



## **Draft Supplemental Environmental Assessment**

Tulsa Port of Catoosa  
Barge Fleeting Area Project  
Rogers County, Oklahoma

March 2016



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## **DRAFT FINDING OF NO SIGNIFICANT IMPACT**

### **SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT - TULSA PORT OF CATOOSA, BARGE FLEETING AREA PROJECT, MARCH 2016 ROGERS COUNTY, OKLAHOMA**

In accordance with the National Environmental Policy Act of 1969, including guidelines in 33 Code of Federal Regulations, Part 230, the Tulsa District and Regional Planning and Environmental Center (RPEC), in cooperation with the Tulsa Port of Catoosa (TPC), have assessed the environmental impacts of a land exchange between the U.S. Army Corps of Engineers (USACE) and the TPC. This Supplemental Environmental Assessment (SEA) was prepared to provide supplemental environmental analysis because of a change in the means of the TPC acquiring lands for development of a barge fleeting area. A 2013 Environmental Assessment (Final Environmental Assessment, Tulsa Port of Catoosa, Barge Fleeting Area Project, Rogers County, Oklahoma, April 2013), incorporated by reference, was prepared to assess environmental effects of leasing approximately 87 acres of USACE property for development of a proposed barge fleeting area. Legislation in Section 6005(c) of the 2014 Water Resources Reform and Development Act (WRRDA 2014) authorized USACE to exchange land with the TPC for development of the barge fleeting area with all costs related to the conveyance borne by the TPC. This SEA, also incorporated by reference, addresses environmental impacts related to this land exchange.

The proposed project, development of a barge fleeting area, remains unchanged except in the means of the real estate mechanism used to acquire land for the project. As described and assessed in the 2013 Final Environmental Assessment (2013 EA), the TPC proposes to construct, operate and maintain a barge fleeting area at the former Verdigris River channel west of the McClellan-Kerr Arkansas River Navigation System, south of the Bird Creek Cut-Off, east of the former Bird Creek channel, and north of the Burlington Northern Santa Fe Railroad. Based on a recent survey, the TPC would acquire 77.055 acres of USACE property immediately south of the TPC's existing facility and the Bird Creek Cut-Off, while the USACE would acquire two adjacent parcels, east of the 77.055-acre tract, totaling 19.817 acres from the TPC. The TPC will make a cash payment to the U.S. Government reflecting any difference in the appraised fair market value of exchanged land values.

An assessment of impacts of a land exchange, as opposed to a leasing action, included a review of all resource areas reviewed in the 2013 EA. Since finalization of the 2013 EA, federally listed proposed, candidate, threatened, and endangered species includes three additional species potentially found in the project area. No critical habitat for any of the listed species occurs within the project area, and no effect determinations for all federally listed species remains, as in the 2013 EA. An update (November 2015) of hazardous waste sites in the project area indicates no significant issues.

It has been determined from the enclosed Supplemental Environmental Assessment that the Proposed Action is not a major federal action that would significantly affect the quality of the natural or human environment. Therefore, an environmental impact statement will not be prepared.

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Date

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Richard A Pratt  
Colonel, U.S. Army  
District Commander

Enclosure: Supplemental Environmental Assessment

**Draft Supplemental Environmental Assessment  
Tulsa Port of Catoosa  
Barge Fleeting Area Project  
Rogers County, Oklahoma**

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# Draft Supplemental Environmental Assessment (SEA)

## Tulsa Port of Catoosa Barge Fleeting Area Project Rogers County, Oklahoma

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## **ACRONYMS AND ABBREVIATIONS**

