	41.7
84-74-2	Di-n-butyl phthalate	42.5	U	67.1	42.5
86-73-7	Fluorene	5.85	U	13.5	5.85
117-84-0	Di-n-octyl phthalate	35.9	U	67.1	35.9
118-74-1	Hexachlorobenzene	50.4	U	67.1	50.4
87-68-3	Hexachlorobutadiene	33.7	U	67.1	33.7
77-47-4	Hexachlorocyclopentadiene	30.2	+ UN-	67.1	30.2
67-72-1	Hexachloroethane	36.5	U	67.1	36.5
193-39-5	<pre>Indeno[1,2,3-cd]pyrene</pre>	5.85	U	13.5	5.85
78-59-1	Isophorone	37.9	U	67.1	37.9
91-20-3	Naphthalene	5.85	Ū	13.5	5.85
98-95-3	Nitrobenzene	40.5	U	67.1	40.5
621-64-7	N-Nitrosodi-n-propylamine	39.1	U	67.1	39.1
86-30-6	n-Nitrosodiphenylamine(as diphenylamine)	10.7	Ü	67.1	10.7
87-86-5	Pentachlorophenol	53.6	Ü	135	53.6
85-01-8	Phenanthrene	6.85	U	13.5	6.85
108-95-2	Phenol	40.9	U	67.1	40.9
129-00-0	Pyrene	6.85	U	13.5	6.85
206-44-0	Fluoranthene	6.85	U	13.5	6.85
120-82-1	1,2,4-Trichlorobenzene	36.5	U	67.1	36.5

FORM I 8270D

Applot Sp

Page 257 of 1022

Lab Name: TestAmerica Nashville Job No.: 490-137889-1

SDG No.:

Client Sample ID: South Lab Sample ID: 490-137889-6

Matrix: Solid Lab File ID: 100317-034.D

Analysis Method: 8270D Date Collected: 10/02/2017 14:45

Extract. Method: 3550C Date Extracted: 10/03/2017 12:58

Sample wt/vol: 30.42(g) Date Analyzed: 10/04/2017 00:48

Con. Extract Vol.: 1.00(mL) Dilution Factor: 200

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 2.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 465063 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-50-1	1,2-Dichlorobenzene	38.3	U	67.1	38.3
541-73-1	1,3-Dichlorobenzene	38.3	U	67.1	38.3
106-46-7	1,4-Dichlorobenzene	39.5	U	67.1	39.5
92-87-5	Benzidine	41.1	ではい	67.1	41.1
100-51-6	Benzyl alcohol	39.1	Ū	67.1	39.1
62-75-9	N-Nitrosodimethylamine	4.03	U	67.1	4.03

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	478	X	10-120
321-60-8	2-Fluorobiphenyl (Surr)	49		29-120
367-12-4	2-Fluorophenol (Surr)	106		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	65		27-120
4165-62-2	Phenol-d5 (Surr)	42		10-120
1718-51-0	Terphenyl-d14 (Surr)	71		13-120

FORM I 8270D

& tolents

Page 258 of 1022

### DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDER	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUMBER			SDG NUMBER	490-137586-1
20406.012.001.1065	5.01; SDG No.		il. Two samples we	for Work Order Number re analyzed for Target Analyte ers are listed below.
		SAMPLE NUM	BERS	
Top Soil		Backfill		
		_		
		-		
USEPA National Fu National Functional Laboratory Program (April, 2016), Qual	inctional Guide il Guidelines fo in National Fun ity Assurance/Q col for Holding	lines for Organic Superfuor for Inorganic Superfund actional Guidelines for I Quality Control Guidance g Times, Blanks, and V	and Methods Data R Data Review (Janu High Resolution Sup Jor Removal Activi	tions were achieved, following eview (January, 2017), USEPA nary, 2017), USEPA Contract perfund Methods Data Review ties (September, 2011), and/or April 13, 1989). Specific data
REVIEWER	Gloria J. Swit	alski	DATE	October 6, 2017

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

J - The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### METALS DATA EVALUATION

### 1. Analytical Method:

Samples were prepared and analyzed for ICP metals using the procedures specified in SW-846 Method 6020A. Samples were prepared and analyzed for mercury using the procedures specified in SW-846 Methods 7471B.

### 2. Holding Times:

The samples were received above the recommended  $\leq$ 6°C NFG limit. Professional judgment was used to not qualify the sample results. All samples met established holding time criteria of 180 days for ICP metals and 28 days for mercury. No qualifications are placed on the data.

#### 3. Initial Calibration:

ICP initial calibration included a blank and three standards and initial calibration verification results fell within the control limits of 90% to 110% of the true values and mercury initial calibration included a blank and six standards and initial calibration verification results fell within the control limits of 85% to 115% values. No qualifications are placed on the data.

#### 4. Continuing Calibration:

All ICP results fell within the control limits of 90% to 110% of the true values and all mercury results fell within the control limits of 85% to 115% of the true values. No qualifications are placed on the data.

#### 5. CRDL Standard:

All results for the CRDL standard were within the control limits of 70% to 130% of the true values or the sample results were greater than the CRDL action level. No qualifications are placed on the data.

#### 6. Blanks:

#### A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were prepared/digested for each matrix or every 20 samples whichever is greater. A target analyte was detected in the method blank. Details are noted below:

INSTRUMENT ID DATE/TIME	ANALYTE/BLANK ID	CONCENTRATION	AFFECTED SAMPLES
ICPMS3 9/29/17 @,16:41	Aluminum/MB 490-463964/1-A	7.286 mg/kg	All Solids, remove laboratory "B" flag

MB=Method Blank

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. ICP Interference Check:

All results for the interference check sample were within the control limits of 80% to 120% of the true values. No qualifications are placed on the data.

#### 8. Laboratory Control Sample (LCS):

The recoveries for the LCS were within the control limits provided. No qualifications are placed on the data.

#### 9. Duplicate Sample Analysis:

#### A. Laboratory Duplicate Analysis:

No sample from this analytical package underwent matrix spike/matrix spike duplicate (MS/MSD) analysis. No qualifications are placed on the data.

### B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

#### 10. Spiked Sample Analysis:

No sample from this analytical package underwent MS/MSD analysis. No qualifications are placed on the data.

#### 11. ICP Serial Dilution:

No sample from this analytical package underwent serial dilution. No qualifications are placed on the data.

### 12. Sample Quantitation and Reporting Limits:

Concentrations of all reported analytes were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

#### 13. Laboratory Contact

No laboratory contact was required.

#### 14. Overall Assessment:

Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.

The analytical data is acceptable for use with the qualifications listed above.

### DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDER	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUMBER			SDG NUMBER	490-137586-1
20406.012.001.1065	5.01; SDG No.		Oil. Two samples	for Work Order Numbe were analyzed for Polynuclea bers are listed below.
		SAMPLE NUM	IBERS	
Top Soil		Backfill		
		_		
USEPA National Functional Functional Functional Laboratory Program (April, 2016), Qual the Regional Proto-	inctional Guide of Guidelines for on National Fur ity Assurance/Q col for Holdin	lines for Organic Superfi for Inorganic Superfund actional Guidelines for I Quality Control Guidance g Times, Blanks, and V	und Methods Data R Data Review (Janu High Resolution Sup of for Removal Active	tions were achieved, following deview (January, 2017), USEPA dary, 2017), USEPA Contractor perfund Methods Data Review dities (September, 2011), and/o April 13, 1989). Specific data
qualifications are lis	sted in the follow	wing discussion.		
REVIEWER	Gloria J. Swit	alski	DATE	October 6, 2017

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### PAH FRACTION EVALUATION

### 1. Analytical Method:

Samples were prepared and analyzed using the procedures specified in SW-846 Method 8270D Selective Ion Monitoring (SIM).

### 2. Holding Time:

The samples were received within the recommended  $\leq 6$ °C NFG limit. All samples were extracted within the required holding time of less than 7 days for waters and less than 14 days for solids/wastes after collection. Analysis of the samples was conducted within 40 days of extraction. No qualifications are placed on the data.

#### 3. Tuning/Performance:

DFTPP tuning of the mass spectrometer(s) is not required when performing SIM. No qualifications are placed on the data.

#### 4. Initial Calibration:

All individual relative response factors (RRFs) and average RRFs for the initial calibration were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent relative standard deviations (%RSDs) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits or the correlation coefficient was > 0.990. No qualifications are placed on the data.

#### 5. Continuing Calibration:

All individual RRFs for the initial calibration verification (ICV) and continuing calibration (CC) standards were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent differences (%Ds) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits. No qualifications are placed on the data.

#### 6. Blanks:

#### A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and concentration or every 20 samples whichever is greater. No target analytes were detected in the method blank at concentrations that warrant blank action. No qualifications are placed on the data.

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. System Monitoring Compounds (SMC):

All recoveries of the system monitoring compounds (surrogates) were within the control limits provided. No qualifications are placed on the data.

## 8. Duplicates:

## A. Laboratory Duplicate Analysis:

Sample Backfill underwent MS/MSD analysis for the solid matrix. The relative percent difference (RPD) values for the duplicate sample analysis are less than 20% for aqueous samples and less than 35% for solid samples for concentrations greater than five times the reporting limit (RL). For sample concentrations less than five times the RL, the QC criteria are within  $\pm$  the RL for the aqueous matrix or  $\pm$  two times the RL for the solid matrix. All QC criteria were met. No qualifications are applied to the data.

## B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 9. Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Sample Backfill underwent MS/MSD analysis for the solid matrix. Recoveries of all spiked analytes were within the control limits provided in both the matrix spike and matrix spike duplicate. No qualifications are applied to the data.

#### 10. Internal Standards:

Areas of the six internal standards were within the control limits of a factor of 2 (-50% to +100%) and retention times were within 30 seconds from the associated 12 hour calibration standard. No qualifications are placed on the data.

## 11. Laboratory Control Sample (LCS):

The laboratory analyzed an LCS and recoveries were within the control limits provided. No qualifications are placed on the data.

## 12. Target Compound Identification:

All target compounds reported by the laboratory met identification criteria of relative retention times (RRT) within 0.06 RRT units of the 12 hour standard and that all ions present in the standard mass spectrum were present in the sample mass spectrum and the abundance of these ions agreed within  $\pm$  20% of the standard. No qualifications are placed on the data.

#### 13. Target Compound Quantitation and Reporting Limits:

Concentrations of all reported compounds were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

## 14. Laboratory Contact:

No laboratory contact was required.

15. Overall Assessment
Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.
The analytical data is acceptable for use with the qualifications listed above.

# DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDER	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUM	MBER		SDG NUMBER	490-137671-1
20406.012.001.1065	5.01; SDG No		Oil. One sample	for Work Order Numbe was analyzed for Polynuclea bers are listed below.
		SAMPLE NUM	BERS	
WOR006-48-17092	8-56			
	_			
USEPA National Functional National Functional Laboratory Program (April, 2016), Qual	unctional Guide al Guidelines f m National Fu lity Assurance/Q col for Holdin	elines for Organic Superfu for Inorganic Superfund nctional Guidelines for I Quality Control Guidance g Times, Blanks, and V	and Methods Data R Data Review (Janu High Resolution Sup For Removal Active	tions were achieved, following deview (January, 2017), USEPA contractions (September, 2011), and/o April 13, 1989). Specific data
REVIEWER	Gloria J. Swit	talski	DATE	October 6, 2017

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### PAH FRACTION EVALUATION

## 1. Analytical Method:

Samples were prepared and analyzed using the procedures specified in SW-846 Method 8270D Selective Ion Monitoring (SIM).

## 2. Holding Time:

The samples were received within the recommended  $\leq$ 6°C NFG limit. All samples were extracted within the required holding time of less than 7 days for waters and less than 14 days for solids/wastes after collection. Analysis of the samples was conducted within 40 days of extraction. No qualifications are placed on the data.

## 3. Tuning/Performance:

DFTPP tuning of the mass spectrometer(s) is not required when performing SIM. No qualifications are placed on the data.

#### 4. Initial Calibration:

All individual relative response factors (RRFs) and average RRFs for the initial calibration were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent relative standard deviations (%RSDs) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits or the correlation coefficient was > 0.990. No qualifications are placed on the data.

## 5. Continuing Calibration:

All individual RRFs for the initial calibration verification (ICV) and continuing calibration (CC) standards were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent differences (%Ds) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits. No qualifications are placed on the data.

#### 6. Blanks:

## A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and concentration or every 20 samples whichever is greater. No target analytes were detected in the method blank at concentrations that warrant blank action. No qualifications are placed on the data.

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. System Monitoring Compounds (SMC):

All recoveries of the system monitoring compounds (surrogates) were within the control limits with the following exceptions:

SAMPLE ID	SURROGATE	%R	QC LIMITS	QUALIFIER FLAG
WOR006-48-170928-56	2-Fluorobiphenyl	121	29-120%	JH*, detected compounds
	Nitrobenzene-d5	129	27-120%	
WOR006-48-170928-56MS	2-Fluorobiphenyl	145	29-120%	None, QC sample
	Terphenyl-d14	122	27-120%	

<sup>\*2-</sup>Methylnaphthalene and 1-methylnaphthalene were ultimately qualified JK due to extremely low (<10%) or no (0%) MS/MSD recoveries as noted below.

## 8. Duplicates:

## A. Laboratory Duplicate Analysis:

Sample WOR006-48-170928-56 underwent MS/MSD analysis for the solid matrix. The relative percent difference (RPD) values for the duplicate sample analysis are less than 20% for aqueous samples and less than 35% for solid samples for concentrations greater than five times the reporting limit (RL). For sample concentrations less than five times the RL, the QC criteria are within  $\pm$  the RL for the aqueous matrix or  $\pm$  two times the RL for the solid matrix. All QC criteria were met. No qualifications are applied to the data.

## B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 9. Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Sample WOR006-48-170928-56 underwent MS/MSD analysis for the solid matrix. Recoveries of the following spiked analytes were outside of the control limits provided:

SAMPLE ID	ANALYTE	%R/%R	CONTROL LIMITS	QUALIFIER FLAG
WOR006-48-170928-56	2-Methylnaphthalene	-26/-46	13-120%	JL*
	1-Methylnaphthalene	0.5/8	10-120%	JL*

<sup>\*</sup>Ultimately qualified JK due to high surrogate recoveries as noted above.

#### 10. Internal Standards:

Areas of the six internal standards were within the control limits of a factor of 2 (-50% to +100%) and retention times were within 30 seconds from the associated 12 hour calibration standard. No qualifications are placed on the data.

## 11. Laboratory Control Sample (LCS):

The laboratory analyzed an LCS and recoveries were within the control limits provided. No qualifications are placed on the data.

## 12. Target Compound Identification:

All target compounds reported by the laboratory met identification criteria of relative retention times (RRT) within 0.06 RRT units of the 12 hour standard and that all ions present in the standard mass spectrum were

present in the sample mass spectrum and the abundance of these ions agreed within  $\pm$  20% of the standard. No qualifications are placed on the data.

## 13. Target Compound Quantitation and Reporting Limits:

Concentrations of all reported compounds were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

The only sample was analyzed at a 5-fold dilution due to the high concentration of target analytes and/or due to the sample matrix. RL in this sample are elevated as a result of the dilution performed.

## 14. Laboratory Contact:

The laboratory was contacted on October 5, 2017 regarding an incorrect field ID. An acceptable response was received on October 5, 2017.

#### 15. Overall Assessment

Detected compound results in the only sample were estimated due to high surrogate recoveries.

Detected 2-methylnaphthalene and 1-methylnaphthalene results in the only sample were estimated due to no or extremely low (<10%) MS/MSD recoveries.

Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.

The analytical data is acceptable for use with the qualifications listed above.

# DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDE	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUM	MBER		SDG NUMBER	490-137762-1
20406.012.001.106	5.01; SDG No.		Oil. Two samples	for Work Order Numbe were analyzed for Polynuclea bers are listed below.
		SAMPLE NUM	BERS	
WOR006-010-48-17	70929-56	WOR006-010-48-17	0929-57	
USEPA National Functional National Functional Laboratory Progra (April, 2016), Qual	unctional Guide al Guidelines f m National Fu lity Assurance/ col for Holdin	elines for Organic Superfu for Inorganic Superfund nctional Guidelines for H Quality Control Guidance g Times, Blanks, and V	and Methods Data R Data Review (Jan High Resolution Su for Removal Active	tions were achieved, following deview (January, 2017), USEPA Contraction of the Contracti
REVIEWER	Gloria J. Swit	talski	DATE	October 10, 2017

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### PAH FRACTION EVALUATION

## 1. Analytical Method:

Samples were prepared and analyzed using the procedures specified in SW-846 Method 8270D Selective Ion Monitoring (SIM).

## 2. Holding Time:

The samples were received within the recommended  $\leq$ 6°C NFG limit. All samples were extracted within the required holding time of less than 7 days for waters and less than 14 days for solids/wastes after collection. Analysis of the samples was conducted within 40 days of extraction. No qualifications are placed on the data.

