



A R K A N S A S
Department of Environmental Quality

April 10, 2019

Philip Ofosu (6SF-TS)
USEPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

**Re: Preliminary Assessment Report for Lewis Lumber and Manufacturing Company
136 West Mill Street
Cove, Polk County, Arkansas
EPA SEMS ID: ARD006348353; AFIN: 57-00020**

Dear Mr. Ofosu:

The Arkansas Department of Environmental Quality Office of Land Resources (ADEQ) has completed the Preliminary Assessment (PA) for the Lewis Lumber and Manufacturing Company ("Lewis Lumber") site located at 136 West Mill Street in Cove, Polk County, Arkansas. Enclosed, please find a CD of the PA Report. Based upon ADEQ's findings, further investigation at the Lewis Lumber site is recommended.

If you have any questions or require additional information, please contact me at 501-682-0872 or by email at krepsk@adeq.state.ar.us.

Sincerely,

A handwritten signature in blue ink that reads "Katie Kreps".

Katie Kreps
Brownfield and Site Assessment Supervisor
Office of Land Resources
Arkansas Department of Environmental Quality

Enclosure: CD

**PRELIMINARY ASSESSMENT
FOR
LEWIS LUMBER AND MANUFACTURING COMPANY
EPA SEMS ID: ARD006348353
COVE, POLK COUNTY, ARKANSAS**

Philip Ofosu
EPA Site Assessment Manager

Date



4/5/19

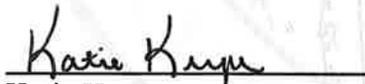
Jarrod Zweifel, P.G.
Assessment and Remediation Senior Manager
Office of Land Resources
Arkansas Department of Environmental Quality

Date



Ben Reynolds, P.E.
Technical Branch Manager
Office of Land Resources
Arkansas Department of Environmental Quality

3/14/19
Date



Katie Kreps
Brownfield and Site Assessment Supervisor
Office of Land Resources
Arkansas Department of Environmental Quality

03/01/2019
Date

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LIST OF ACRONYMS

ADEQ	Arkansas Department of Environmental Quality
ADH	Arkansas Department of Health
AFIN	ADEQ Facility Identification Number
ANHC	Arkansas Natural Heritage Commission
ANRC	Arkansas Natural Resources Commission
ARDOT	Arkansas Department of Transportation
AST	aboveground storage tank
BGS	below ground surface
CAA	Clean Air Act
CCA	Chromium Copper Arsenate
CEI	Compliance Evaluation Inspection
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CO	carbon monoxide
CWA	Clean Water Act
FEMA	Federal Emergency Management Agency
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NOV	Notice of Violation
NO _x	nitrogen oxides
NRCS	Natural Resources Conservation Service
PA	Preliminary Assessment
PDS	Permit Data System

LIST OF ACRONYMS (cont.)

PM/PM ₁₀	particulate matter
PPE	Probable Point of Entry
PSA	Pre-CERCLA Screening Assessment
RCRA	Resource Conservation and Recovery Act
RST	Regulated Storage Tank
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SESSI	Soil Exposure and Subsurface Intrusion
SIC	Standard Industry Classification
SIP	Site Inspection Prioritization
SO ₂	sulfur dioxide
SQG	Small Quantity Generator
SWPPP	Stormwater Pollution Prevention Plan
TDL	Target Distance Limit
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the 1986 Superfund Amendments and Reauthorization Act (SARA), the Arkansas Department of Environmental Quality Office of Land Resources (ADEQ) was tasked by the United States Environmental Protection Agency (USEPA) Region 6 to conduct a Preliminary Assessment (PA) for the Lewis Lumber and Manufacturing Company (“Lewis Lumber”) site located in Cove, Polk County, Arkansas.

1.1 Project Objective

The objective of this investigation was to collect information concerning conditions at the Lewis Lumber site sufficient to assess the potential threat posed to human health and the environment and to determine the need for additional CERCLA/SARA or other appropriate action.

1.2 Project Scope

The scope of the investigation included a review of available file information, a comprehensive contamination migration pathway target survey, and limited on-site and off-site reconnaissance.

Report Format

This PA Report was prepared to present the findings of the PA investigation. The PA Report contains the following sections:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Migration/Exposure Pathways and Targets
- Section 4 – Summary and Conclusions
- Section 5 – References
- Section 6 – Photographic Log

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

- Appendix A – Property Records
- Appendix B – Historical Aerial Photographs
- Appendix C – Arkansas Natural Resources Commission Watershed Maps and Information
- Appendix D – Arkansas Natural Heritage Commission File Review
- Appendix E – Natural Resources Conservation Service Custom Web Soil Survey Report

2.0 SITE BACKGROUND

Sections 2.1 through 2.4 provide background information characterizing the Lewis Lumber site. ADEQ collected and reviewed available background information regarding the location, description, former operations, and potential waste sources at the site. Unless otherwise referenced, the discussions in these sections are based on background information and site reconnaissance conducted on May 30, 2018, and January 16, 2019.

ADEQ submitted a Pre-CERCLA Screening Assessment (PSA) for the Lewis Lumber site to USEPA Region 6 on July 23, 2018, and a Potential Hazardous Waste Site Identification Form for the Lewis Lumber site to USEPA Region 6 on August 30, 2018.

Throughout its operational history, the Lewis Lumber site was used as a lumber mill and wood treating facility. According to the Site Inspection Prioritization (SIP) Report prepared by Roy F. Weston, Inc. in 1994, Lewis Lumber began lumber mill operations on-site in 1958 and began wood treating in 1976 (Reference [Ref.] 1). Prior to 1976, the majority of operations occurred on the northern portion of the site. Lewis Lumber operated on-site until 2009, when the property was sold to Jerry Hairrell and Hairrell Lumber began operations. Hairrell Lumber closed and ceased operations on December 30, 2010 due to bankruptcy. The site has remained inactive since this time.

2.1 Site Location and Setting

The Lewis Lumber site is located at 136 West Mill Street in Cove, Polk County, Arkansas. **Figure 2-1** provides the location of Polk County and the Lewis Lumber site. The Lewis Lumber site is approximately thirty-seven acres in size. The site is located in a rural residential and agricultural area with a wooded area to the north; residences and North Lewis Street to the east; a wooded area and residences to the south; and residences and an open vegetated field to the west (Refer to Photographic Log, Photos 1–4). West Mill Street intersects the site from the east and separates the site into a northern and southern portion (Refer to Photographic Log, Photo 5).

Cove is located in western Polk County, along the western Arkansas state boundary. According to Google Earth Pro, the approximate geographic coordinates for the center of the site are 34.440194° north latitude and 94.415292° west longitude. The site slopes down to the north at a grade of approximately five percent (5%), with the center of the site approximately 1,050 feet above mean sea level (Ref. 2).

2.1.1 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low income populations. The remainder of this section provides

information for considering environmental justice within the vicinity of the Lewis Lumber site.

Cove had a population of 373 residents within 211 housing units in 2014 (Ref. 3). The site's zip code is 71937. Cove experienced a 2.6 percent decrease in population between 2000 and 2014. The population racial percentages in 2010 were as follows: 91.1 percent Caucasian, 5.8 percent Hispanic, 2.6 percent two or more races, and 0.5 percent American Indian. The estimated median household income for Cove in 2016 was \$38,587, compared to the estimated median household income for Arkansas of \$44,334. The percentage of Cove residents with income below the poverty level in 2016 was 21.9, while the Arkansas average was 23.3. Compared to the Arkansas state average, Cove was rated "significantly below" in the categories of "black race population percentage" and "foreign-born population percentage" and "significantly above" in the category of "length of stay since moving."

2.2 Site Description

The Lewis Lumber site is approximately thirty-seven acres in size. The site is situated in a rural residential and agricultural area bordered by a wooded area to the north; residences and North Lewis Street to the east; a wooded area and residences to the south; and residences and an open vegetated field to the west. West Mill Street intersects the site from the east and separates the site into a northern and southern portion. **Figure 2-2** provides an aerial view and shows the site boundary, significant site features, and adjacent properties and roads.

The site is not fenced and is easily accessible to trespassers; however, a gate is located at the entrance to the site on West Mill Street. During reconnaissance, the gate was locked, making the site inaccessible by vehicle (Refer to Photographic Log, Photo 6).

Approximately twenty buildings were formerly located on the Lewis Lumber site. The majority of the buildings had been demolished prior to the May 30, 2018 site reconnaissance. Demolition debris is located throughout the site, primarily in the locations of former buildings (Refer to Photographic Log, Photos 7–22). Included within the demolition debris are empty 5-gallon hydraulic fluid buckets, small-quantity containers of various contents, broken universal waste bulbs, and various wiring and tubing (Refer to Photographic Log, Photos 23–26). The only buildings remaining on-site are portions of the Chromium Copper Arsenate (CCA) Treatment Building on the southern portion; a former residence on the west portion; and an office, break building, and wooden frame of a plywood storage building on the northern portion of the site (Refer to Photographic Log, Photos 27–31). All buildings remaining on-site are in poor condition. In addition to concrete foundations of former buildings, the remaining land cover at the site consists mostly of gravel and vegetated areas.

There are multiple burn piles and numerous areas of staining on gravel, concrete foundations, and soil, accompanied by hydrocarbon odor, located throughout the Lewis

Lumber site (Refer to Photographic Log, Photos 32–42). In addition, one concrete foundation on the northern portion of the site had staining in the shape of rings indicative of former 55-gallon drums (Refer to Photographic Log, Photo 43). Areas of disturbed soil, presumably resulting from demolition activities, and a large sawdust pile are located on the north-central portion of the site (Refer to Photographic Log, Photo 44).

The CCA Treatment Building is a grouping of buildings on the southern portion of the site that were adjoined over time. Areas of staining accompanied by hydrocarbon and chemical odors were located in numerous areas in and around the CCA Treatment Building (Refer to Photographic Log, Photo 45). Three large (approximately 10,000 gallons each) aboveground storage tanks (ASTs), one of which is labeled “Wood Chemicals Group CCA-C (50%) Wood Preservative,” (“CCA Treatment Tanks”) are located within a concrete containment area under a portion of the CCA Treatment Building (Refer to Photographic Log, Photo 46). During site reconnaissance, all three CCA Treatment Tanks were empty. Green staining was visible on the CCA Treatment Tanks and inside the concrete containment area. In addition, during site reconnaissance, the concrete containment area surrounding the CCA Treatment Tanks contained liquid presumed to be rainwater (Refer to Photographic Log, Photo 47).

Concrete saddles for additional former ASTs are located north of the CCA Treatment Tanks (Refer to Photographic Log, Photo 48). A concrete catch/recirculation basin with a metal tank and sump on each side is located south of the CCA Treatment Tanks (Refer to Photographic Log, Photo 49). The concrete catch/recirculation basin was stained and contained liquid presumed to be rainwater during site reconnaissance. A covered concrete drip pad and treatment area is located south of the catch/recirculation basin. During site reconnaissance, staining was visible on the concrete drip pad and treatment area; in particular, dense green staining was located on the south portion of the concrete drip pad (Refer to Photographic Log, Photos 50 and 51). An approximately 18,000-gallon underground concrete containment area is located east of the CCA Treatment Tanks (Refer to Photographic Log, Photo 52). During site reconnaissance, the approximately 18,000-gallon underground concrete containment area contained liquid presumed to be rainwater with sheen on the surface (Refer to Photographic Log, Photo 53).

Near the south site boundary and the location of the former Dry Kiln, two pairs of 55-gallon drums connected by approximately 6-inch diameter pipes were located underground and surrounded by concrete (Refer to Photographic Log, Photo 54). During site reconnaissance, both pairs of 55-gallon drums contained water presumed to be rainwater. The purpose of these drums could not be determined.

The majority of surface water runoff flows north off the site into Dry Creek approximately 250 feet north of the site. Dry Creek flows west into Mountain Fork approximately thirteen miles downstream from the site.

2.3 Site Ownership History

Unless otherwise referenced, the Lewis Lumber site ownership history was established via a review of Polk County property records, ADEQ records, and Arkansas Department of Transportation (ARDOT) historical aerial photographs. The Lewis Lumber site is located in Section 4, Township 4 South, Range 32 West (S4 T4S R32W) (Ref. 4). A legal description for the entire Lewis Lumber site was unable to be obtained during this PA investigation.

Lewis Lumber began lumber mill operations on-site in 1958 and began wood treating in 1976. Prior to 1976, the majority of operations occurred on the northern portion of the site. Lewis Lumber operated on-site until 2009, when the property was sold to Jerry Hairrell and Hairrell Lumber began operations. Hairrell Lumber closed and ceased operations on December 30, 2010 due to bankruptcy. The site has remained inactive since this time.

Appendix A provides copies of Polk County property records for the Lewis Lumber site. These records contain information regarding property parcel numbers, acreage, and deed transfers.

2.4 Site Operations and Waste Characteristics

The remainder of this section provides available information regarding operations and waste characteristics associated with the Lewis Lumber site. Information was obtained via ADEQ records and Permit Data System (PDS) file reviews.

2.4.1 Historical Waste Management Practices

Historical information available specific to the waste management practices at the Lewis Lumber site is summarized below:

Throughout its operational history, the Lewis Lumber site was used as a lumber mill and wood treating facility. Lewis Lumber began lumber mill operations on-site in 1958 and began wood treating in 1976. Logs and precut stock, both hardwood and softwood, were received at the Lewis Lumber site by truck. The logs were cut to length and debarked. The debarked logs were either made into posts and poles or cut into timber for making pallets and skids or specialty lumber. The majority of the posts and poles were treated. Softwood needed to be kiln-dried prior to treating; however, the hardwood did not require drying. All wood treatment was done using a waterborne preservative. Once dried, the treated posts and poles were shipped off-site with the other wood products for sale. According to the Safety Data Sheet (SDS), the CCA Type C Wood Preservative used on the Lewis Lumber site was composed of chromic acid, arsenic acid, and copper oxide.

A review of the ADEQ PDS indicated that that ADEQ Facility Identification Number (AFIN) 57-00020 is associated with the Lewis Lumber site. Hairrell Lumber has an inactive hazardous waste EPA identification number (ARD006348353), a Regulated Storage Tank (RST) Permit (57001609), a voided Minor Source Air Permit (2088-A), and a voided National Pollutant Discharge Elimination System (NPDES) Storm Runoff Permit (ARR00B362). In addition, according to ADEQ records, the Lewis Lumber site was registered as a Small Quantity Generator (SQG) of hazardous waste.

According to ADEQ RST records, three 5,000-gallon diesel underground storage tanks (USTs) were historically located on the Lewis Lumber site. All three tanks were initially installed in 1975 and were removed in 1989.

A review of ADEQ records indicated a history of poor hazardous waste management practices at the Lewis Lumber site including the following complaints and violations:

- Failure to submit hazardous waste annual reports by required deadlines;
- Multiple occurrences of exceeding stormwater runoff benchmarks;
- A complaint in May 1989 regarding CCA runoff from the drip pad leaving the site;
- Numerous hazardous waste management violations reported during a March 1993 Compliance Evaluation Inspection (CEI);
- Exceedance of 2088-A permit limit pertaining to the amount of logs received during an air inspection in January 2007; and
- Multiple items of concern noted in an Industrial Stormwater Compliance Inspection in April 2009 including failure to submit permit transfer paperwork, failure to prepare a Stormwater Pollution Prevention Plan (SWPPP), drums containing unknown fluids that needed to be identified and disposed of properly, large piles of discarded timber wastes and solid waste (two of which were directly on the bank of a small creek), and several areas of spilled oil-based fluids.

In addition, approximately fifty drums with varying amounts of unknown liquids and a pile of potentially contaminated debris was documented on-site during a CEI conducted in August 2012. A Notice of Violation (NOV) (LIS 13-075) was subsequently issued to Jerry Hairrell in May 2013 requiring all solid and hazardous waste on-site be identified and properly disposed, an ADEQ-approved Sampling and Analysis Plan (SAP) including a plan for the drip pad closure to be developed and implemented, and additional remedial actions based upon the results of the implemented SAP. Jerry Hairrell filed for bankruptcy and insufficient funds were available to complete the sampling and clean-up activities outlined in the SAP. The site was abandoned upon closure of the bankruptcy case.

Based on the results of the SIP Report prepared in 1994, a No Further Remedial Action Planned under Superfund decision was made for the Lewis Lumber site; however, the site remained active for over fifteen additional years after the report

was written and ADEQ requested the site to be reevaluated under current conditions.

Table 2-1 below summarizes the review of historical aerial photographs of the Lewis Lumber site obtained during this PA investigation (Ref. 5).

Table 2-1. Summary of Historical Aerial Photographs

Year	Subject Property Description	Surrounding Area Description
1969	Numerous buildings are present on the northern portion of the site, including the present-day plywood storage building, office, and former residence. Numerous piles of wood are present on the northern portion of the site. The southern portion of the site is undeveloped with the exception of three buildings.	Forested areas border the south, west, and north sides of the site. North Lewis Street borders the east side of the site and two residences are located near the east portion of the site.
1976	The majority of trees on the southern portion of the site have been cleared and additional trees have been cleared on the northern portion of the site. Three new buildings, including the present-day break building, have been constructed and additions have been built onto other buildings on the northern portion of the site. Two of the buildings on the southern portion of the site are no longer present. The first portion of the CCA Treatment Building has been constructed on the southern portion of the site.	Trees have been cleared and two buildings have been constructed west of the site.
1982	A new building has been constructed on the northern portion of the site. Two new buildings and additions to the CCA Treatment Building have been constructed on the southern portion of the site. Numerous piles (presumably wood and lumber) are now also present on the southern portion of the site. A parking area with cars is now present on the southern portion of the site, just south of West Mill Street.	Surrounding area does not appear to have changed significantly since the 1976 photograph.
1990	Three new buildings have been constructed on the northern portion of the site, additions have been built onto already present buildings, and a new building has been constructed west of West Mill Street, near the former residence. More trees have been cleared and piles of potential sawdust, gravel, or soil are present on the southern portion of the site. Cars are now parked on the east portion of the site, north of West Mill Street, and are no longer parked south of West Mill Street. Five buildings formerly on the east portion of the site, north of West Mill Street, have been removed.	More trees have been removed west of the site, which now consists of an open vegetated field with a few trees.
1998	Another addition has been built onto the CCA Treatment Building. Large piles of wood are now present on the east portion of the site, north of West Mill Street.	Surrounding area does not appear to have changed significantly since the 1990 photograph.
2006	Site does not appear to have changed significantly since the 1998 photograph.	Surrounding area does not appear to have changed significantly since the 1998 photograph.
2012	The site appears inactive. No cars or piles of wood or lumber are visible on-site.	Surrounding area does not appear to have changed significantly since the 2006 photograph.
2015	Many of the buildings on-site have been demolished or appear in disrepair.	Surrounding area does not appear to have changed significantly since the 2012 photograph.

Appendix B provides copies of historical aerial photographs of the site and surrounding properties obtained via Google Earth Pro and the ARDOT.

Available regulatory compliance and hazardous material and waste information are provided below in Section 2.4.2 and Section 2.5.2.

2.4.2 Regulatory Compliance

Except as otherwise referenced, the following information was compiled using cross-referenced ADEQ files and report documentation.

A review of the ADEQ PDS indicated that AFIN 57-00020 is associated with the Lewis Lumber site. The Standard Industry Classification (SIC) Code for the ADEQ-issued permits for the Lewis Lumber site is listed as 2491: Wood Preserving. The North American Industry Classification System (NAICS) Code for the ADEQ-issued permits for the Lewis Lumber site is listed as 321114: Wood Preservation.

Environmental regulations pertinent to lumber mills and wood treating facilities include: the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA). Information relevant to each of these regulatory categories is provided below.

CAA

A review of the ADEQ PDS indicated that Lewis Lumber was issued Minor Source Air Permit 2088-A on May 12, 2005. This permit was voided on April 8, 2013.

The following emissions were produced at the Lewis Lumber site: particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_x), and volatile organic compounds (VOCs).

As stated previously in Section 2.4.1, Hairrell Lumber was cited in 2007 for exceeding the 2088-A permit limit pertaining to the amount of logs received.

Additional air emissions information is provided in Section 3.4, Air Migration Pathway.

CWA

NPDES Storm Runoff Permit ARR00B362 was issued for the Lewis Lumber site on May 4, 1994, and voided on May 12, 2011. Requirements established under the CWA (e.g., spill prevention, control and countermeasure plans, and SWPPPs) are potentially relevant to a lumber mill and wood treating facility such as Lewis Lumber.

As stated previously in Section 2.4.1, the Lewis Lumber site had water permit compliance violations while in operation.

RCRA

Hazardous wastes are covered by RCRA Subtitle C, while non-hazardous wastes are covered under RCRA Subtitle D. Hazardous materials become hazardous wastes if and when they are discarded or intended to be discarded. According to ADEQ records, the Lewis Lumber site was registered as a SQG of hazardous waste.

As stated previously in Section 2.4.1, the Lewis Lumber site had numerous hazardous waste management violations while in operation.

2.5 Source Characterization

Sections 2.5.1 through 2.5.4 provide source characterization information.

2.5.1 Source Descriptions

According to ADEQ PDS, Hairrell Lumber has an RST Permit (57001609). According to ADEQ RST records, three 5,000-gallon diesel USTs were historically located on the Lewis Lumber site. All three tanks were initially installed in 1975 and were removed in 1989.

Based upon site reconnaissance and ADEQ records, the following additional sources are or were located on the Lewis Lumber site: three large CCA Treatment Tanks and associated concrete containment area; an unknown quantity of former ASTs north of the CCA Treatment Tanks; a concrete catch/recirculation basin south of the CCA Treatment Tanks; the concrete drip pad and treatment area; an approximately 18,000-gallon underground concrete containment area; the two pairs of underground 55-gallon drums connected by approximately 6-inch diameter pipes; multiple burn piles and numerous areas of staining on gravel, concrete foundations, and soil; and an unknown quantity of 5-gallon hydraulic fluid buckets, 55-gallon drums and small-quantity containers of various contents, broken universal waste bulbs, and various wiring and tubing.

According to Minor Source Air Permit 2088-A, Lewis Lumber had a total of sixteen point sources that produced the following air emissions: PM/PM₁₀, SO₂, CO, NO_x, and VOCs. Information on these sources is summarized below in **Table 2-2**.

Table 2-2. Air Permit 2088-A Point Sources

Source Number	Source	Pollutants
01	Debarker	PM/PM ₁₀
02	Post Peeler	PM/PM ₁₀
03	Post Peeler Shavings	PM/PM ₁₀
04	Sawmill Sawdust Handling	PM/PM ₁₀
05	Main Saw	PM/PM ₁₀
06	Edger	PM/PM ₁₀
07	Chipper	PM/PM ₁₀
08	Moulder	PM/PM ₁₀
09	Gang Saw #1 – Mill	PM/PM ₁₀
10	Gang Saw #2 – Yard	PM/PM ₁₀
11	Resaw	PM/PM ₁₀
12	Planner Mill Sawdust	PM/PM ₁₀
13	Chip Pile Handling	PM/PM ₁₀
14	Planner Mill	PM/PM ₁₀
15	Wood-Waste Fired Boiler	PM/PM ₁₀ , SO ₂ , NO _x , CO, VOCs
16	Dry Kiln	VOCs

Section 2.5.2 below provides additional relevant hazardous substance, pollutant, or contaminant information.

2.5.2 Evidence of Hazardous Substance, Pollutant, or Contaminant

Evidence of potential hazardous substances, pollutants, or contaminants observed during this PA investigation included the following:

- Demolition debris containing empty 5-gallon hydraulic fluid buckets, small-quantity containers of various contents, broken universal waste bulbs, and various wiring and tubing;
- Multiple burn piles and numerous areas of staining on gravel, concrete foundations, and soil, accompanied by hydrocarbon odor;
- Staining in the shape of rings, indicative of former 55-gallon drums, on a concrete foundation;
- Areas of staining accompanied by hydrocarbon and chemical odors in numerous areas in and around the CCA Treatment Building;
- Three large CCA Treatment Tanks and associated concrete containment area with green staining;
- Concrete saddles for additional former ASTs north of the CCA Treatment Tanks;
- The stained concrete catch/recirculation basin with a metal tank and sump on each side;
- Staining on the concrete drip pad and treatment area, in particular, dense green staining on the south portion;

- The approximately 18,000-gallon underground concrete containment area with liquid presumed to be rainwater with sheen on the surface; and
- The two pairs of underground 55-gallon drums with unknown purpose connected by approximately 6-inch diameter pipes.

The following historical occurrences would constitute as evidence of potential hazardous substances, pollutants, or contaminants:

- The historical use of three 5,000-gallon diesel USTs;
- Multiple occurrences of exceeding stormwater runoff benchmarks;
- The complaint in May 1989 regarding CCA runoff from the drip pad leaving the site;
- Numerous hazardous waste management violations reported during a CEI in March 1993;
- Multiple items of concern noted in an Industrial Stormwater Compliance Inspection in April 2009 including drums containing unknown fluids that needed to be identified and disposed of properly, large piles of discarded timber wastes and solid waste (two of which were directly on the bank of a small creek), and several areas of spilled oil-based fluids; and
- The historical use of an unknown quantity of 55-gallon drums and small-quantity containers holding various contents.