ABB	American Burying Beetle
BFA	Barge Fleeting Area
BFFA	Barge Fleeting Fill Area
CERCLIS-NFRAP	Comprehensive Environmental Response, Compensation, and Liability Information System-No Further Remedial Action Planned
CLOMR	Conditional Letter of Map Revision
CORRACTS	Correction Action Report
DA	Department of Army
EA	Environmental Assessment
EDR	Environmental Data Resources
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FINDS	Facility Index Systems/Facility Registry System
FONSI	Finding of No Significant Impact
HIST LUST	Historic Leaking Underground Storage Tank
Km	Kilometer
Mi	Mile
MKARNS	McClellan-Kerr Arkansas River Navigation System
NEPA	National Environmental Policy Act
NPL	National Priorities List
ODEQ	Oklahoma Department of Environmental Quality
ODWC	Oklahoma Department of Wildlife Conservation
OPDES	Oklahoma Pollution Discharge Elimination System
PA	Preferred Alternative
Port	Tulsa Port of Catoosa
Port Authority	City of Tulsa-Rogers County Port Authority
RCRA-CESQG	Resource Conservation and Recovery Act-Conditionally Exempt Small Quantity Generators
RCRA-NonGen	Resource Conservation and Recovery Act-Non Generators
SEA	Supplemental Environmental Assessment
SWPPP	Stormwater Pollution Prevention Plan
TRIS	Toxic Chemical Release Inventory System

U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USC	U.S. Code
UST	Underground Storage Tank
WNS	White Nose Syndrome
WRRDA	Water Resources Reform and Development Act

## **1.0 INTRODUCTION**

This Supplemental Environmental Assessment (SEA) supplements the Final Environmental Assessment, Tulsa Port of Catoosa Barge Fleeting Area Project, Rogers County Oklahoma (US Army Corps of Engineers, April 2013), herein referred to as the “2013 EA”. The 2013 EA was prepared in accordance with the National Environmental Policy Act (NEPA) in support of two federal actions which were necessary for the proposed construction of the Port’s Barge Fleeting Area (BFA). These two federal actions were: the lease of United States Army Corps of Engineers (USACE) owned land to the Port, and the authorization through permits issued by the USACE under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act to construct the BFA. Together these actions are referred to as the “Proposed Project”.

**This SEA is being prepared because the agency has made changes to the proposed project as described below, and also because new information relevant to environmental items to be addressed has become available.**

The change in the Proposed Project affects only the first federal action, i.e. the originally approved lease of land by the USACE to the Port. The 2013 EA determined that the preferred method of land conveyance was a lease. The 2013 EA also determined the preferred alternative for construction of the BFA. A Finding of No Significant Impact (FONSI) was issued on May 2, 2013. The second federal action, i.e. the USACE Authorization, was executed through the issuance of Department of the Army (DA) Permit No. SWT-2012-947 on September 13, 2013 (Appendix A).

However, in 2014 legislation in Section 6005(c) of the Water Resources Reform and Development Act (WRRDA) authorized the USACE to exchange land with the Port, and Section 6005(g) exempted this land exchange from the screening provisions normally required under Title 10 USC Section 2696. See USACE WRRDA Memo, Appendix B. As a result, the land exchange alternative is now the Preferred Alternative (PA) (instead of the lease alternative) and has prompted the preparation of this SEA.

Since the publication of the 2013 EA, three additional species which could potentially be found in the project area have been listed pursuant to the Endangered Species Act. In light of this new information, the evaluation of impacts to federally listed species as a result of the Proposed Project has been updated accordingly. In addition, a new Environmental Data Resources (EDR) Report was generated and reviewed in order to confirm that no hazardous materials/waste sites are located within the project area.

## **1.1 Proposed Project**

The Proposed Project remains unchanged from 2013 except in terms of the real estate mechanism being used to acquire the land for the Project. As described in the 2013 EA, the Port has proposed to construct, operate, and maintain a BFA at the former Verdigris River channel at approximately Verdigris River Mile 50 (Figure 1-1). The BFA would be used to store both empty and loaded barges prior to and after transfer of cargo at the existing Port terminal. In effect, the proposed BFA would serve as a temporary “parking lot” for the barges using the docks at the Port terminal. Figure 1-2 shows the relative location of the proposed BFA and the applicant’s existing terminal.