## 3. Tuning/Performance:

DFTPP tuning of the mass spectrometer(s) is not required when performing SIM. No qualifications are placed on the data.

#### 4. Initial Calibration:

All individual relative response factors (RRFs) and average RRFs for the initial calibration were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent relative standard deviations (%RSDs) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits or the correlation coefficient was > 0.990. No qualifications are placed on the data.

## 5. Continuing Calibration:

All individual RRFs for the initial calibration verification (ICV) and continuing calibration (CC) standards were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent differences (%Ds) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits. No qualifications are placed on the data.

#### 6. Blanks:

## A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and concentration or every 20 samples whichever is greater. No target analytes were detected in the method blank at concentrations that warrant blank action. No qualifications are placed on the data.

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. System Monitoring Compounds (SMC):

All recoveries of the system monitoring compounds (surrogates) were within the control limits with the following exceptions:

SAMPLE ID	SURROGATE	%R	QC LIMITS	QUALIFIER FLAG
WOR006-010-48-170929-56	Nitrobenzene-d5	260	27-120%	None, only 1 out
WOR006-010-48-170929-56MS	Nitrobenzene-d5	215	27-120%	None, only 1 out & QC sample
WOR006-010-48-170929-56MSD	Nitrobenzene-d5	357	27-120%	None, only 1 out & QC sample
WOR006-010-48-170929-57	Nitrobenzene-d5	607	27-120%	None, only 1 out

#### 8. Duplicates:

## A. Laboratory Duplicate Analysis:

Sample WOR006-010-48-170929-56 underwent MS/MSD analysis for the solid matrix. The relative percent difference (RPD) values for the duplicate sample analysis are less than 20% for aqueous samples and less than 35% for solid samples for concentrations greater than five times the reporting limit (RL). For sample concentrations less than five times the RL, the QC criteria are within  $\pm$  the RL for the aqueous matrix or  $\pm$  two times the RL for the solid matrix. QC criteria were met for the following compound:

SAMPLE ID/MATRIX	ANALYTE	RPD	AFFECTED SAMPLE	QUALIFIER FLAG
WOR006-010-48-170929-56/Solid	Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene	50 49 45	WOR006-010-48-170929-56	None, sample ND JK JK

## B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 9. Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Sample WOR006-010-48-170929-56 underwent MS/MSD analysis for the solid matrix. Recoveries of the following spiked analytes were outside of the control limits provided:

SAMPLE ID	ANALYTE	%R/%R	CONTROL LIMITS	QUALIFIER FLAG
WOR006-010-48-170929-56	Acenaphthene	OK/149	19-120%	JH
	Fluorene	180/221	20-120%	None, sample ND
	Indeno(1,2,3-cd)pyrene	124/145	22-121%	None, sample ND
	Naphthalene	OK/203	10-120%	None, sample ND
	Phenanthrene	OK/133	21-122%	JH

## 10. Internal Standards:

Areas of the six internal standards were within the control limits of a factor of 2 (-50% to +100%) and retention times were within 30 seconds from the associated 12 hour calibration standard with the following exceptions:

SAMPLE ID	INTERNAL STANDARD	% AREA OF 12 HR STD	QUALIFIER FLAG *
WOR006-010-48-170929-56MSD	Dichlorobenzene-d4 Perylene-d12	48.6% 48.5%	None, QC sample

SAMPLE ID	INTERNAL STANDARD	% AREA OF 12 HR STD	QUALIFIER FLAG *
WOR006-010-48-170929-57	Perylene-d12	46.5%	JH/UJ

<sup>\*</sup>Impacted compounds include benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene.

#### 11. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD):

The laboratory analyzed an LCS/LCSD and recoveries and RPD were within the control limits provided. No qualifications are placed on the data.

## 12. Target Compound Identification:

All target compounds reported by the laboratory met identification criteria of relative retention times (RRT) within 0.06 RRT units of the 12 hour standard and that all ions present in the standard mass spectrum were present in the sample mass spectrum and the abundance of these ions agreed within  $\pm$  20% of the standard. No qualifications are placed on the data.

## 13. Target Compound Quantitation and Reporting Limits:

Concentrations of all reported compounds were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

Both samples were analyzed at a 5-fold dilution due to the high concentration of target analytes and/or due to the sample matrix. RL in these samples are elevated as a result of the dilutions performed.

## 14. Laboratory Contact:

No laboratory contact was required.

#### 15. Overall Assessment

2-Methylnaphthalene and 1-methylnaphthalene results in one sample were estimated due to high MSD RPDs.

Acenaphthene and phenanthrene results in one sample were estimated due to high MS/MSD recoveries.

Benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene results in one sample were estimated due to low internal standard area recovery.

Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.

The analytical data is acceptable for use with the qualifications listed above.

# DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDER	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUMBER			SDG NUMBER	490-137889-1
20406.012.001.1065	5.01; SDG No.	TON®) has completed 490-137889-1; Wilcox O TestAmerica Laboratorie	il. Four samples we	re analyzed for Target Analyte
		SAMPLE NUM	BERS	
West-01		West-02		North
South				
USEPA National Functional National Functiona Laboratory Program (April, 2016), Quality	inctional Guide Il Guidelines f In National Fu Ity Assurance/Q Col for Holdin	elines for Organic Superfi for Inorganic Superfund nctional Guidelines for I Quality Control Guidance g Times, Blanks, and V	and Methods Data R Data Review (Janu High Resolution Sup For Removal Active	tions were achieved, following <i>Peview</i> (January, 2017), <i>USEPA</i> cary, 2017), <i>USEPA Contract</i> perfund Methods Data Review ities (September, 2011), and/or April 13, 1989). Specific data
REVIEWER	Gloria J. Swit	alski	DATE	October 23, 2017

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

J - The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### METALS DATA EVALUATION

## 1. Analytical Method:

Samples were prepared and analyzed for ICP metals using the procedures specified in SW-846 Method 6020A. Samples were prepared and analyzed for mercury using the procedures specified in SW-846 Methods 7471B.

#### 2. Holding Times:

The samples were received above the recommended  $\leq$ 6°C NFG limit. Professional judgment was used to not qualify the sample results. All samples met established holding time criteria of 180 days for ICP metals and 28 days for mercury. No qualifications are placed on the data.

#### 3. Initial Calibration:

ICP initial calibration included a blank and three standards and initial calibration verification results fell within the control limits of 90% to 110% of the true values and mercury initial calibration included a blank and six standards and initial calibration verification results fell within the control limits of 85% to 115% values. No qualifications are placed on the data.

## 4. Continuing Calibration:

All ICP results fell within the control limits of 90% to 110% of the true values and all mercury results fell within the control limits of 85% to 115% of the true values. No qualifications are placed on the data.

#### 5. CRDL Standard:

All results for the CRDL standard were within the control limits of 70% to 130% of the true values or the sample results were greater than the CRDL action level. No qualifications are placed on the data.

#### 6. Blanks:

#### A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were prepared/digested for each matrix or every 20 samples whichever is greater. Target analytes were detected in the method and calibration blanks at concentrations that warrant blank action. Sample concentrations less than five times the highest analyte concentration reported in associated blanks are flagged UB (not detected, detection limit raised due to possible blank contamination). Details are noted below:

INSTRUMENT ID DATE/TIME	ANALYTE/BLANK ID	CONCENTRATION	AFFECTED SAMPLES
ICPMS3 10/6/17 @11:05	Iron/MB 490-465078/1-A	2.856 mg/kg	All Solids, remove laboratory "B" flag
ICPMS2 10/4/2017 @12:40	Antimony/CCB 490-465475/20	0.0008651 mg/L	UB, All Solids

MB=Method Blank; CCB=Continuing Calibration Blank

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. ICP Interference Check:

All results for the interference check sample were within the control limits of 80% to 120% of the true values. No qualifications are placed on the data.

## 8. Laboratory Control Sample (LCS):

The recoveries for the LCS were within the control limits provided. No qualifications are placed on the data.

## 9. Duplicate Sample Analysis:

## A. Laboratory Duplicate Analysis:

No sample from this analytical package underwent matrix spike/matrix spike duplicate (MS/MSD) analysis. No qualifications are placed on the data.

## B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 10. Spiked Sample Analysis:

No sample from this analytical package underwent MS/MSD analysis. No qualifications are placed on the data.

#### 11. ICP Serial Dilution:

No sample from this analytical package underwent serial dilution. No qualifications are placed on the data.

## 12. Sample Quantitation and Reporting Limits:

Concentrations of all reported analytes were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

Manganese, selenium, and zinc in one sample were analyzed at a 5-fold dilution due to the high concentration of target analytes and/or due to the sample matrix. RL in this sample are as a result of the dilution performed.

## 13. Laboratory Contact

The laboratory was contacted on October 12, 2017 regarding the manganese percent recovery on a Form 2B-IN. An acceptable response was received on October 20, 2017.

## 14. Overall Assessment:

The antimony result in all solid samples was qualified due to method blank action.

Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.

The analytical data is acceptable for use with the qualifications listed above.

# DATA QUALITY ASSURANCE REVIEW

SITE NAME	Wilcox Oil			
WORK ORDE	R NUMBER	20406.012.001.1065.01	TDD NUMBER	0001/17-065
PROJECT NUM	MBER		SDG NUMBER	490-137889-1
20406.012.001.106	5.01; SDG No.	TON®) has completed 490-137889-1; Wilcox TestAmerica Laboratorio	Oil. Six samples v	vere analyzed for Polynuclea
		SAMPLE NUM	IBERS	
WOR006-012-36-17	71002-56	WOR006-011-36-17	71002-56	West-01
West-02		North		South
This data package v	was validated to	determine if Quality Co	ntrol (QC) specifica	tions were achieved, following
USEPA National Fr National Functional Laboratory Progra (April, 2016), Qual	unctional Guide al Guidelines f m National Fu lity Assurance/Q col for Holdin	elines for Organic Superfi for Inorganic Superfund nctional Guidelines for I Quality Control Guidance g Times, Blanks, and V	ind Methods Data R Data Review (Janu High Resolution Sup of for Removal Activi	Peview (January, 2017), USEPA Lary, 2017), USEPA Contract perfund Methods Data Review lities (September, 2011), and/o April 13, 1989). Specific data
REVIEWER	Gloria J. Swit	alski	DATE	October 12, 2017

## **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

J - The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

#### PAH FRACTION EVALUATION

## 1. Analytical Method:

Samples were prepared and analyzed using the procedures specified in SW-846 Method 8270D Selective Ion Monitoring (SIM).

## 2. Holding Time:

The samples were received within the recommended  $\leq 6^{\circ}$ C NFG limit. All samples were extracted within the required holding time of less than 7 days for waters and less than 14 days for solids/wastes after collection. Analysis of the samples was conducted within 40 days of extraction. No qualifications are placed on the data.

## 3. Tuning/Performance:

DFTPP tuning of the mass spectrometer(s) is not required when performing SIM. No qualifications are placed on the data.

#### 4. Initial Calibration:

All individual relative response factors (RRFs) and average RRFs for the initial calibration were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent relative standard deviations (%RSDs) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits or the correlation coefficient was > 0.990. No qualifications are placed on the data.

## 5. Continuing Calibration:

All individual RRFs for the initial calibration verification (ICV) and continuing calibration (CC) standards were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent differences (%Ds) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits. No qualifications are placed on the data.

#### 6. Blanks:

## A. Laboratory Blanks:

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and concentration or every 20 samples whichever is greater. No target analytes were detected in the method blank at concentrations that warrant blank action. No qualifications are placed on the data.

#### B. Field Blanks:

No field or rinsate blank samples were submitted with this analytical package. No qualifications are placed on the data.

#### 7. System Monitoring Compounds (SMC):

All recoveries of the system monitoring compounds (surrogates) were within the control limits with the following exceptions:

SAMPLE ID	SURROGATE	%R	QC LIMITS	QUALIFIER FLAG
WOR006-012-36-171002-56	Nitrobenzene-d5	247	27-120%	None, only 1 out & 10X DL
WOR006-011-36-171002-56	Nitrobenzene-d5	255	27-120%	None, only 1 out & 10X DL
West-01	2-Fluorobiphenyl	19	29-120%	None, only 1 out & 10X DL
West-02	2-Fluorobiphenyl	19	29-120%	None, 10X DL
	Nitrobenzene-d5	17	27-120%	
North	2-Fluorobiphenyl	6	29-120%	None, 25X DL
	Nitrobenzene-d5	5	27-120%	
	Terphenyl-d4	8	13-120%	
South	2-Fluorobiphenyl	14	29-120%	None, 25X DL
	Nitrobenzene-d5	13	27-120%	

DL=dilution

## 8. Duplicates:

## A. Laboratory Duplicate Analysis:

No sample from this analytical package underwent matrix spike/matrix spike duplicate (MS/MSD) analysis. No qualifications are placed on the data.

## B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 9. Matrix Spike/Matrix Spike Duplicate (MS/MSD):

No sample from this analytical package underwent MS/MSD analysis. No qualifications are placed on the data.

## 10. Internal Standards:

Areas of the six internal standards were within the control limits of a factor of 2 (-50% to +100%) and retention times were within 30 seconds from the associated 12 hour calibration standard with the following exceptions:

SAMPLE ID	INTERNAL STANDARD	% AREA OF 12 HR STD	QUALIFIER FLAG *
WOR006-012-36-171002-56 (10X)	Perylene-d12	43.4%	None, affected compounds reported from 25X
WOR006-011-36-171002-56 (10X)	1,4-Dichlorobenzene-d4 Perylene-d12	48.5% 42.1%	None, affected compounds reported from 25X
West-01	Perylene-d12	41.3%	JH
West-02	Perylene-d12	45.4%	JH/UJ

<sup>\*</sup>Impacted compounds include benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene.

#### 11. Laboratory Control Sample (LCS):

The laboratory analyzed an LCS and recoveries were within the control limits provided. No qualifications are placed on the data.

## 12. Target Compound Identification:

All target compounds reported by the laboratory met identification criteria of relative retention times (RRT) within 0.06 RRT units of the 12 hour standard and that all ions present in the standard mass spectrum were present in the sample mass spectrum and the abundance of these ions agreed within  $\pm$  20% of the standard. No qualifications are placed on the data.

## 13. Target Compound Quantitation and Reporting Limits:

Concentrations of all reported compounds were correctly calculated.

Reported concentrations less than the reporting limit (RL) qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the method detection limit (MDL).

All samples were analyzed at a 10 or 25-fold dilution due to the high concentration of target analytes and/or due to the sample matrix. RL in these samples are elevated as a result of the dilutions performed.

## 14. Laboratory Contact:

No laboratory contact was required.

#### 15. Overall Assessment

Benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene results in two samples were estimated due to low internal standard area recoveries.

Reported concentrations less than the RL qualified "J" by the laboratory are qualified "JQ" to indicate that the result is less than the RL but greater than the MDL.

The analytical data is acceptable for use with the qualifications listed above.

# DATA QUALITY ASSURANCE REVIEW

SITE NAME Wilcox Oil			
WORK ORDER NUMBER	20406.012.001.1065.01	ΓDD NUMBER	0001/17-065
PROJECT NUMBER		SDG NUMBER	490-137889-1
Weston Solutions, Inc. (WE 20406.012.001.1065.01; SDG Semivolatile Organic Compoundelow.	No. 490-137889-1; Wilco	ox Oil. Four sam	ples were analyzed for
	SAMPLE NUMBI	ERS	
West-01	West-02	North	
South			
_		-	
_		-	
_			
		-	
		-	
		<u> </u>	
		-	
		-	
This data package was validate following USEPA National Following USEPA National Following, 2017), USEPA National Page 2017), USEPA Contract Laborate Superfund Methods Data Reversional Activities (September, Preservation (April 13, 1989). September 13, 1989).	Functional Guidelines for nal Functional Guidelines for oratory Program National view (April, 2016), Quality 2011), and/or the Regional F	Organic Superfund r Inorganic Superfu Functional Guideli y Assurance/Qualit Protocol for Holding	Methods Data Review nd Data Review (January nes for High Resolution y Control Guidance for Times, Blanks, and VOA
REVIEWER Gloria I Swi	. II.	D.A. TED	October 23 2017
KEVIEWEK CHOTIS I SWI	TAICKT	DATE	Cioper /3 /UL/

#### **Data Qualifiers**

Data Qualifier Definitions were supplied by the Office of Solid Waste and Emergency Response (September 1989) and are included in the Functional Guidelines. Data qualifiers may be combined (UJ, QJ) with the corresponding combination of meanings. Additional qualifiers may be added to provide additional, more specific information (JL, UB, QJK), modifying the meaning of the primary qualifier. Addition qualifiers utilized by WESTON are H, L, K, B, and Q.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation or detection limit, which has been adjusted for sample weight/sample volume, extraction volume, percent solids, sample dilution or other analysis specific parameters.