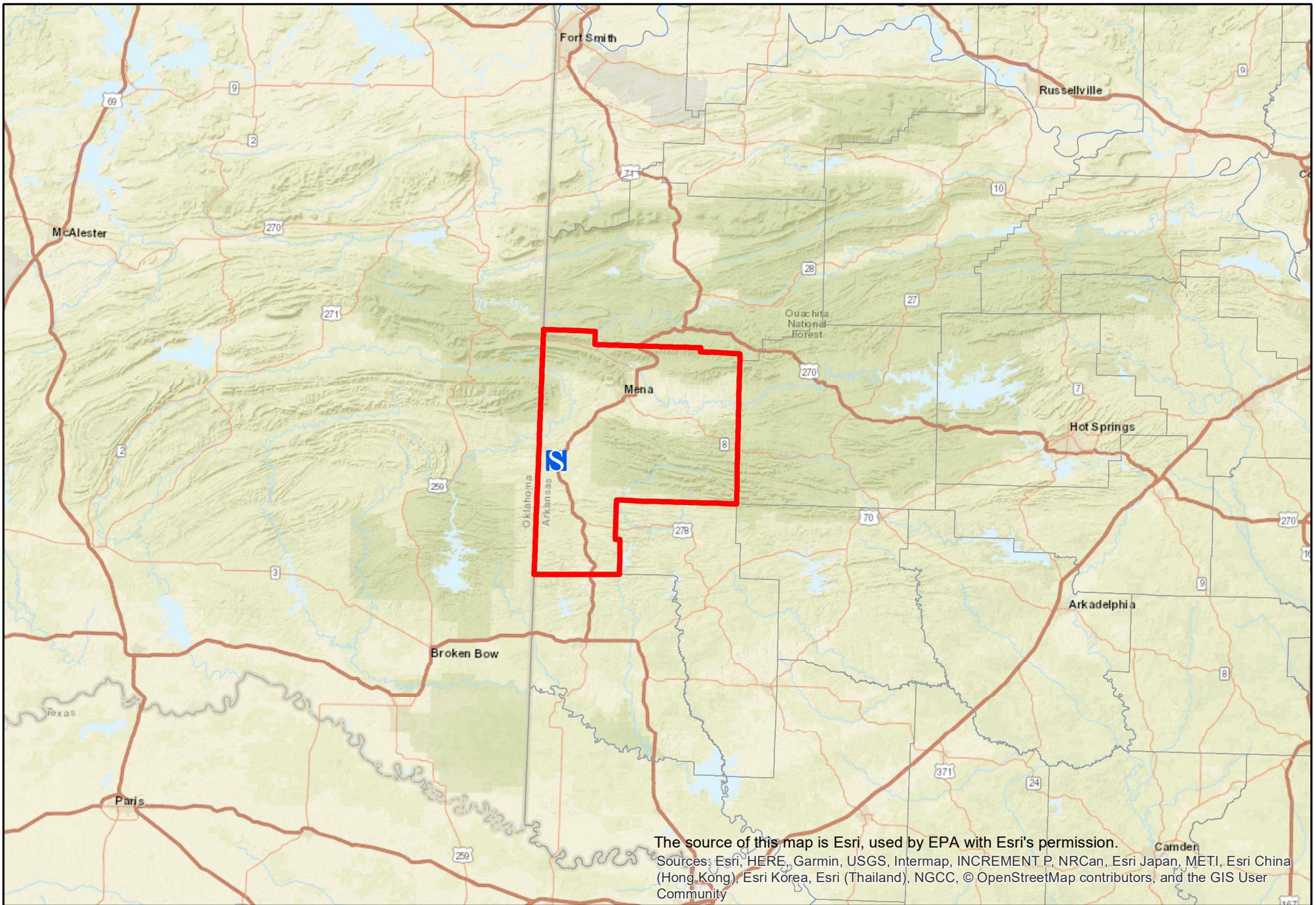
2.5.3 Source Containment Features

Source containment features that are or were located at the Lewis Lumber site include: the approximately twenty buildings formerly on-site, including the present-day CCA Treatment Building, office, break building, and plywood storage building; three former 5,000-gallon diesel USTs; three large CCA Treatment Tanks and associated concrete containment area; former ASTs north of the CCA Treatment Tanks; the concrete catch/recirculation basin; the approximately 18,000-gallon underground concrete containment area; the two pairs of underground 55-gallon drums with unknown purpose connected by approximately 6-inch diameter pipes; an unknown quantity of 5-gallon hydraulic fluid buckets; and an unknown quantity of former 55-gallon drums and small-quantity containers holding various contents.

2.5.4 Waste Quantity or Source Size

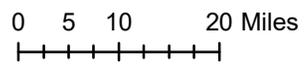
Approximate quantities of waste and sizes of sources that are or were formerly located at the Lewis Lumber site include: three former 5,000-gallon diesel USTs; three large (approximately 10,000 gallons each) CCA Treatment Tanks and associated concrete containment area; former ASTs of unknown sizes north of the CCA Treatment Tanks; the concrete catch/recirculation basin (approximately 10,000 gallons); the approximately 18,000-gallon underground concrete containment area; the two pairs of underground 55-gallon drums with unknown purpose connected by approximately 6-inch diameter pipes; an unknown quantity

of 5-gallon hydraulic fluid buckets; and an unknown quantity of former 55-gallon drums and small-quantity containers holding various contents.



Lewis Lumber
Site Location and County Map
Figure 2-1

Legend:
 □ Polk County
 S Site Location



 ADEQ <small>ARKANSAS</small> <small>Department of Environmental Quality</small>	Site Location and County Map
	Location: Cove, Arkansas
	County: Polk
AFIN: 57-00020	Date: April 2019



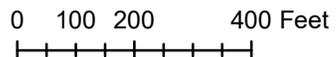
The source of this map is Esri, used by EPA with Esri's permission.
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Lewis Lumber
Site Map
Figure 2-2

Legend:

- Site Boundary
- ▶ Site Drainage

▶ Flow Direction



AFIN:
57-00020

Site Map	
Location:	Cove, Arkansas
County:	Polk
Date:	April 2019

3.0 MIGRATION/EXPOSURE PATHWAYS AND TARGETS

Migration and exposure pathway targets were calculated for this PA using the MARPLOT[®] desktop mapping system to search selected information from the USEPA, the United States Census Bureau, and the United States Geological Survey (USGS).

Sections 3.1 through 3.4 provide information regarding migration and exposure pathways and targets.

3.1 Groundwater Migration Pathway

Sections 3.1.1 through 3.1.4 provide groundwater information for the Lewis Lumber site.

3.1.1 Local Geology and Hydrologic Setting

The following information was obtained from the Arkansas Geological Commission's *Stratigraphic Summary of Arkansas* and the 1993 Geologic Map of Arkansas.

Lewis Lumber is located within the Ouachita Mountains physiographic province. The Ouachita Mountains are made up of complexly folded and faulted Paleozoic-age sedimentary rocks that were originally deposited in mostly deep marine environments. A structural fabric that trends more or less east-west was produced by a continental collision during the late Paleozoic that pushed up this region. The folding was intricate at all scale levels and several local sequences, both complete and partial, are overturned. Throughout the area, compressional faulting is commonly expressed in the sequence. The Gulf Coastal Plain and Mississippi Embayment cut off the area to the east.

The Lewis Lumber site is located within the Stanley Shale formation of the Ouachita Mountains physiographic province. This unit is composed of dark gray shale interbedded with fine-grained sandstone. Both plant and invertebrate fossils have been reported in this formation, but preservation is usually poor. The total thickness of the Stanley Shale formation varies from 3,500 to over 10,000 feet (Ref. 6; Ref. 7).

The following information was obtained from the USGS *Ground Water Atlas of the United States*:

The Ouachita Mountains aquifer lies under the Lewis Lumber site. This aquifer consists of mostly shale, sandstone, and chert beds of Cambrian and Pennsylvanian age. The Ouachita Mountains are characterized by alternating mountains and inter-montane valleys to the north and a southernmost piedmont area. The Ouachita Mountains Aquifer has a wide extent, with a width of eighty miles along the Arkansas-Oklahoma state border that progressively narrows eastward toward the central part of the state. Despite its large expanse, due to the

predominance of shale and low porosity sandstones, this aquifer yields limited quantities of water for domestic and non-irrigation farm uses. Well depths are shallow in the Ouachita Mountains aquifer and often yield less than fifty gallons per minute. Other than for limited quantities of water for domestic and non-irrigation farm purposes, most communities rely on surface water supplies (Ref. 8).

Groundwater in the vicinity of the Lewis Lumber site is believed to flow northeast toward the Ouachita River, with groundwater elevations influenced by topography. By searching through the USGS National Water Information System (Ref. 9), two wells were found within a 1-mile radius of the Lewis Lumber site. The static groundwater elevations for these wells ranged from 1.45 feet below ground surface (bgs) at the shallowest to 12.70 feet bgs at the deepest. No additional groundwater wells were recorded with the USGS National Water Information System within a 4-mile radius of the Lewis Lumber site.

A radius search conducted using the Arkansas Natural Resources Commission (ANRC) Well Construction and Pump Installation Database indicated that eight groundwater wells are located within a 1-mile radius of the Lewis Lumber site. Of the eight ANRC wells recorded, four are monitoring wells, one is a public supply well, and three are of unknown uses. The public supply well is located on a residential property southeast of the site. One of the wells recorded as having an unknown use is located on the Lewis Lumber site, northwest of the CCA Treatment Building. This well was used as a water supply well on-site. During site reconnaissance on January 16, 2019, the well was capped. The depth to groundwater in this well was 14 feet.

A total of seventy-seven groundwater wells are recorded on the ANRC well Construction and Pump Installation Database within a 4-mile radius of the Lewis Lumber site. Of the seventy-seven ANRC wells recorded, forty-two are domestic wells, twenty are of unknown uses, eight are commercial livestock wells, five are monitoring wells, one is a public supply well, and one is a domestic irrigation well. The static groundwater elevations of these wells range from five feet to fifty-one feet bgs (Ref. 9).

No groundwater wells within a 4-mile radius of the Lewis Lumber site were recorded as drinking water wells on the ANRC Well Construction and Pump Installation Database; however, it is possible that some are being used for this purpose.

3.1.2 Releases and Potential Releases to Groundwater

The USGS, ANRC, and Arkansas Geological Survey are all entities which monitor Arkansas groundwater quality for various purposes; however, none of these entities currently monitors groundwater quality within a 4-mile radius of the Lewis Lumber site.

The historical use of two pairs of underground 55-gallon drums, an approximately 18,000-gallon underground concrete containment area, and three former 5,000-gallon diesel USTs are indications of the potential for releases to the groundwater to have occurred. In addition, there is the potential for releases to the groundwater via soil contamination. Areas of potential soil contamination are described in more detail in Section 3.3.2.

No additional analytical or other evidence of releases to groundwater were documented during this PA investigation.

The following section discusses the groundwater migration pathway targets.

3.1.3 Groundwater Migration Pathway Targets

MARPLOT[®] mapping tool, which includes United States Census Bureau information for the year 2010, was used to calculate populations within the radii discussed below. Using the coordinates of 34.440194° north latitude and 94.415292° west longitude, approximately 337 people reside within a 1-mile radius and 1,909 people reside within a 4-mile radius of the Lewis Lumber site. **Figure 3-1** provides a map depicting the 1-mile and 4-mile radii around the approximate site location.

Additional population apportionments and number of groundwater wells recorded on the ANRC Well Construction and Pump Installation Database within certain distance radii are presented below in **Table 3-1**.

Table 3-1. Lewis Lumber Site Population Distances and ANRC-recorded Groundwater Wells

Distance Radius (Miles)	Number of Residents	Number of Wells
0.25	6	1
0.50	92	7
1.0	337	8
2.0	779	21
3.0	1,142	51
4.0	1,909	77

The residents of Cove are served by Gillham Regional Water District. Gillham Regional Water District's water source is surface water from Gillham Lake, not groundwater (Ref. 11).

There are ANRC domestic groundwater wells and a public supply well located within a 4-mile radius of the Lewis Lumber site. No groundwater wells within a 4-mile radius of the Lewis Lumber site were recorded as drinking water wells on the ANRC Well Construction and Pump Installation Database; however, it is possible that some are being used for this purpose.

In addition, a water supply well (recorded as having an unknown use on the ANRC Well Construction and Pump Installation Database) is located on-site, northwest of the CCA Treatment Building.

3.1.4 Groundwater Migration Pathway Conclusions

No records of groundwater sampling in the vicinity of the Lewis Lumber site were found during this PA investigation.

The historical use of two pairs of underground 55-gallon drums, an approximately 18,000-gallon underground concrete containment area, and three former 5,000-gallon diesel USTs are indications of the potential for releases to the groundwater to have occurred. In addition, there is the potential for releases to the groundwater via soil contamination.

The residents of Cove are served by Gillham Regional Water District. Gillham Regional Water District's water source is surface water from Gillham Lake, not groundwater. There are ANRC domestic groundwater wells and a public supply well located within a 4-mile radius of the Lewis Lumber site. No groundwater wells within a 4-mile radius of the Lewis Lumber site were recorded as drinking water wells on the ANRC Well Construction and Pump Installation Database; however, it is possible that some are being used for this purpose. In addition, a water supply well is located on-site, northwest of the CCA Treatment Building.

According to the Arkansas Department of Health (ADH), which routinely monitors for constituents in drinking water according to federal and state laws, the most current sample results for the Gillham Regional Water District indicated no violations (Ref. 12).

3.2 Surface Water Migration Pathway

Sections 3.2.1 through 3.2.4 provide surface water information for the Lewis Lumber site.

3.2.1 Hydrologic Setting

According to Google Earth Pro, the Lewis Lumber site slopes down to the north at a grade of approximately five percent (5%). The center of the site is approximately 1,050 feet above mean sea level.

Available sources reviewed during this PA investigation to determine the Lewis Lumber site hydrologic setting and surface water conditions included: Topozone topographic map for Cove in Polk County, Arkansas; USGS Arkansas Water Science Center databases; Federal Emergency Management Agency (FEMA) National Flood Hazard Map; ADEQ's *2016 Integrated Water Quality Monitoring Assessment Report*; and the ANRC-Arkansas Watershed Information System.

The areas surrounding the Lewis Lumber site generally slope down to the north toward Dry Creek (Ref. 13).

Based on soil type, the Lewis Lumber site is considered well-drained; however, during site reconnaissance, multiple areas of standing water and evidence of former areas of standing water were visible. Surface water runoff is moderate based on soil type. The majority of surface water runoff flows north off the site into Dry Creek approximately 250 feet north of the site. Dry Creek flows west into Mountain Fork approximately thirteen miles downstream from the site. The 15-mile Target Distance Limit (TDL) is estimated to occur along Mountain Fork.

The site has one Probable Point of Entry (PPE). The PPE is located on the north side of the site, where surface water runoff flows north off the site into Dry Creek.

A portion of the Lewis Lumber site is situated within the 100-year floodplain (Ref. 14).

According to the ADEQ's 2016 *Integrated Water Quality Monitoring Assessment Report*, the Lewis Lumber site is located in Segment 1D (Ref. 15). Segment 1D is located on the western edge of Montgomery County and covers a portion of Polk County. This segment encompasses a twenty-two mile reach of the Mountain Fork of the Little River from its headwaters to the Arkansas-Oklahoma state line.

The waters within Segment 1B have been designated as suitable for the propagation of fish and wildlife; primary and secondary contact recreation; and public, industrial, and agricultural water supplies. Mountain Fork is also designated as an Extraordinary Resource Waterbody and an Ecologically Sensitive Waterbody because of the occurrence of the leopard darter (*Etheostoma pantherina*). However, a portion of Mountain Fork does not meet the turbidity and temperature water quality standards. The source of turbidity is thought to be from nonpoint sources, mainly pasture, in the watershed. In addition, the turbidity and elevated temperatures are likely caused from an inadequate riparian zone adjacent to the river in the watershed.

3.2.2 Releases and Potential Releases to Surface Water

The sheen on the water in the approximately 18,000-gallon underground concrete containment area is a current indication of a potential release from the Lewis Lumber site to the surface water migration pathway. Historical indications of potential releases from the Lewis Lumber site to the surface water migration pathway include: the multiple occurrences of exceeding stormwater runoff benchmarks, the complaint in May 1989 regarding CCA runoff from the drip pad leaving the site, and the two large piles of discarded timber wastes and solid waste formerly on the bank of a small creek on-site.

In addition, there is the potential for releases to surface water via soil contamination. Areas of potential soil contamination are described in more detail in Section 3.3.2.

3.2.3 Surface Water Migration Pathway Targets

According to the Arkansas Watershed Information System, the Lewis Lumber site lies within the Middle Mountain Fork watershed. The total area of this watershed covers 22,043.82 acres (34.04 square miles) and contains the surface water linear feature of 24.84 miles in the form of Streams/Rivers. The population of the Middle Mountain Fork watershed was 784 people in 2000, with a population density of 23.03 people per square mile (Ref. 16).

Appendix C contains ANRC-Arkansas Watershed Information System watershed maps and supporting documentation for the above information.

The Arkansas Natural Heritage Commission (ANHC) maintains a database on the status and location of threatened or endangered species and significant ecological communities in Arkansas. An occurrence of an element of special concern represents a location, which provides habitat for sensitive species (both state and federal species), is an outstanding example of a natural community, or is a colonial bird nesting site.

According to the file review conducted by the ANHC, no occurrences of elements of special concern have been recorded within a 1-mile radius of the site. Eight occurrences of elements of special concern have been recorded within a 4-mile radius of the site. Four aquatic or semi-aquatic elements of special concern have been recorded within a 4-mile radius of the site: Mena crayfish (*Faxonius menae*), Ouachita shiner (*Lythrurus snelsoni*), Kiamichi shiner (*Notropis ortenburgeri*), and Strecker's Chorus Frog (*Pseudacris streckeri*). A total of 299 occurrences of elements of special concern have been recorded within a 15-mile radius of the site (Ref. 17).

Figure 3-2 illustrates the approximate 15-mile radius delineation used by the ANHC for the database search for threatened and endangered species and significant ecological communities, and indicates the site's 15-mile TDL and other significant surface water migration pathway features. **Appendix D** contains a copy of the file review provided by the ANHC and supporting documentation for the above information.

The USEPA National Environmental Policy Act (NEPA) website, NEPAassist, was accessed to obtain surface water migration target information. According to NEPAassist, the closest wetland area is a Riverine Wetland located along Mountain Fork, approximately 13.1 miles downstream from the Lewis Lumber site. In addition, multiple Freshwater Forested/Shrub Wetland and Freshwater

Emergent Wetland areas are located farther downstream along Mountain Fork within the site's 15-mile TDL (Ref. 18).

The residents of Cove are served by Gillham Regional Water District. Gillham Regional Water District's water source is surface water from Gillham Lake. Gillham Lake is located upgradient and within a different watershed than the Lewis Lumber site.

3.2.4 Surface Water Migration Pathway Conclusions

The sheen on the water in the approximately 18,000-gallon underground concrete containment area is a current indication of a potential release from the Lewis Lumber site to the surface water migration pathway. Historical indications of potential releases from the Lewis Lumber site to the surface water migration pathway include: the multiple occurrences of exceeding stormwater runoff benchmarks, the complaint in May 1989 regarding CCA runoff from the drip pad leaving the site, and the two large piles of discarded timber wastes and solid waste directly on the bank of a small creek. In addition, there is the potential for releases to surface water via soil contamination.

The residents of Cove are served by Gillham Regional Water District. Gillham Regional Water District's water source is surface water from Gillham Lake. Gillham Lake is located upgradient and within a different watershed than the Lewis Lumber site.

No occurrences of an element of special concern have been recorded by the ANHC within a 1-mile radius of the site.

A Riverine Wetland and multiple Freshwater Forested/Shrub Wetland and Freshwater Emergent Wetland areas are located downstream from the Lewis Lumber site, within the 15-mile TDL.

3.3 Soil Exposure and Subsurface Intrusion Pathway

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey for Polk County, Arkansas, the soil map unit composition for the Lewis Lumber site is comprised primarily of the following soils: 85.9% Sherless gravelly fine sandy loam, 1 to 6 percent slopes; 10.0% Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded; and 4.1% Sherless-Nashoba-Bismarck complex, 15 to 35 percent slopes, extremely stony (Ref. 19).

Descriptions of these soils are summarized below:

Sherless gravelly fine sandy loam, 1 to 6 percent slopes

This moderately deep, well-drained soil is often found on hills and ridges primarily in the southern part of the country. The surface layer is typically dark grayish brown gravelly fine sandy loam,

approximately four inches thick. The subsurface layer is light yellowish brown fine sandy loam that extends to approximately ten inches bgs. The upper portion of the subsoil is yellowish red clay loam that extends to a depth of approximately twenty-one inches bgs. The middle portion is yellowish red, mottled clay loam that extends to a depth of approximately thirty-four inches bgs. The lower portion is yellowish red, yellowish brown, and gray loam that extends to a depth of approximately thirty-eight inches bgs. The substratum is typically yellowish red, yellowish brown, and gray fractured and tilted soft acidic sandstone that extends to a depth of approximately forty-five inches bgs. This soil ranges from moderately acidic to extremely acidic, except for areas where amendments have been applied. Permeability is moderate. Available water capacity is moderate. Runoff is low to medium.

Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded

This very deep, moderately well-drained soil is often found on narrow flood plains mostly in the southern portion of the country. The surface layer is typically grayish brown fine sandy loam, approximately three inches thick. The subsurface layer is brown fine sandy loam that extends to approximately seventeen inches bgs. The upper portion of the subsoil is yellowish brown fine sandy loam that extends to a depth of approximately forty-two inches bgs. The middle portion is yellowish brown, mottled fine sandy loam that extends to a depth of approximately sixty-two inches bgs. The lower portion is light yellowish gray, mottled fine sandy loam that extends to a depth of approximately eighty inches bgs. This soil ranges from slightly acidic to strongly acidic in the surface and subsurface layers and neutral to strongly acidic in the underlying material. Permeability is moderately rapid. Available water capacity is high. Runoff is negligible to very low.

Sherless-Nashoba-Bismarck complex, 15 to 35 percent slopes, extremely stony

This soil is a complex of Sherless, Nashoba, and Bismarck soils. This soil is often found on hillsides mainly in the southwestern portion of the county. Sherless and Nashoba are moderately deep and Bismarck is shallow. Sherless ranges from moderately acidic to extremely acidic, Nashoba ranges from strongly acidic to very strongly acidic, and Bismarck ranges from strongly acidic to extremely acidic. Permeability is moderate in Sherless and Bismarck and moderately rapid in Nashoba. Available water capacity is moderate in Sherless and very low in Nashoba and Bismarck. Runoff is medium to high (Ref. 20).

Appendix E provides the NRCS Custom Web Soil Survey Report for the Lewis Lumber site.

Sections 3.3.1 through 3.3.4 provide additional soil information.

3.3.1 Physical Source Access Conditions

In addition to concrete foundations of former buildings, the remaining land cover at the site consists mostly of gravel and vegetated areas. The site is not fenced and is easily accessible to trespassers; however, a gate is located at the entrance to the site on West Mill Street. During reconnaissance, the gate was locked, making the site inaccessible by vehicle.

3.3.2 Actual or Potential Contamination Areas

Current indications of potential releases from the Lewis Lumber site to the Soil Exposure and Subsurface Intrusion (SESSI) pathway include: the concrete saddles for additional ASTs north of the CCA Tanks; the stained concrete drip pad and treatment area; a large sawdust pile on the north-central portion of the site; and numerous debris piles, burn piles, areas of staining accompanied by hydrocarbon or chemical odors, and areas of disturbed soil located throughout the site. Historical indications of potential releases from the Lewis Lumber site to the SESSI pathway include: a complaint in May 1989 regarding CCA runoff from the drip pad leaving the site; the numerous hazardous waste management violations reported during a March 1993 CEI; the drums containing unknown fluids that needed to be identified and disposed of properly, large piles of discarded timber wastes and solid waste, and several areas of spilled oil-based fluids noted in an Industrial Stormwater Compliance Inspection in April 2009; and the approximately fifty drums with varying amounts of unknown liquids and the pile of potentially contaminated debris documented on-site during a CEI conducted in August 2012.

In addition, there is the potential for subsurface intrusion into the remaining buildings on-site and nearby buildings via soil or groundwater contamination.

3.3.3 Soil Exposure and Subsurface Intrusion Pathway Targets

There are residences and churches located within a 1-mile radius of the Lewis Lumber site. The nearest residence is located adjacent to the east portion of the site, on the south side of West Mill Street. The nearest church is located approximately 0.32 miles southwest of the Lewis Lumber site.