The proposed BFA would be located west of the McClellan-Kerr Arkansas River Navigation System (MKARNS) Navigation Channel, south of the Bird Creek Cut-off, east of the former Bird Creek channel and north of the Burlington Northern Santa Fe Railroad. It is estimated that there would be 1.55 million cubic yards of excavation; approximately 1.225 million cubic yards of this material would be hauled to the proposed Barge Fleeting Fill Area (BFFA), located across Bird Creek from the BFA. The remaining excavated material would be used within the BFA to achieve final grades.

In order for construction of the BFA to proceed, the Port now proposes to exchange land with the USACE in accordance with Section 6005(c) of the 2014 WRRDA. Based on a recent survey (Appendix C) the Port would acquire 77.055 acres of USACE-owned property, triangular in shape, located immediately south of and adjacent to the Port’s existing facility and the Bird Creek Constructed Channel (called the Bird Creek Cut-off). This parcel is referred to as the “disposal tract”. Portions of the site were once used as a dredge disposal facility, but it has not been used as such by the USACE since the Port became operational in 1971 and the USACE does not intend to use this facility in the future (McQueen, Personal Communications, 2009). Under the MKARNS Land Use Allocations, it is zoned for industrial use and identified in various USACE documents as “Cut-off 18-12.”

In exchange for the 77.055-acre parcel, the USACE will acquire two parcels of land that are adjacent to each other totaling 19.817 acres (referred to as the "acquisition tract") from the Port. This tract of land is located just to the east of the 77.055-acre tract as depicted in Figure 1-3. If the appraised fair market value of the disposal tract exceeds the fair market value of the acquisition tracts, the Port will make a cash payment to the United States, reflecting the difference in land values.

## **1.2 Project Update**

Significant progress has been made on the proposed project, including completion of an updated American Burying Beetle (ABB) Presence/Absence Study in July 2014; advertisement (Feb. 19, 2015) of the first phase of the Barge Fleeting Area construction, part of which included the initial segment of the stream and wetland mitigation improvements; Oklahoma Department of Environmental Quality (ODEQ) authorization to Discharge under the Oklahoma Pollution Discharge Elimination System (OPDES) Stormwater Construction General Permit OKR10 (Authorization No. OKR1025521), effective April 6, 2015; Tulsa Port of Catoosa issuance of Notice to Proceed for the BFA – Phase I construction on April 28, 2015; completion of the two deed restriction legal descriptions and exhibits (approximate 65-acre and 88-acre parcels) for preservation of mitigation areas; and the issuance of Conditional Letters of Map Revision (CLOMRs) on December 7, 2015 for the City of Catoosa, City of Tulsa, and Rogers County along Bird Creek within the limits of the Tulsa Port of Catoosa.

## **1.3 Purpose and Need of this SEA**

The purpose and need for this SEA is to evaluate whether the land exchange authorized in the 2014 WRRDA, to establish a BFA for the Tulsa Port of Catoosa, would result in significant impacts on the environment. The analysis of impacts in this SEA is limited to the review of conditions that have changed or new information that has developed since the FONSI was issued for the 2013 EA. Where conditions remain unchanged, the analysis contained in the 2013 EA remains as determined in the analysis of record and is incorporated by reference.

## 2.0 ALTERNATIVES EVALUATED

### 2.1 Introduction

As described earlier, the Proposed Project involves two federal actions: the exchange of federally and privately owned land and the authorization of permits by the USACE under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Since the permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act have already been issued, that federal action is not further discussed in this SEA.

### 2.2 Federal Action #1 – Real Estate Instrument/Property Access

The following alternatives were evaluated in consideration of Federal Action #1 Real Estate Instrument. For the full description of these alternatives, please refer to Section 2 of the 2013 EA.