An additional qualifier, "B", may be appended to indicate that while the analyte was detected in the sample, the presence of the analyte may be attributable to blank contamination and the analyte is therefore considered undetected with the sample detection or quantitation limit for the analyte being elevated.

J - The analyte was analyzed for, but the associated numerical value may not be consistent with the amount actually present in the environmental sample or may not be consistent with the sample detection or quantitation limit. The value is an estimated quantity. The data should be seriously considered for decision-making and are usable for many purposes.

An additional qualifier will be appended to the "J" qualifier that indicates the bias in the reported results:

- L Low bias
- H High bias
- K Unknown bias
- Q The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

The L and H qualifier will only be employed when a single qualification is required. When more than one quality control parameter affects the analytical result and a conflict results in assigning a bias, the result will be flagged JK.

- R Quality Control indicates that data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Resampling and reanalysis are necessary for verification to confirm or deny the presence of an analyte.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

## **SVOC FRACTION EVALUATION**

#### 1. Analytical Method:

Samples were prepared and analyzed for SVOCs using the procedures specified in SW-846 Method 8270D.

## 2. Holding Time:

The samples were received within the recommended  $\leq$ 6°C NFG limit. All samples were extracted within the required holding time of less than 7 days for waters and less than 14 days for solids/wastes after collection. Analysis of the samples was conducted within 40 days of extraction. No qualifications are placed on the data.

#### 3. Tuning/Performance:

DFTPP tuning of the mass spectrometer(s) was conducted at the required frequency and results were within the required criteria. No qualifications are placed on the data.

#### 4. Initial Calibration:

All individual relative response factors (RRFs) and average RRFs for the initial calibration were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent relative standard deviations (%RSDs) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits or the correlation coefficient was > 0.990. No qualifications are placed on the data.

## 5. Continuing Calibration:

All individual RRFs for the initial calibration verification (ICV) and continuing calibration (CC) standards were greater than the compound dependent (see Table 34 of National Functional Guidelines) control limits. All percent differences (%Ds) were less than the compound dependent (see Table 34 of National Functional Guidelines) control limits with the following exceptions:

STANDARD TYPE	ANALYTE	%D	QC LIMIT	AFFECTED SAMPLES	QUALIFIER FLAG
ICV	Benzaldehyde Hexachlorocyclopentadiene Benzidine	46.4 45.4 51.0	≤40 ≤25 ≤30	All	UJK UJK UJK

#### 6. Blanks:

## A. Laboratory Blanks

A method blank was prepared at the required frequency of every time samples were extracted for each matrix and concentration or every 20 samples whichever is greater. Target compounds were not detected in the blanks analyzed. No qualifications are placed on the data.

#### B. Field Blanks:

No field blank samples were submitted with this analytical package. No qualifications are placed on the data.

## 7. System Monitoring Compounds (SMC):

All recoveries of the system monitoring compounds (surrogates) were within the control limits with the following exceptions:

SAMPLE ID	SURROGATE	%R	QC LIMITS	QUALIFIER FLAG
West-02	2-Fluorobiphenyl	10	29-120%	None, 25X DL
	Nitrobenzene-d5	12	27-120%	
	Phenol-d5	9	10-120%	
North	2-Fluorobiphenyl	3	29-120%	None, 25X DL
	2-Fluorophenol	9	10-120%	_
	Nitrobenzene-d5	3	27-120%	
	Phenol-d5	4	10-120%	
	Terphenyl-d4	5	13-120%	
South	2,4,6-Tribromophenol	478	10-120%	None, 200X DL

DL=dilution

## 8. Matrix Spike/Matrix Spike Duplicate (MS/MSD):

No sample from this analytical package underwent MS/MSD analysis for the soil matrix. No qualifications are placed on the data.

## 9. Duplicates:

## A. Laboratory Duplicate Analysis:

No sample from this analytical package underwent MS/MSD analysis for the soil matrix. No qualifications are placed on the data.

#### B. Field Duplicate Analysis:

No field duplicate samples were submitted with this analytical package. No qualifications are placed on the data.

## 10. Internal Standards:

Areas of the six internal standards were within the control limits of a factor of 2 (-50% to +100%) and retention times were within 30 seconds from the associated 12 hour calibration standard. No qualifications are placed on the data.

#### 11. Laboratory Control Sample (LCS):

The laboratory analyzed LCS and recoveries were within the control limits provided. No qualifications are placed on the data.

## 12. Target Compound Identification:

All target compounds reported by the laboratory met identification criteria of relative retention times (RRT) within 0.06 RRT units of the 12 hour standard and that all ions present in the standard mass spectrum were present in the sample mass spectrum and the abundance of these ions agreed within  $\pm$  20% of the standard. No qualifications are placed on the data.

## 13. Target Compound Quantitation and Reporting Limits:

All samples were ND.

All samples were analyzed at a 25 or 200-fold dilution due to the high concentration of target analytes and/or due to the sample matrix. Reporting limits in these samples are elevated as a result of the dilutions performed.

## 14. Laboratory Contact:

The laboratory was contacted on October 12, 2017 regarding the lack of initial calibration data and why samples weren't analyzed at lesser dilutions. An acceptable response was received on October 20, 2017.

## 15. Overall Assessment

Benzaldehyde, hexachlorocyclopentadiene, and benzidine results in all samples were estimated due to high initial calibration verification %D.

The analytical data is acceptable for use with the qualifications listed above.

# APPENDIX F

# ANALYTICAL RESULTS

The analytical results will be provided with the final Report CD.

# APPENDIX G

QUALITY ASSURANCE SAMPLING PLAN

# **QUALITY ASSURANCE SAMPLING PLAN**

## **FOR**

# R6 WILCOX OIL REFINERY REMOVAL ASSESSMENT WEST 221st STREET SOUTH/REFINERY ROAD BRISTOW, CREEK COUNTY, OKLAHOMA

Prepared for

U.S. Environmental Protection Agency Region 6

Will LaBombard, Project Officer 1445 Ross Ave. Dallas, Texas 75202

Through

U.S. Environmental Protection Agency Region 8

1595 Wynkoop Street Denver, Colorado 80202-1129

Contract No. EP-S8-13-01
Technical Direction Document No. 0009/WESTON-042-17-064
WESTON Work Order No. 20408.012.009.6064.01
NRC No. N/A
SEMS ID OK0001010917
FPN N/A
EPA OSC Steve Mason
START PTL Derrick Cobb

Prepared by

Weston Solutions, Inc.

Cecilia H. Shappee, P.E., Program Manager 5599 San Felipe, Suite 700 Houston, Texas 77056 (713) 985-6600

August 2017

# TABLE OF CONTENTS

Sec	tion			Page
1.	INT	RODUCTION		1-1
	1.1	PROJECT OBJECTIVES		1-1
	1.2	PROJECT TEAM		1-2
	1.3	QASP FORMAT		1-3
2.	SITI	E BACKGROUND		2-1
	2.1	SITE LOCATION AND DESCRIPTION		2-1
	2.2	OPERATIONAL AND REGULATORY	HISTORY	2-3
	2.3	SUMMARY OF PREVIOUS INVESTIG	ATIONS	2-4
	2.4	POTENTIAL SOURCES OF HAZARDO	OUS MATERIALS	2-5
	2.5	SITE CONCERNS		2-6
3.	SAN	APLING APPROACH AND PROCEDUI	RES	3-1
	3.1	OVERVIEW OF SAMPLING ACTIVITY		
		3.1.1 Data Quality Objective		3-1
			entation	
		3.1.4 Field Activities Review Meetin	g	3-2
		3.1.5 Mobilization and Command Po	st Establishment	3-2
	3.2	SAMPLING/MONITORING APPROAC	Н	3-2
		3.2.1 Post-Excavation Soil Sampling		3-3
	3.3	SAMPLE MANAGEMENT		3-4
	3.4	DECONTAMINATION		3-6
	3.5	SAMPLE PRESERVATION, CONTAIN	ERS, AND HOLD TIMES	3-6
4.	ANA	ALYTICAL METHODS AND DATA VA	LIDATION	4-1
5.	<b>QU</b> A	ALITY ASSURANCE		5-1
	5.1	SAMPLE CHAIN-OF-CUSTODY PROC		
	5.2	PROJECT DOCUMENTATION		5-2
	5.3	REPORT PREPARATION		5-6

# LIST OF APPENDICES

Appendix A	Standard	Operating	Procedures
------------	----------	-----------	------------

Appendix B Data Quality Objective

Appendix C TDD No. 0009/WESTON-042-17-064

# LIST OF FIGURES

Figure 1-1	Site Location Map

Figure 2-1 Site Area Map

Figure 2-2 Site Property Map

Figure 3-1 Proposed Excavation Map

# LIST OF TABLES

Table 1-1	Site-Specific Action Level Wilcox Oil Refinery1-
Table 3-1	Requirements for Containers, Preservation Techniques, Sample Volumes, and Holding Times
Table 4-1	Sample Description and Rationale4-

## 1. INTRODUCTION

Weston Solutions, Inc. (WESTON®), the Superfund Technical Assessment and Response Team (START) Contractor has been tasked by the U.S. Environmental Protection Agency (EPA) Region 6 Prevention and Response Branch (PRB) under Region 8 Contract No. EP-S8-13-01, Technical Direction Document (TDD) No. 0009/WESTON-042-17-064 (Appendix C) to provide technical support during the time critical removal action at the Wilcox Oil Company Superfund Site, located at West 221st Street South/Refinery Road near Bristow, Creek County, Oklahoma. A Site Location Map is provided as Figure 1-1. All figures are provided as separate portable document format (PDF) files. The Superfund Enterprise Management System (SEMS) Identification Number assigned to the Site is OK0001010917. Site coordinates are Latitude 35.842144° North and Longitude 96.381456° West.

START has prepared this Quality Assurance Sampling Plan (QASP) to describe the technical scope of work and activities to be completed as part of the TDD. START will work concurrently with the Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC., who will be responsible for excavation, transportation, and disposal of site-related contaminated soil including benzo(a)pyrene and sludge containing total petroleum hydrocarbons (TPH). Specific ERRS site-related activities will be described in their respective work plan documents.

## 1.1 PROJECT OBJECTIVES

START is providing general technical support to EPA for performance of the Wilcox Oil Refinery time-critical removal action. START activities include establishing on-site excavation grids; collecting post-excavation samples; performing laboratory analysis, data validation, and data management; air monitoring; and maintaining site documentation using Response Manager. In addition, written, digital, and cost documentation will be compiled documenting the removal activities.

Specific field investigation activities will include discussion of data quality objectives (DQOs), health and safety protocol, community relations, field activity meetings, command post establishment, and quality control/quality assurance.

The objective of the time-critical removal action is to remove the threat to human health and the environment posed by chemicals of concern (COCs) resulting from historical site operations conducted at the former Wilcox Oil Refinery Site, specifically related to Property 006. The objective of the time-critical removal action will be achieved by excavating contaminated soils ranging from a depth of 0 to 24 inches below ground surface (bgs). Post-excavation soil samples will be collected by START prior to backfilling the excavated grids with clean fill material. Soil samples representing each grid will be analyzed for Semi-volatile Organic Compounds (SVOCs) following SW-846 Method 8270 - Selected Ion Monitoring (SIM). The site-specific COC is Target Analyte List (TAL) benzo(a)pyrene. The site-specific action level, as specified in the May 2017 "EPA Action Memorandum," is provided in Table 1-1.

Table 1-1
Site-Specific Action Level
Wilcox Oil Refinery
Bristow, Creek County, Oklahoma

Analyte	Action Level <sup>1</sup>	Units
Benzo(a)pyrene	0.11	mg/kg

Notes:

mg/kg - milligrams per kilogram

1 – specified in the "EPA Action Memorandum, May 2017."

## 1.2 PROJECT TEAM

The START Project Team Leader (PTL) position will be held by Derrick Cobb, and the Field Team Leader (FTL), Meagan Willis, will fill positions of Field Safety Officer (FSO) and Data Manager. The PTL will be responsible for the technical quality of work performed in the field, documentation of site operations, collecting confirmation soil samples, providing overall site health and safety support, and will serve as the START liaison to the EPA Region 6 On-Scene Coordinator (OSC) Steve Mason. The FTL, in collaboration with EPA OSC Mason will determine the location for sample collection in the field, collect samples as necessary, log the activities at each sample location in the field logbook, and verify the sample documentation. Data management will include entering samples collected into SCRIBE; producing accurate chain-of-custody documentation for the samples during the removal action; entering daily operations and sample collection data into the Regional Response Center–Enterprise Data Management System (RRC-

EDMS) Response Manager software; and sample shipment. START will conduct sample collection, preparation, and documentation; and document site activities in field logbooks and data sheets. The START Scope of Work Leader, Jeff Criner, will provide technical support to the START personnel during project activities.

## 1.3 QASP FORMAT

This QASP has been organized in a format that is intended to facilitate and effectively meet the objective of the removal action. The QASP is organized as follows:

- Section 1 Introduction
- Section 2 Site Background
- Section 3 Sampling Approach and Procedures
- Section 4 Analytical Methods and Data Validation
- Section 5 Quality Assurance

All figures are provided as separate Portable Document Format (PDF) files. Appendices are attached with the following information.

- Appendix A Standard Operating Procedures
- Appendix B Data Quality Objective
- Appendix C TDD No. 0009/WESTON-042-17-064



#### 2. SITE BACKGROUND

This section presents a summary of background information for the Wilcox Oil Refinery site including site location and description, operational and regulatory history, previous investigations, and sources of contamination.

#### 2.1 SITE LOCATION AND DESCRIPTION

The Wilcox Oil Refinery site is an abandoned and demolished oil refinery and associated tank farm located north of Bristow, Creek County, Oklahoma. The geographic coordinates of the Site are approximately 35°50'31" North latitude and 96°23'02" West longitude. A detailed title search in the Creek County Clerk office confirms that the property was used in oil refinery operations from approximately 1915 until November 1963. The former Lorraine refinery, including associated tank farm, operated under numerous companies from approximately 1915 to 1937 when the property was sold to Wilcox Oil and Gas Company. Wilcox Oil and Gas Company purchased refinery operations on the remaining acres east of the railroad tracks and operated as a crude oil refinery from the 1920s until the property was sold on 01 November 1963. The site encompasses approximately 140 to 150 acres. A Site Area Map is provided as Figure 2-1, and a Site Property Map is provided as Figure 2-2.

The site is flanked by Route 66 to the west; a residential area and Turner Turnpike to the northwest and north; Sand Creek to the southwest; and residential, agricultural, and wooded areas to the east and south. The topography in the vicinity of the site slopes to the south. Surface water runoff would follow the topography in the vicinity of the site. There are several fresh-water ponds on the site, and some local residents indicated that, historically, fishing has occurred. Two intermittent streams drain the eastern and western portions of the site, and these streams flow south into Sand Creek.

The former Wilcox Process Area is fenced while residential and agricultural properties on the site are partially fenced with barbed wire. A chain-link fence was installed around the former Lorraine Process Area during the 2015 Phase II removal assessment.

The Site is divided into five major former operational areas: the Wilcox Refinery, the Lorraine Refinery, the North Tank Farm, the East Tank Farm, and the Loading Dock Area. These five areas are described as follows:

- The former Wilcox Refinery Area is fenced and covers approximately 26 acres. Most of the equipment and storage tanks that remained on-site in 1963 were auctioned and have been salvaged for scrap iron by private land owners, and what remains are in ruins. Four aboveground storage tanks (ASTs) (12,500 gallons each) remain standing, in addition to a number of buildings, discarded drums and pieces of scrap iron and piping. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature. A building in the northern part of the former refinery has been converted to a residence. An intermittent creek flows southward across the eastern portion of the refinery area through a small pond in the southeast corner of the refinery area and into Sand Creek.
- The former Lorraine Refinery Area covers approximately 8 acres and includes the southwestern portion of the Site, south of Refinery Road and west of the railroad. No refinery structures remain in the processing area. The First Assembly of God Church, a playground, and one residence are located here. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature.
- The East Tank Farm was a large crude oil storage area/tank farm covering approximately 80 acres and contains pits, ponds, and a number of circular berms that surrounded tank locations. All of the tanks have been cut down and removed; however, remnants of the tank locations remain and are visible. Many of the berms surrounding the pits, ponds, and former tanks have been cut or leveled. An intermittent creek is located in the eastern portion of the tank farm and flows south to Sand Creek. A pumping or gas compressor station exists in the north-central portion of the Site, and an active pipeline crosses from northwest to southeast across the middle of the Site. There are four residences located on top of or directly next to former tank locations. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature. Waste was also observed in several drainage channels that empty into Sand Creek.
- The North Tank Farm was a crude and fuel oil storage area consisting of approximately 20 acres. No refinery structures remain in the product storage area, and all tanks have been cut down and removed. Remnants of the tank locations are not visible, and historic locations are difficult to pinpoint. One residence is located in this area.
- The Loading Dock Area is approximately 7 acres and was used for loading and unloading product by rail. Just a few refinery structures/supports remain and are generally located

parallel to the existing rail lines. There are multiple areas of stressed vegetation, barren areas, and visible black tarry waste of a hydrocarbon nature.