In addition to concrete foundations of former buildings, the remaining land cover at the site consists mostly of gravel and vegetated areas. The site is not fenced and is easily accessible to trespassers; however, a gate is located at the entrance to the site on West Mill Street. During reconnaissance, the gate was locked, making the site inaccessible by vehicle.

No occurrences of elements of special concern have been recorded within a 1-mile radius of the Lewis Lumber site.

MARPLOT[®] mapping tool, which includes United States Census Bureau information for the year 2010, was used to calculate populations within the radii discussed below. Using the coordinates of 34.440194° north latitude and 94.415292° west longitude, approximately 337 people reside within a 1-mile radius of the Lewis Lumber site.

Figure 3-3 provides a topographical map depicting the 1-mile radius around the approximate site location. **Table 3-2** provides population apportionments within certain distance radii of the Lewis Lumber site.

Table 3-2. Lewis Lumber Site Population Distances

Distance Radius (Miles)	Number of Residents
0.25	6
0.50	92
1.0	337
2.0	779
3.0	1,142
4.0	1,909

Additional potential soil contamination targets include site visitors and trespassers. Potential subsurface intrusion targets include nearby residents and trespassers into buildings on the site.

3.3.4 Soil Exposure and Subsurface Intrusion Pathway Conclusions

Current indications of potential releases from the Lewis Lumber site to the SESSI pathway include: the concrete saddles for additional ASTs north of the CCA Tanks; the stained concrete drip pad and treatment area; a large sawdust pile located on the north-central portion of the site; and numerous debris piles, burn piles, areas of staining accompanied by hydrocarbon or chemical odors, and areas of disturbed soil located throughout the site. Historical indications of potential releases from the Lewis Lumber site to the SESSI pathway include: a complaint in May 1989 regarding CCA runoff from the drip pad leaving the site; the numerous hazardous waste management violations reported during a March 1993 CEI; the drums containing unknown fluids that needed to be identified and disposed of properly, large piles of discarded timber wastes and solid waste, and several areas of spilled oil-based fluids noted in an Industrial Stormwater Compliance Inspection in April 2009; and the approximately fifty drums with varying amounts of unknown liquids and the pile of potentially contaminated debris documented on-site during a CEI conducted in August 2012.

In addition, there is the potential for subsurface intrusion into the remaining buildings on-site and nearby buildings via soil or groundwater contamination.

Multiple SESSI pathway targets have been identified.

3.4 Air Migration Pathway

Sections 3.4.1 through 3.4.4 provide air migration pathway information for the Lewis Lumber site.

3.4.1 Climate

Cove is warm during summer when temperatures tend to be in the 70's and very cold during winter when temperatures tend to be in the 30's. The average annual temperature is 58.5 degrees Fahrenheit (°F), with an average annual low of 45.2°F and an average annual high of 71.7°F. The average annual precipitation is 56.87 inches. Precipitation is fairly evenly distributed throughout the year with the wettest month being May at an average of 6.56 inches (Ref. 21).

3.4.2 Releases and Potential Releases to Air

Lewis Lumber was issued Minor Source Air Permit 2088-A on May 12, 2005. This permit was voided on April 8, 2013. As stated previously in Section 2.4.1, Hairrell Lumber was cited in 2007 for exceeding the 2088-A permit limit pertaining to the amount of logs received.

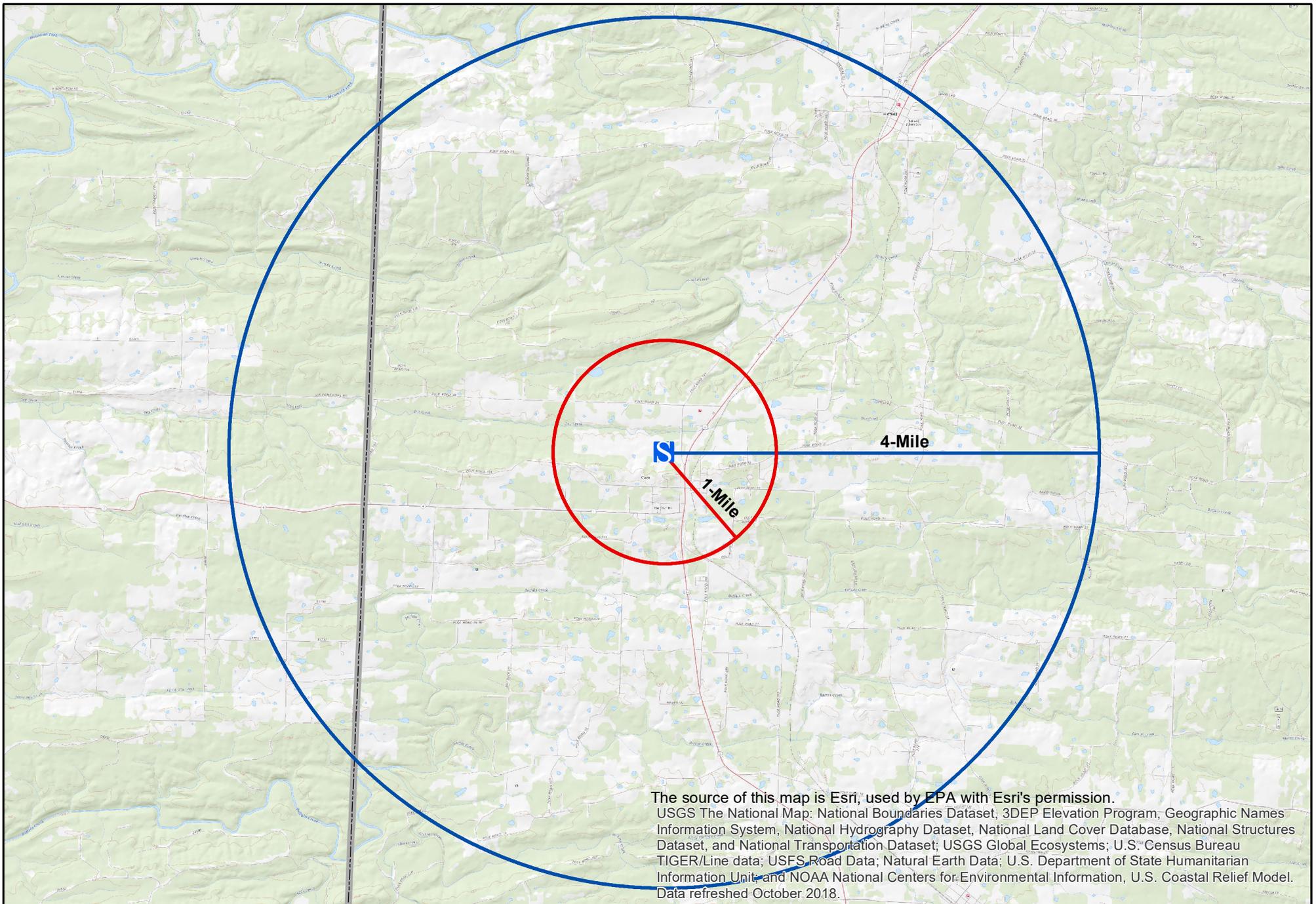
In addition to the buildings remaining and concrete foundations of former buildings, land cover at the site consists mostly of gravel and vegetated areas. Although there are some areas of exposed soil on the site, no blowing particulates were noted during site reconnaissance.

3.4.3 Air Migration Pathway Targets

Air migration pathway primary targets identified for the Lewis Lumber site include site visitors, site trespassers, and residences adjacent to the site. Secondary air migration pathway targets include nearby residents and workers at nearby businesses and churches.

3.4.4 Air Migration Pathway Conclusions

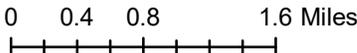
A review of the ADEQ PDS indicated that Lewis Lumber has a voided Minor Source Air Permit (2088-A). Hairrell Lumber was cited in 2007 for exceeding the 2088-A permit limit pertaining to the amount of logs received.



The source of this map is Esri, used by EPA with Esri's permission. USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed October 2018.

**Lewis Lumber
1-Mile and 4-Mile Radius
Figure 3-1**

Legend:
 Site Location



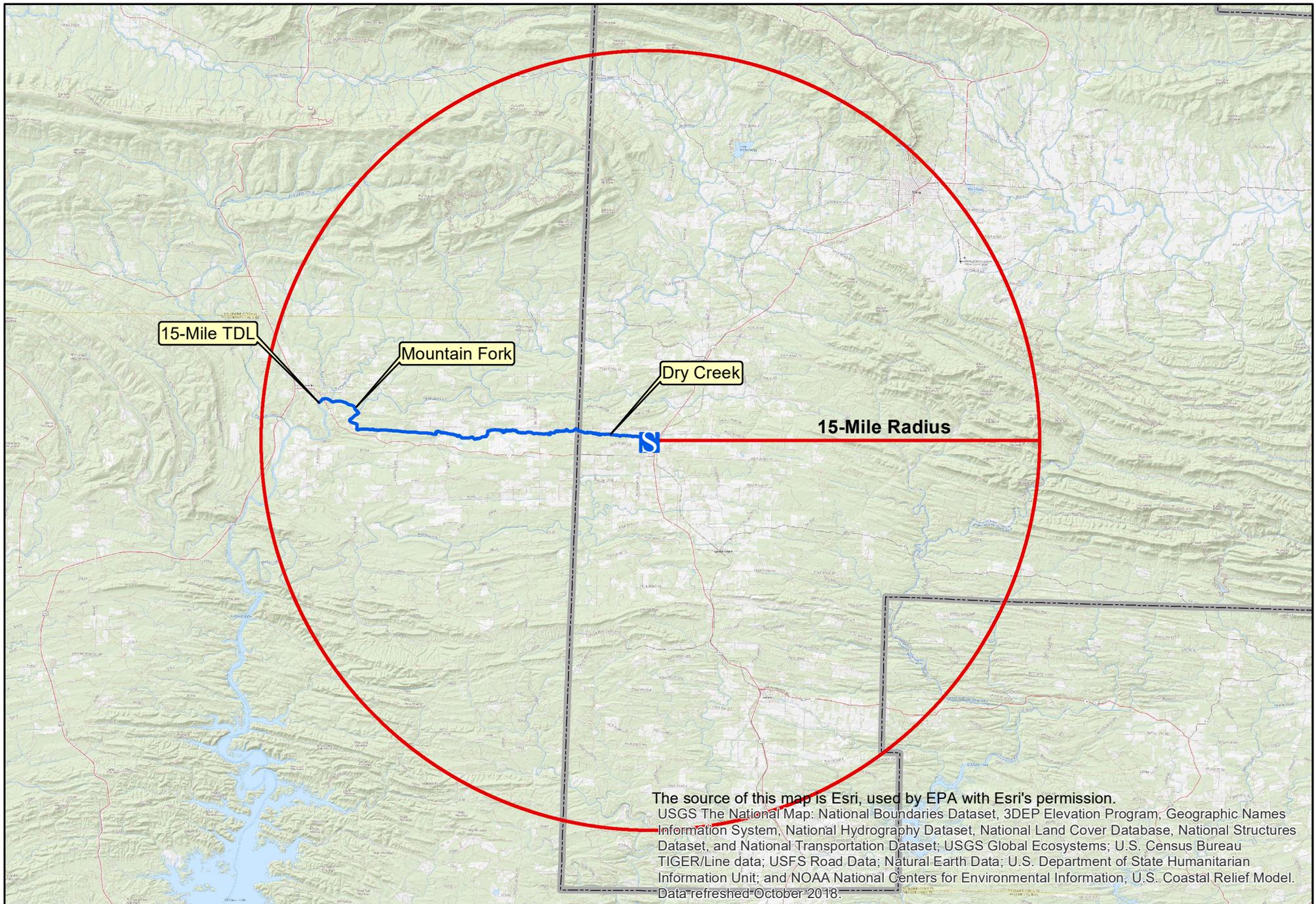
AFIN:
57-00020

1-Mile and 4-Mile Radius

Location: **Cove, Arkansas**

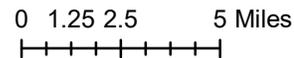
County: **Polk**

Date: **April 2019**

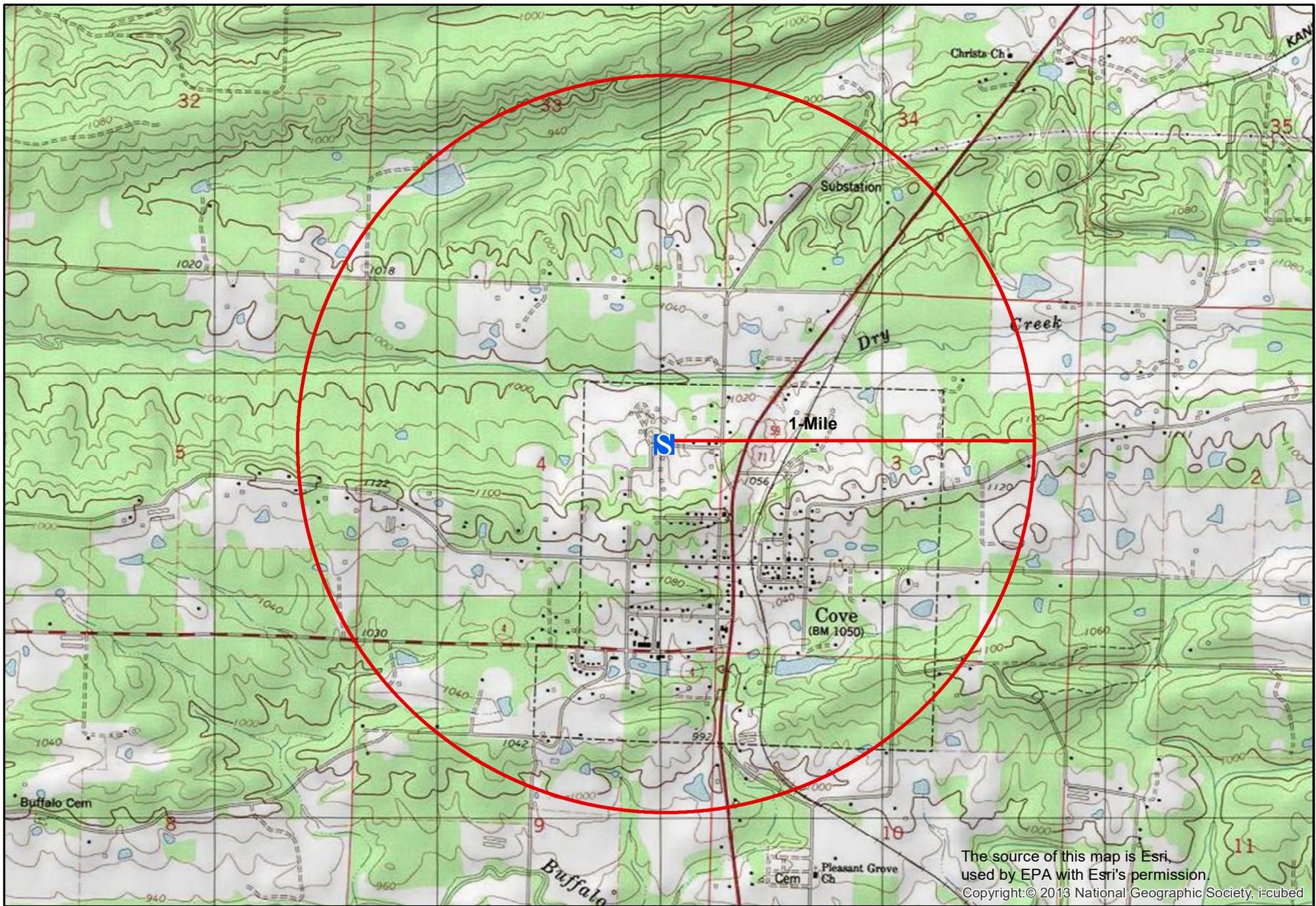


Lewis Lumber
15-Mile Radius and 15-Mile TDL
Figure 3-2

Legend:
 Site Location



 ADEQ ARKANSAS Department of Environmental Quality	15-Mile Radius and 15-Mile TDL Location: Cove, Arkansas
	County: Polk Date: April 2019
AFIN: 57-00020	

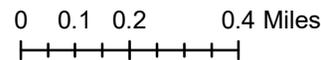


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Lewis Lumber
1-Mile Radius Topographic
Figure 3-3

Legend:

 Site Location



AFIN:
57-00020

1-Mile Radius Topographic

Location: **Cove, Arkansas**

County: **Polk**

Date: **April 2019**

4.0 SUMMARY AND CONCLUSIONS

The Lewis Lumber site is situated in a rural residential and agricultural area on an approximately thirty-seven acre lot in Cove, Polk County, Arkansas. Throughout its operational history, the Lewis Lumber site was used as a lumber mill and wood treating facility. According to the SIP Report prepared by Roy F. Weston, Inc. in 1994, Lewis Lumber began lumber mill operations on-site in 1958 and began wood treating in 1976. Prior to 1976, the majority of operations occurred on the northern portion of the site. Lewis Lumber operated on-site until 2009, when the property was sold to Jerry Hairrell and Hairrell Lumber began operations. Hairrell Lumber closed and ceased operations on December 30, 2010 due to bankruptcy. The site has remained inactive since this time.

ADEQ submitted a PSA for the Lewis Lumber site to USEPA Region 6 on July 23, 2018, and a Potential Hazardous Waste Site Identification Form for the Lewis Lumber site to USEPA Region 6 on August 30, 2018. The PA investigation results are detailed in this PA Report and summarized in the remainder of this section.

Available information reviewed during the course of this PA investigation indicated the following concerns at the Lewis Lumber site:

- The historical use of the site as a lumber mill and wood treating facility;
- Demolition debris located throughout the site containing empty 5-gallon hydraulic fluid buckets, small-quantity containers of various contents, broken universal waste bulbs, and various wiring and tubing;
- Multiple burn piles and numerous areas of staining on gravel, concrete foundations, and soil, accompanied by hydrocarbon odor;
- Staining in the shape of rings, indicative of former 55-gallon drums, on a concrete foundation;
- Areas of staining accompanied by hydrocarbon and chemical odors in numerous areas in and around the CCA Treatment Building;
- Three large CCA Treatment Tanks and associated concrete containment area with green staining;
- Concrete saddles for additional former ASTs north of the CCA Treatment Tanks
- The stained concrete catch/recirculation basin with a metal tank and sump on each side;
- Staining on the concrete drip pad and treatment area, in particular, dense green staining on the south portion;
- The approximately 18,000-gallon underground concrete containment area with liquid presumed to be rainwater with sheen on the surface;
- The two pairs of underground 55-gallon drums with unknown purpose connected by approximately 6-inch diameter pipes;
- The historical use of three 5,000-gallon diesel USTs;
- Multiple occurrences of exceeding stormwater runoff benchmarks;
- The complaint in May 1989 regarding CCA runoff from the drip pad leaving the site;

- Numerous hazardous waste management violations reported during a CEI in March 1993;
- Multiple items of concern noted in an Industrial Stormwater Compliance Inspection in April 2009; and
- The historical use of an unknown quantity of 55-gallon drums and small-quantity containers holding various contents.

The SESSI pathway and surface water migration pathway are of most concern due to the reasons listed above and the existence of targets. Potential soil exposure targets include site visitors, trespassers, and residents adjacent to the site. Potential subsurface intrusion targets include nearby workers, residents, and trespassers into buildings on the site. The surface water migration pathway includes surface water runoff that flows north off the site into Dry Creek approximately 250 feet north of the site. Dry Creek flows west into Mountain Fork approximately thirteen miles downstream from the site.

The groundwater migration pathway is of indeterminate concern due to the potential for releases at the Lewis Lumber site; however, the source of water for the residents of Cove is surface water, not groundwater. There are ANRC domestic groundwater wells and a public supply well located within a 4-mile radius of the Lewis Lumber site. No groundwater wells within a 4-mile radius of the site were recorded as drinking water wells on the ANRC Well Construction and Pump Installation Database; however, it is possible that some are being used for this purpose.

The air migration pathway is of least concern. Although there is the potential for releases to have occurred and nearby air migration pathway targets exist, no evidence of dust dispersion was noted during site reconnaissance and no current air emissions are being produced at the site.

Based upon these findings, ADEQ recommends further investigation to more accurately define the nature and extent of sources at the Lewis Lumber site presenting potential threats to human health and the environment.

5.0 REFERENCES

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6.0 PHOTOGRAPHIC LOG

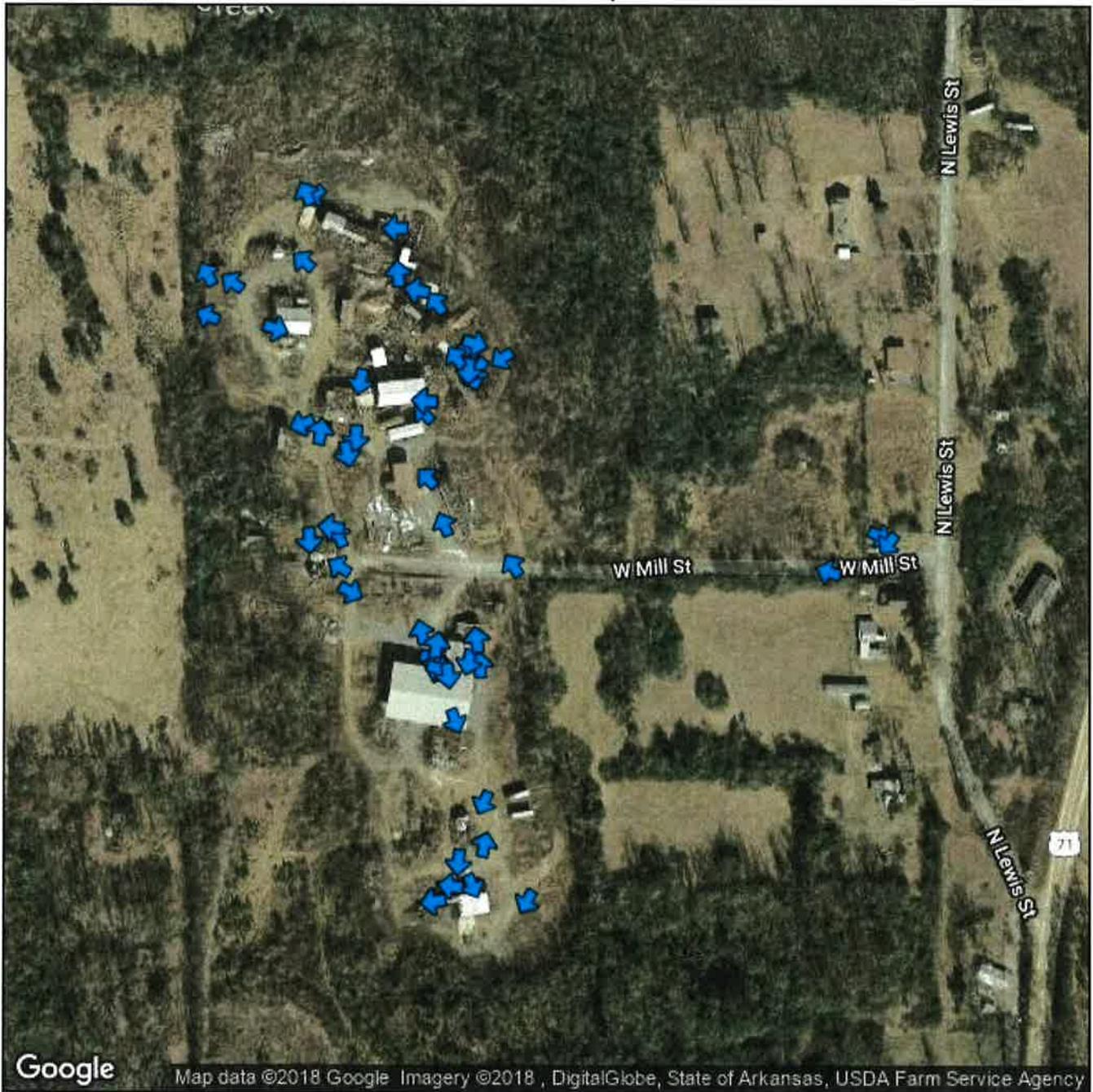
This section provides photographs taken at the Lewis Lumber site during site reconnaissance.