#### 2.2.1 Preferred Alternative

Five alternatives were advanced for consideration in the 2013 EA as follows:

- Alternative 1: Disposal/Transfer- Federal Property and Administrative Services Act
- Alternative 2: Granting an Easement
- Alternative 3: Lease
- Alternative 4: Land Exchange
- No Action Alternative

In the 2013 EA, Alternative 4 was dismissed from full evaluation. Alternative 3 was identified as the Preferred Alternative in the 2013 EA due to the flexibility of the leasing process. The lease decision process, however, is lengthy and subject to frequent re-evaluations. In 2014, new legislation added to the WRRDA allowed for a land exchange to occur between the Port and the USACE, thereby making Alternative 4 the most preferred and practical alternative to proceed with Federal Action #1. In this SEA, Alternative 4 has been selected as the PA (Figure 2-1).

Under Alternative 4, the Port would exchange land currently under its ownership for land owned by the USACE in accordance with the 2014 WRRDA Section 6005(c), which authorizes the Secretary of the Army to accept a warranty deed for approximately 34 acres of land owned by the Port (acquisition tract) and in exchange the USACE will convey to the Port by quitclaim deed approximately 87 acres (disposal tract) as illustrated in Figure 1-3.

The land exchange is specifically authorized under Section 6005(c) of WRRDA. Section (c)(1) defines the approximately 87 acres of USACE-owned land as the “Federal land” contained within

tracts 413 and 427, and the approximately 34 acres (that lie immediately south and east of the Federal land) owned by the Port are referred to as the “non-Federal land”. Section (c)(2) describes the Land Exchange- “on conveyance by the Tulsa Port of Catoosa to the United States of all right, title, and interest in and to the non-Federal land, the Secretary shall convey to the Tulsa Port of Catoosa all right, title, and interest of the United States in and to the Federal land”. Section (c)(3) details that the Secretary may only accept conveyance of the non-Federal land by warranty deed and shall convey the Federal land to the Port by quitclaim deed subject to any reservations, terms and conditions the Secretary determines necessary to allow the operation and maintenance of MKARNS. In addition, if the appraised fair market value of the Federal land exceeds the value of the non-Federal land, the Port shall make a cash payment to the United States reflecting the difference. Section (g)(1) notes that the exact acreage and the legal description of any real property to be conveyed shall be determined by a survey that is satisfactory to the Secretary. The most recently performed Land Survey can be found in Appendix C.

On August 3, 2015 the USACE Southwestern Division Commander issued a memorandum of guidance on implementation of Section 6005(c) to the Tulsa District USACE. It states that “WRRDA 2014 expressly exempts this land exchange from the screening provisions of Title 10 USC Section 2696”. As such, it can be deduced that this method of conveyance would involve the lowest level of risk because it is specifically authorized by current legislation and exempt from the screening process that would normally be required.

### **2.3 Federal Action #2 - USACE Permit Approval of Proposed Project**

There is no change in the Preferred Alternative for Federal Action #2. All alternatives were evaluated in the 2013 EA.

### 3.0 EXISTING ENVIRONMENT

This section of the SEA describes only those conditions which have changed in the study area since 2013. There has been no change to geology, soils, prime and unique farmlands, water resources, transportation, infrastructure and utilities, land use and zoning, socioeconomics and environmental justice, air quality, noise, terrestrial or aquatic biological resources (except as noted below for federally listed species), cultural resources or aesthetic and scenic resources. For a full description of existing conditions on those topics, please refer to Section 3 of the 2013 EA.

#### 3.1 Hazardous Waste

The following table provides a summary of the hazardous waste sites that were listed in the 2012 EDR Report compared to the 2015 EDR Report. For a full discussion of these sites and their locations, please refer to the 2013 EA.

**Table 3-1**

**Hazardous Waste Sites Listed in EDR Reports**

Site Name	List Status in 2012 EDR Report	List Status in 2015 EDR Report
Agrico Chemical Co.	CERCLIS-NFRAP, CORRACTS RCRA-CESQG	Not Listed
Solvay Fluorides LLC	RCRA-CESQG, TRIS, FINDS	Not Listed
OKG Bulkhandling, Inc	RCRA-NonGen, FINDS	CERCLIS - NFRAP
Steel and Pipe Supply	RCRA-NonGen, FINDS, AST	Not Listed
Asphalt Technology	BROWNFIELDS	Not Listed
BJ's Pit Stop	LUST, UST, HIST LUST	Not Listed

A new EDR database search was performed in November 2015. Based on a review of the 2015 database report from EDR, it remains that there are no significant issues regarding hazardous waste sites for this project. Due to new EDR study area size restrictions, two reports were generated to cover the same study area as the 2012 EDR Report. The two 2015 reports are included in Appendix D.