#### 2.2 OPERATIONAL AND REGULATORY HISTORY

A modern skimming and cracking plant was constructed in 1929. The upgraded facility had an operating capacity of 4,000 barrels of crude oil per day. The main components of the system consisted of a skimming plant, cracking unit, and re-distillation battery with a vapor recovery system and continuous treating equipment. The crude oil was brought directly from the field, eliminating storage and handling facilities, but resulting in crude oil with high sediment and water.

Sanborn fire insurance maps can be used to understand historical property usage. The Wilcox Oil and Gas Company and Lorraine Refining Company Sanborn Insurance Maps indicate that the properties contained approximately 80 storage tanks of various sizes, a cooling pond, and approximately 10 buildings housing refinery operations. The maps also indicate that crude oil, fuel oil, gas oil, distillate, kerosene, naptha, and benzene (petroleum ether) were all stored on the property.

After the refinery operations ceased and most of the tanks and buildings were demolished and sold for scrap, the property was sold to private interests. Beginning in 1975 with the construction of the church, private residences were constructed on 6 parcels of land that were part of the former refinery operations. The most recent being constructed in 2003/2004. One former building associated with the refinery was repurposed as a residence. As a result, there is a total of seven residences on the Site, all of which are located on former tank or refinery operations locations. Three of the residences located on the eastern portion of the Site are known to use water from domestic/private wells. The drainage pattern of the Site is primarily toward Sand Creek that serves as the western and southwestern boundaries of the Site. Two intermittent streams and several drainage channels cross the portion of the Site east of the railroad and flow into Sand Creek.

The refinery waste source areas of concern include a backfilled oily waste pond and pit, a breached settling pond, a former pond apparently backfilled with solid refinery waste, and a number of former tank storage areas. The contaminants of concern are metals and organic compounds (Total Petroleum Hydrocarbons (TPH) and Polycyclic Aromatic Hydrocarbons [PAHs]). These potential

contaminants of concern are found in soil, sediment, and waste material.

Specifically, Property 006 (subject to this removal action) is currently occupied by a family. During previous assessment activities, levels of benzo(a)pyrene were found to exceed the screening level of 0.016 mg/kg at depths ranging from 0.0 inches bgs to 24 inches bgs. No other SVOC or TPH exceedances were reported for Property 006.

#### 2.3 SUMMARY OF PREVIOUS INVESTIGATIONS

Multiple investigations have been performed on the Site since 1994. These documents were used to summarize the Site background and operational history described above.

- Preliminary Assessment (PA) was performed at the former Wilcox Refinery Site by the Oklahoma Department of Environmental Quality (ODEQ) in December 1994.
- Expanded Site Inspection (ESI) was performed at the former Wilcox Refinery Site for the EPA in March 1997.
- Site Assessment (SA) was performed at the former Wilcox Refinery Site by EPA in March 1999.
- PA was performed at the former Lorraine Refinery Site by ODEQ in September 2008.
- Site Inspection (SI) was performed at the former Lorraine Refinery Site by ODEQ in August 2009.
- ESI was performed at the former Lorraine Refinery Site by ODEQ in September 2010.
- ESI was performed at the former Wilcox Refinery Site by ODEQ in September 2011.
- Hazard Ranking System Package was completed in May 2013.

In 2014, the EPA ERRS contractor capped and locked an abandoned drinking water well located near the former location of the First Assembly of God Church to the west of the site. ERRS also installed a fence with signage around an oily sludge pit located on a residential property developed within the historical refinery boundary (Property 001).

In 2014 and 2015, WESTON, the EPA Region 6 START contractor, was tasked by EPA Region 6 to perform a Removal Assessment at the Wilcox Oil Refinery site under TDD No. 5/WESTON-042-15-004. Phase 1 was conducted 08 - 11 December 2014, and Phase 2 was conducted 18 May 2015 through 12 June 2015. The field sampling strategy focused on collecting soil samples from

residential properties that have been built on or are in close proximity to the Wilcox Oil Refinery Site.

Prior to initiating the sampling activities in Phase 1, EPA gained access to one targeted residential property (Property 001) within the former Wilcox Oil Refinery Site boundary. As part of the assessment activities, the EPA Team collected 187 soil samples (including duplicate QA/QC samples) from a total of 57 grids. Two samples were also taken at the request of the EPA OSC from soil on the bank of an on-site pond and soil that was affected with a tar-like substance from an unknown source.

Prior to initiating Phase 2, EPA gained access to 9 residential properties. The EPA Team collected a total of 240 soil samples (including duplicate QA/QC samples) from a total of 52 grids from 9 properties on and around the Wilcox Oil Refinery Site (5 properties located on the site and 4 properties located adjacent to the site). At the direction of the EPA OSC, select locations were pushed to deeper depths to visually investigate the presence of potential refinery waste. Based on historical site operations and historical aerial photographs, selected grids were investigated below 24 inches bgs. These grids were identified on Properties 002, 006, 008, and 011. The center point of each grid was advanced to a maximum depth of 8 feet bgs or refusal (i.e., bedrock). Visual observations were noted. No analytical samples were collected from these at-depth soil investigation borings.

Results from previous investigations are presented in the EPA START-3 *Wilcox Oil Company Superfund Site Removal Assessment Report*, (TDD No. 5/WESTON-042-15-004) dated January 2016, for results from previous investigations.

#### 2.4 POTENTIAL SOURCES OF HAZARDOUS MATERIALS

Information concerning the known or potential hazardous substance source areas at the site (Property 006) and the COCs thought to be associated with each source are presented in the following section. Based on the EPA START-3 Removal Assessment Report, former site activities that contributed to potential sources include the following:

- The Wilcox Refinery
- Lorraine Refinery

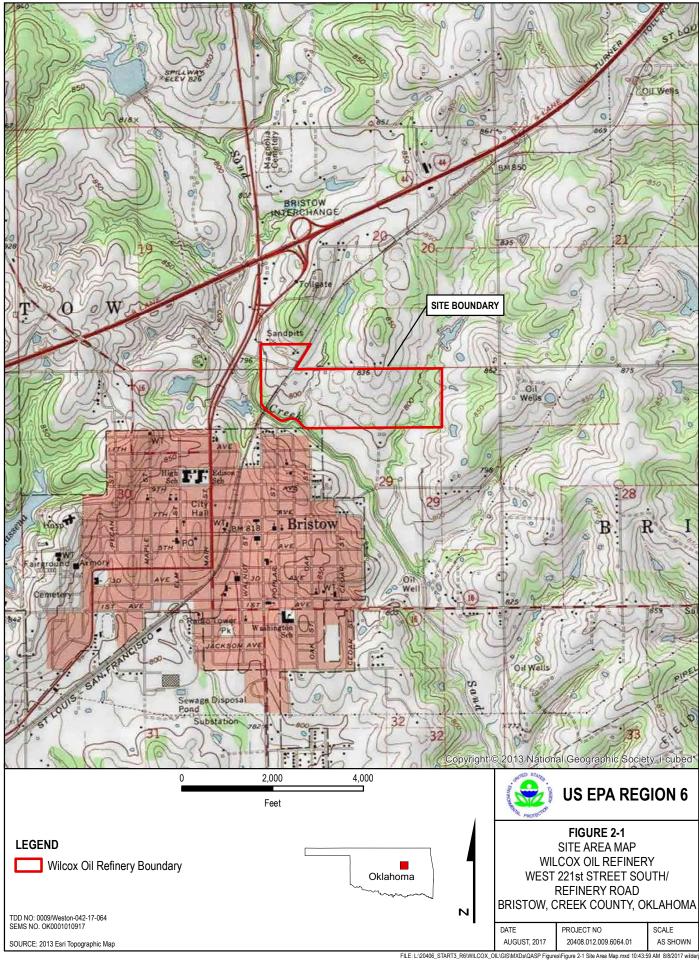
- North Tank Farm
- East Tank Farm
- Loading Dock Area

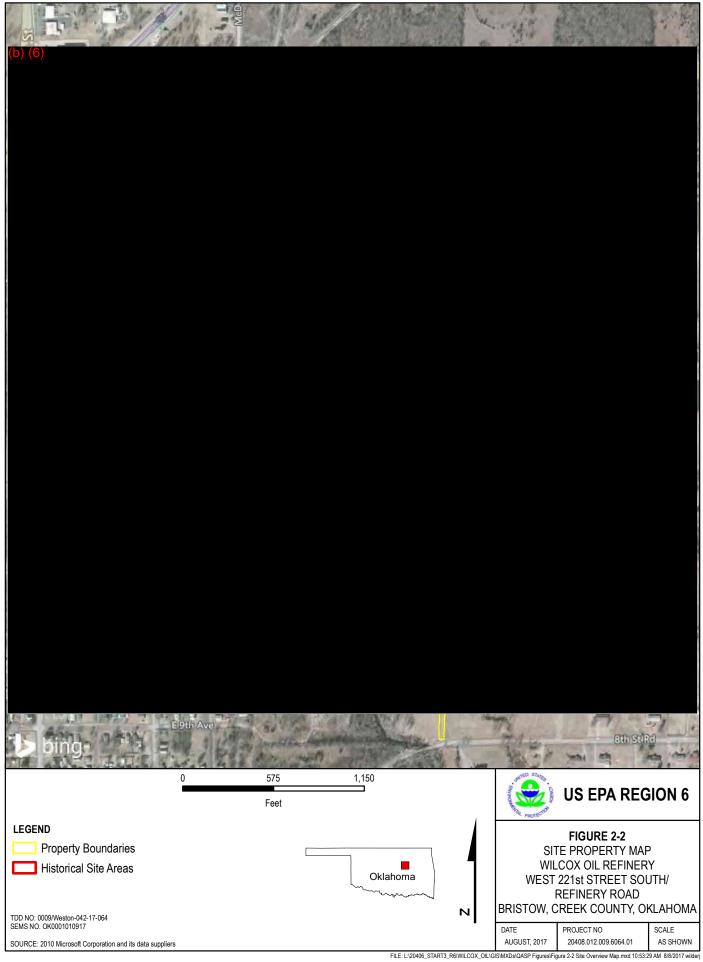
#### 2.5 SITE CONCERNS

The site presents concerns regarding public health and the environment as a result of the following circumstances:

- Surface and subsurface soils contaminated with SVOCs (specifically benzo(a)pyrene) to depths of 24 inches exceeding the removal action level (0.11 mg/kg) established for the site.
- Exposure to hazardous substances could be from ingestion, skin absorption, and inhalation.

The COCs for Property 006 are SVOCs associated with former refinery operations.





#### 3. SAMPLING APPROACH AND PROCEDURES

The specific field investigation activities that will be conducted during the Wilcox Oil Refinery removal are presented in the following subsections. An overview of sampling activities, along with a discussion of data quality objectives, health and safety protocol, community relations, field activity meetings, and command post establishment are summarized in Subsection 3.1. Subsection 3.2 summarizes grid establishment, post excavation soil sampling, and quality control/quality assurance. Relevant START Standard Operating Procedures (SOPs) for field sampling methods are included in Appendix A.

#### 3.1 OVERVIEW OF SAMPLING ACTIVITIES

Based on historical site data, a sampling strategy was developed to collect data necessary to evaluate and meet the objectives of the removal action. A Proposed Excavation Map is provided as Figure 3-1.

#### 3.1.1 Data Quality Objective

The objective of the removal action is to remove the threat to human health and the environment posed by COCs resulting from historical site operations conducted at the Wilcox Oil Refinery Site at Property 006. To accomplish this, a data quality objective (DQO) for determining the presence or absence of site-related contaminated soils that are above or below the site-specific action level for this project was developed (Appendix B). This site-specific DQO was developed using the seven-step process set out in the *EPA Guidance for Quality Assurance Project Plans: EPA QA/G-5*.

#### 3.1.2 Health and Safety Plan Implementation

START field activities will be conducted in accordance with a site-specific Health and Safety Plan (HASP) prepared for the Wilcox Oil Refinery removal action. START will coordinate its safety practices and procedures with EPA and ERRS. The HASP specifies that soil sampling activities will proceed in modified Level D personal protective equipment (PPE) including coveralls and/or long-sleeve shirts/pants, safety glasses, disposable gloves, and steel-toed boots. The PTL will act as the FSO and will be responsible for implementation of the HASP during START field activities.

START will be required to conduct work according to the guidelines and requirements of the HASP. In accordance with the START general health and safety operating procedures, the field team will also drive the route to the hospital specified in the HASP prior to initiating sampling activities.

#### 3.1.3 Community Relations

Community relations may require additional EPA involvement due to the general nature of the site. Community relations issues will be directed to the EPA OSC. If the EPA OSC is not present, the START PTL, under the guidance of the Scope of Work (SOW) Leader, will manage community relations in the field as directed by the EPA OSC.

#### 3.1.4 Field Activities Review Meeting

START will conduct a meeting with the entire field team to familiarize them with the project scope of work, discuss the planned field activities, roles and responsibilities, and review the project HASP and other relevant operating procedures. This meeting will be conducted prior to any site activities. It is anticipated that EPA, ERRS, and START will conduct daily planning meetings and document overall site activities and progress as necessary.

#### 3.1.5 Mobilization and Command Post Establishment

START will mobilize the equipment required for the removal activities from the WESTON Regional Equipment Store (RES) warehouse located in Houston, Texas, and the EPA Warehouse located in Addison, Texas, as necessary.

#### 3.2 SAMPLING/MONITORING APPROACH

Sampling will be conducted in general accordance with the *EPA Compendium of Emergency Response Team (ERT) Soil Sampling and Surface Geophysics Procedures* and with EPA ERT and START SOPs (Appendix A). WESTON SOPs include SOP No. 0110.01 and 1001.10 (Surface Soil Sampling and Composite Sampling). The specific sampling, decontamination, and sample handling procedures, including disposition of investigation-derived waste (IDW), are described in the following subsections. The following subsections describe the proposed sampling, sample

handling procedures, and field quality control (QC) samples for the removal action activities. The EPA OSC will be notified, and concurrence will be obtained if significant deviations from the planned sampling activities are proposed. Details regarding deviations of the QASP will be documented in the START site logbook.

#### 3.2.1 Post-Excavation Soil Sampling

Upon completion of ERRS excavation activities, START will collect confirmation samples from the 100-foot by 100-foot systematic grids established across the site (Figure 3-1). ERRS will excavate 8 grids to depths ranging from 0 to 24 inches bgs. After ERRS excavation activities, START will collect approximately 10 confirmation soil samples (8 normal and 2 quality assurance samples) from 8 excavated grids.

Each sample will be collected from the bottom of the excavated grid and will consist of a 5-point composite sample. Samples will be collected using equipment and procedures appropriate to the matrix, parameters, and sampling objectives. Samples will be collected with dedicated (disposable) plastic scoops. The samples will then be stored in cleaned, unused glass or plastic containers and preserved in a manner appropriate to the analysis to be performed. Sampling personnel will change gloves between each sample collection/handling. The volume of the sample collected will be sufficient to perform the laboratory analysis requested. The composite samples will be placed in appropriate laboratory containers and labeled with appropriate sample nomenclature, and placed immediately on ice, prior to shipment to a laboratory for analysis (following SOP 1101.01 and 1102.01).

Information regarding sample management, sample nomenclature, decontamination, and sample preservation, containers and holding times can be found in Sections 3.3 and 3.4. Information regarding sample analysis and data validation is summarized in Section 4.

#### **3.2.2** Field Quality Control Samples

START will collect field quality control samples as needed during the removal action according to SOPs 1005.01, 1005.02. Quality assurance/quality control (QA/QC) samples will be collected according to the following:

- Blind field duplicate samples will be collected during sample activities for locations selected by the PTL. The data obtained from these samples will be used to ensure the quality assurance of the sampling procedures and laboratory analytical data by following an evaluation of reproducibility of results. Efforts will be made to collect duplicate samples from an area colocated from the original sample location where there is visual evidence of contamination or where contamination is suspected. One duplicate sample will be collected for every 10 samples of the same matrix.
- Matrix Spike (MS)/Matrix Spike Duplicate (MSD) samples will be collected during the sample activities for locations selected by the PTL. The data obtained from these samples will be used to ensure the quality assurance of the sampling procedures and laboratory analytical data by following an evaluation of reproducibility of results. Efforts will be made to collect MS/MSD samples from an area co-located from the original sample location where there is visual evidence of contamination or where contamination is suspected. One MS and one MSD samples will be collected for every 20 samples of the same matrix.
- Temperature blanks will be prepared in the field and will consist of one 40-milliliter glass sample container with Teflon-lined septum cap. The temperature blank will be packaged along with the field samples in the shipping cooler and will represent the temperature of the incoming cooler upon receipt at the laboratory. Use of these samples within a shipping container enables the laboratory to assess the temperature of the shipment without disturbing any of the field samples.