**Lewis Lumber and Manufacturing
Company**
Preliminary Assessment



Overview Map

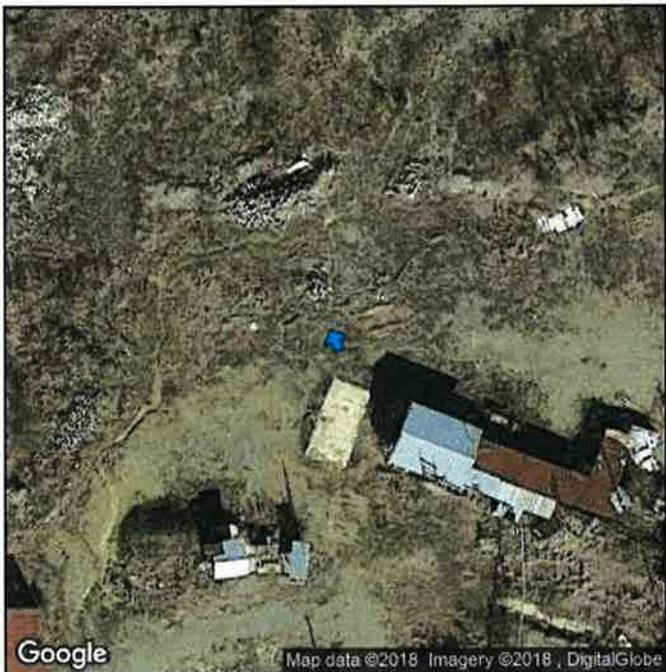


Lewis Lumber and Manufacturing Company



N 34° 26' 31.32"
 W 94° 24' 57.51"

5/30/2018 12:45:45 PM
 RIMG0032.JPG



Attributes	
Photo Number	1
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK GW JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:45:45 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0032.JPG
Subject	Wooded area north of the site; staining and debris piles containing wood

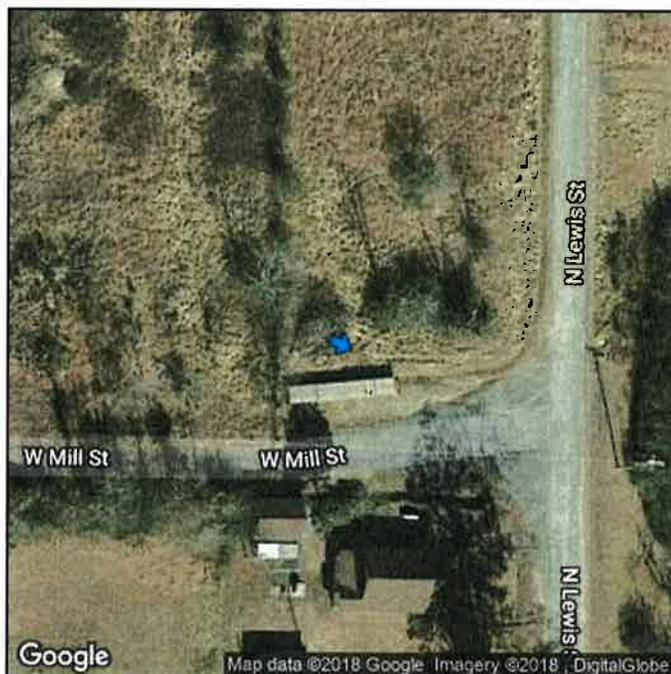
MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



N 34° 26' 25.31"
 W 94° 24' 45.16"

5/30/2018 11:53:17 AM
 RIMG0001.JPG



Attributes	
Photo Number	2
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 11:53:17 AM
Make	RICOH
Model	G700 SE
File Name	RIMG0001.JPG
Subject	North Lewis Street and residence east of the site

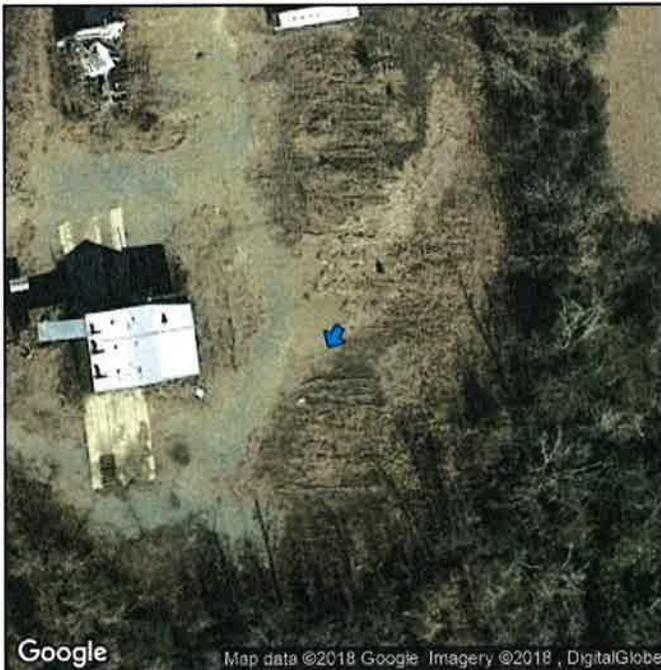
MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



N 34° 26' 18.85"
 W 94° 24' 52.74"

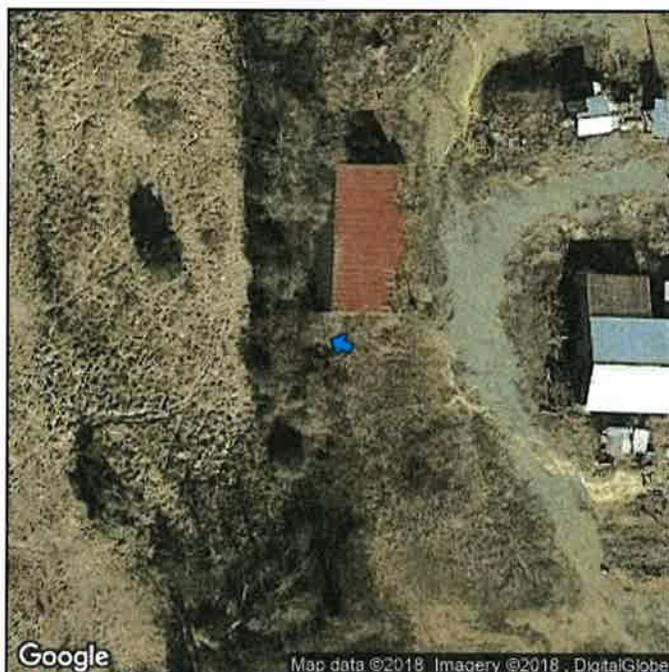
5/30/2018 1:26:00 PM
 RIMG0067.JPG



Google
 Map data ©2018 Google Imagery ©2018 , DigitalGlobe

Attributes	
Photo Number	3
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham KK for JG
Witness	Katie Kreps KK
Site Location	Cove, AR
Date/Time	5/30/2018 1:26:00 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0067.JPG
Subject	Wooded area south of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



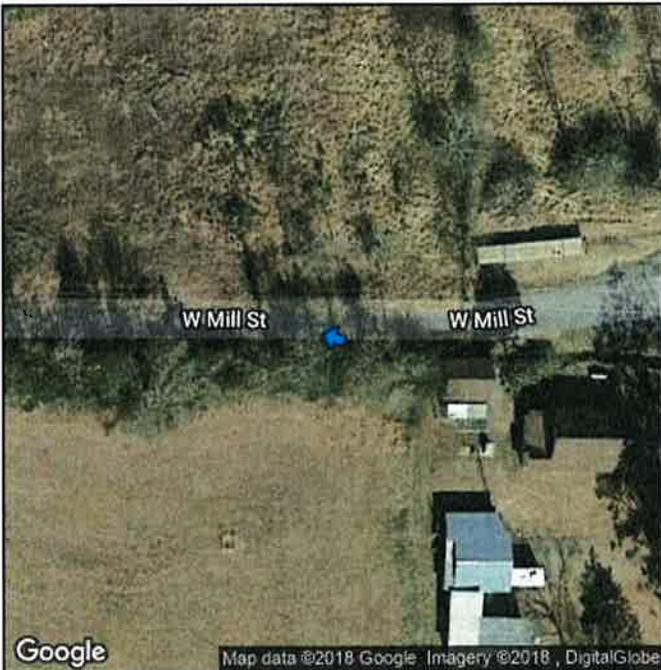
Attributes	
Photo Number	4
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KIC for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:53:11 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0036.JPG
Subject	Open vegetated field west of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



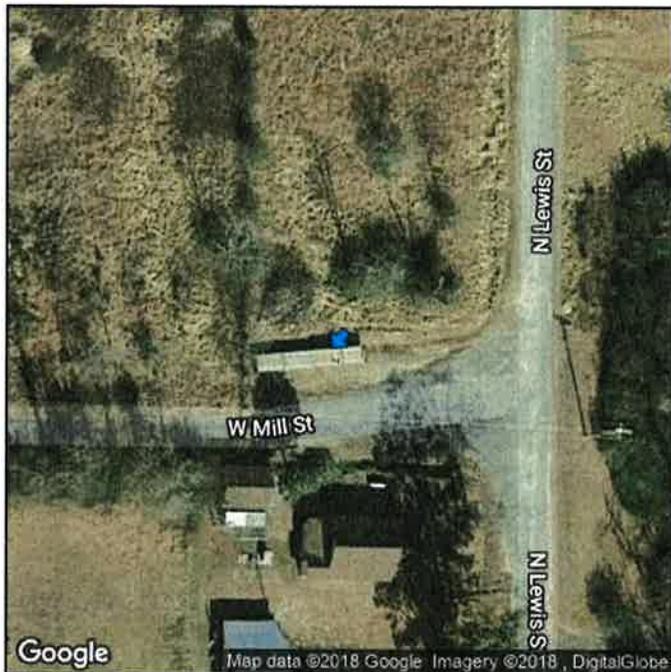
N 34° 26' 24.67"
 W 94° 24' 46.31"

5/30/2018 11:55:33 AM
 RIMG0003.JPG



Attributes	
Photo Number	5
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 11:55:33 AM
Make	RICOH
Model	G700 SE
File Name	RIMG0003.JPG
Subject	West Mill Street intersecting the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	6
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham KK for JG
Witness	Katie Kreps KK
Site Location	Cove, AR
Date/Time	5/30/2018 11:54:07 AM
Make	RICOH
Model	G700 SE
File Name	RIMG0002.JPG
Subject	Locked gate at the entrance to the site on West Mill Street

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



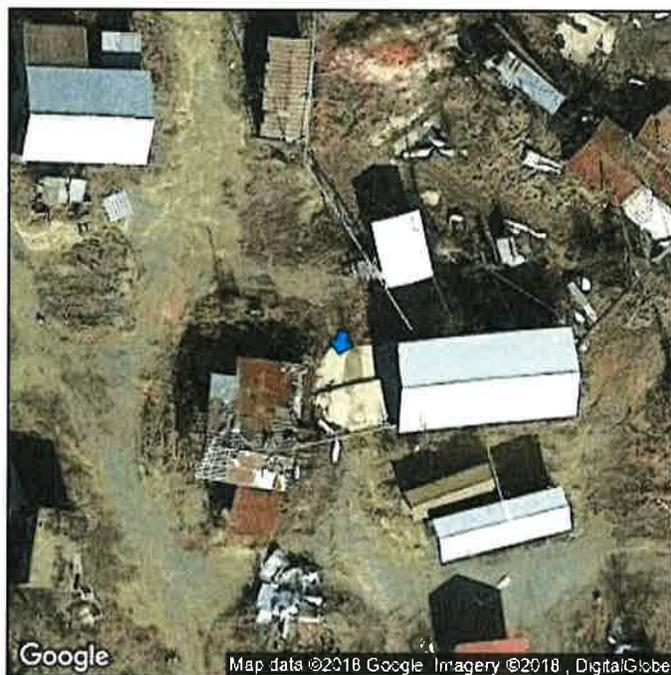
N 34° 26' 27.45"
 W 94° 24' 54.97"

5/30/2018 12:10:07 PM
 RIMG0012.JPG



Attributes	
Photo Number	7
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:10:07 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0012.JPG
Subject	Concrete foundation and demolition debris in location of former building on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



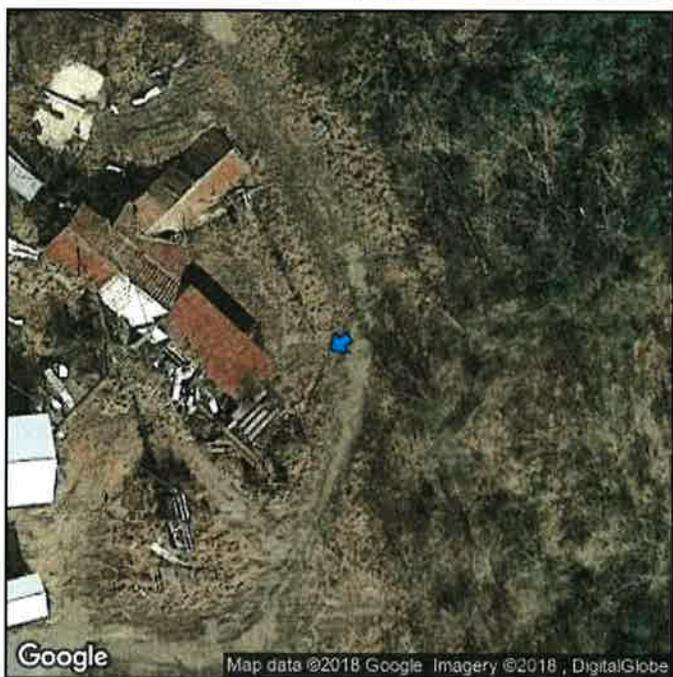
Attributes	
Photo Number	8
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:13:02 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0015.JPG
Subject	Concrete foundation and demolition debris in location of former building on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	9
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KL for JG</i>
Witness	Katie Kreps <i>KL</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:16:10 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0016.JPG
Subject	Demolition debris in location of former building on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	10
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KL for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:20:14 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0018.JPG
Subject	Demolition debris in location of former building on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	11
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:29:47 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0025.JPG
Subject	Concrete foundation in location of former building on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



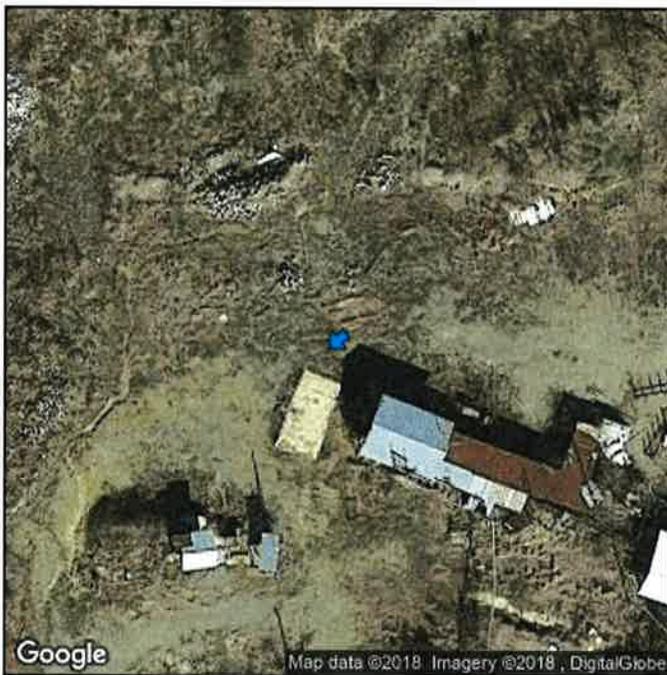
Attributes	
Photo Number	12
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:31:53 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0027.JPG
Subject	Demolition debris and disturbed soil in location of former building on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	13
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham KK for JB
Witness	Katie Kreps KK
Site Location	Cove, AR
Date/Time	5/30/2018 12:37:20 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0028.JPG
Subject	Demolition debris in location of former building on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	14
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:42:43 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0031.JPG
Subject	Concrete foundation on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



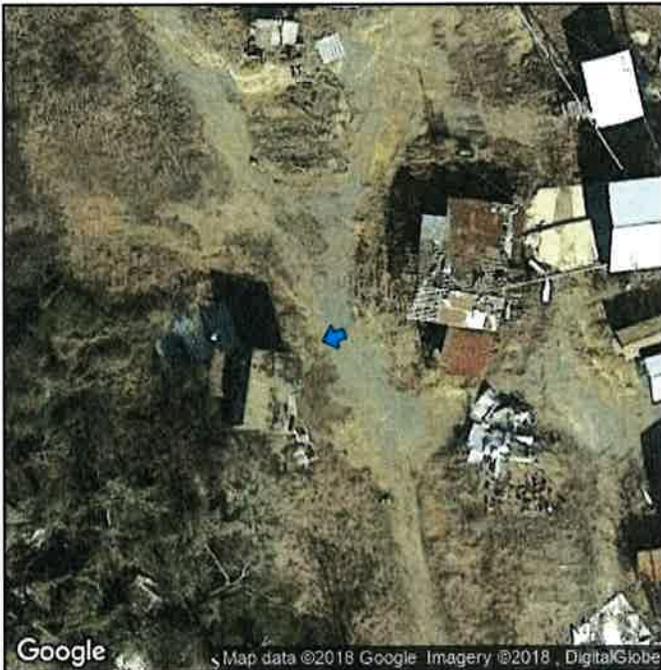
Attributes	
Photo Number	15
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KL for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:47:30 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0033.JPG
Subject	Concrete foundation and demolition debris in location of former building on the northwest portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	16
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:49:42 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0034.JPG
Subject	Concrete foundation and demolition debris in location of former building on the northwest portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



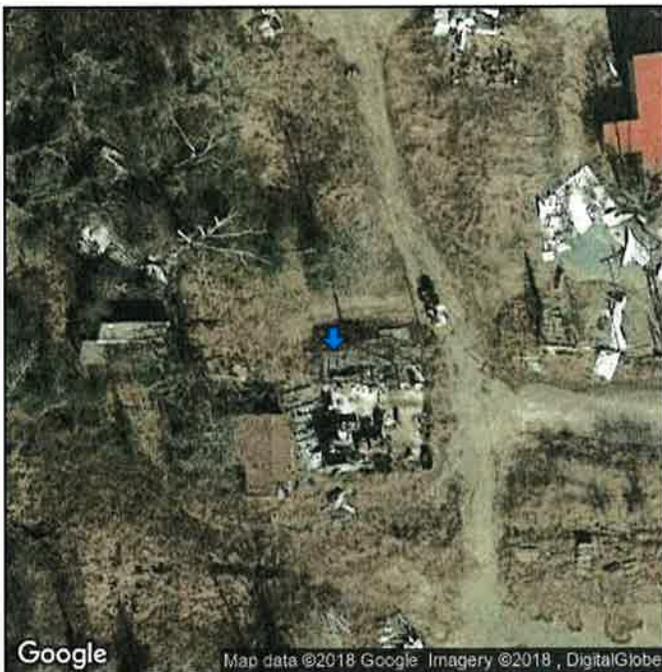
Attributes	
Photo Number	17
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:57:47 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0040.JPG
Subject	Concrete foundation and demolition debris in location of former building on the west portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



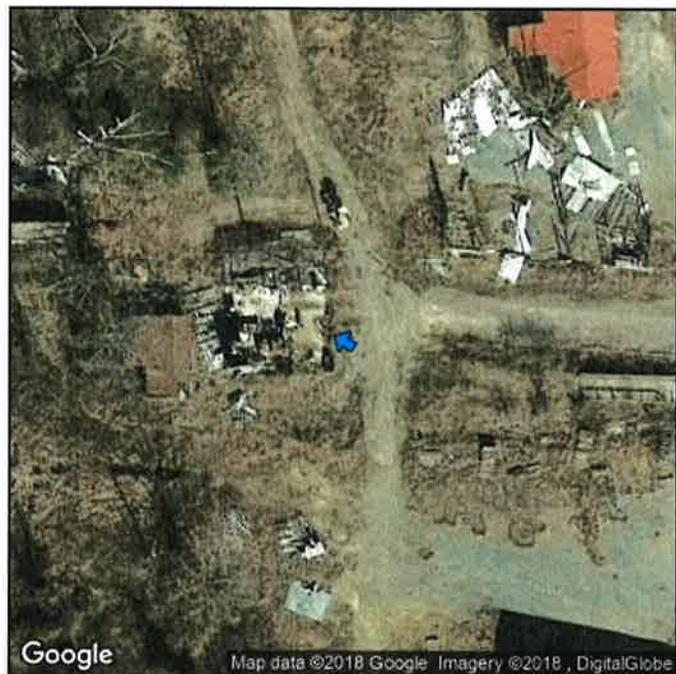
Attributes	
Photo Number	18
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:58:33 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0041.JPG
Subject	Demolition debris in location of former building on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	19
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:02:04 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0044.JPG
Subject	Demolition debris in location of former building on the west portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



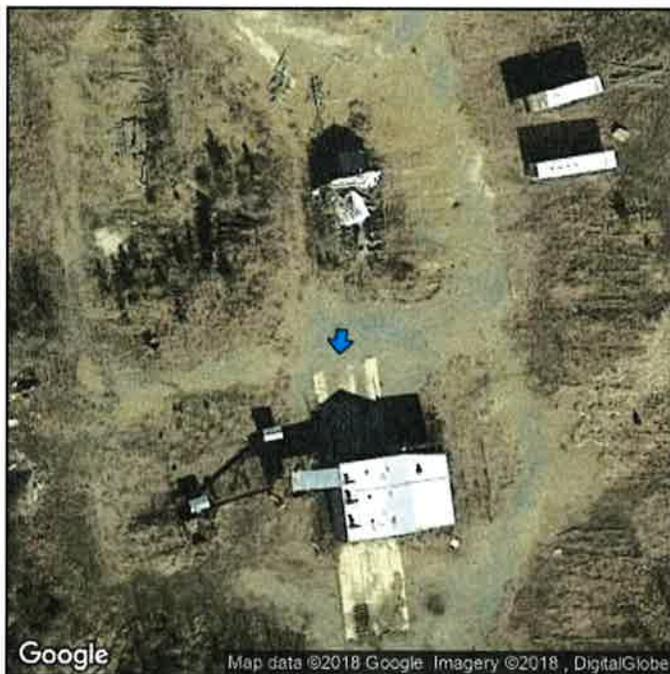
Attributes	
Photo Number	20
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:03:09 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0045.JPG
Subject	Concrete foundation with staining in location of former building on the west portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	21
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:19:15 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0060.JPG
Subject	Demolition debris in location of former building on the south-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



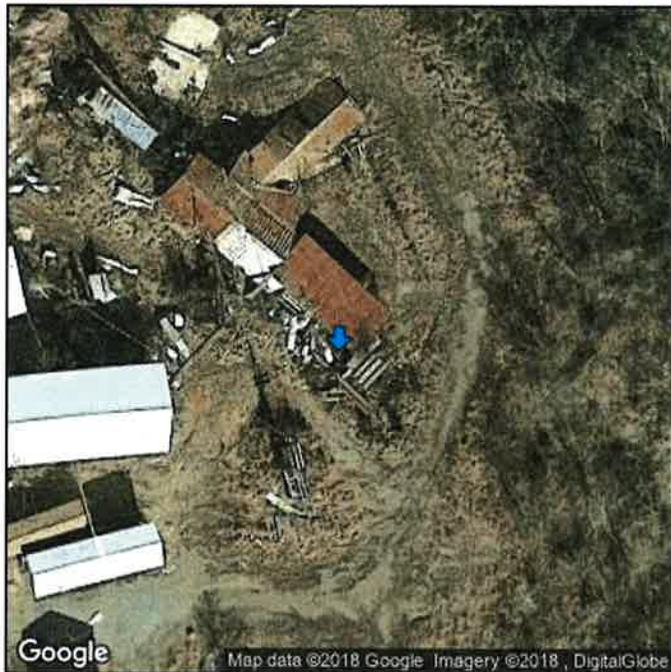
Attributes	
Photo Number	22
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:21:01 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0062.JPG
Subject	Concrete foundation in location of former Dry Kiln on the southern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



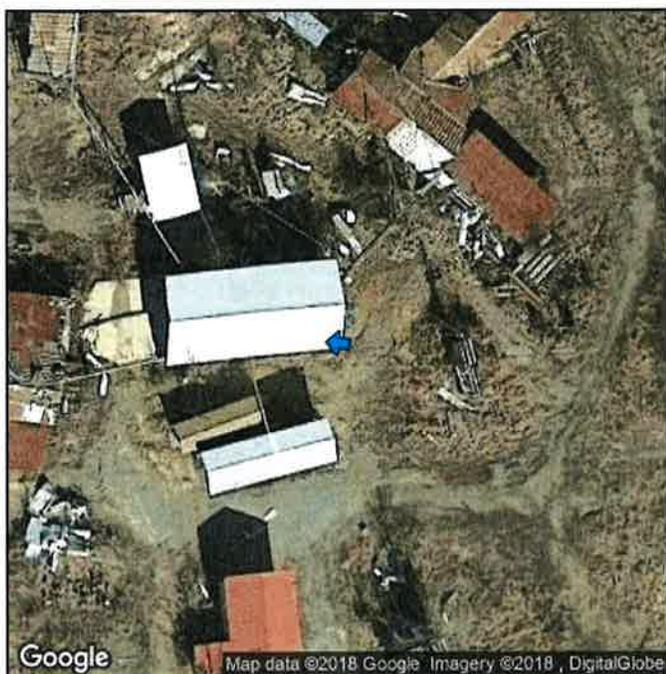
Attributes	
Photo Number	23
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:17:29 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0017.JPG
Subject	Empty 5-gallon hydraulic fluid buckets in debris pile on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	24
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:26:11 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0023.JPG
Subject	Empty 5-gallon hydraulic fluid bucket near debris pile on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	25
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:11:18 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0013.JPG
Subject	Broken universal waste bulb near debris pile on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



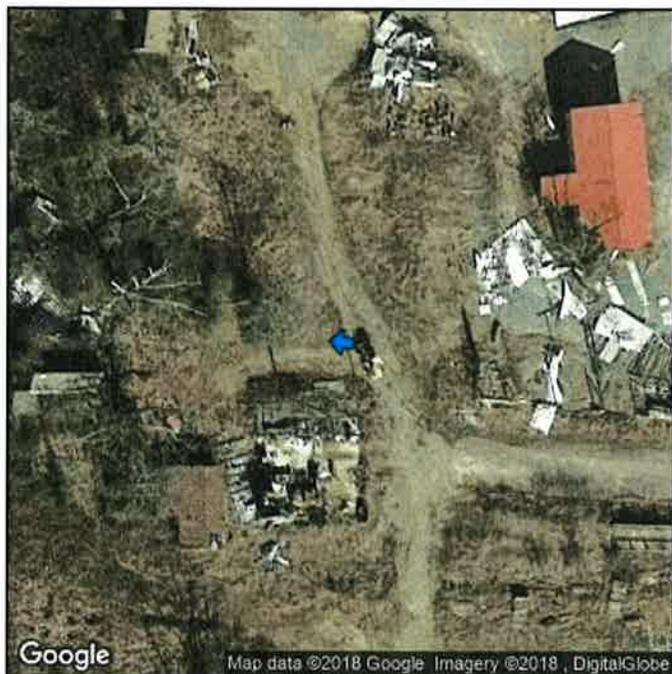
Attributes	
Photo Number	26
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:12:18 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0053.JPG
Subject	Broken universal waste bulb near the CCA Treatment Building on the southern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	27
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham KK for JG
Witness	Katie Kreps KK
Site Location	Cove, AR
Date/Time	5/30/2018 1:04:00 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0046.JPG
Subject	CCA Treatment Building on the southern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	28
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:00:36 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0043.JPG
Subject	Former residence on west portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	29
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:05:57 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0009.JPG
Subject	Office on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	30
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:07:49 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0010.JPG
Subject	Break building and debris pile on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



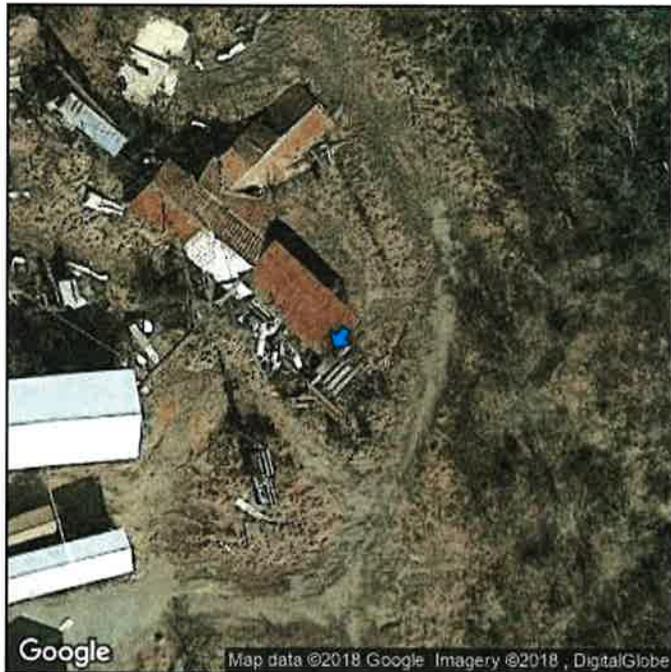
N 34° 26' 24.76"
 W 94° 24' 53.03"

5/30/2018 12:01:37 PM
 RIMG0005.JPG



Attributes	
Photo Number	31
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:01:37 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0005.JPG
Subject	Wooden frame of plywood storage building on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	32
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:23:15 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0020.JPG
Subject	Areas of staining and burn piles on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



N 34° 26' 28.60"
 W 94° 24' 53.93"

5/30/2018 12:24:43 PM
 RIMG0021.JPG



Attributes	
Photo Number	33
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:24:43 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0021.JPG
Subject	Area of staining on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	34
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:24:56 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0022.JPG
Subject	Area of staining on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	35
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:27:31 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0024.JPG
Subject	Staining and demolition debris on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



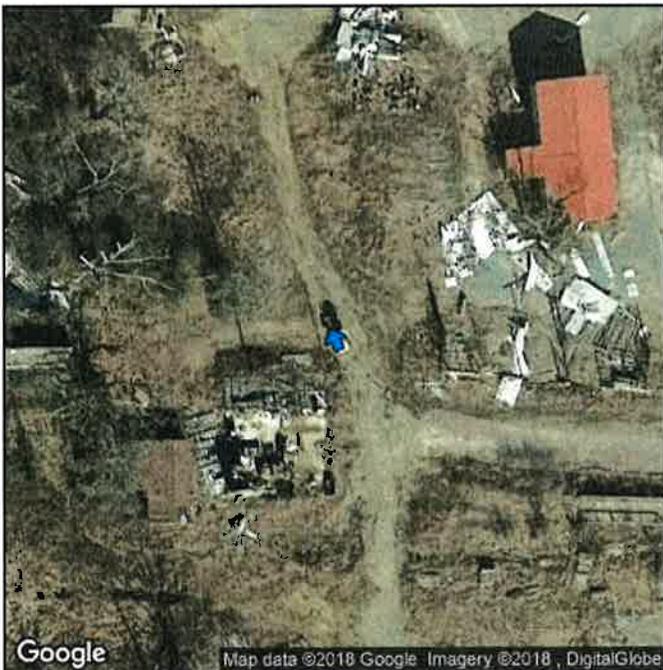
Attributes	
Photo Number	36
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:51:40 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0035.JPG
Subject	Staining and debris on concrete foundation on the northwest portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



N 34° 26' 25.32"
 W 94° 24' 56.82"

5/30/2018 1:00:08 PM
 RIMG0042.JPG



Attributes	
Photo Number	37
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KX for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:00:08 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0042.JPG
Subject	Staining on the west portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	38
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:05:28 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0048.JPG
Subject	Staining on the southern portion of the site, north of the CCA Treatment Building

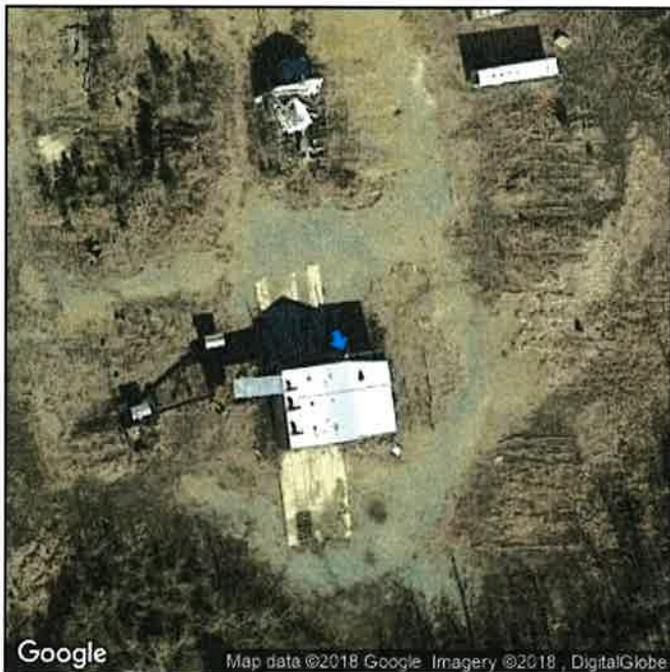
MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

Lewis Lumber and Manufacturing Company



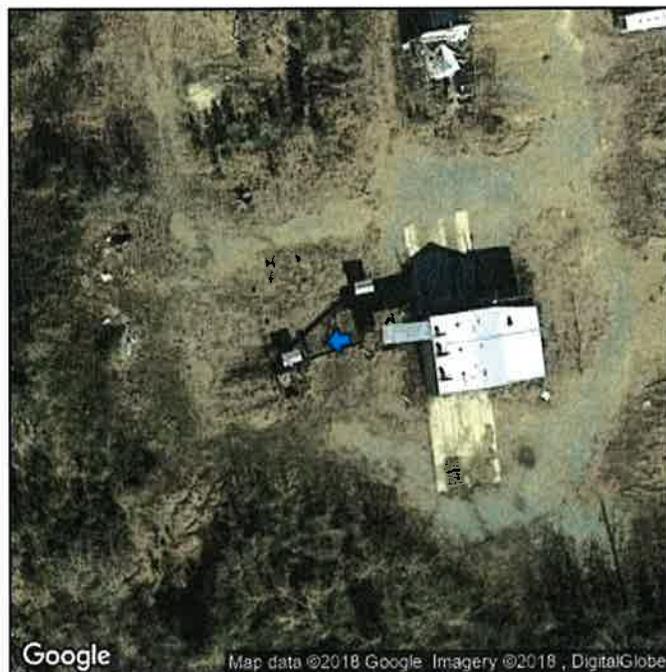
Attributes	
Photo Number	39
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:20:12 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0061.JPG
Subject	Staining on the south-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



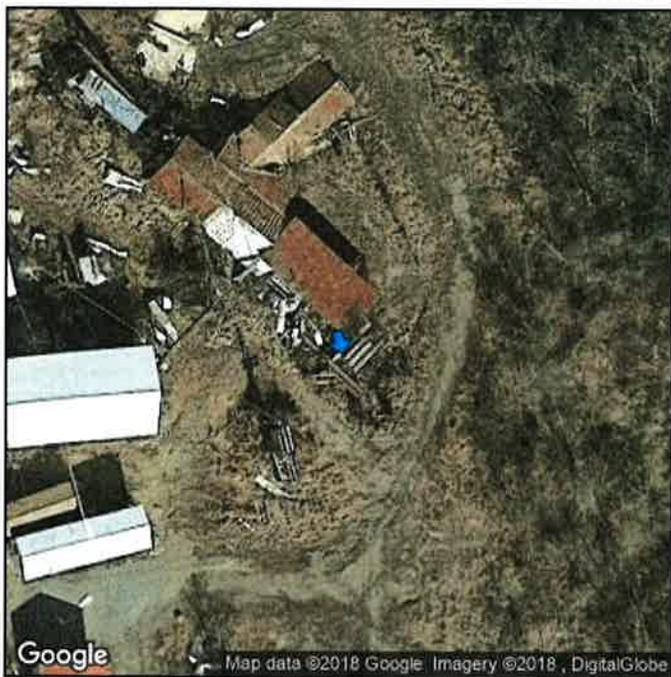
Attributes	
Photo Number	40
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JKK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:22:04 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0063.JPG
Subject	Staining on concrete foundation of the former Dry Kiln on the southern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	41
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:23:58 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0065.JPG
Subject	Staining west of the former Dry Kiln on the southern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



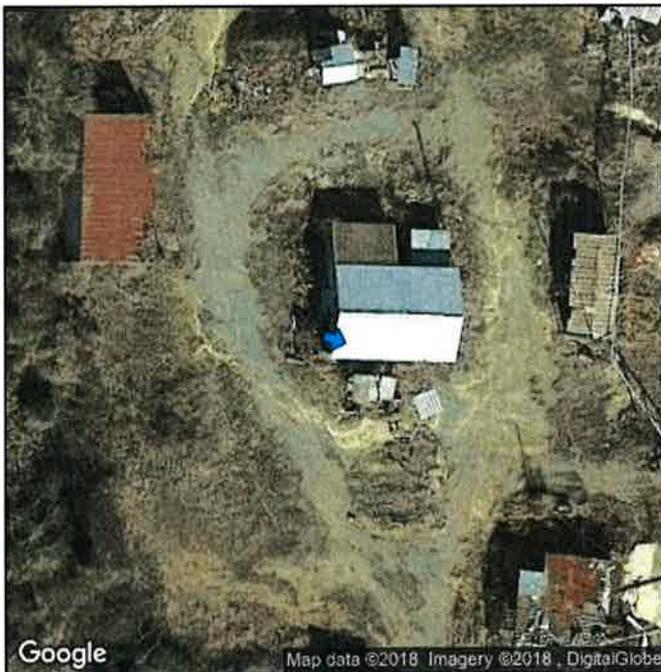
Attributes	
Photo Number	42
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:21:59 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0019.JPG
Subject	Burn pile on the northeast portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



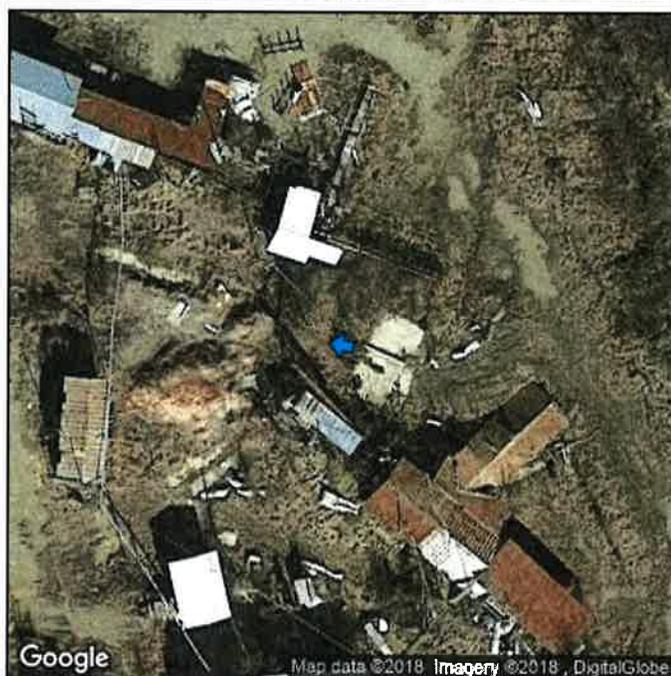
N 34° 26' 28.96"
 W 94° 24' 58.15"

5/30/2018 12:55:33 PM
 RIMG0039.JPG



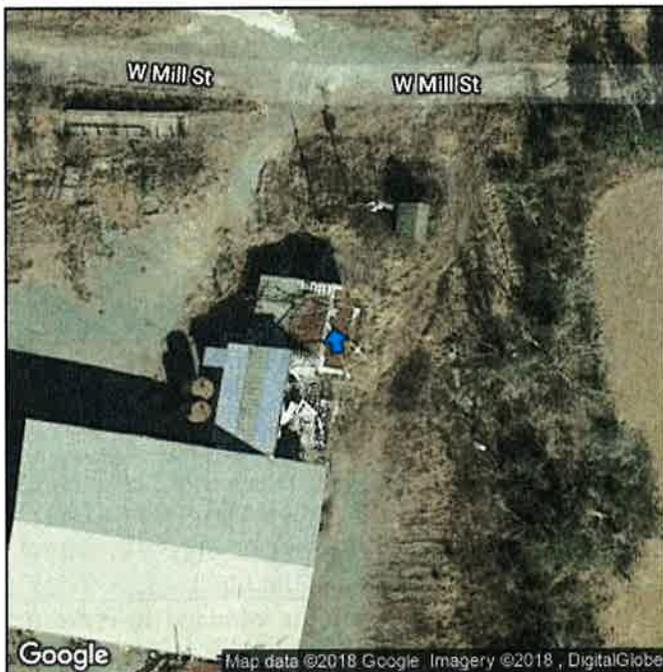
Attributes	
Photo Number	43
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:55:33 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0039.JPG
Subject	Staining in the shape of rings on a concrete foundation on the northern portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



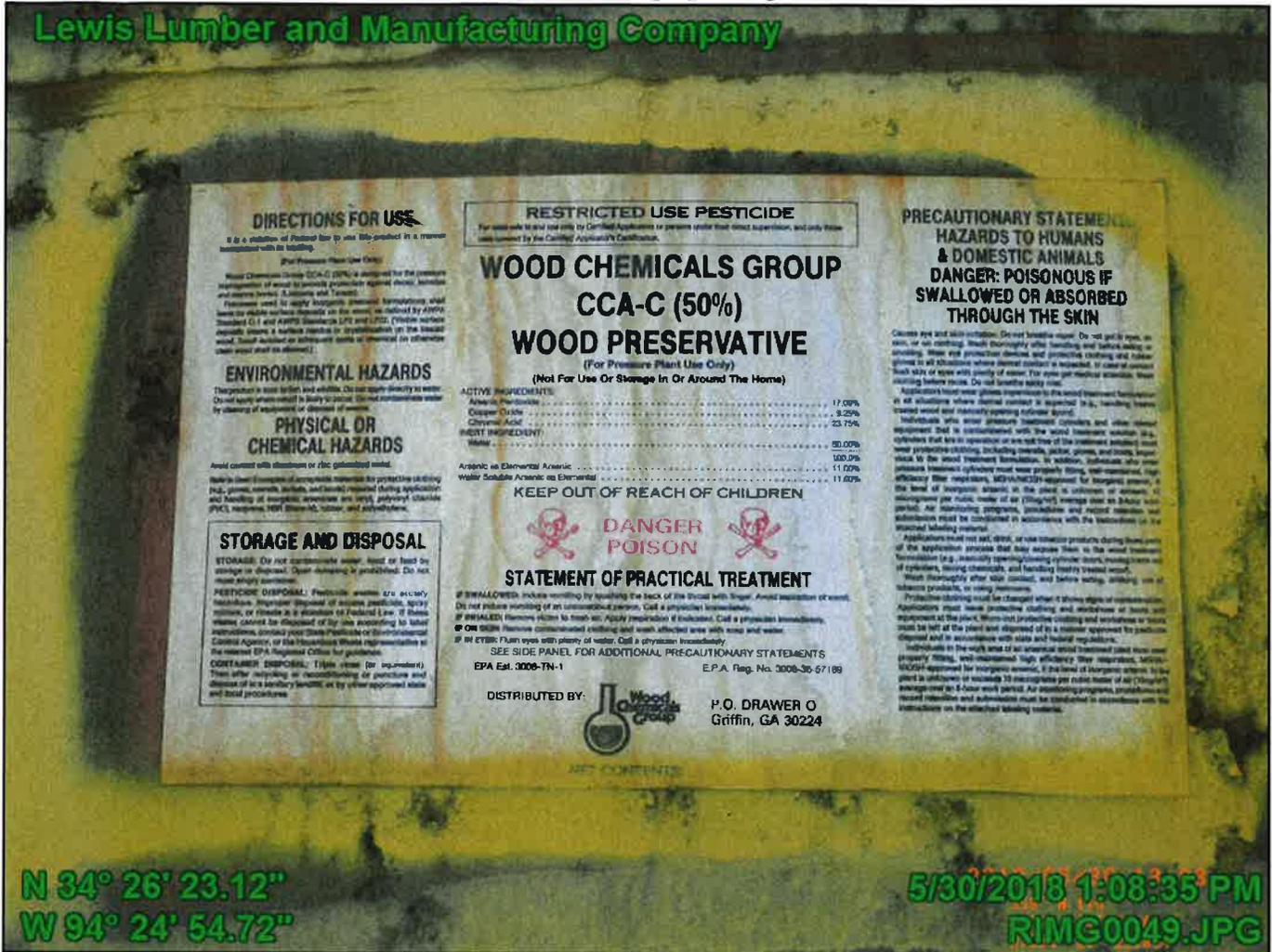
Attributes	
Photo Number	44
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 12:30:57 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0026.JPG
Subject	Large sawdust pile and areas of disturbed soil on the north-central portion of the site

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	45
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KL for JG</i>
Witness	Katie Kreps <i>KL</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:32:15 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0073.JPG
Subject	Staining on concrete near the CCA Treatment Building

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



N 34° 26' 23.12"
W 94° 24' 54.72"

5/30/2018 1:08:35 PM
RIMG0049.JPG



Attributes	
Photo Number	46
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK Cor JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:08:35 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0049.JPG
Subject	Label on CCA Tank

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



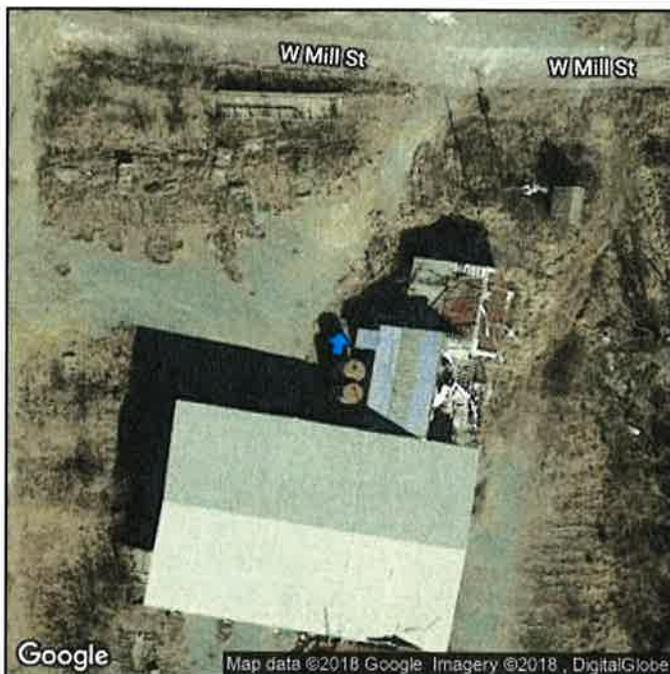
N 34° 26' 23.05"
 W 94° 24' 54.69"

5/30/2018 1:09:25 PM
 RIMG0050.JPG



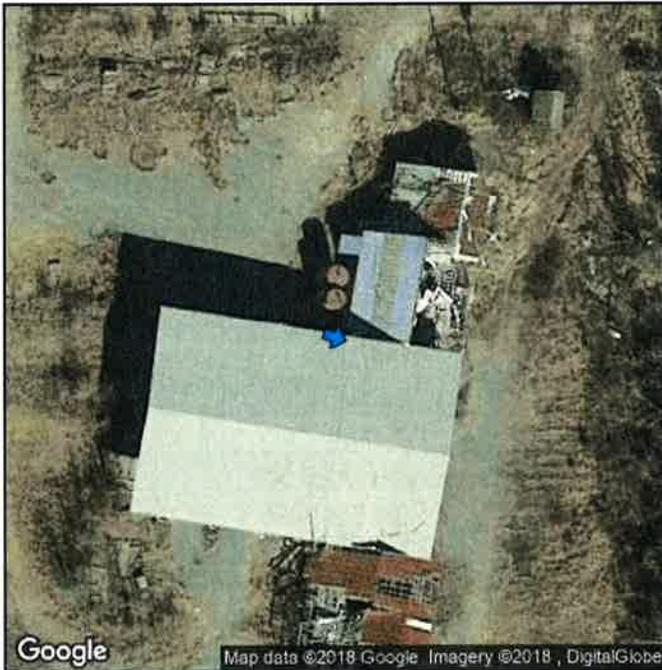
Attributes	
Photo Number	47
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:09:25 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0050.JPG
Subject	Green staining on the CCA Tanks and inside the concrete containment area with liquid

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	48
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JG</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:11:16 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0052.JPG
Subject	Concrete saddles for ASTs north of the CCA Tanks

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	49
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:13:35 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0055.JPG
Subject	Stained concrete catch/recirculation basin containing liquid

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



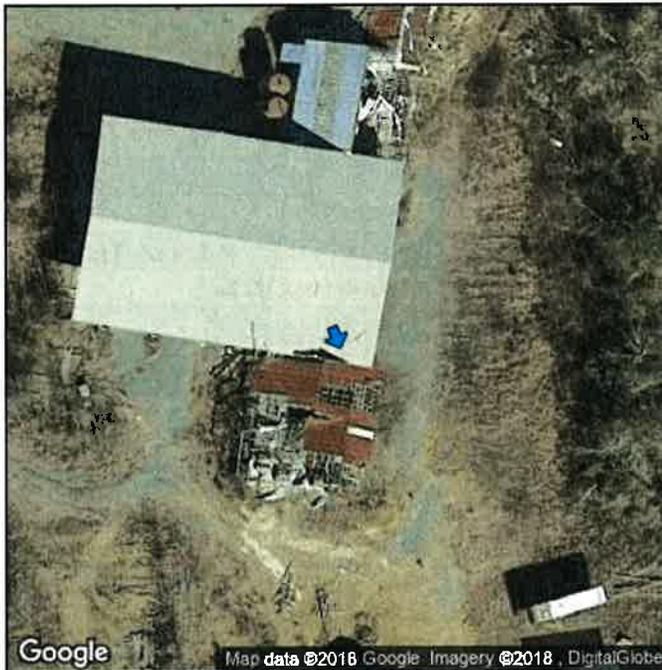
Attributes	
Photo Number	50
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:14:57 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0057.JPG
Subject	Covered concrete drip pad and treatment area with staining