#### 3.3 SAMPLE MANAGEMENT

Specific nomenclature that will be used by START will provide a consistent means of facilitating the sampling and overall data management for the project (SOP 0110.05) The START Scope of Work Leader must approve any deviations from the sample nomenclature proposed below.

As stated in SOP 0110.05, sample nomenclature will follow a general format regardless of the type or location of the sample collected. The general nomenclature consists of the following components:

- Property/Site Identification (ID) or Area of Concern
- Grid ID
- Sample Collection Depth
- Collection Type (Soil, Field QC, etc.)
- QA/QC Type (Normal, Duplicate, etc.).

The following presents the sample nomenclature for analytical samples that will generate unique sample names compatible with most data management systems. The sample nomenclature is based upon specific requirements for reporting these results.

#### **SAMPLE NOMENCLATURE - SOIL**

Property ID - Grid ID - Depth - Collection Type + QC Type + Date

Where:

**Property ID:** An identifier used to designate the particular property or Area of Concern

(AOC) where the sample was collected.

**Grid ID:** A two- or three-character alphanumeric code used to designate the particular

grid or station within the AOC where the sample was collected.

**Depth:** A two-digit code used to designate what depth of sample was collected:

06	0 to 6 inches
18	6 to 18 inches
24	18 to 24 inches
48	24 to 48 inches

**Collection Type:** A one-digit code used to designate what type of sample was collected:

1	Surface Water
2	Groundwater
3	Leachate
4	Field QC/Water Sample
5	Soil

6	Oil
7	Waste
8	Other
9	Drinking Water
0	Sediment

**QC Type:** A one-digit code used to designate the QC type of the sample:

1	Normal
2	Duplicate
3	Rinsate Blank
4	Trip Blank
5	Field Blank

6	Confirmation
7	Confirmation Duplicate

**Date:** An identifier used to designate the date of sample collection.

#### **Examples:**

- **WOR006-D4-24-170811-56\_**: Represents a confirmation soil sample collected from Wilcox Oil Refinery Property 006 from Grid D4 at a depth of 24 inches bgs on August 1, 2017.
- WOR006-D4-24-170811-57: Represents the duplicate confirmation soil sample collected from Wilcox Oil Refinery Property 006 Grid D4 at a depth of 24 inches bgs on August 1, 2017.

Sample data management will be completed utilizing SCRIBE including chain of custody and sample documentation needs.

#### 3.4 DECONTAMINATION

The non-disposable sampling equipment, if any, (hand trowels, stainless steel bowls, Geoprobe coring shoe, etc.) used during the sample collection process will be thoroughly pre-cleaned before initial use, between use, and at the end of the field investigation. Equipment decontamination, as described in SOP 1201.01, will be completed in the following steps:

- Water spray or brush, if needed, to remove soil/sediment from the equipment.
- Nonphosphate detergent and potable water wash to clean the equipment.
- Final potable water rinse.
- Equipment air-dried.

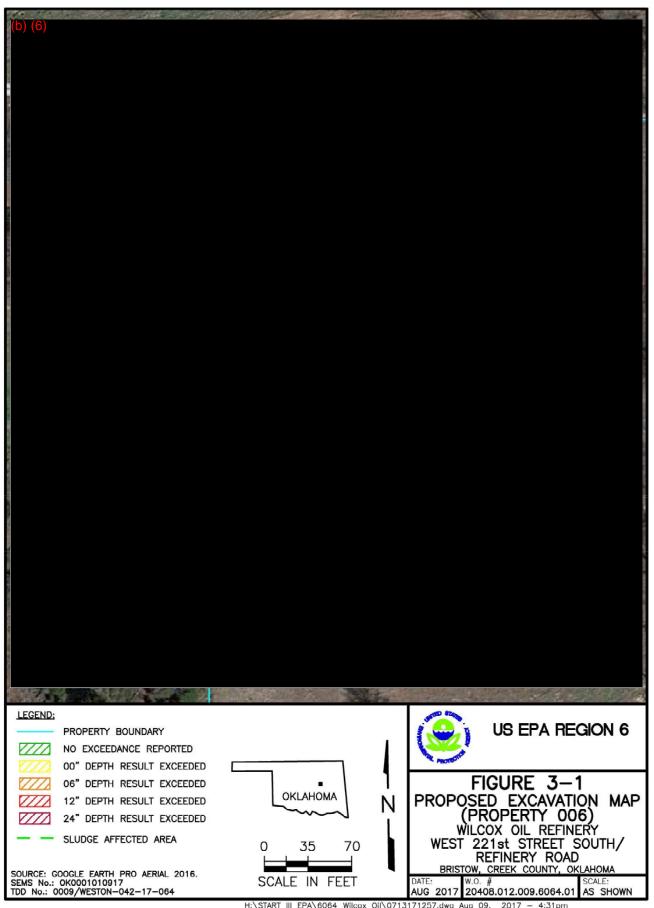
Personnel decontamination procedures will be described in the site-specific HASP that will be prepared by START prior to implementation of activities at the Site. All decontamination activities will be conducted at a temporary decontamination pad that will be constructed/designated in an area to be determined by the PTL.

#### 3.5 SAMPLE PRESERVATION, CONTAINERS, AND HOLD TIMES

Sample preservation, containers, and holding times utilized during this Removal Action will be consistent with analytical methods and laboratory volume requirements as provided in Table 3-1. Once collected, samples will be stored in coolers and kept at approximately 4° C while at the site and until they are submitted for analysis. Chain-of-custody forms will be completed for each sample shipment and sent with the samples to the designated laboratory. Samples that have been analyzed will be disposed of by the designated laboratory in accordance with the laboratory SOPs.

# Table 3-1 Requirements for Containers, Preservation Techniques, Sample Volumes, and Holding Times Wilcox Oil Refinery Bristow, Creek County, Oklahoma

Name	Analytical Methods	Matrix	Container	Preservation	Minimum Volume or Weight	Maximum Holding Time
SVOCs	SW846 8270-SIM	Soil	Glass	4°C	8 oz.	14 days to extraction (soil)/ 40 days after extraction to analysis



H:\START III EPA\6064\_Wilcox Oil\0713171257.dwg Aug 09, 2017 - 4:31pm

#### 4. ANALYTICAL METHODS AND DATA VALIDATION

Soil samples will be submitted to a participating EPA laboratory for analytical analysis. Requested sample analysis will be indicated on the chain-of-custody form and will include the following method:

• SVOCs [benzo(a)pyrene] by EPA SW-846 Method 8270-SIM

Table 4-1 below illustrates the sample description and rationale.

Table 4-1
Sample Description and Rationale
Wilcox Oil Refinery
Wilcox, Creek County, Oklahoma

Sample Location	Sample Collection Method	Sample Depth	No. of Samples <sup>1</sup>	Rationale	EPA Analytical Method
Soil	Disposable Scoop Hand Trowel	24 inches bgs	10	To document the removal of site-specific constituents of concern in subsurface soil	SVOCs – EPA SW-846 Method 8270-SIM

Notes: <sup>1</sup>Soil Samples – 8 Normal and 2 QA/QC samples including field duplicates and MS/MSD samples.

Following analysis, the laboratory will provide preliminary deliverables data via email in PDF. The final data deliverable will include a full Contract Laboratory Program (CLP)-like data package (Level IV data package with QC and raw data) in PDF and a final Electronic Data Deliverable (EDD) in Microsoft Excel format. Initial data deliverables (preliminary results) will be based on a 1-business-day Turn-around Time (TAT), unless otherwise directed by the EPA OSC. The TAT criteria will be initiated when the sample group is received by the laboratory and continues until the data deliverable is submitted to START. The final Level IV data deliverable will be submitted by the laboratory based on a 10-business-day TAT.

START will validate the analytical data generated by the laboratory and provide an evaluation of QA/QC samples for reporting purposes. Data validation will be conducted in accordance with the EPA CLP *National Functional Guidelines for Organic Superfund Data Review – August 2014* (EPA-S40-R-014-002) and *National Functional Guidelines for Inorganic Superfund Data Review – August 2014* (EPA-S40-R-013-001). A summary of the data validation findings will be

presented in Data Validation Summary Reports as part of the final report. The following will be evaluated to verify that the analytical data is within acceptable QA/QC tolerances:

- The completeness of the laboratory reports, verifying that required components of the report are present and that the samples indicated on the accompanying chain of custody are addressed in the report.
- The calibration and tuning records for the laboratory instruments used for the sample analyses.
- The results of internal standards analyses.
- The results of laboratory blank analyses.
- The results of laboratory control sample (LCS) analyses.
- The results of MS/MSD analyses.
- The results of surrogate recovery analyses.
- Compound identification and quantification accuracy.
- Laboratory precision, by reviewing the results for blind field duplicates.
- Variances from the QA/QC objectives will be addressed as part of the Data Validation Summary Reports.

#### 5. QUALITY ASSURANCE

Quality Assurance (QA) will be conducted in accordance with the WESTON Corporate Quality Management Manual, dated October 2016; the WESTON START Quality Management Plan; and EPA Guidance for Performing Removal Actions under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Following receipt of the TDD from EPA, a Quality Control (QC) officer will be assigned and will monitor work conducted throughout the entire project including reviewing interim report deliverables and field audits. The START PTL will be responsible for QA/QC of the field investigation activities. The designated laboratory utilized during the investigation will be responsible for QA/QC related to the analytical work. START will also collect samples to verify that laboratory QA/QC is consistent with the required standards and to validate the laboratory data received.

#### 5.1 SAMPLE CHAIN-OF-CUSTODY PROCEDURES

START will utilize SCRIBE for the sample documentation and chain of custody preparation needs. Because of the evidentiary nature of sample collection, the possession of samples must be traceable from the time the samples are collected until they are introduced as evidence in legal proceedings. After sample collection and identification, the samples will be maintained under the chain-of-custody procedures. Personnel required to package and ship coolers containing potentially hazardous material will be trained accordingly.

The chain-of-custody procedures are documented in WESTON SOP 1101.01, and will be made available to personnel involved with the sampling. A typical chain-of-custody record included in SOP 1101.01 will be completed each time a sample or group of samples is prepared for shipment to the laboratory. The record will repeat the information on each of the sample labels and will serve as documentation of handling during shipment. A copy of this record will remain with the shipped samples at all times, and the member of the sampling team who originally relinquished the samples will retain another copy. START personnel will complete a chain-of-custody form for all samples sent to a designated off-site laboratory.

Samples relinquished to the participating laboratories will be subject to the following procedures for transfer of custody and shipment:

- The chain of custody record will accompany samples. When transferring possession of samples, the individuals relinquishing and receiving the samples will sign, date, and note the time of the sample transfer on the record. This custody record documents transfer of sample custody from the sampler to another person or to the laboratory.
- Samples will be properly packed for shipment and dispatched to the appropriate laboratory for analysis with separate, signed custody records enclosed in each sample box or cooler. Sample shipping containers will be custody-sealed for shipment to the laboratory. The preferred procedure includes use of a custody seal wrapped across filament tape that is wrapped around the package at least twice. The custody seal will then be folded over and stuck to the seal to ensure that the only access to the package is by cutting the filament tape or breaking the seal to unwrap the tape.
- If sent by common carrier, a bill of lading or air bill will be used. Bill of lading and air bill receipts will be retained in the project file as part of the permanent documentation of sample shipping and transfer.

SOPs 1101.01 and 1102.01, provided in Appendix A, describe these procedures in more detail.

#### 5.2 PROJECT DOCUMENTATION

Documents will be completed legibly and in ink and by entry into field logbooks, Response Manager, or SCRIBE. Response Manager is the Enterprise Data Collection System designed to provide near real-time access to non-analytical data normally collected in logbooks. Response Manager provides a standard data collection interface for modules of data normally collected by START field personnel while on-site. These modules fall into two basic categories for response and removal. The modules include Emergency Response, Reconnaissance, Facility Assessment, Shipping, Containers, Materials, Calls, Household Hazardous Waste (HHW), and General/Site Specific data. The system provides users with a standard template for laptop/desktop/tablet PCs that will synchronize to the secure web interface using merge replication technology to provide access to field collected data via on the RRC-EDMS EPA Web Hub. Response Manager also includes an electronic template that provides some of the standard data entry templates from Response Manager to users for field data entry. Response Manager also includes an integrated Global Positioning System (GPS) unit with the secure electronic template, and the coordinates collected in Response Manager are automatically mapped on the RRC-EDMS interactive mapping

site. Geographic information system (GIS) personnel can then access this data to provide comprehensive site maps for decision-making support.

Response Manager also includes an Analytical Module that is designed to give SCRIBE users the ability to synchronize the SCRIBE field data to the RRC-EDMS Web Hub. This allows analytical data managers and data validators access to data to perform reviews from anywhere with an Internet connection. The Analytical Module is designed to take the analytical data entered into EPA SCRIBE software and make it available for multiple users to access on one site. START personnel will utilize SCRIBE for all data entry on-site and will upload to the Response Manager Analytical Module.

#### **Field Documentation**

The following field documentation will be maintained as described below.

#### Field Logbook

The field logbook is a descriptive notebook detailing site activities and observations so that an accurate, factual account of field procedures may be reconstructed. All entries will be signed by the individuals making them. Entries should include, at a minimum, the following:

- Site name and project number.
- Names of personnel on-site.
- Dates and times of all entries.
- Description of all site activities, including site entry and exit times.
- Noteworthy events and discussions.
- Weather conditions.
- Site observations.
- Identification and description of samples and locations.
- Subcontractor information and names of on-site personnel.
- Dates and times of sample collections and chain-of-custody information.
- Records of photographs.
- Site sketches.
- Calibration results.

Sample Labels

Sample labels will be securely affixed to the sample container. The labels will clearly identify the

particular sample and include the following information:

Site name and project number.

Date and time the sample was collected.

Sample preservation method.

Analysis requested.

Sampling location.

**Chain-of-Custody Record** 

A chain of custody will be maintained from the time of sample collection until final deposition.

Every transfer of custody will be noted and signed for and a copy of the record will be kept by

each individual who has signed it.

**Custody Seal** 

Custody seals demonstrate that a sample container has not been tampered with or opened. The

individual who has custody of the samples will sign and date the seal and affix it to the container

in such a manner that it cannot be opened without breaking the seal.

**Photographic Documentation** 

START will take photographs to document site conditions and activities as site work progresses.

Initial conditions should be well documented by photographing features that define the site-related

contamination or special working conditions. Representative photographs should be taken of each

type of site activity. The photographs should show typical operations and operating conditions as

well as special situations and conditions that may arise during site activities. Site final conditions

should also be documented as a record of how the site appears at completion of the work.

Photographs should be taken with either a film camera or digital camera capable of recording the

date on the image. Each photograph will be recorded in the logbook and within Response Manager

with the location of the photographer, direction the photograph was taken, the subject of the

photograph, and its significance (i.e., why the picture was taken). Where appropriate, the

TDD No. 0009/WESTON-042-17-064

SEMS ID OK0001010917

photograph location, direction, and subject will also be shown on a site sketch and recorded within Response Manager.

#### Response Manager

START will use the Response Manager module located on the EPA Web Hub, <a href="https://solutions.westonproject.net/epawebhub/">https://solutions.westonproject.net/epawebhub/</a>, to compile and organize the data collected from project activities. The information to be included encompasses some or all of the following depending on the specific project needs:

- General Module site-specific data including location and type of site. It also includes an area for key site locations including geo-spatial data associated with the key site locations.
- Emergency Response Module includes the following sub-modules: Basic Info, HAZMAT, Release, Time Line Log, Incident Zones, Photos, Sensitive Receptors, Evacuations, Source, Cause, and Weather.
- Reconnaissance Module provides standard templates with the flexibility of adding any
  additional questions of values to the drop-down lists for targeted reconnaissance efforts.
  Typically, the data in this module is associated with Emergency Support Function (ESF)-10
  deployments and the cleanup of orphaned containers and hazardous debris, but the module
  can be utilized for any or all reconnaissance activities.
- Facility Assessment Module provides standard templates with the flexibility of adding any
  additional questions of values to the drop-down lists for assessments of structures. Typically
  utilized for EPA regulated program facilities during an ESF-10 deployment of resources. This
  module can be utilized to track the assessment of any facilities including multiple assessments
  of the fixed facilities.
- Shipping Module provides standard templates for creating a cradle-to-grave record of all waste shipments from the site until they are recycled or destroyed. This includes the ability to capture manifests and manifest line items and upload photos/original documents to support the records.
- Container Module provides standard templates for cataloguing containers including HAZCAT and Layer information in each container. The module also allows for tracking which containers are bulked.
- Properties Module provides standard templates with the flexibility of adding any additional
  questions of values to the drop-down lists for collection of property data including access

agreements and assessments of the property and current status of property regarding the site removal action.