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



N 34° 26' 22.02"
 W 94° 24' 54.26"

5/30/2018 1:17:36 PM
 RIMG0059.JPG



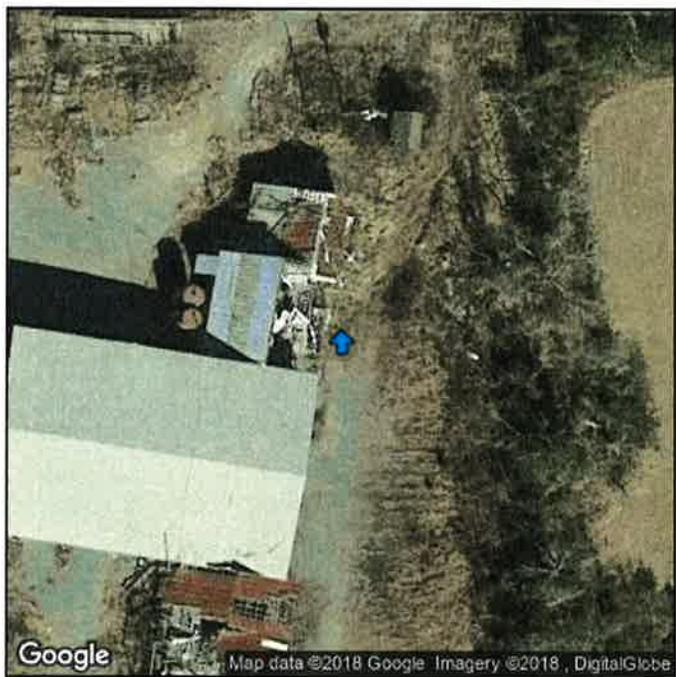
Attributes	
Photo Number	51
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:17:36 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0059.JPG
Subject	Dense green staining on the south portion of the concrete drip pad

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



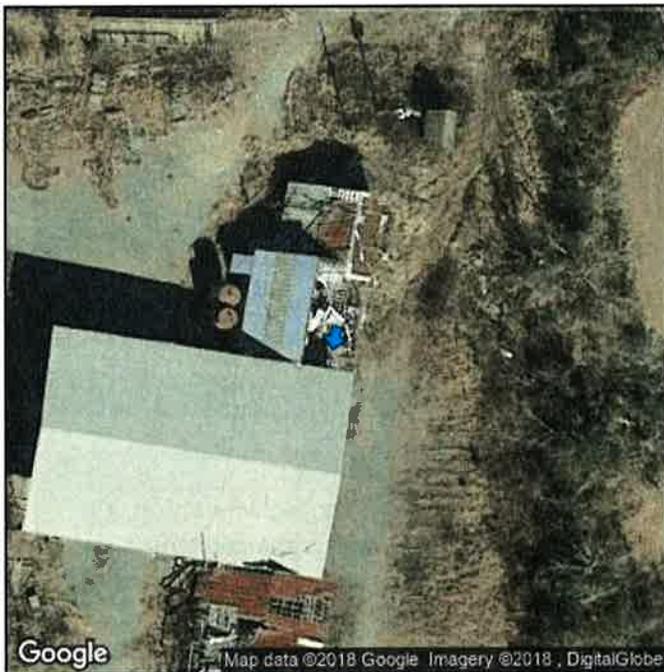
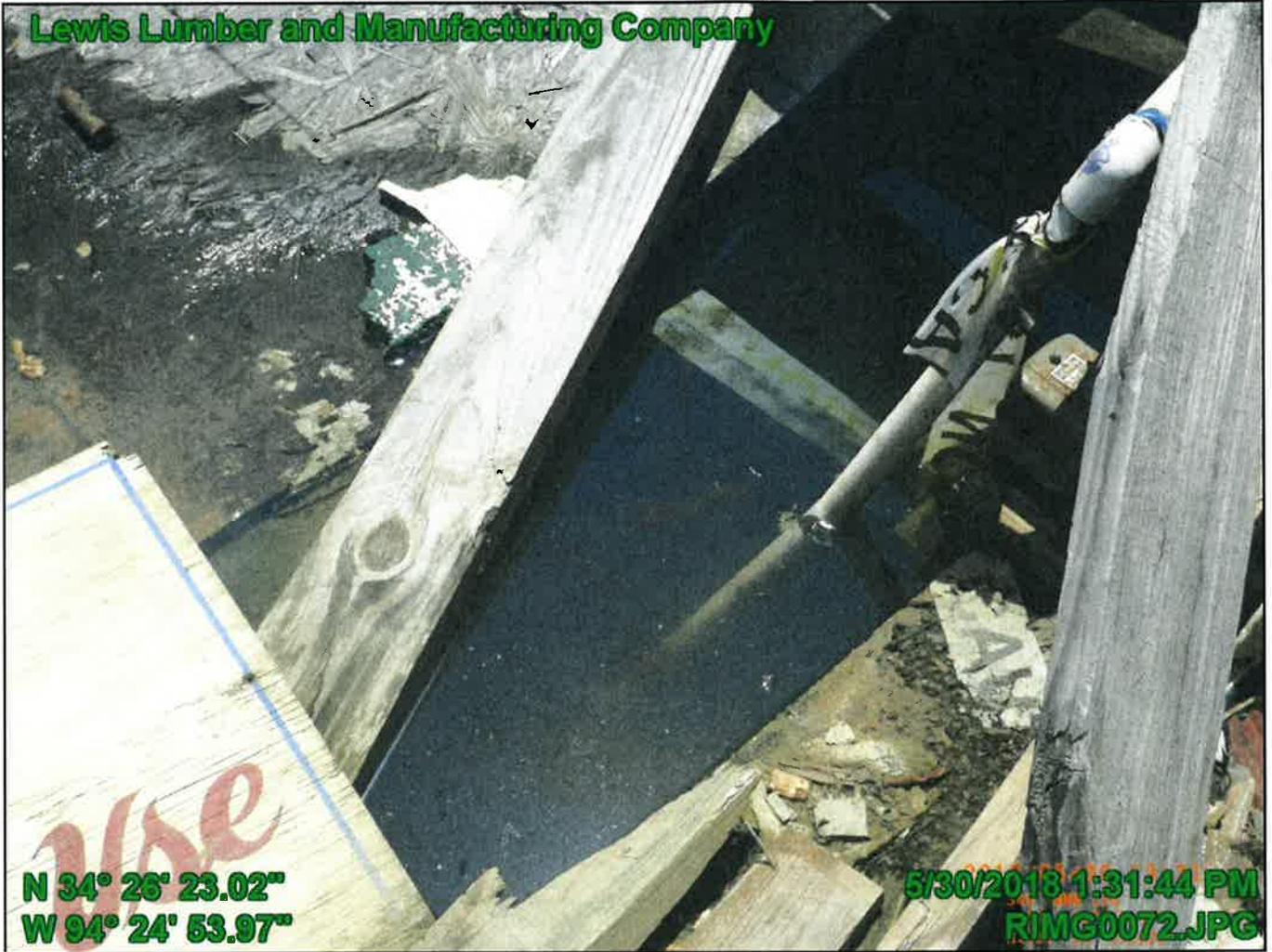
N 34° 26' 23.02"
 W 94° 24' 53.72"

5/30/2018 1:29:04 PM
 RIMG0069.JPG



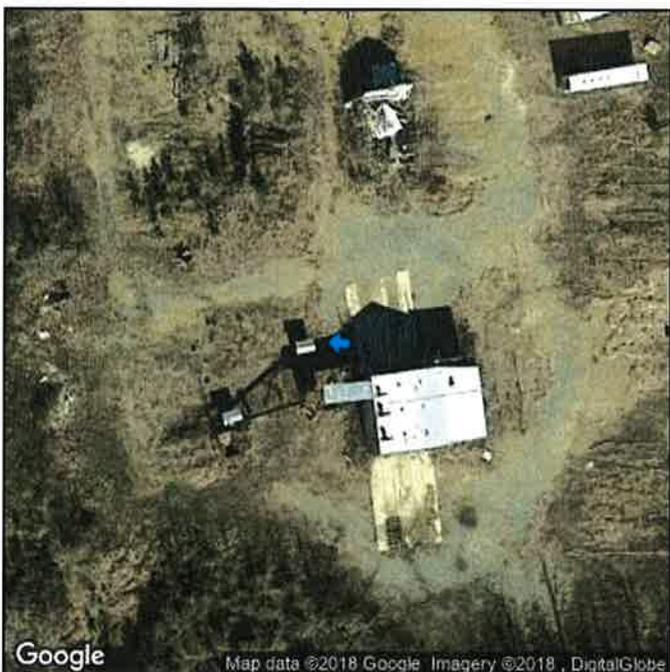
Attributes	
Photo Number	52
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:29:04 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0069.JPG
Subject	Debris and approximately 18,000-gallon underground concrete containment area east of the CCA Tanks

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	53
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>JK for J6</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:31:44 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0072.JPG
Subject	Liquid with sheen on the surface in the approximately 18,000-gallon underground concrete containment area

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.



Attributes	
Photo Number	54
Facility	Lewis Lumber and Manufacturing Company
Event	Preliminary Assessment
AFIN	57-00020
Photographer	Joshua Graham <i>KK for JB</i>
Witness	Katie Kreps <i>KK</i>
Site Location	Cove, AR
Date/Time	5/30/2018 1:22:45 PM
Make	RICOH
Model	G700 SE
File Name	RIMG0064.JPG
Subject	Two underground 55-gallon drums surrounded by concrete near the south site boundary and location of former Dry Kiln

MAP DISCLAIMER: This map is intended to represent the general locations of the features displayed. This map should for reference purposes only. All GPS locations are mapping grade in accuracy and are not post-processed.

APPENDIX A
PROPERTY RECORDS

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Transparency

Real Estate Parcels 1
Real Estate Layers
3200-0082-0000
HAIRRELL, JERRY
More Details...

Real Estate Parcels
8.0218 acres
349,428.9999 sq feet
0.0125 sq miles
32,463.0478 sq meters
0.0325 sq kilometers

Google
-94.41785, 34.43987

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Transparency

Real Estate Parcels 1
Real Estate Layers
3200-0084-0000
HAIRRELL, JERRY
More Details...

Real Estate Parcels
3.2032 acres
139,530.186 sq feet
0.005 sq miles
12,962.791 sq meters
0.013 sq kilometers

Google
-94.41648, 34.43718

actDataScout

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Real Property - Personal Property - Business Personal - Tax Collector - Circuit Clerk -

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Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00179-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
1.8991 acres
82,726.985 sq feet
0.003 sq miles
7,685.5958 sq meters
0.0077 sq kilometers

Table of Contents Selection

Google

Map data ©2018 Google Imagery ©2018 DigitalGlobe, State of Arkansas, USDA Farm Service Agency Terms of Use Report a map error

-94.41219, 34.44051

actDataScout

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Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00183-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
1.1154 acres
48,587.6181 sq feet
0.0017 sq miles
4,513.9418 sq meters
0.0045 sq kilometers

Table of Contents Selection

Google

Map data ©2018 Google Imagery ©2018 DigitalGlobe Terms of Use Report a map error

-94.41363, 34.44143

actDataScout 

Email Password Log in Forgot Password? REGISTER

Real Property ▾ Personal Property ▾ Business Personal ▾ Tax Collector ▾ Circuit Clerk ▾

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Table of Contents  Selection 

Transparency 

Real Estate Parcels **1**

Real Estate Layers

3200-00184-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
0.276 acres
12,021.0888 sq feet
0.0004 sq miles
1,116.7968 sq meters
0.0011 sq kilometers

Google  Map data ©2018 Google Imagery ©2018 Terms of Use Report a map error

-94.41432, 34.44028

actDataScout 

Email Password Log in Forgot Password? REGISTER

Real Property ▾ Personal Property ▾ Business Personal ▾ Tax Collector ▾ Circuit Clerk ▾

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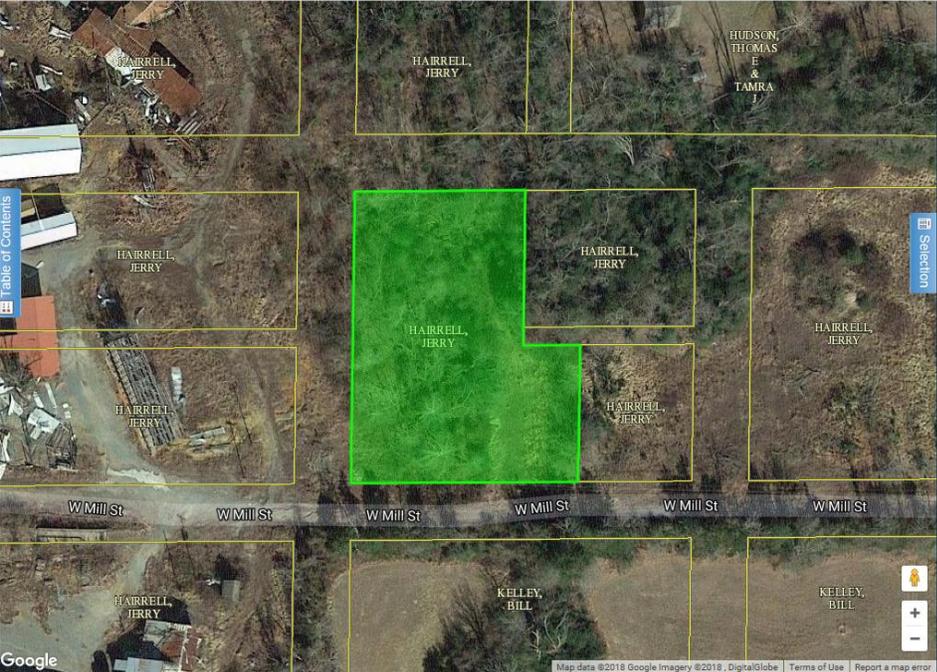
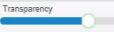


Table of Contents  Selection 

Transparency 

Real Estate Parcels **1**

Real Estate Layers

3200-00185-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
1.0214 acres
44,493.1115 sq feet
0.0018 sq miles
4,133.5493 sq meters
0.0041 sq kilometers

Google  Map data ©2018 Google Imagery ©2018, DigitalGlobe Terms of Use Report a map error

-94.41541, 34.43987

actDataScout

Real Property - Personal Property - Business Personal - Tax Collector - Circuit Clerk -

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Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00186-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
0.4139 acres
18,030.5313 sq feet
0.0006 sq miles
1,675.0928 sq meters
0.0017 sq kilometers

Google
-94.41425, 34.44081

actDataScout

Real Property - Personal Property - Business Personal - Tax Collector - Circuit Clerk -

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Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00188-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
1.0128 acres
44,119.7007 sq feet
0.0016 sq miles
4,098.8583 sq meters
0.0041 sq kilometers

Google
-94.41517, 34.43957



Transparency

4 Real Estate Parcels 1

Real Estate Layers

3200-00189-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

1.0129 acres
44,120.6074 sq feet
0.0016 sq miles
4,098.9425 sq meters
0.0041 sq kilometers



Transparency

4 Real Estate Parcels 1

Real Estate Layers

3200-00190-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

0.8278 acres
36,060.5707 sq feet
0.0013 sq miles
3,350.1399 sq meters
0.0034 sq kilometers



-94.41648, 34.44054

Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00191-0000
 HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

0.8278 acres
 36,060.1935 sq feet
 0.0013 sq miles
 3,350.1048 sq meters
 0.0034 sq kilometers



-94.41636, 34.44123

Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00192-0000
 HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

2.2189 acres
 96,654.7718 sq feet
 0.0035 sq miles
 8,979.5308 sq meters
 0.009 sq kilometers



Google
-94.41656, 34.44132

Transparency

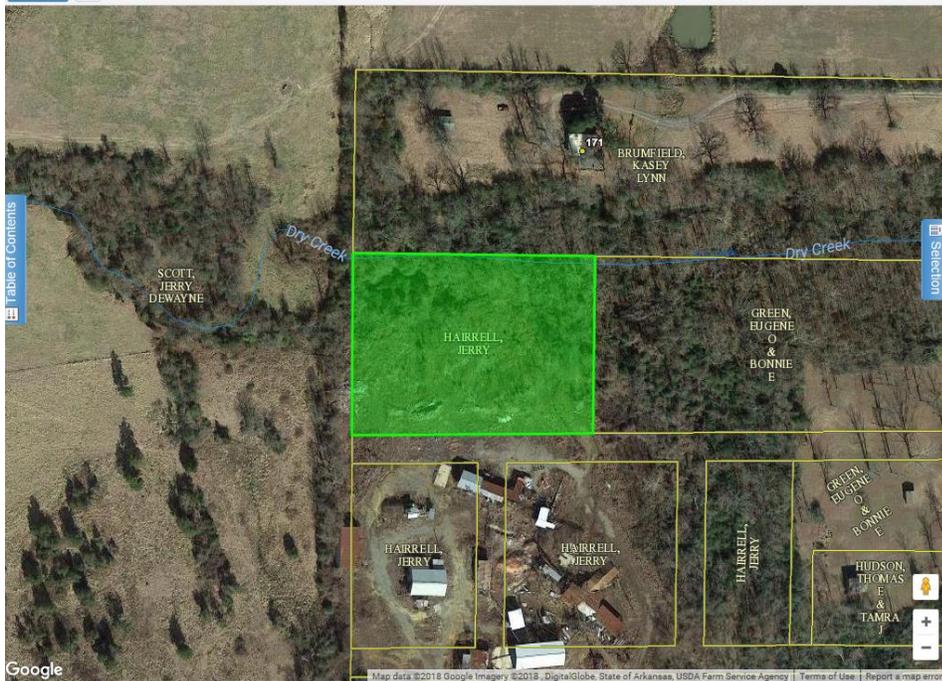
Real Estate Parcels 1

Real Estate Layers

3200-00193-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

1.618 acres
70,478,415.2 sq feet
0.0029 sq miles
6,547,665.4 sq meters
0.0065 sq kilometers



Google
-94.41513, 34.44255

Transparency

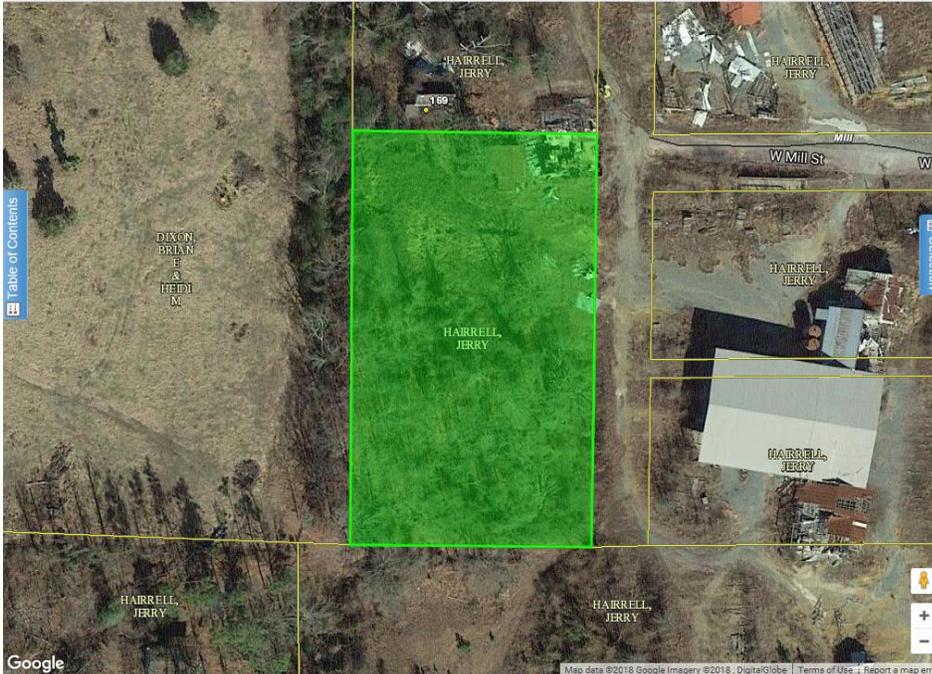
Real Estate Parcels 1

Real Estate Layers

3200-00195-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels

3.0468 acres
132,719,850.8 sq feet
0.0048 sq miles
12,330,089.5 sq meters
0.0123 sq kilometers



Google
-94.41753, 34.43898

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Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00196-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
 1.7767 acres
 77,392.1326 sq feet
 0.0028 sq miles
 7,189.9713 sq meters
 0.0072 sq kilometers



Google
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Map data ©2018 Google Imagery ©2018, DigitalGlobe | Terms of Use | Report a map error

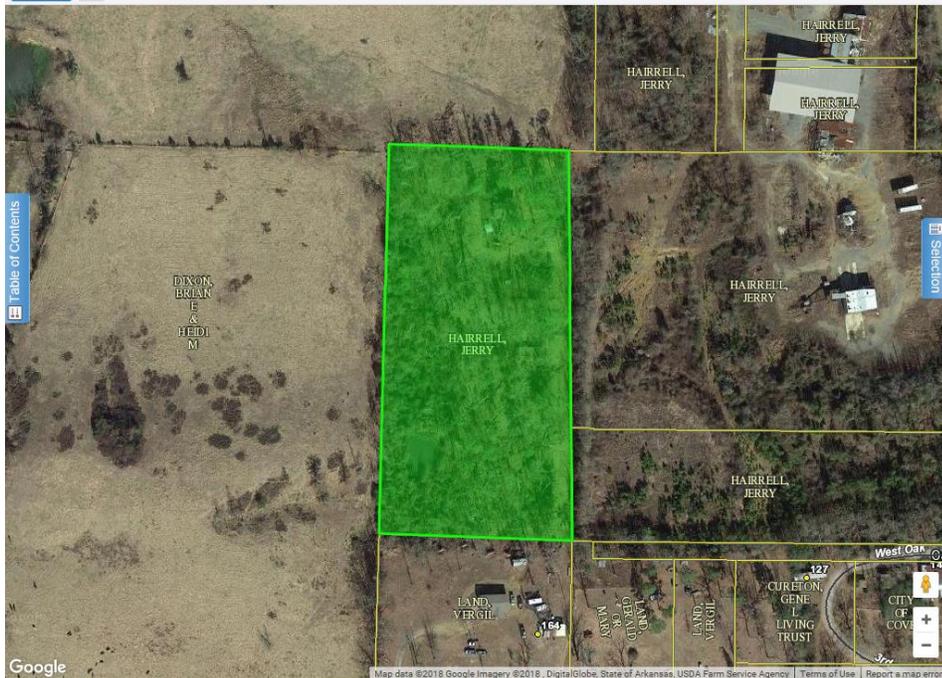
Transparency

Real Estate Parcels 1

Real Estate Layers

3200-00197-0000
HAIRRELL, JERRY
[More Details...](#)

Real Estate Parcels
 1.2548 acres
 54,657.1651 sq feet
 0.002 sq miles
 5,077.8217 sq meters
 0.0051 sq kilometers



Real Estate Parcels 1

Real Estate Layers

3200-00226-0001
HAIRRELL, JERRY
[More Details.](#)

Real Estate Parcel:
5.1382 acres
223,818.099 sq feet
0.008 sq mile
20,793.4019 sq meter
0.0208 sq kilometer

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: 430' X 960' GOFF'S ADDITION

Property Information

Physical Address:

Subdivision: GOFFS ADD TO COVE

Block / Lot: 1 / 2

S-T-R: N/A

Size (Acres): 0.000

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$22,950	\$4,590	\$4,590
Building:	0	0	0
Total:	\$22,950	\$4,590	\$4,590

Taxes

Estimated Taxes:	\$239
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
6.60 AC	6.600	Acres
Total	6.600	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1671	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$22,950.00	\$4,590.00
2016	\$22,950.00	\$4,590.00
2017	\$22,950.00	\$4,590.00

Map



Property Owner**Name:** HAIRRELL, JERRY %STATE OF
ARKANSAS**Mailing Address:** HC 71 BOX 164
CLAYTON, OK 74536**Type:** (IV) Ind. Vacant**Tax Dist:** (79CO) COSSATOT RIVER SCH,
COVE**Millage Rate:** 52.10**Extended Legal:** GOFF'S ADDITION**Property Information****Physical Address:****Subdivision:** GOFFS ADD TO COVE**Block / Lot:** 1 / 4-5**S-T-R:** N/A**Size (Acres):** 0.000**Market and Assessed Values**

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$12,700	\$2,540	\$2,540
Building:	0	0	0
Total:	\$12,700	\$2,540	\$2,540

Taxes

Estimated Taxes:	\$132
Homestead Credit:	\$0

Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.