- Materials Module provides standard templates for tracking materials that are brought onsite or that are removed from the site.
- Daily Reports provides standard templates for tracking daily site activities, daily site personnel, and daily site notes for reporting back to the EPA OSC in pollution reports (POLREP) or situation reports (SITREP).
- HHW Module provides standard templates with the flexibility of adding any additional questions of values to the drop-down lists for tracking the amount of HHW collected at individual collection stations by HHW type.
- Data Files data files can be uploaded in the photo module section and be associated with individual records or with the site in general. The meta-data associated with that data file can be filled in using the photo log fields.

The data stored in the Response Manager database can be viewed and edited by any individual with access rights to those functions. At any time deemed necessary, POLREP and/or SITREPs can be generated by exporting the data out of Response Manager into Microsoft Excel/Word. The database is stored on a secure server and backed up regularly.

#### 5.3 REPORT PREPARATION

At the completion of the project, START will review and validate laboratory data and prepare a draft report of field activities and analytical results for EPA OSC review. Draft deliverable documents will be uploaded to the EPA TeamLink website for EPA OSC review and comment.

## Appendix A Standard Operating Procedures

SOP	0110.01				
GROUP	Database Manage	Database Management System			
SUB-GROUP	Data Collection and Acquisition				
TITLE	Sample Nomenclature				
DATE	02/26/2009	FILE	0110-20060227.DOC	PAGE	1 of 2

#### INTRODUCTION

The following Standard Operating Procedure (SOP) presents the sample nomenclature for analytical samples that will generate unique sample names compatible with most data management systems. The sample nomenclature is based upon specific requirements for the reporting of these results. A site specific data management plan should be prepared prior to sample collection.

#### **PROCEDURE**

## SAMPLE NOMENCLATURE – SOIL AND SEDIMENT Area of Concern – ID – Depth - Collection Type + QC Type

Where:

Area of Concern: A four-digit identifier used to designate the particular Area of Concern

(AOC) that the location where the sample was collected.

**ID:** A three-digit identifier used to designate the particular location in the AOC

from which the sample was collected or the center of the composite sample.

**Depth:** A two-digit code used to designate what depth of sample was collected:

03	0 to 3 inches
06	3 to 6 inches
12	6 to 12 inches

**Collection Type:** A one-digit code used to designate what type of sample was collected:

1	Surface Water
2	Ground Water
3	Leachate
4	Field QC/water sample
5	Soil/Sediment

6	Oil
7	Waste
8	Other
9	Drinking Water

**QC Type:** A one-digit code used to designate the QC type of the sample:

1	Normal
2	Duplicate
3	Rinsate Blank
4	Trip Blank
5	Field Blank
6	Confirmation

#### **Examples:**

- 2054-055-06-51: Represents the normal soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.
- 2054-055-06-52: Represents the duplicate soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.
- 2054-055-06-43: Represents the rinsate water sample collected after the last sample of the day if last sample was collected from AOC 2054 at location 055 from 3 to 6 inches of depth.

SOP	0110.01					
GROUP	Database Manage	Database Management System				
SUB-GROUP	Data Collection a	Data Collection and Acquisition				
TITLE	Sample Nomenclature					
DATE	02/26/2009	FILE	0110-20060227.DOC	PAGE	2 of 2	

## SAMPLE NOMENCLATURE – WATER (from fixed station or location to be sampled more than once)

#### WELL OR STATION – YYYYMMDD - Collection Type + QC Type

#### Where:

Well or Station: For Wells and boreholes always assume there will be 10 or more so

Monitoring Well 1 becomes designated MW01 or MW-01. If it is anticipated that there will be over 100 wells designate Monitoring Well 1 as MW001 or

MW-001.

**YYYYMMDD:** A four-digit year + two-digit month + two-digit day

**Collection Type:** A one-digit code used to designate what type of sample was collected and are

shown on page 1.

**QC Type:** A one-digit code used to designate the QC type of the sample and are shown

on page 1.

#### **Examples:**

• *MW01-20090226-21:* Represents the normal groundwater sample collected from Monitoring Well 1 on 26 February 2009.

• *MW01-20090226-44:* Represents the trip blank in the same ice chest as the groundwater sample in the previous collected from Monitor Well 1 on 02/26/2009. All trip blanks must have a sample ID and they must be unique and on the Chain-of-Custody.

• 2054-000-00-43: Represents the rinsate sample from AOC 2054

SOP	0110.05					
GROUP	Database Manage	Database Management System				
SUB-GROUP	Data Collection a	Data Collection and Acquisition				
TITLE	Sample Nomencl	Sample Nomenclature				
DATE	04/01/2010	FILE	0110.05.docx	PAGE	1 of 2	

#### INTRODUCTION

The following Standard Operating Procedure (SOP) presents the sample nomenclature for analytical samples that will generate unique sample names compatible with most data management systems. The sample nomenclature is based upon specific requirements for the reporting of these results. A site specific data management plan should be prepared prior to sample collection.

#### **PROCEDURE**

#### SAMPLE NOMENCLATURE - SOIL AND SEDIMENT

Area of Concern - ID - Depth - Collection Type + QC Type

Where:

**Area of Concern:** A four-digit identifier used to designate the particular Area of Concern (AOC)

that the location where the sample was collected.

**ID:** A three letter &/or digit identifier used to designate the particular location (i.e.

grid A01, P06, or 055) in the AOC from which the sample was collected or the

center of the composite sample.

**Depth:** A two-digit code used to designate what depth of sample was collected:

code	Assessment	Confirmation
00	0 to 0 Surface	N/A
03	0 to 3 inches	3 inches below original ground surface
06	3 to 6 inches	6 inches below original ground surface
12	6 to 12 inches	12 inches below original ground surface

**Collection Type:** A one-digit code used to designate what type of sample was collected:

1	Surface Water
2	Ground Water
3	Leachate
4	Field QC/water sample
5	Soil/Sediment

6	Oil
7	Waste
8	Other
9	Drinking Water

**QC Type:** A one-digit code used to designate the QC type of the sample:

1	Normal
2	Duplicate
3	Rinsate Blank
4	Trip Blank
5	Field Blank
6	Confirmation, Normal
7	Confirmation, Duplicate

#### **Examples:**

- 2054-055-06-51: Represents the normal soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.
- 2054-055-06-52: Represents the duplicate soil sample collected from AOC 2054 at location 055 from 3 to 6 inches of depth.

SOP	0110.05					
GROUP	Database Manage	Database Management System				
SUB-GROUP	Data Collection a	Data Collection and Acquisition				
TITLE	Sample Nomenclature					
DATE	04/01/2010	FILE	0110.05.docx	PAGE	2 of 2	

- 2054-000-00-43: Represents the rinsate sample from AOC 2054
- 2054-055-06-56: Represents the normal soil sample collected from AOC 2054 at location 055 after 6 inches of material has been removed as the confirmation sample during removal.

NOTE: The depth is in relation to the <u>original</u> ground surface.

• 2054-055-06-43: Represents the rinsate water sample collected after the last sample of the day if last sample was collected from AOC 2054 at location 055 from 3 to 6 inches of depth.

## <u>SAMPLE NOMENCLATURE – WATER</u> (from fixed station or location to be sampled more than once)

#### WELL OR STATION - YYMMDD - Collection Type + QC Type

#### Where:

Well or Station: For Wells and boreholes always assume there will be 10 or more so

Monitoring Well 1 becomes designated MW01 or MW-01. If it is anticipated that there will be over 100 wells designate Monitoring Well 1 as MW001 or MW-001. For stations along a water pathway use stations from the furthest most upstream point and travel downstream in 100 ft. increments (i.e. point of probable entry would be Station 0+00 or ST000; 525 ft. downstream would

be 5+25 or ST525)

**YYYYMMDD:** A four-digit year + two-digit month + two-digit day

**Collection Type:** A one-digit code used to designate what type of sample was collected and are

shown on page 1.

**QC Type:** A one-digit code used to designate the QC type of the sample and are shown

on page 1.

#### **Examples:**

• *ST100-100226-21:* Represents the normal groundwater sample collected from Station 1+00 on 26 February 2010.

• *MW01-100226-44:* Represents the trip blank in the same ice chest as the groundwater sample from Monitor Well 1 on 02/26/2010. All trip blanks must have a sample ID and they must be unique and on the Chain-of -Custody.

SOP	1001.10				
GROUP	Soil Sampling Proc	edures			
SUB-GROUP					
TITLE	Soil Compositing			_	
DATE	4/24/2013	FILE	Compositing Soil	PAGE	1 of 2
			Sampling -		
			Revised 1001-10		

#### INTRODUCTION

The following Standard Operating Procedure (SOP) describes the procedure for compositing soil samples. Soil samples are typically collected for laboratory analysis, and sometimes it is necessary to composite (mix together) samples from several locations for one combined analysis at the laboratory. This soil sampling procedure is closely related to SOP Nos. 1001.01, 1001.03, and 1001.10 regarding soil sampling procedures. This procedure serves as an alternative method of sample preparation prior to placing the samples in containers, as described in the other named SOPs.

#### **PROCEDURE**

#### **Equipment**

Equipment that may be used as part of the soil compositing procedure is identified under SOP Nos. 1001.01 and 1001.03 where soil sampling methods are described. Specific equipment typically used during the compositing process after discrete samples are collected includes:

- Mixing bowls or buckets
- Scoops, spatulas, and knives
- Sample containers
- Personal protection clothing
- Plastic Sheeting
- Decontamination equipment and supplies

#### Method

The procedure to be used to physically collect soil samples are described in SOP Nos. 1001.01 and 1001.03. Reference should be made to these SOPs for specific sampling equipment, procedures, and other general guidelines. As soil samples are collected, the site-specific Sampling and Analysis Plan may require compositing (mixing together) of two or more samples to create a single sample that will be sent to the laboratory for analysis. When this is the case, the following compositing procedure will generally be used:

- The soil will be collected in general accordance with SOP 1001.01 or 1001.03, with the exception that samples from discrete locations will generally not be immediately placed into sample containers and an additional preparation step (i.e., compositing) will be performed.
- As they are collected, soil samples selected for compositing will be staged in a clean mixing bowl or mixing bucket until each sample to be included in the composite sample is obtained. Depending on site requirements and analytical procedures to be requested, it may be necessary to temporarily stage individual discrete-location samples within clean sample jars, aluminum foil, or other appropriate materials for the project. The method for sample staging should be specified in the site-specific sampling and analysis plan.

SOP	1001.10				
GROUP	Soil Sampling Proc	edures			
SUB-GROUP					
TITLE	Soil Compositing				
DATE	4/24/2013	FILE	Compositing Soil	PAGE	2 of 2
			Sampling -		
			Revised 1001-10		

- For composite samples that will be analyzed for volatile organic compounds, an equal portion of soil will be removed directly from each discrete-location sample and placed into a final sample jar without homogenizing the soil.
- For analyses other than volatile organics, equal portions of soil will be removed from each discrete-location sample and placed in a clean mixing bowl. The equal portions of the samples will then be broken up and homogenized together using a scoop or spatula. Homogenization will generally continue until the discrete samples being combined are reasonably indistinguishable as individual samples in the soil mixture. However, it is recognized that homogenization can be difficult for highly plastic clays. In this case, equal amounts of the soil core of each clay sample will be cut into small, roughly cubical pieces using a stainless steel knife, and an equal numbers of pieces of each discrete sample will be placed into the bowl and homogenized to extent practical.
- The composited soil sample will be collected from the mixing bowl containing the individual homogenized samples after homogenization is performed. The composited sample will be collected using a stainless steel or disposable plastic scoop or similar tool. The sample will be placed in a clean sample container and then handled in accordance with soil sampling SOPs 1001.01 and 1001.03.

Variations on this procedure are allowable to accommodate different soil conditions and any site requirements specifically identified in the site-specific Sampling and Analysis Plan.

The number of discrete samples that may be composited into a single sample typically ranges from two to six. The number of discrete samples that may be composited for the project in question will be specified in the site-specific Sampling and Analysis Plan.

#### REFERENCES

SOP No. 1001.01 - Standard Operating Procedure, Surface Soil Sampling

SOP No. 1001.03 - Standard Operating Procedure, Shallow Subsurface and Near Surface Soil Sampling

SOP	1101.01				
GROUP	Sampling Handling	5			
SUB-GROUP	Sample Custody	Sample Custody			
TITLE	Sample Custody in the Field				
DATE	11/19/2001	FILE	1101-01.DOC	PAGE	1 of 4

#### INTRODUCTION

The following Standard Operating Procedure (SOP) presents procedures for maintaining sample chain of custody (COC) during activities where samples are collected.

#### **PROCEDURE**

Sample custody is defined as being under a person's custody if any of the following conditions exist:

- it is in their possession,
- it is in their view, after being in their possession,
- it was in their possession and they locked it up, or
- it is in a designated secure area.

A designated field sampler will be personally responsible for the care and custody of collected samples until they are transferred to another person or properly dispatched to the laboratory. To the extent practicable, as few people as possible will handle the samples.

Sample tags or labels will be completed and applied to the container of each sample. When the tags or labels are being completed, waterproof ink will be used. If waterproof ink is not used, the tags or labels will be covered by transparent waterproof tape. Sample containers may also be placed in Ziploc-type storage bags to help keep them clean in the cooler. Information typically included on the sample tags or labels will include the following:

- Project Code
- Station Number and Location
- Sample Identification Number
- Date and Time of Sample Collection
- Type of Laboratory Analysis Required
- Preservation Required, if applicable
- Collector's Signature
- Priority (optional)
- Other Remarks

Additional information may include:

- Anticipated Range of Results (Low, Medium, or High)
- Sample Analysis Priority

SOP	1101.01				
GROUP	Sampling Handling	7			
SUB-GROUP	Sample Custody				
TITLE	Sample Custody in	the Field			
DATE	11/19/2001	FILE	1101-01.DOC	PAGE	2 of 4

A COC form will be completed each time a sample or group of samples is prepared for transfer to the laboratory. The form will repeat the information on each of the sample labels and will serve as documentation of handling during shipment. The minimum information requirements of the COC form are listed in Table 1101.01-A. An example COC form is shown in Figure 1101.01-A. The completed COC must be reviewed by the Field Team Leader or Site Manager prior to sample shipment. The COC form will remain each sample shipping container at all times, and another copy will be retained by the member of the sampling team who originally relinquished the samples or in a project file.

SOP	1101.01				
GROUP	Sampling Handling	j )			
SUB-GROUP	Sample Custody	Sample Custody			
TITLE	Sample Custody in the Field				
DATE	11/19/2001	FILE	1101-01.DOC	PAGE	3 of 4

#### TABLE 1101.01-A CHAIN OF CUSTODY FORM

INFORMATION	COMPLETED BY	DESCRIPTION		
COC	Laboratory	enter a unique number for each chain of custody form		
SHIP TO	Field Team	enter the laboratory name and address		
CARRIER	Field Team	enter the name of the transporter (e.g., FedEx) or handcarried		
Airbill	Field Team	enter the airbill number or transporter tracking number (if applicable)		
Project Name	Field Team	enter the project name		
Sampler Name	Field Team	enter the name of the person collecting the samples		
SAMPLER SIGNATURE	Field Team	signature of the person collecting the samples		
SEND RESULTS TO	Field Team	enter the name and address of the prime contractor		
FIELD SAMPLE ID	Field Team	enter the unique identifying number given to the field sample (includes MS, MSD, field duplicate and field blanks)		
DATE	Field Team	enter the year and date the sample was collected in the format M/D (e.g., 6/3)		
TIME	Field Team	enter the time the sample was collected in 24 hour format (e.g., 0900)		
MATRIX	Field Team	enter the sample matrix (e.g., water, soil)		
Preservative	Field Team	enter the preservative used (e.g., HNO3) or "none"		
Filtered/ Unfiltered	Field Team	enter "F" if the sample was filtered or "U" if the sample was not filtered		
Containers	Field Team	enter the number of containers associated with the sample		
MS/MSD	Field Team or Laboratory	enter "X" if the sample is designated for the MS/MSD		
ANALYSES REQUESTED	Field Team	enter the method name of the analysis requested (e.g., SW6010A)		
COMMENTS	Field Team	enter comments		
SAMPLE CONDITION UPON RECEIPT AT LABORATORY	Laboratory	enter any problems with the condition of any sample(s)		
Cooler Temperature	Laboratory	enter the internal temperature of the cooler, in degrees C, upon opening		
SPECIAL INSTRUCTIONS/COMME NTS	Laboratory	enter any special instructions or comments		
RELEASED BY (SIG)	Field Team and Laboratory	enter the signature of the person releasing custody of the samples		
COMPANY NAME	Field Team and Laboratory	enter the company name employing the person releasing/receiving custody		
RECEIVED BY (SIG)	Field Team and Laboratory	enter the signature of the person receiving custody of the samples		
DATE	Field Team and Laboratory	enter the date in the format M/D/YY (e.g., 6/3/96) when the samples were released/received		
Тіме	Field Team and Laboratory	enter the date in 24 hour format (e.g., 0900) when the samples were released/received		

SOP	1101.01				
GROUP	Sampling Handling				
SUB-GROUP	Sample Custody				
TITLE	Sample Custody in the Field				
DATE	11/19/2001	FILE	1101-01.DOC	PAGE	4 of 4

### FIGURE 1101.01-A CHAIN OF CUSTODY FORM

SOP	1102.01				
GROUP	Sample Handling				
SUB-GROUP	Sample Shipping				
TITLE	Sample Shipping				
DATE	11/19/2001	FILE	1102-01.DOC	PAGE	1 of 1

#### INTRODUCTION

The following Standard Operating Procedure (SOP) presents the procedures for sample shipping that will be implemented during field work involving sampling activities.