Land

Land Use	Size	Units
3.25 AC	3.250	Acres
Total	3.250	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1672	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1982	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$12,700.00	\$2,540.00
2016	\$12,700.00	\$2,540.00
2017	\$12,700.00	\$2,540.00

Map



As of: 4/30/2018

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: ALL BLOCK 2 CARLIN'S ADDN

Property Information

Physical Address: N LEWIS ST

Subdivision: CARLIN'S TO COVE

Block / Lot: 002 / ALL

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$9,100	\$1,820	\$1,820
Building:	0	0	0
Total:	\$9,100	\$1,820	\$1,820

Taxes

Estimated Taxes:	\$95
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
100*296	2.270	Acres
Total	2.270	

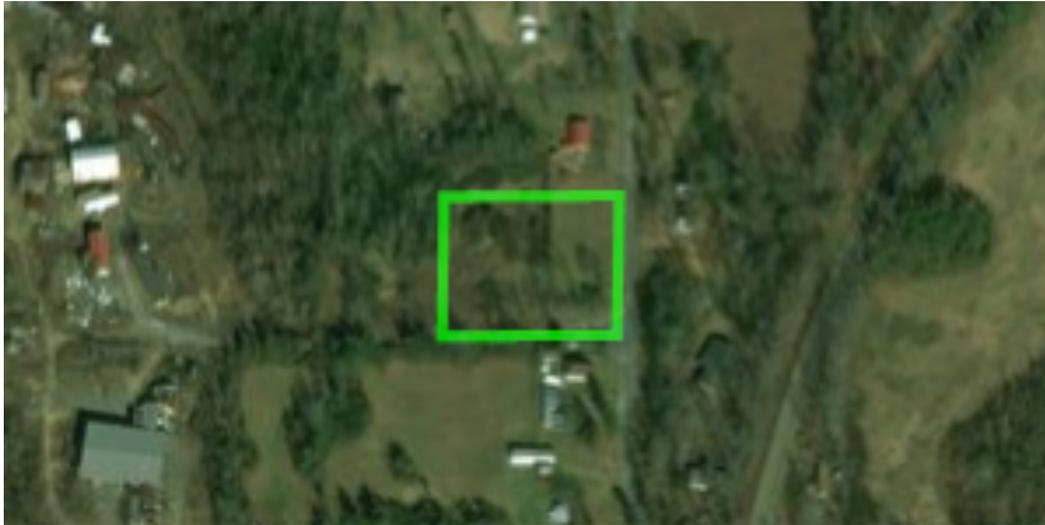
Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1674	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LMBR & MFG CO, INC	N/A	N/A
11/1/1993	244	347	N/A	29.70	\$8,500	LEWIS LMBR & MFG CO, INC	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$9,100.00	\$1,820.00
2016	\$9,100.00	\$1,820.00
2017	\$9,100.00	\$1,820.00

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 4 / 4-9

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$6,050	\$1,210	\$1,210
Building:	0	0	0
Total:	\$6,050	\$1,210	\$1,210

Taxes

Estimated Taxes:	\$63
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	1.020	Acres
Total	1.020	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1676	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$6,050.00	\$1,210.00
2016	\$6,050.00	\$1,210.00
2017	\$6,050.00	\$1,210.00

Map



As of: 4/30/2018

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 005 / 1-2

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$1,900	\$380	\$380
Building:	0	0	0
Total:	\$1,900	\$380	\$380

Taxes

Estimated Taxes:	\$20
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
100*140	0.320	Acres
Total	0.320	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1666	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
6/23/1986	195	499	N/A	5.50	\$4,750		N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$1,900.00	\$380.00
2016	\$1,900.00	\$380.00
2017	\$1,900.00	\$380.00

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 5 / 3-9

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$6,500	\$1,300	\$1,300
Building:	0	0	0
Total:	\$6,500	\$1,300	\$1,300

Taxes

Estimated Taxes:	\$68
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	1.180	Acres
Total	1.180	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CorrDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1664	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$6,500.00	\$1,300.00
2016	\$6,500.00	\$1,300.00
2017	\$6,500.00	\$1,300.00

Map



As of: 4/30/2018

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: LOTS 10-12 CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 005 / 10-12

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$1,900	\$380	\$380
Building:	0	0	0
Total:	\$1,900	\$380	\$380

Taxes

Estimated Taxes:	\$20
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
150*140	0.480	Acres
Total	0.480	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1665	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LMBR & MFG CO, INC	N/A	N/A
	244	347	N/A			LEWIS LMBR & MFG CO, INC	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$1,900.00	\$380.00
2016	\$1,900.00	\$380.00
2017	\$1,900.00	\$380.00

Map



Property Owner**Name:** HAIRRELL, JERRY %STATE OF
ARKANSAS**Mailing Address:** HC 71 BOX 164
CLAYTON, OK 74536**Type:** (II) Ind. Improv.**Tax Dist:** (79CO) COSSATOT RIVER SCH,
COVE**Millage Rate:** 52.10**Extended Legal:** ALL LOTS 1-4, 9-12 AND EAST 41' OF LOT 5 CARLIN'S ADDITION**Property Information****Physical Address:****Subdivision:** CARLIN'S TO COVE**Block / Lot:** 7 / N/A**S-T-R:** N/A**Size (Acres):****Market and Assessed Values****Taxes**

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value	Estimated Taxes:	\$1,820
Land:	\$8,300	\$1,660	\$1,660	Homestead Credit:	\$0
Building:	169100	33820	30098	Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.	
Total:	\$177,400	\$35,480	\$31,758		

Land

Land Use	Size	Units
346 * 220	1.750	Acres
Total	1.750	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1677	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$177,400.00	\$27,524.00
2016	\$177,400.00	\$29,641.00
2017	\$177,400.00	\$31,758.00

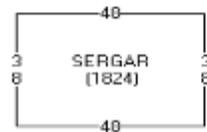
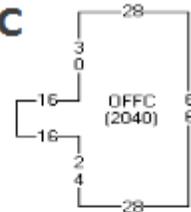
Details for Commercial Card 1**Business Name(s):** LEWIS LBR, OFFICE, KILN, TREAT**Number of Units:****Total Floor Area:** 3864

Site Work: N/A
Foundation: N/A
Floor Struct: N/A
Struct. Frame: N/A
Exterior Walls: N/A
Ext. Wall Load: N/A
Roof Struct.: N/A
Roof Cover: N/A

Floor Cover: N/A
Ceilings: N/A
Interior Finish: N/A
Insulation: N/A
Appliances: N/A
Plumbing: N/A
Electric: Avg.B
Misc:



DataScout, LLC



Building 1

Age/YC	Condition	Effective Age	Stories	Grade
15	Average	15	1	D4

Avg. Floor Area: 2040

Avg. Perimeter: 220

No. Floors: 1

Avg. Floor Hgt: 8

Common Wall:

Total Floor Area: 2040

Total Height: 8

Unit Multiplier:

Occupancy	Heating/Cooling	Sprinkler
Primary Office Buildings - Comm. (100%)	None (100%)	N/A
Secondary N/A	N/A	N/A

Building 2

Age/YC	Condition	Effective Age	Stories	Grade
30	L	30	1	D4

Avg. Floor Area: 1824

Avg. Perimeter: 172

No. Floors: 1

Avg. Floor Hgt: 16

Common Wall:

Total Floor Area: 1824

Total Height: 16

Unit Multiplier:

Occupancy	Heating/Cooling	Sprinkler
Primary Garages - Service (100%)	None (100%)	N/A
Secondary N/A	N/A	N/A

Outbuildings and Yard Improvements

Item	Type	Size/Dim	Unit Multi.	Quality	Age
LOG	OFFC	10x14			
LUMB	SHED	20x100			
LUMB	SHED	20x100			
Pole Shed		26x40			
Pole Shed		18x36			
Pole Shed		2748			
Pole Shed		60x60			
Pole Shed		24x36			
Rigid Frame Metal Building		100x150			
Rigid Frame Metal Building		40x52			

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: PT. LOT 5 & ALL LOTS 6-8 CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 7 / N/A

S-T-R: N/A

Size (Acres):

Market and Assessed Values

Taxes

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$3,200	\$640	\$640
Building:	0	0	0
Total:	\$3,200	\$640	\$640

Estimated Taxes:	\$33
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	0.530	Acres
Total	0.530	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1678	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$3,200.00	\$640.00
2016	\$3,200.00	\$640.00
2017	\$3,200.00	\$640.00

Map



Property Owner**Name:** HAIRRELL, JERRY %STATE OF
ARKANSAS**Mailing Address:** HC 71 BOX 164
CLAYTON, OK 74536**Type:** (II) Ind. Improv.**Tax Dist:** (79CO) COSSATOT RIVER SCH,
COVE**Millage Rate:** 52.10**Extended Legal:** CARLIN'S ADDITION**Property Information****Physical Address:****Subdivision:** CARLIN'S TO COVE**Block / Lot:** 8 / 1-6**S-T-R:** N/A**Size (Acres):****Market and Assessed Values**

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$6,550	\$1,310	\$1,310
Building:	66600	13320	13320
Total:	\$73,150	\$14,630	\$14,630

Taxes

Estimated Taxes:	\$762
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	1.190	Acres
Total	1.190	

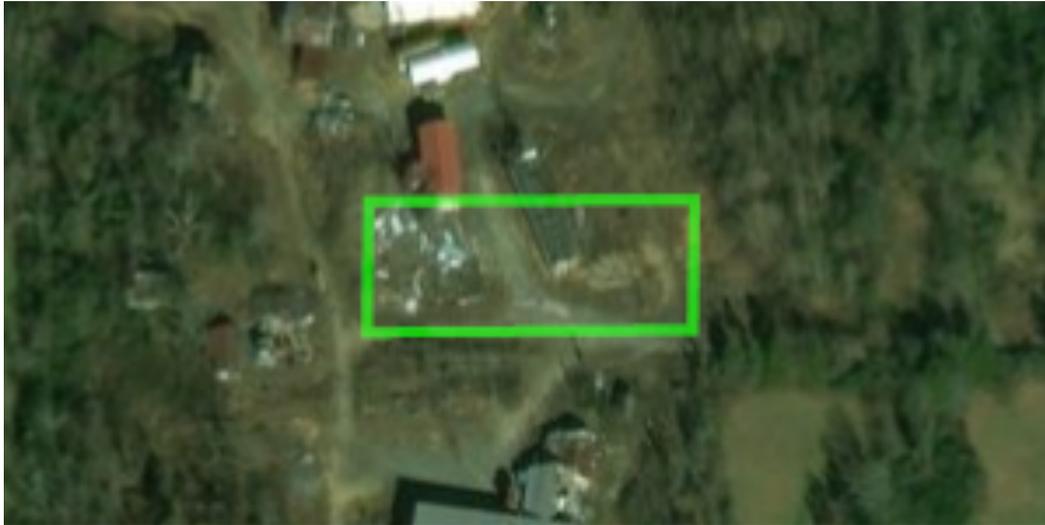
Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1667	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$73,150.00	\$14,630.00
2016	\$73,150.00	\$14,630.00
2017	\$73,150.00	\$14,630.00

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: LOTS 7-12 CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 8 / 7-12

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$6,550	\$1,310	\$1,310
Building:	0	0	0
Total:	\$6,550	\$1,310	\$1,310

Taxes

Estimated Taxes:	\$68
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	1.190	Acres
Total	1.190	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1668	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$6,550.00	\$1,310.00
2016	\$6,550.00	\$1,310.00
2017	\$6,550.00	\$1,310.00

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: ALL BLOCK 9

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 9 / ALL

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$12,600	\$2,520	\$2,520
Building:	0	0	0
Total:	\$12,600	\$2,520	\$2,520

Taxes

Estimated Taxes:	\$131
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	3.180	Acres
Total	3.180	

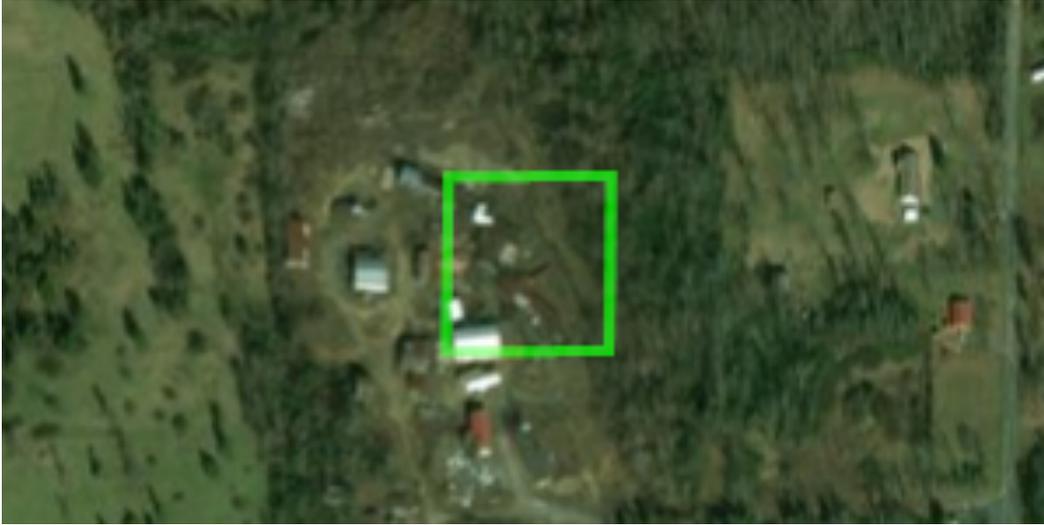
Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1669	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$12,600.00	\$2,520.00
2016	\$12,600.00	\$2,520.00
2017	\$12,600.00	\$2,520.00

Map



Property Owner**Name:** HAIRRELL, JERRY %STATE OF
ARKANSAS**Mailing Address:** HC 71 BOX 164
CLAYTON, OK 74536**Type:** (IV) Ind. Vacant**Tax Dist:** (79CO) COSSATOT RIVER SCH,
COVE**Millage Rate:** 52.10**Extended Legal:** ALL BLOCK 10 CARLIN'S ADDITION**Property Information****Physical Address:****Subdivision:** CARLIN'S TO COVE**Block / Lot:** 10 / 1-8**S-T-R:** N/A**Size (Acres):****Market and Assessed Values**

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$8,700	\$1,740	\$1,740
Building:	0	0	0
Total:	\$8,700	\$1,740	\$1,740

Taxes

Estimated Taxes:	\$91
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	1.910	Acres
Total	1.910	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1670	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A
			N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$8,700.00	\$1,740.00
2016	\$8,700.00	\$1,740.00
2017	\$8,700.00	\$1,740.00

Map



Property Owner**Name:** HAIRRELL, JERRY %STATE OF
ARKANSAS**Mailing Address:** HC 71 BOX 164
CLAYTON, OK 74536**Type:** (IV) Ind. Vacant**Tax Dist:** (79CO) COSSATOT RIVER SCH,
COVE**Millage Rate:** 52.10**Extended Legal:** PT. BLOCK 11 CARLIN"S ADDITION**Property Information****Physical Address:****Subdivision:** CARLIN'S TO COVE**Block / Lot:** 11 / N/A**S-T-R:** N/A**Size (Acres):****Market and Assessed Values**

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$15,050	\$3,010	\$3,010
Building:	0	0	0
Total:	\$15,050	\$3,010	\$3,010

Taxes

Estimated Taxes:	\$157
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	4.050	Acres
Total	4.050	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1675	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$15,050.00	\$3,010.00
2016	\$15,050.00	\$3,010.00
2017	\$15,050.00	\$3,010.00

Map



As of: 4/30/2018

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (RI) Res. Improv.

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: PT. BLOCK 12

Property Information

Physical Address: W MILL ST

Subdivision: CARLIN'S TO COVE

Block / Lot: 12 / pt

S-T-R: N/A

Size (Acres):

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$6,150	\$1,230	\$1,230
Building:	6500	1300	1300
Total:	\$12,650	\$2,530	\$2,530

Taxes

Estimated Taxes:	\$132
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
210 X 483	2.330	Acres
Total	2.330	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CorrDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1679	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
	182	224	N/A				N/A	N/A

Reappraisal Value History

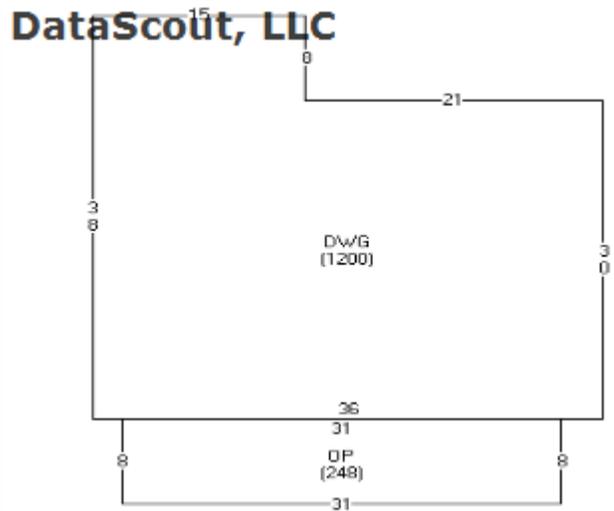
Tax Year	Total Value	Total Assessed
2015	\$12,650.00	\$2,530.00
2016	\$12,650.00	\$2,530.00
2017	\$12,650.00	\$2,530.00

Details for Residential Card 1

Occupancy	Story	Construction	Total Liv	Grade	Year Built	Age	Condition	Beds
Single Family	ONE	Frame Siding Std.	1,200	7		45	Average	

Exterior Wall: ASB.SHING
Foundation: Closed Piers
Floor Struct: Wood with subfloor
Floor Cover: Carpet & Tile
Insulation: N/A
Roof Cover: Asphalt Shingle
Roof Type: Gable

Plumbing: Full: 1
Fireplace: N/A
Heat / Cool: None
Basement: N/A
Basement Area:
Year Remodeled:
Style:



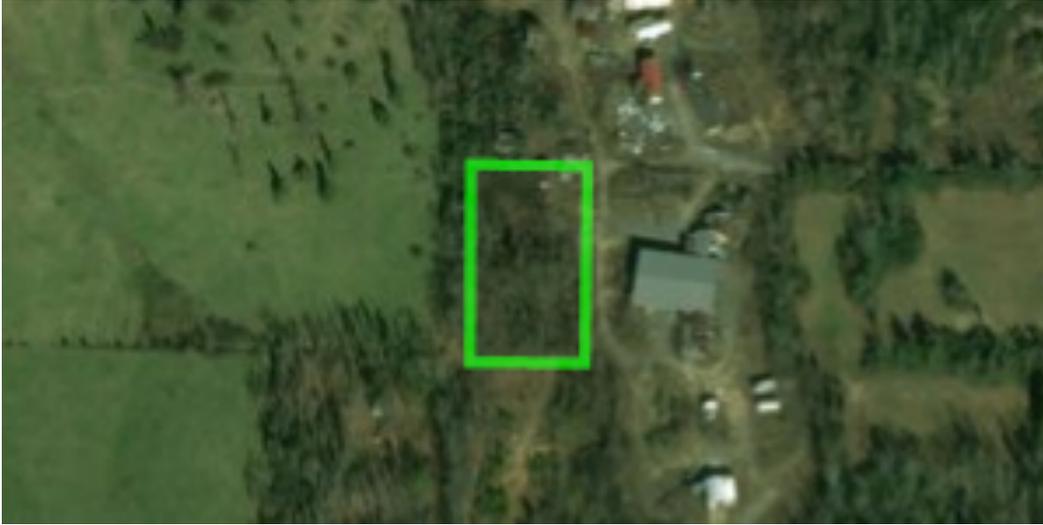
Base Structure

Item	Label	Description	Area
A	DWG	Dwelling	1200
B	OP	Porch, open	248

Outbuildings and Yard Improvements

Item	Type	Size/Dim	Unit Multi.	Quality	Age
Garage - frame unfinished, detach		748			

Map



Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (IV) Ind. Vacant

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: PT. BLOCK 12 N 159' CARLIN'S ADDITION

Property Information

Physical Address:

Subdivision: CARLIN'S TO COVE

Block / Lot: 12 / PT

S-T-R: N/A

Size (Acres):

Market and Assessed Values

Taxes

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$4,600	\$920	\$920
Building:	0	0	0
Total:	\$4,600	\$920	\$920

Estimated Taxes:	\$48
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
AC	0.770	Acres
Total	0.770	

Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1680	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
1/1/1985	174	263	N/A			LEWIS LUMBER & MANUFACTURING	N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$4,600.00	\$920.00
2016	\$4,600.00	\$920.00
2017	\$4,600.00	\$920.00

Map



As of: 4/30/2018

Property Owner

Name: HAIRRELL, JERRY %STATE OF ARKANSAS

Mailing Address: HC 71 BOX 164
CLAYTON, OK 74536

Type: (RI) Res. Improv.

Tax Dist: (79CO) COSSATOT RIVER SCH, COVE

Millage Rate: 52.10

Extended Legal: N/2 E/4 NW SE COVE ACREAGE

Property Information

Physical Address:

Subdivision: COVE ACREAGE (4-4-32)

Block / Lot: N/A / N/A

S-T-R: 04-04-32

Size (Acres): 5.000

Market and Assessed Values

	Estimated Market Value	Full Assessed (20% Mkt Value)	Taxable Value
Land:	\$14,000	\$2,800	\$2,800
Building:	14100	2820	2820
Total:	\$28,100	\$5,620	\$5,620

Taxes

Estimated Taxes:	\$293
Homestead Credit:	\$0 <small>Note: Tax amounts are estimates only. Contact the county/parish tax collector for exact amounts.</small>

Land

Land Use	Size	Units
	5.000	Acres
Total	5.000	

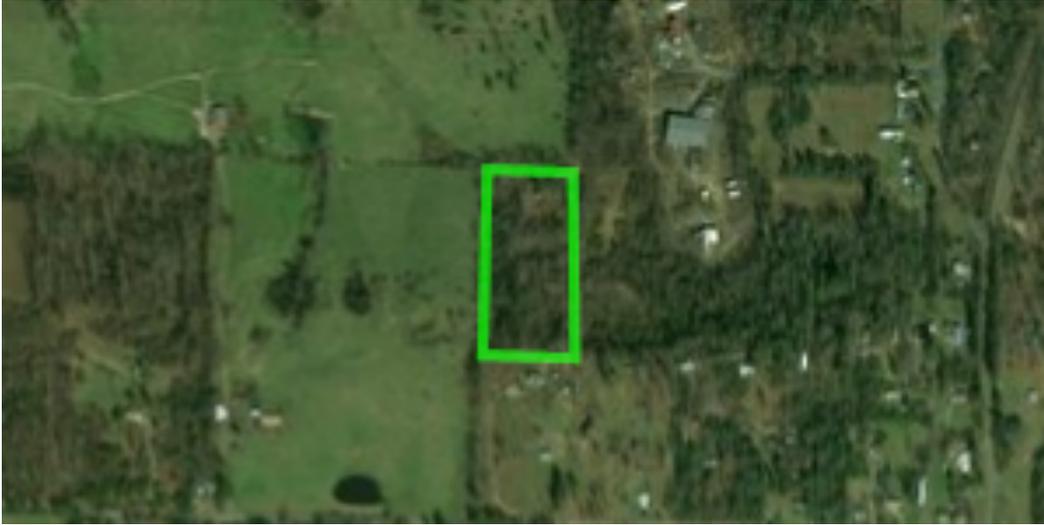
Deed Transfers

Date	Book	Page	Deed Type	Stamps	Est. Sale	Grantee	Code	Type
6/12/2013	2013	1303	CommDeed			HAIRRELL, JERRY	N/A	N/A
8/25/2011	2011	1682	Redem Deed			HAIRRELL, JERRY	N/A	N/A
8/18/2009	2009	1915	CommDeed			HAIRRELL, JERRY	N/A	N/A
6/22/2009	2009	1392	CommDeed			LEWIS LUMBER & MANUFACTURING	N/A	N/A
	115	107	N/A				N/A	N/A

Reappraisal Value History

Tax Year	Total Value	Total Assessed
2015	\$28,100.00	\$5,620.00
2016	\$28,100.00	\$5,620.00
2017	\$28,100.00	\$5,620.00

Map



APPENDIX B
HISTORICAL AERIAL PHOTOGRAPHS



1969

Arkansas Department of Transportation



1976

Arkansas Department of Transportation



1982

Arkansas Department of Transportation



1990

Arkansas Department of Transportation



1998

Arkansas Department of Transportation





11/2012

671 ft

2012
Google Earth



1/2015

671 ft

2015
Google Earth

APPENDIX C

ARKANSAS NATURAL RESOURCES COMMISSION

WATERSHED MAPS AND INFORMATION

94°25'0"W

94°20'0"W

34°35'0"N

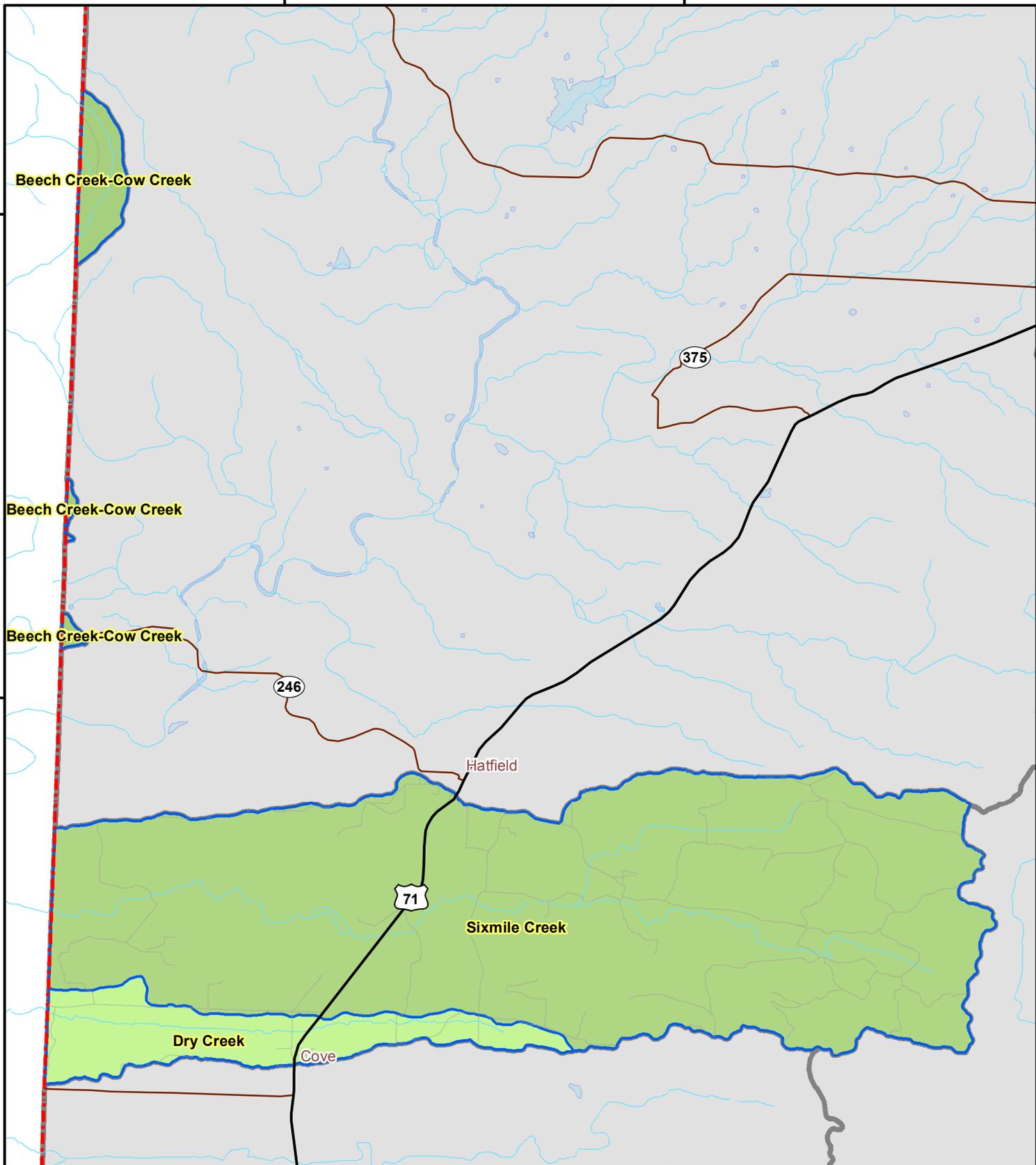
34°35'0"N

34°30'0"N

34°30'0"N

94°25'0"W

94°20'0"W



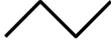
Middle Mountain Fork Sub-Watersheds (12-Digit HUCs)

Nominal Scale
1:100,000

Map produced by the Center for Advanced Spatial Technologies, 2006.
Funding for the Arkansas Automated Reporting and Mapping System
provided by the Arkansas 85th General Assembly through the
Arkansas Natural Resources Commission.



Map Legend

-  Interstate Highway
-  State Highway
-  U.S. Highway
-  Other Roads
-  County Boundary
-  Streams
-  Waterbodies
-  Current Watershed Boundary
-  Watershed Boundary

For all watersheds that cross the Arkansas border, only the Arkansas portion of the watershed was used for mapping and statistical reporting.

All highway and road information provided by the Arkansas State Highway and Transportation Department. Publication date: August 29, 2006.

County boundaries provided by the Arkansas State Highway and Transportation Department. Publication date: January 1, 2001.

Watershed boundaries provided by the Arkansas State Office of the US Natural Resources Conservation Service. Publication date: 2005.

Streams and waterbodies provided by the US Geological Survey, National Hydrography Dataset. Publication date: 1999.

Placenames provided by the US Census Bureau as Census Designated Places. Publication date: 2000.

Watershed Report

Middle Mountain Fork

1114010802

The Center for Advanced Spatial Technologies at the University of Arkansas has developed the Arkansas Automated Reporting and Mapping System with funding from the Arkansas 85th General Assembly through the Arkansas Natural Resource Commission. The 308 ten-digit watershed units and the 1556 twelve-digit watershed units were delineated by the Natural Resources Conservation Service, a division of the US Department of Agriculture. For all watersheds that cross the Arkansas border, only the Arkansas portion of the watershed was used for mapping and statistical reporting.

Watershed Summary (10 Digit HUC)

Middle Mountain Fork (1114010802)

Area Summary

Area - Square Miles.....:	34.04
Area - Acres.....:	22043.82

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	680.00	2230.00
Elevation Minimum.....:	237.00	777.00
Elevation Average.....:	325.00	1066.00

Surface Water Area Features

	<u>Sq. Miles</u>
Streams/Rivers.....:	-.--
Canals/Ditch.....:	-.--
Swamps/Marsh.....:	-.--
Lakes/Ponds.....:	-.--
Reservoirs.....:	-.--

Surface Water Linear Features

	<u>Miles</u>
Streams/Rivers.....:	24.84
Canals/Ditch.....:	-.--
Pipelines.....:	-.--

Watershed Report

Middle Mountain Fork

1114010802

The Center for Advanced Spatial Technologies at the University of Arkansas has developed the Arkansas Automated Reporting and Mapping System with funding from the Arkansas 85th General Assembly through the Arkansas Natural Resource Commission.

The 308 ten-digit watershed units and the 1556 twelve-digit watershed units were delineated by the Natural Resources Conservation Service, a division of the US Department of Agriculture.

For all watersheds that cross the Arkansas border, only the Arkansas portion of the watershed was used for mapping and statistical reporting.

Watershed Summary (10 Digit HUC)

Middle Mountain Fork (1114010802)

Area Summary

Area - Square Miles.....: 34.04
 Area - Acres.....: 22043.82

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....:	680.00	2230.00
Elevation Minimum.....:	237.00	777.00
Elevation Average.....:	325.00	1066.00

Population Summary

Population Estimate for 1990.....: 728.00
 Population Density for 1990 (persons/sq mi)...: 21.39
 Population Estimate for 2000.....: 784.00
 Population Density for 2000 (persons/sq mi)...: 23.03
 Population Percent Change.....: 7.69%

Population Density Summary

<u>Density</u>	<u>Area 1990</u>	<u>% of Total</u>	<u>Area 2000</u>	<u>% of Total</u>	<u>% Change</u>
0	8.15	23.94%	9.32	27.38%	14.36%
0-5	1.57	4.61%	.77	2.26%	-50.96%
5-10	3.39	9.96%	1.57	4.61%	-53.69%
10-25	14.84	43.60%	13.20	38.78%	-11.05%
25-50	3.10	9.11%	5.51	16.19%	77.74%
50-100	1.85	5.43%	1.63	4.79%	-11.89%
100-500	.90	2.64%	1.83	5.38%	103.33%
500-1000	.02	.06%	.00	-.--%	-.--%
> 1000	.03	.09%	.01	.03%	-66.67%

APPENDIX D

ARKANSAS NATURAL HERITAGE COMMISSION FILE REVIEW



THE DEPARTMENT OF ARKANSAS
HERITAGE

Date: October 5, 2018
Subject: Elements of Special Concern
Polk County Site
ANHC No.: S-ADEQ-18-171

Asa Hutchinson
Governor

Stacy Hurst
Director

Ms. Katie Kreps
Office of Land Resources
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Dear Ms. Kreps:

Arkansas Arts Council

Arkansas Historic
Preservation Program

Arkansas State Archives

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars
Cultural Center

Old State House Museum

Staff members of the Arkansas Natural Heritage Commission (ANHC) have reviewed our files for records indicating the occurrence of rare plants and animals, outstanding natural communities, natural or scenic rivers, or other elements of special concern within or near a site located at 34.440194° latitude and -94.415292° longitude in Polk County, Arkansas. We find no records at present time at or in the immediate vicinity of the listed coordinates.

Attached is a list of Elements of Special Concern known to occur within a fifteen-mile radius of the Polk County site. The list has been annotated to indicate those elements falling within a one and a four mile radius of the site. The following numbers of occurrences have been recorded within each review range:

- One mile search area – 0 occurrences
- Four mile search area – 8 occurrences
- Fifteen mile search area – 299 occurrences

An occurrence represents a location, which provides habitat for sensitive species (both state and federal species), is an outstanding example of a natural community, or is a colonial bird nesting site. A legend is provided to help you interpret the codes used on this list.

Please keep in mind that the study area may contain important natural features of which we are unaware. Staff members of the Arkansas Natural Heritage Commission have not conducted a field survey of the study site. Our review is based on data available to the program at the time of the request. It should not be regarded as a final statement on the elements or areas under consideration. If you have questions or need additional information, please feel free to contact me.

Thank you for consulting us. It has been a pleasure to work with you on this study.

Sincerely,

Cindy Osborne
Data Manager/Environmental Review Coordinator
Enclosure: Element list, legend



1100 North Street
Little Rock, AR 72201

(501) 324-9619
fax: (501) 324-9618
tdd: 711

e-mail:
info@naturalheritage.com
website:
www.naturalheritage.com

9/25/2018

Arkansas Natural Heritage Commission
Department of Arkansas Heritage
Elements of Special Concern
Polk County Site (34.440194, -94.415292)
15-mile Radius

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Animals-Invertebrates					
<i>Amblyscirtes linda</i>	Linda's Roadside-Skipper	-	INV	G2G3	S1S3
<i>Fallicambarus strawni</i>	Saline burrowing crayfish	-	INV	G1G2	S1
<i>Fallicambarus tenuis</i>	Ouachita Mountain crayfish	-	INV	G3	S2
✓ <i>Faxonius menae</i>	Mena crayfish	-	INV	G3	S3
<i>Heterosternuta ouachita</i>	Ouachita diving beetle	-	INV	GNR	S2
<i>Lampsilis spB cf hydiana</i>	Red River Fatmucket	-	INV	GNR	S2
<i>Pentacora ouachita</i>	Ouachita shore bug	-	INV	GNR	S1
<i>Procambarus parasimulans</i>	Bismark burrowing crayfish	-	INV	G4	S3
<i>Procambarus reimeri</i>	Irons Fork burrowing crayfish	-	INV	G1	S1
<i>Ptychobranhus occidentalis</i>	Ouachita Kidneyshell	-	INV	G3G4	S3
<i>Stenotrema unciferum</i>	Ouachita slitmouth	-	INV	G2	SNR
<i>Toxolasma lividum</i>	Purple Lilliput	-	INV	G3Q	S3
<i>Toxolasma parvum</i>	Lilliput	-	INV	G5	S3
<i>Villosa lienosa</i>	little spectaclecase	-	INV	G5	S3
Animals-Vertebrates					
<i>Ambystoma annulatum</i>	Ringed Salamander	-	INV	G4	S3
<i>Crotalus atrox</i>	Western Diamond-backed Rattlesnake	-	INV	G5	S2S3
<i>Hemidactylium scutatum</i>	Four-toed Salamander	-	INV	G5	S2
✓ <i>Lythrurus snelsoni</i>	Ouachita shiner	-	INV	G3G4	S2
<i>Myotis leibii</i>	eastern small-footed bat	-	INV	G4	S1
<i>Myotis septentrionalis</i>	northern long-eared bat	LT	SE	G1G2	S1S2
✓ <i>Notropis ortenburgeri</i>	Kiamichi shiner	-	INV	G3	S3
<i>Percina pantherina</i>	leopard darter	LT	SE	G2	S1
<i>Plethodon caddoensis</i>	Caddo Mountain Salamander	-	INV	G2G3	S2
<i>Plethodon kiamichi</i>	Kiamichi Slimy Salamander	-	INV	G2	S1
<i>Plethodon ouachitae</i>	Rich Mountain Salamander	-	INV	G3	S2
✓ <i>Pseudacris streckeri</i>	Strecker's Chorus Frog	-	INV	G5	S2
<i>Sonora semiannulata</i>	Western Groundsnake	-	INV	G5	S1
Plants-Vascular					
<i>Acer saccharum var.</i>	chalk maple	-	INV	G5T5	S2S3
<i>Amorpha ouachitensis</i>	Ouachita indigo-bush	-	INV	G3Q	S3
<i>Amsonia hubrichtii</i>	Ouachita bluestar	-	INV	G3	S3
<i>Calamovilfa arcuata</i>	Cumberland sand-reed	-	INV	G2G3	S1
<i>Cardamine angustata</i>	slender toothwort	-	INV	G5	S2
<i>Carex latebracteata</i>	Waterfall's sedge	-	ST	G3	S3
<i>Carex pennsylvanica</i>	Pennsylvania sedge	-	INV	G5	S3
<i>Carex stricta</i>	tussock sedge	-	INV	G5	S3

Arkansas Natural Heritage Commission
Department of Arkansas Heritage
Elements of Special Concern
Polk County Site (34.440194, -94.415292)
15-mile Radius

Scientific Name	Common Name		Federal Status	State Status	Global Rank	State Rank
<i>Carex timida</i>	timid sedge	-	INV	G2G4	S2S3	
<i>Cypripedium kentuckiense</i>	Kentucky lady's-slipper	-	INV	G3	S3	
<i>Deschampsia flexuosa</i>	wavy hair grass	-	INV	G5	S2S3	
<i>Draba aprica</i>	open-ground whitlow-grass	-	ST	G3	S2	
<i>Euphorbia longicuris</i>	wedge-leaf spurge	-	INV	G4G5	S1	
<i>Euphorbia ouachitana</i>	Ouachita spurge	-	INV	GNR	S3	
<i>Galium arkansanum var. pubiflorum</i>	hairy-flower Arkansas bedstraw	-	INV	G5T2	S2	
<i>Gratiola brevifolia</i>	sticky hedge-hyssop	-	INV	G4	S3	
<i>Houstonia ouachitana</i>	Ouachita bluet	-	INV	G3	S3	
<i>Hydrophyllum brownei</i>	Browne's waterleaf	-	INV	G2	S2	
<i>Ilex longipes</i>	Georgia holly	-	INV	G5	S3	
<i>Liatris compacta</i>	Ouachita blazing-star	-	INV	G3	S3	
<i>Luzula acuminata var. carolinae</i>	Carolina wood-rush	-	INV	G5T4T5	S2	
<i>Ribes cynosbati</i>	prickly gooseberry	-	INV	G5	S2S3	
<i>Sanicula smallii</i>	Small's black-snakeroot	-	INV	G5	S3	
<i>Solidago ouachitensis</i>	Ouachita goldenrod	-	INV	G3	S3	
<i>Stachys iltisii</i>	Ouachita hedge-nettle	-	INV	G3	S3	
<i>Streptanthus squamiformis</i>	Ouachita twistflower	-	ST	G2G3	S2	
<i>Valerianella nuttallii</i>	Nuttall's cornsalad	-	INV	G2?	S2	
<i>Valerianella palmeri</i>	Palmer's cornsalad	-	INV	G3	S3	
<i>Vernonia lettermannii</i>	Letterman's ironweed	-	INV	G3	S3	
Special Elements-Natural Communities						
Ouachita Shale Glade and Barrens		-	INV	GNR	SNR	
Upland Stream-Ouachita Mountains		-	INV	GNR	SNR	
Special Elements-Other						
Colonial nesting site, water birds		-	INV	GNR	SNR	

* - No elements of special concern have been recorded within a one-mile radius of the Polk County Site.

✓ - These elements of special concern have been recorded within a four-mile radius of the Polk County Site.

LEGEND

STATUS CODES

FEDERAL STATUS CODES

C	=	Candidate species. The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
LE	=	Listed Endangered; the U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
LT	=	Listed Threatened; the U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.
-PD	=	Proposed for Delisting; the U.S. Fish and Wildlife Service has proposed that this species be removed from the list of Endangered or Threatened Species.
PE	=	Proposed Endangered; the U.S. Fish and Wildlife Service has proposed this species for listing as endangered.
PT	=	Proposed Threatened; the U.S. Fish and Wildlife Service has proposed this species for listing as threatened.
T/SA E/SA	=	Threatened (or Endangered) because of similarity of appearance.

STATE STATUS CODES

INV	=	Inventory Element; The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities, colonial bird nesting sites, outstanding scenic and geologic features as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
WAT	=	Watch List Species; The Arkansas Natural Heritage Commission is not conducting active inventory work on these species, however, available information suggests they may be of conservation concern. The ANHC is gathering general information on status and trends of these elements. An "*" indicates the status of the species will be changed to "INV" if the species is verified as occurring in the state (this typically means the agency has received a verified breeding record for the species).
MON	=	Monitored Species; The Arkansas Natural Heritage Commission is currently monitoring information on these species. These species do not have conservation concerns at present. They may be new species to the state, or species on which additional information is needed. The ANHC is gathering detailed location information on these elements
SE	=	State Endangered; this term is applied differently for plants and animals. Animals – These species are afforded protection under Arkansas Game and Fish Commission (AGFC) Regulation. The AGFC states that it is unlawful to import, transport, sell, purchase, hunt, harass or possess any threatened or endangered species of wildlife or parts. The AGFC lists as endangered any wildlife species or subspecies endangered or threatened with extinction, listed or proposed as a candidate for listing by the U.S. Fish and Wildlife Service or any native species or subspecies listed as endangered by the Commission. Plants – These species have been recognized by the Arkansas Natural Heritage Commission as being in danger of being extirpated from the state. This is an administrative designation with no regulatory authority.
ST	=	State Threatened; These species have been recognized by the Arkansas Natural Heritage Commission as being likely to become endangered in Arkansas in the foreseeable future, based on current inventory information. This is an administrative designation with no regulatory authority.

DEFINITION OF RANKS

Global Ranks

G1	=	Critically imperiled globally. At a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
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- G2** = Imperiled globally. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3** = Vulnerable globally. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4** = Apparently secure globally. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5** = Secure globally. Common, widespread and abundant.
- GH** = Of historical occurrence, possibly extinct globally. Missing; known from only historical occurrences, but still some hope of rediscovery.
- GU** = Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GX** = Presumed extinct globally. Not located despite intensive searches and virtually no likelihood of rediscovery.
- GNR** = Unranked. The global rank not yet assessed.
- GNA** = Not Applicable. A conservation status rank is not applicable.
- T-RANKS=** T subranks are given to global ranks when a subspecies, variety, or race is considered at the state level. The subrank is made up of a "T" plus a number or letter (1, 2, 3, 4, 5, H, U, X) with the same ranking rules as a full species.

State Ranks

- S1** = Critically imperiled in the state due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors making it vulnerable to extirpation.
- S2** = Imperiled in the state due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation.
- S3** = Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4** = Apparently secure in the state. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5** = Secure in the state. Common, widespread and abundant.
- SH** = Of historical occurrence, with some possibility of rediscovery. Its presence may not have been verified in the past 20-40 years. A species may be assigned this rank without the 20-40 year delay if the only known occurrences were destroyed or if it had been extensively and unsuccessfully sought.
- SU** = Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SX** = Presumed extirpated from the state. Not located despite intensive searches and virtually no likelihood of rediscovery.
- SNR** = Unranked. The state rank not yet assessed.
- SNA** = Not Applicable. A conservation status rank is not applicable.

General Ranking Notes

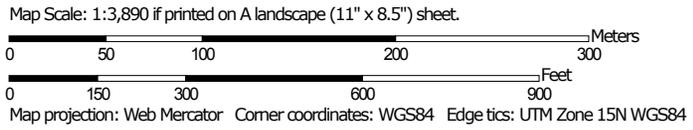
- Q** = A "Q" in the global rank indicates the element's taxonomic classification as a species is a matter of conjecture among scientists.
- RANGES=** Ranges are used to indicate a range of uncertainty about the status of the element.
- ?** = A question mark is used to denote an inexact numeric rank.
- B** = Refers to the breeding population of a species in the state.
- N** = Refers to the non-breeding population of a species in the state.

APPENDIX E
NATURAL RESOURCES CONSERVATION SERVICE
CUSTOM WEB SOIL SURVEY REPORT

Soil Map—Polk County, Arkansas



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Polk County, Arkansas

Survey Area Data: Version 16, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 12, 2015—Dec 7, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
17B	Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded	3.1	10.0%
30C	Sherless gravelly fine sandy loam, 1 to 6 percent slopes	26.9	85.9%
33F	Sherless-Nashoba-Bismarck complex, 15 to 35 percent slopes, extremely stony	1.3	4.1%
Totals for Area of Interest		31.3	100.0%

Polk County, Arkansas

17B—Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: m51t

Elevation: 500 to 1,000 feet

Mean annual precipitation: 45 to 65 inches

Mean annual air temperature: 49 to 72 degrees F

Frost-free period: 195 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Dela and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dela

Setting

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy alluvium derived from sandstone

Typical profile

A1, A2 - 0 to 17 inches: fine sandy loam

C1 - 17 to 42 inches: fine sandy loam

C2, C3 - 42 to 80 inches: stratified loamy fine sand to fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: About 36 to 60 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water storage in profile: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A

Ecological site: Loamy Bottomland (R119XY050OK)

Hydric soil rating: No

Minor Components

Aquents

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Polk County, Arkansas

Survey Area Data: Version 16, Oct 5, 2017

Polk County, Arkansas

33F—Sherless-Nashoba-Bismarck complex, 15 to 35 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: m51p

Elevation: 600 to 1,800 feet

Mean annual precipitation: 44 to 65 inches

Mean annual air temperature: 49 to 72 degrees F

Frost-free period: 190 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Sherless and similar soils: 50 percent

Nashoba and similar soils: 30 percent

Bismarck and similar soils: 15 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sherless

Setting

Landform: Hillsides or mountainsides

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Loamy residuum weathered from sandstone and shale

Typical profile

A - 0 to 4 inches: cobbly fine sandy loam

E - 4 to 10 inches: gravelly fine sandy loam

Bt1, Bt2 - 10 to 34 inches: clay loam

BC - 34 to 38 inches: loam

Cr - 38 to 45 inches: weathered bedrock

Properties and qualities

Slope: 15 to 35 percent

Percent of area covered with surface fragments: 9.0 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: Loamy Backslope (F119XY024AR)
Hydric soil rating: No

Description of Nashoba

Setting

Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Gravelly residuum weathered from sandstone

Typical profile

A - 0 to 4 inches: cobbly fine sandy loam
Bw - 4 to 24 inches: very gravelly loam
Cr - 24 to 36 inches: weathered bedrock
R - 36 to 40 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 35 percent
Percent of area covered with surface fragments: 9.0 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: Rubbly Dry Backslope (F119XY029AR)
Hydric soil rating: No

Description of Bismarck

Setting

Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Gravelly residuum weathered from acid shale

Typical profile

A - 0 to 4 inches: cobbly silt loam
E - 4 to 8 inches: very gravelly silt loam
Bw - 8 to 14 inches: extremely channery silt loam
Cr - 14 to 20 inches: weathered bedrock

Properties and qualities

Slope: 15 to 35 percent
Percent of area covered with surface fragments: 9.0 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Natural drainage class: Somewhat excessively drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: Loamy Shallow Backslope (F119XY023AR)
Hydric soil rating: No

Minor Components

Clebit

Percent of map unit: 5 percent
Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Hydric soil rating: No

Data Source Information

Soil Survey Area: Polk County, Arkansas
Survey Area Data: Version 16, Oct 5, 2017

Polk County, Arkansas

30C—Sherless gravelly fine sandy loam, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: m513

Elevation: 500 to 1,800 feet

Mean annual precipitation: 45 to 65 inches

Mean annual air temperature: 49 to 72 degrees F

Frost-free period: 195 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Sherless and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sherless

Setting

Landform: Hills

Landform position (three-dimensional): Nose slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loamy residuum weathered from sandstone and shale

Typical profile

A - 0 to 4 inches: gravelly fine sandy loam

E - 4 to 10 inches: fine sandy loam

Bt1, Bt2 - 10 to 34 inches: clay loam

BC - 34 to 38 inches: loam

Cr - 38 to 45 inches: weathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: Loamy Sandstone Upland (F119XY007AR)
Hydric soil rating: No

Minor Components

Mazarn

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Littlefir

Percent of map unit: 5 percent
Landform: Hillsides
Hydric soil rating: No

Data Source Information

Soil Survey Area: Polk County, Arkansas
Survey Area Data: Version 16, Oct 5, 2017