#### **TERMS**

COC - Chain-of-Custody

#### **PROCEDURE**

Prior to shipping or transferring custody of samples, they will be packed according to D.O.T. requirements with sufficient ice to maintain an internal temperature of  $4^{\circ}C \pm 2^{\circ}C$  during transport to the laboratory. Samples relinquished to the participating laboratories will be subject to the following procedures for transfer of custody and shipment:

- 1. Samples will be accompanied by a COC record. When transferring possession of samples, the individuals relinquishing and receiving the samples will sign, date, and note the time of the sample transfer on the record. If sent by common carrier, a bill of lading or airbill should be used. Bill of lading and airbill receipts will be retained in the project file as part of the permanent documentation of sample shipping and transfer. This custody record documents transfer of sample custody from the sampler to another person or to the laboratory. The designated laboratory will accept custody in the field upon sample pick-up or at the laboratory if the samples are delivered via field personnel or a courier service.
- 2. Samples will be properly packed in approved shipping containers for laboratory pick-up by the appropriate laboratory for analysis, with separate, signed custody records enclosed in each sample box or cooler. Sample shipping containers will be padlocked or custody-sealed for transfer to the laboratory. The preferred procedure includes use of a custody seal wrapped across filament tape that is wrapped around the package at least twice. The custody seal will then be folded over and stuck to itself so that the only access to the package is by cutting the filament tape or breaking the seal to unwrap the tape. The seal will then be signed. The designated laboratory will accept custody of the samples upon receipt.
- 3. Whenever samples are split with state representatives or other parties, the COC record will be marked to indicate with whom the samples were split.
- 4. The field sampler will call the designated laboratory to inform them of sample shipment and verify sample receipt as necessary.

SOP	1201.01	1201.01					
GROUP	Decontamination						
SUB-GROUP	Sampling Equipment Decontamination						
TITLE	Sampling Equipment Decontamination						
DATE	11/19/2001						

### INTRODUCTION

The following Standard Operating Procedure (SOP) presents the methods used for minimizing the potential for cross-contamination, and provides general guidelines for sampling equipment decontamination procedures.

### **PROCEDURE**

As part of the Health and Safety Plan (HASP), develop and set up a decontamination plan before any personnel or equipment enter the areas of potential exposure. The decontamination plan should include the following:

- The number, location, and layout of decontamination stations
- Which decontamination apparatus is needed
- The appropriate decontamination methods
- Methods for disposal of contaminated clothing, apparatus, and solutions

### **Decontamination Methods**

Personnel, samples, and equipment leaving the contaminated area of a site will be decontaminated. Various decontamination methods will be used to either physically remove contaminants, inactivate contaminants by disinfection or sterilization, or both. The physical decontamination techniques appropriate for equipment decontamination can be grouped into two categories: abrasive methods and non-abrasive methods.

### Abrasive Cleaning Methods

Abrasive cleaning methods work by rubbing/scrubbing the surface containing the contaminant. This method includes mechanical and wet blasting methods.

Mechanical cleaning methods use brushes of metal or nylon. The amount and type of contaminants removed will vary with the hardness of bristles, length of brushing time, and degree of brush contact.

Cleaning can also be accomplished by water blasting which is also referred to as steam cleaning and pressure washing. Pressure washing utilizes high-pressure that is sprayed from a nozzle onto sampling equipment to physically remove soil or (potentially) contaminated material. Steam cleaning is a modification of pressure washing where the water is heated to temperatures approaching 100 °C to assist in removing organic constituents from equipment.

SOP	1201.01				
GROUP	Decontamination				
SUB-GROUP	Sampling Equipment Decontamination				
TITLE	Sampling Equipment Decontamination				
DATE	11/19/2001	FILE	1201-01.DOC	PAGE	2 of 3

### Disinfection/Rinse Methods

Disinfectants are a practical means of inactivating chemicals or contaminants of concern. Standard sterilization methods involve heating the equipment which is impractical for large equipment. Rinsing removes contaminants through dilution, physical attraction, and solubilization.

The use of distilled/deionized water commonly available from commercial vendors may be acceptable for decontamination of sampling equipment provided that it has been verified by laboratory analysis to be target analyte free. Tap water may be used from any municipal water treatment system for mixing of decontamination solutions. An untreated potable water supply is not an acceptable substitute for tap water. Acids and solvents are occasionally utilized in decontamination of equipment to remove metals and organics, respectively, from sampling equipment. Other than ethanol, these are avoided when possible due to the safety, disposal, and transportation concerns associated with them.

Equipment or apparatuses that may be selected for use include the following:

- Personal protective clothing
- Non-phosphate detergent
- Selected solvents for removal of polar and nonpolar organics (ethanol, methanol, hexane)
- Acid washes for removal of metals (nitric acid)
- Long-handled brushes
- Drop cloths or plastic sheeting
- Paper towels
- Galvanized tubs or buckets
- Distilled, deionized, or tap water (as required by the project)
- Storage containers for spent wash solutions
- Sprayers (pressurized and non-pressurized)
- Trash bags
- Safety glasses or splash shield

### Field Sampling Equipment Cleaning Procedures

The following procedures should be followed:

- 1. Where applicable, follow physical removal procedures previously described (pressure wash, scrub wash)
- 2. Wash equipment with a non-phosphate detergent solution
- 3. Rinse with tap water
- 4. Rinse with distilled or deionized water
- 5. Rinse with 10% nitric acid if the sample will be analyzed for metals/organics
- 6. Rinse with distilled or deionized water
- 7. Use a solvent rinse (pesticide grade) if the sample will be analyzed for organics
- 8. Air dry the equipment completely
- 9. Rinse again with distilled or deionized water

SOP	1201.01				
GROUP	Decontamination				
SUB-GROUP	Sampling Equipment Decontamination				
TITLE	Sampling Equipment Decontamination				
DATE	11/19/2001	FILE	1201-01.DOC	PAGE	3 of 3

10. Place in clean bag or container for storage/transport to subsequent sampling locations.

Selection of the solvent for use in the decontamination process is based on the contaminants present at the site. Solvent rinses are not necessarily required when organics are not a contaminant of concern and may be eliminated from the sequence specified below. Similarly, an acid rinse is not required if the analyses do not include inorganics. Use of a solvent is required when organic contamination is present on-site. Typical solvents used for removal of organic contaminants include acetone, ethanol, hexane, methanol, or water. An acid rinse step is required if metals are present on-site. If a particular contaminant fraction is not present at the site, the tenstep decontamination procedure listed above may be modified for site specificity.

Sampling equipment that requires the use of plastic tubing should be disassembled and the tubing replaced with clean tubing before commencement of sampling and between sampling locations. Plastic tubing should not be reused.

SOP	1005.02				
GROUP	Sampling Procedur	es			
SUB-GROUP	Field QA/QC Sampling				
TITLE	Rinse Blank Preparation				
DATE	2/6/2009	FILE	1005-02.DOC	PAGE	1 of 1

### INTRODUCTION

The following Standard Operating Procedure (SOP) presents a method to prepare a type of quality control sample specific to the field decontamination process, the equipment rinse blank. The rinse blank provides information on the effectiveness of the decontamination process employed in the field. When used in conjunction with field blanks and trip blanks, the rinse blank can be used to assist in evaluating possible compromise of samples from field related activities.

### **PROCEDURE**

The equipment rinse blank is prepared by passing target analyte-free (i.e., deionized) water over and through a field decontaminated sampling device, then collecting the rinse water in appropriate clean sample containers. Rinse blanks will typically be collected from equipment that comes in contact with samples, such as auger buckets, split spoons, bailers, shelby tubes, and stainless steel spoons/trowels. The collected sample will be coded appropriately prior to logging and shipping. Equipment blanks are not required if dedicated sampling equipment is used. Equipment blanks will be collected periodically during the day immediately after decontamination of the sampling equipment being used.

The frequency for collecting equipment blanks will be determined prior to engaging in field activities, and communicated in site-specific quality assurance project plans, sampling and analyses plans, or a type of work plan. Equipment blanks will be collected at a rate relative to each type of sample collection procedure (i.e., surface sample, sample at depth using a hand auger). Equipment blanks will generally be collected at a frequency of 1 per 20 (normal) samples of a given matrix.

SOP	1005.01				
GROUP	Sampling Procedur	es			
SUB-GROUP	Field QA/QC Sampling				
TITLE	Field Duplicate Collection				
DATE	4/27/2005	FILE	1005-01.DOC	PAGE	1 of 2

#### INTRODUCTION

The following Standard Operating Procedure (SOP) describes the procedure for collecting field duplicate soil and water samples. When samples are collected for analysis, it is typically desired that independent data allowing evaluation of laboratory precision (i.e., the degree to which a laboratory result can be repeated) on site-specific samples be collected.

A field duplicate sample is a second sample collected at the same location as the original sample. Duplicate samples are collected simultaneously or in immediate succession, using identical recovery techniques, and treated in an identical manner during storage, transportation, and analysis. The sample containers are assigned an identification number in the field such that they cannot be identified (blind duplicate) as duplicated samples by laboratory personnel performing the analysis. Specific locations are designated for collection of field duplicate samples prior to the beginning of sample collection.

The duplicate soil sampling procedure is closely related to SOP Nos. 1001.01, 1001.03, and 1001.10 regarding soil sampling procedures. This procedure serves as an alternative method or extension of sample preparation prior to placing the samples in containers, as described in the 1001 series of the SOPs (e.g. 1001.01 and 1001.03).

### DUPLICATE SOIL SAMPLING PROCEDURE

The procedure to be used to physically collect soil samples are described in SOP Nos. 1001.01 and 1001.03. Reference should be made to these SOPs for specific sampling equipment, procedures, and other general guidelines. As soil is collected, the following procedure will be used to prepare a field duplicate sample:

- The soil will be collected in general accordance with SOP 1001.01 or 1001.03, with the exception that samples will generally not be immediately placed into sample containers and an additional preparation step (i.e., sample splitting) will be performed.
- As they are collected, soil samples to be submitted as field duplicates will be staged in a clean mixing bowl or mixing bucket.
- For samples that will be analyzed for volatile organic compounds, the soil sample will be split in half and an equal portion of soil will be placed directly into two or more different sample containers, each container representing a different sample for laboratory analysis. The soil will not be homogenized to minimize the potential for volatilization of the organic compounds potentially in the sample.
- For analyses of chemicals other than volatile organic compounds, the soil removed from the discrete sample location will be homogenized in a clean mixing bowl using a clean scoop or spatula (as described in SOPs 1001.01 and 1001.03). Homogenization will generally continue until the discrete samples being combined are reasonably indistinguishable as individual samples in the soil mixture. However, it is recognized that homogenization can be difficult for highly plastic clays. In this case, equal amounts of the soil core of each clay sample will be cut into small, roughly cubical pieces using a stainless steel knife and placed into a bowl and homogenized to extent practical.

SOP	1005.01				
GROUP	Sampling Procedur	es			
SUB-GROUP	Field QA/QC Sampling				
TITLE	Field Duplicate Collection				
DATE	4/27/2005	FILE	1005-01.DOC	PAGE	2 of 2

• The field duplicate sample (except for volatiles as note above) will be collected from the mixing bowl containing the homogenized samples after homogenization is performed. The composited sample will be collected using a stainless steel or disposable plastic scoop or similar tool. The sample will be placed in a clean sample container and then handled in accordance with soil sampling SOPs 1001.01 and 1001.03.

Another difference from the referenced SOPs is that additional soil volume may need to be collected from a discrete sample location during the sampling process to provide sufficient sample volume for two or more sets of laboratory analyses. If the collection of additional sample volume will result in the sample interval expanding to greater depths or laterally outward, the sampling tools identified in 1001 series of the SOPs can be used at two immediately vertically or laterally adjacent locations, as appropriate. If sampling from two adjacent but distinct locations is necessary to obtain adequate sample volume, the soil from the two locations should be composited in accordance with SOP 1001.10. Field duplicates of composited samples may also be performed using this SOP for field duplicate samples.

Variations on this procedure are allowable to accommodate different soil conditions and any site requirements specifically identified in the site-specific Sampling and Analysis Plan. Equipment that may be used as part of the soil compositing procedure is identified under SOP Nos. 1001.01 and 1001.03 where soil sampling methods are described.

### **DUPLICATE WATER SAMPLING PROCEDURES**

The procedure to be used to physically collect water samples are described in 1002 series of the SOPs (e.g. 1002.01 and 1002.02). Reference should be made to these SOPs for specific sampling equipment, procedures, and other general guidelines. A duplicate water sample will be collected from the same location as the parent sample and within 15 minutes of the collection of the parent sample.

The number of samples that may be submitted as blind field duplicates for the project in question will be specified in the site-specific sampling plan. Blind field duplicates are typically collected at a frequency of 1 per 10 samples of a given environmental media at sites, especially where laboratory analytical data will be used for evaluating regulatory compliance and other engineering judgments. Sampling in support of a routine monitoring program may not require field duplicates. Reference should be made to the site-specific contract and work plans.

### REFERENCES

SOP No. 1001.01 - Standard Operating Procedure, Surface Soil Sampling

SOP No. 1001.03 - Standard Operating Procedure, Soil Sampling - Hand Auger Method

SOP No. 1001.10 - Standard Operating Procedure, Soil Compositing

# APPENDIX B SITE-SPECIFIC DATA QUALITY OBJECTIVE (DQO)

## Appendix B Data Quality Objective No. 1 – Soil Sampling R6 Wilcox Oil Refinery Removal Bristow, Creek County, Oklahoma

### STEP 1. STATE THE PROBLEM

Former site operations associated with the Wilcox Oil Refinery Site resulted in site-related contaminated soil that was identified as a risk to human health and the environment. The documented contaminant of concern (COC) is Benzo(a)pyrene. A removal action will be conducted to remove contaminated soil up to 2 feet below ground surface (bgs) and document COC concentrations at the extent of the excavations.

### STEP 2. IDENTIFY THE DECISION

Are the concentrations of constituents of concern in soils, represented by a sample, above specified action levels?

IDENTIFY THE ALTERNATIVE ACTIONS THAT
MAY BE TAKEN BASED ON THE DECISIONS.

- If the site-related COC in the excavation soil sample collected from the grid exceeds the site action levels, grid excavation will continue to a maximum depth of 2 feet bgs. A warning barrier will be installed prior to backfilling the excavation area in all grid areas excavated to a depth of 2 feet bgs.
- If no site-related COCs in the confirmation samples exceed the site actions levels, the grid area represented by that sample will not require additional excavation.

SVOCs - SW-846 Method 8270-SIM.

### STEP 3. IDENTIFY INPUTS TO THE DECISION

	IDENTIFY THE INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	•	Contaminant concentrations in confirmation soil samples collected following excavation of grids identified during the 2015 removal assessment.
	IDENTIFY THE SOURCES FOR EACH INFORMATIONAL INPUT AND LIST THE INPUTS THAT ARE OBTAINED THROUGH ENVIRONMENTAL MEASUREMENTS.	-	Five-point composite grab samples collected to represent a 100-foot by 100-foot grid.  Analytical results obtained from the laboratory following SVOCs - SW-846 Method 8270-SIM.
II	BASIS FOR THE CONTAMINANT-SPECIFIC ACTION LEVELS.	•	The site action levels as noted in Table 1-1 of the QASP.
	IDENTIFY POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	•	Soil sampling techniques are described in the Quality Assurance Sampling Plan (QASP).

### Appendix B Data Quality Objective No. 1 – Soil Sampling (Continued)

STEP 4. DEFINE THE BOUNDARIES OF THE STUDY				
DEFINE THE DOMAIN OR GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	The grid represented by the soil sample and analytical results within the site boundaries (QASP Figure 3-1).			
SPECIFY THE CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	Contaminant concentrations in on-site soil.			
DEFINE THE SCALE OF DECISION MAKING.	The scale of decision will be for soil represented by each sample collected from the site.			
DETERMINE THE TIME FRAME TO WHICH THE DATA APPLY.	The data will apply until the soil represented by the sample receives appropriate response actions.			
DETERMINE WHEN TO COLLECT DATA.	Samples will be collected during the removal action planned to start in August 2017.			
IDENTIFY PRACTICAL CONSTRAINTS ON DATA	Inclement weather.			
COLLECTION.	Debris and/or structures or foundations in the proposed sample grid.			
	Access restrictions.			
STEP 5. DEVELOP A DECISION RULE				
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	Post-excavation soil samples will be compared to the site-specific action levels presented in Table 1-1 of this QASP.			
SPECIFY THE ACTION LEVEL FOR THE DECISION.	Benzo(a)pyrene – 0.11 mg/kg			
DEVELOP A DECISION RULE.	If any result in a post-excavation soil sample is above the site-specific action level, grid excavation will continue to a depth of 2 feet bgs. If post-excavation soil sample results are above the site-specific action at 2 feet bgs, then a warning barrier will be installed prior to backfilling the excavated grid area.			
STEP 6. SPECIFY LIMITS ON DECISION ERRORS	S			
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	Contaminant concentrations may range from 0 mg/kg to more than the site-specific action levels.			

### Appendix B Data Quality Objective No. 1 – Soil Sampling (Continued)

STEP 6. SPECIFY LIMITS ON DECISION ERRORS (CONTINUED)			
DEFINE BOTH TYPES OF DECISION ERRORS AND IDENTIFY THE POTENTIAL CONSEQUENCES OF EACH.	Type I Error: Deciding that the specified area represented by the soil sample does not exceed the site-specific action level when, in truth, the soil concentration of the contaminant exceeds its specified action level. The consequence of this decision error is that contaminated soil will remain on-site, possibly endangering human health and the environment. There may also be potential future liability associated with clean-up costs of leaving contaminated soil on-site. This decision error is more severe.		
	Type II Error: Deciding that the specified area represented by the soil sample does exceed the site-specific action level when, in truth, it does not. The consequences of this decision error are that remediation of the specified area will continue and unnecessary costs will be incurred.		
ESTABLISH THE TRUE STATE OF NATURE FOR EACH DECISION RULE.	The true state of nature when the soil is decided to be below the specified action levels when in fact, it is not below the specified action levels, is that the area may need remedial action.  The true state of nature when the soil is decided to be above the specified action levels when in fact, it is not above the specified action levels, is that the area may not need remedial action.		
DEFINE THE TRUE STATE OF NATURE FOR THE MORE SEVERE DECISION ERROR AS THE BASELINE CONDITION OR THE NULL HYPOTHESIS (H <sub>o</sub> ) AND DEFINE THE TRUE STATE FOR THE LESS SEVERE DECISION ERROR AS THE ALTERNATIVE HYPOTHESIS (H <sub>a</sub> ).	H <sub>o</sub> : The soil represented by the soil sample of the specified area is above the specified action level.  H <sub>a</sub> : The soil represented by the soil sample of the specified area is below the specified action level.		
ASSIGN THE TERMS "FALSE POSITIVE" AND "FALSE NEGATIVE" TO THE PROPER DECISION ERRORS.	<ul> <li>False Positive Error = Type I</li> <li>False Negative Error = Type II</li> </ul>		
ASSIGN PROBABILITY VALUES TO POINTS ABOVE AND BELOW THE ACTION LEVEL THAT REFLECT THE ACCEPTABLE PROBABILITY FOR THE OCCURRENCES OF DECISION ERRORS.	To be assigned based on discussions with EPA OSC.		

### Appendix B Revised Data Quality Objective No. 1 – Soil Sampling (Continued)

STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs	The sample size was based on 100-foot by 100-foot grids established within the Study Area. In order to select the optimal sampling program that satisfies the DQOs and is the most resource effective, other elements were considered.

### DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN

For the post-excavation sampling, START will collect five-part composite samples from 100-foot by 100-foot grids. Based on analytical results, grid areas exhibiting COC concentrations above site-specific action levels (QASP Table 1-1) will be excavated to a maximum depth of 2 feet bgs. Approximately 10 post-excavation soil samples (including QA/QC samples) will be collected utilizing sampling procedures described in Section 3.0 of the QASP. The samples will be analyzed following EPA SW-846 Method 8270-SIM.

### Appendix C

TDD No. 0009/WESTON-042-17-064

1 Of 2 Page

U.S. EPA, Region 6 TDD #: 0009/WESTON-042-17-064

1445 Ross Avenue, Suite 1200 Amendment #: Dallas, TX 75202-2733 Contract #: EP-S8-13-01

Vendor: WESTON SOLUTIONS, INC

TDD Title: R6 Wilcox Oil Refinery Site Assessment Verbal Date :

Purpose: TDD INITIATION Start Date: 06/27/2017

> Completion Date : 08/22/2017Effective Date: 06/27/2017

 $\textbf{Priority}: {\tt HIGH}$ Overtime Authorized :  ${\tt Yes}$ Invoice Unit:

> SSID: 06GG Work Area: Response / Removal

Project/Site Name: R6 Wilcox Oil Refinery Site Assessm Work Area Code :  $\ensuremath{^{\mathbb{RS}}}$ 

Project Address: West 221st Street  $\label{eq:Activity: Removal Ass'mnt w/On-Site (walk, survey, or sample)} Activity: Removal Ass'mnt w/On-Site (walk, survey, or sample)$ 

County: Creek Activity Code: RS City: Bristow Operable Unit: State: OK Emergency Code:

**Zip Code**: 74010 FPN: Performance Based: No

ı	Authorized TDD Ceiling :	Amount	LOE (Hours)
I	Previous Action(s):	\$0.00	0.00
I	This Action :	\$30,000.00	0.00
ı	New Total :	\$30,000.00	0.00

### Specific Elements:

### Description of Work:

See Schedule

Region Specific:

CERCLIS:: Misc 2:

Acco	Accounting and Appropriation Information:						SFO:			
Line	Budget / FY	Approp	Budget	Program Element	Object Class	Site Project	Cost	DCN Line-ID	Funding Category	TDD Amount
1	17	Т	6A00	303DC6	2505	06WQWQ00	C001	176ARVC005-001	REMOVAL	\$30,000.00

U.S. EPA, Region 6 TDD#: 0009/WESTON-042-17-064
1445 Ross Avenue, Suite 1200 Amendment#:

1445 Ross Avenue, Suite 1200 Amendment#:

Dallas, TX 75202-2733 Contract#: EP-S8-13-01

Vendor: WESTON SOLUTIONS, INC

Project Officer :	Will LaBombard		Branch Mail Code:	
			Phone Number :	214-665-7199
	(Signature)	(Date)	Fax Number :	
Contracting Officer Re	presentative Steve Mason		Branch Mail Code :	
			Phone Number :	214-665-2276
	(Signature)	(Date)	Fax Number :	
Contract Specialist:	Brian Delaney		Branch Mail Code :	
			Phone Number :	214-665-7473
	(Signature)	(Date)	Fax Number :	
Contracting Officer :	Brian Delaney		Branch Mail Code :	
Electronically S	Signed by Brian Delaney	06/27/2017	Phone Number :	214-665-7473
	(Signature)	(Date)	Fax Number :	
Other Agency Official			Branch Mail Code :	
			Phone Number :	
	(Signature)	(Date)	Fax Number :	

Description of Work: The initial funding ceiling for this TDD is set at \$30,000.

Contractor shall review analytical results from prior sampling activities and provide technical advice to the OSC. Contractor shall document all site activities and provide web based reporting as directed by the OSC. Contractor shall collect all facts and information pertaining to residential properties. Identify Site and adjacent property owner information, provide property owner map. Assist OSC in documenting site access from remedial program for affected parties. If review of prior sampling activities warrant additional sampling, Contractor shall collect soil samples to determine the extent of contamination on designated residential properties. Location, type, and method of sample collection will be determined by the OSC. Contractor shall develop sampling plan. Contractor shall develop draft POLREP.

Notify TM (at a minimum) within 15 days of the TDD period of performance or within 80% of the TDD ceiling if additional time or funding are required to continue the task. START shall coordinate scope and details of final report with OSC. Contact OSC Mason at 214-665-2276 to discuss site tasks.

### APPENDIX H

**TECHNICAL DIRECTION DOCUMENT NO. 0001/17-065** 

U.S. EPA, Region 6 TDD #: 0001/17-065
1445 Ross Avenue, Suite 1200 Amendment #: 002
Dallas, TX 75202-2733 Contract #: EP-S5-17-02
Vendor: WESTON SOLUTIONS, INC.

TDD Title: Wilcox Oil Residence Site Removal Verbal Date:

Purpose: INCREMENTAL FUNDING Start Date: 08/23/2017

Completion Date: 12/31/2017 Effective Date: 08/23/2017

 $\begin{aligned} & \textbf{Priority}: \ ^{HIGH}\\ \textbf{Overtime Authorized}: \ ^{Yes}\\ & \textbf{Invoice Unit}: \end{aligned}$ 

SSID: 0600 Work Area: Response / Removal

Project/Site Name: Wilcox Oil Residence Site Removal

Work Area Code: RS

Project Address : (b) (6) Street Activity: Emergency Response Action (Site Specific)

 County: Creek
 Activity Code: RV

 City: Bristow
 Operable Unit:

 State: OK
 Emergency Code:

 Zip Code: 74010
 FPN:

Performance Based : No

ı			
I	Authorized TDD Ceiling :	Amount	LOE (Hours)
	Previous Action(s):	\$0.00	0.00
	This Action :	\$0.00	0.00
I	New Total	\$0.00	0.00

### Specific Elements:

### Description of Work:

See Schedule

Region Specific:

CERCLIS: : Misc 2:

Acco	Accounting and Appropriation Information:							SFO:			
Line Budget / FY Approp Budget Program Object Site Project Cost Flement Class						DCN Line-ID	Funding Category	TDD Amount			

TDD #: 0001/17-065 U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Amendment #: 002 Dallas, TX 75202-2733 Contract #: EP-S5-17-02 Vendor: WESTON SOLUTIONS, INC. Project Officer : Will LaBombard **Branch Mail Code:** 214-665-7199 Phone Number : (Signature) (Date) Fax Number: Contracting Officer Representative Branch Mail Code: Steve Mason 214-665-2276 Phone Number: (Signature) (Date) Fax Number: **Contract Specialist:** Michael J. Pheeny **Branch Mail Code:** 214-665-2798 Phone Number : (Date) (Signature) Fax Number: Contracting Officer : Michael J. Pheeny **Branch Mail Code:** Electronically Signed by Michael J. Pheeny 11/20/2017 214-665-2798 Phone Number: (Signature) (Date) Fax Number: Other Agency Official Branch Mail Code Phone Number: (Signature) (Date) Fax Number:

U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733 TDD #: 0001/17-065 Amendment #: 002 Contract #: EP-S5-17-02

Vendor: WESTON SOLUTIONS, INC.

#### Description of Work:

Amendment 002 - Increase the funding ceiling by \$7,000 (for a new ceiling of \$57,000) to cover additional costs for use of START trailer on site for 2 weeks as well as additional document review.

Amendment 001 - Extend the POP to 12/31/2017 for additional use of the START trailer at the site, and close-out of reports and data.

Base ORIG - The initial funding ceiling for this TDD is set at \$50,000. When available, all TDD costs shall be invoiced against the oldest 6A00E or 6A00S task order funding.

The contractor shall use SSID A6GG on all forms, reports, emails, communications, and deliverables.

Stephen Mason will be the primary COR for this TDD and Bill Rhotenberry will be the alternate COR.

#### Scope of Work:

Start shall coordinate all activities with the OSC.

START shall photo document / document conditions and activities at the site.

START shall maintain site files.

START shall develop and implement a QA sampling plan.

START shall conduct air monitoring and sampling for contaminants of concern.

START shall perform confirmation sampling of soil for contaminants of concern.

START shall acquire lab services for analysis of soil and air samples.

START shall draft POLREP(s).

START shall execute QASP upon approval of OSC.

START shall prepare draft removal report for OSC review.

START shall assist EPA with waste profile analyses.

In addition, the contractor shall provide documentation in support of the invoice. Documentation shall include: time

sheets with description of work completed, subcontractor invoices with explanation of work provided, documentation to support internal/external equipment rentals, travel expense reports with receipts, purchases made dedicated to the project with explanation and receipts, and any other documentation that contractor determines applicable. This documentation shall be submitted with the monthly vouchers in an electronic format deliverable to the PO/CO supporting the time period and costs claimed in the invoice. Additionally, contractor shall provide a final cost package deliverable at the completion of the project. The deliverable shall include all documents previously sent to EPA rolled up into one document which includes the: Technical Direction Document (TDD), Technical Monthly Progress reports (TPRs), invoices and all supporting cost documentation described above. Contractor shall provide two electronic versions of the final deliverable: one redacted and one unredacted. On the unredacted electronic version, the Contractor shall highlight all information that is Confidential Business Information.

U.S. EPA, Region 6

1445 Ross Avenue, Suite 1200

Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD#: 0001/17-065

Amendment #:

Contract #: EP-S5-17-02

TDD Title: Wilcox Oil Residence Site Removal Verbal Date:

Purpose: TDD INITIATION Start Date: 08/23/2017

Completion Date: 10/31/2017 Effective Date: 08/23/2017

 $\begin{aligned} & \textbf{Priority}: \ ^{\texttt{HIGH}} \\ & \textbf{Overtime Authorized}: \ ^{\texttt{Yes}} \\ & \textbf{Invoice Unit}: \end{aligned}$ 

SSID: 0600 Work Area: Response / Removal

Project/Site Name: Wilcox Oil Residence Site Removal Work Area Code: RS

Project Address : (b) (6) Street Activity : Emergency Response Action (Site Specific)

 County: Creek
 Activity Code: RV

 City: Bristow
 Operable Unit:

 State: OK
 Emergency Code:

 Zip Code: 74010
 FPN:

Performance Based : No

l	Authorized TDD Ceiling :	Amount	LOE (Hours)
l	Previous Action(s):	\$0.00	0.00
l	This Action :	\$0.00	0.00
l	New Total :	\$0.00	0.00

### Specific Elements:

### Description of Work:

See Schedule

Region Specific:

CERCLIS: : Misc 2:

Acco	Accounting and Appropriation Information:							SFO:			
Line Budget / FY Approp Budget Program Object Site Project Cost Flement Class						DCN Line-ID	Funding Category	TDD Amount			

U.S. EPA, Region 6

1445 Ross Avenue, Suite 1200

Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD #: 0001/17-065

Amendment #:

Contract #: EP-S5-17-02

Project Officer : Will LaBombard **Branch Mail Code:** 214-665-7199 Phone Number: (Signature) (Date) Fax Number : **Contracting Officer Representative Branch Mail Code:** Steve Mason 214-665-2276 Phone Number : (Signature) (Date) Fax Number: Brian Delaney **Contract Specialist: Branch Mail Code:** 214-665-7473 Phone Number : (Date) (Signature) Fax Number: Contracting Officer : Brian Delaney Branch Mail Code: Electronically Signed by Brian Delaney 08/23/2017 214-665-7473 Phone Number : (Signature) (Date) Fax Number: Other Agency Official Branch Mail Code :

Description of Work: The initial funding ceiling for this TDD is set at \$50,000. When available, all TDD costs shall be invoiced against the oldest 6A00E or 6A00S task order funding.

(Date)

Phone Number:

Fax Number:

The contractor shall use SSID A6GG on all forms, reports, emails, communications, and deliverables.

Stephen Mason will be the primary COR for this TDD and Bill Rhotenberry will be the alternate COR.

### Scope of Work:

Start shall coordinate all activities with the OSC.

START shall photo document / document conditions and activities at the site.

START shall maintain site files.

(Signature)

START shall develop and implement a QA sampling plan.

START shall conduct air monitoring and sampling for contaminants of concern.

START shall perform confirmation sampling of soil for contaminants of concern.

START shall acquire lab services for analysis of soil and air samples.

START shall draft POLREP(s).

START shall execute QASP upon approval of OSC.

START shall prepare draft removal report for OSC review.

START shall assist EPA with waste profile analyses.

In addition, the contractor shall provide documentation in support of the invoice. Documentation shall include: time

sheets with description of work completed, subcontractor invoices with explanation of work provided, documentation to support internal/external equipment rentals, travel expense reports with receipts, purchases made dedicated to the project with explanation and receipts, and any other documentation that contractor determines applicable. This documentation shall be submitted with the monthly vouchers in an electronic format deliverable to the PO/CO supporting the time period and costs claimed in the invoice. Additionally, contractor shall provide a final cost package deliverable at the completion of the project. The deliverable shall include all documents previously sent to EPA rolled up into one document which includes the: Technical Direction Document (TDD), Technical Monthly Progress reports (TPRs), invoices and all supporting cost documentation described above. Contractor shall provide two electronic versions of the final deliverable: one redacted and one unredacted. On the unredacted electronic version, the Contractor shall highlight all information that is Confidential Business Information.