The difference between the 2012 and 2015 reports is that only one site is now listed, as compared to six sites in 2012 (Table 3-1, above). The former OKG Bulkhandling site, located at 980 Ft. Gibson Road, is approximately ¾ mile from the proposed project and is now listed on the Comprehensive Environmental Response, Compensation, and Liability Information System - No Further Remedial

Action Planned (CERCLIS-NFRAP) database. Sites on this database have been removed and archived from the CERCLIS sites and are judged not to be potential National Priority List (NPL) sites. Archived status indicates that, to the best of the Environmental Protection Agency's (EPA's) knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the NPL unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

### **3.2 Threatened and Endangered Species**

The list of federally-listed species and designated critical habitat areas in Rogers County, Oklahoma was reviewed (<https://ecos.fws.gov/ipac/>, USFWS) on February 4, 2016 (see Appendix E). Since the 2013 EA was completed, the status of two species has changed (Neosho mucket (*Lampsilis rafinesqueana*) mussel to "endangered" and rabbitsfoot (*Quadrula cylindrical cylindrical*) mussel to "threatened" from candidate species and critical habitat has been designated for the rabbitsfoot mussel in Rogers County. In addition, the Northern Long-eared bat (*Myotis septentrionalis*) has been listed as threatened.

#### ***Neosho mucket mussel***

Surveys conducted at 32 sites on the Verdigris River found no live Neosho mucket mussels in 1990. The results of these surveys suggested the Neosho mucket has been extirpated from the Verdigris River in Oklahoma (Mathers, 1990). Aquatic surveys of the Verdigris River from 2006 to 2009 by the Oklahoma Department of Wildlife Conservation (ODWC) confirmed the results of prior studies regarding the absence of this species from the Verdigris River. Therefore the species is not found in the study area.

#### ***Rabbitsfoot mussel***

ODWC also surveyed the Verdigris River for rabbitsfoot mussel during their 2006 to 2009 surveys. ODWC determined the rabbitsfoot population below Oologah Lake was one of the largest populations of the species in the region. In its proposed 2012 critical habitat designation for the rabbitsfoot, USFWS proposed designation of portions of the Verdigris River. In its comments on the proposed critical habitat designation for the species, ODWC recommended that no critical habitat be designated below the State Highway 266 Bridge located across the Verdigris River (80 Federal Register No. 13, page 24698, April 30, 2015). USFWS concurred with that recommendation and modified the critical habitat boundary, after determining that the MKARNS

project had modified the potential habitat for the species, and that there was no suitable habitat for rabbitsfoot below the State Highway 266 Bridge. This bridge is located approximately 2 miles upstream from the BFA. The best scientific and commercial data therefore support a conclusion that rabbitsfoot is not found in the project area.

### **Northern Long-eared bat**

According to USFWS, there are records of Northern Long-eared bat occurrence in seven Oklahoma counties along the far eastern boundary of the state (89 Federal Register No. 63, page 17982, April 2, 2015). These individuals are likely seasonal occupants of the 9 hibernacula which are known to exist in Delaware, Adair, Cherokee, Le Flore and Sequoyah Counties (Todd Fagin, Oklahoma Natural Heritage Inventory, personal communication, February 4, 2016). According to the Oklahoma Natural Heritage database, the nearest record of Northern Long-eared bat to the study area in the last 30 years was 40 miles away in the vicinity of a hibernacula (Todd Fagin, Oklahoma Natural Heritage Inventory, personal communication, February 4, 2016). Although the USFWS reports that records exist for Northern Long-eared bat in only seven Oklahoma counties, the USFWS website ([http://ecos.fws.gov/tess\\_public/profile/species](http://ecos.fws.gov/tess_public/profile/species), February 8, 2016) states that Northern Long-eared bat is known or believed to occur in 23 Oklahoma counties. This list of counties includes 16 counties, such as Rogers County, where there is no record of Northern long-eared bat occurrence. According to the USFWS, this range is based on an assumption that Northern Long-eared bats commonly migrate 55 miles from their hibernacula to summer roosting areas (Brian Fuller, USFWS, personal communication, February 5, 2016). With respect to migratory movements of Northern Long-eared bat, the USFWS states the following:

While the Northern Long-eared bat is not considered a long-distance migratory species, short regional migratory movements between seasonal habitats (summer roosts and winter hibernacula) have been documented between 56 km (35 mi.) and 89 km (55 mi.) (89 Federal Register 63, page 17985, April 2, 2015)

In support of the establishment of this 55-mile buffer zone, USFWS cites two peer-reviewed publications (Griffin 1945) and Caire (1979) and one non-peer reviewed museum handbook, Nagorson and Brigham (1993). None of the references contain data which support the long distance seasonal movement patterns of Northern Long-eared bats as described in the Federal Register notice. Both of the peer-reviewed papers rely on recapture data collected from bats banded at either hibernacula or summer maternity colonies. There is only a single record of a Northern Long-eared bat migration reported in either of these publications. That was for the winter migration of a single, male Northern Long-eared bat. Other data presented in these papers is for other bat species which can be found in hibernacula with Northern Long-eared bats.

There is no discussion in either paper regarding how the results of movement studies on these other species could to be used to understand movement patterns of Northern Long-eared bats. The non-peer reviewed paper contains a single statement that movement of Northern Long-eared bat from hibernacula to summer roosts have been documented up to 56 km (35 mi), but this statement is presented without attribution.

Griffin (1945) does not report the total number of bats recaptured, but does state that out of 13,000 bats of 6 species banded, only 39 recoveries (0.003% of the total number banded) occurred at a distance of 10 miles or more from the original banding location. Importantly, Griffin concludes, “The data obtained do not satisfactorily indicate either the summer range of the bats banded in caves or the winter quarters of those marked at summer colonies.”

Caire (1979) conducted a similar banding study of Keen’s myotis (*Myotis keenii*). Caire reported that he recaptured 47 of 945 bats banded. He reported a high degree of philopatry with nearly all bats recaptured at their original location of banding and that only a single “long distance movement” of 56 km (35 mi) was recorded.

Based on a review of these two peer-reviewed papers, which USFWS has identified as the best available science on the subject of migration of Northern Long-eared bat, it is reasonable to conclude that long distance migration of Northern Long-eared bats between hibernacula and summer habitat is at best poorly understood, and most likely rare, based on studies of other related species. Therefore, based on a search of available records of species occurrence, and the best scientific and commercial data available on migration patterns of Northern Long-eared bat, it is reasonable to conclude the Northern Long-eared bat is not found at the project site. Correspondence with the Oklahoma Natural Heritage Inventory is provided in Appendix E.

On January 14, 2016 the USFWS issued its Final Rule under Section 4(d) of the Endangered Species Act: Rule for the Northern Long-Eared Bat. The 4(d) rule prohibits incidental take in areas affected by white-nose syndrome (WNS). The most recent mapping updated January 29, 2016 shows Rogers County, Oklahoma within this WNS zone (Appendix F).

According to the 4(d) rule, within the WNS zone incidental take outside of hibernacula that results from tree removal is only prohibited when it (1) Occurs within 0.25 miles (0.4 km) of known northern long-eared bat hibernacula; or (2) cuts or destroys known occupied maternity roost trees, or any other trees within a 150-foot (45-meter) radius from the known occupied maternity trees, during the pup season (June 1 through July 31).

***American Burying beetle***

As recommended in the 2013 EA, and subsequent to the signing of the FONSI in 2013, an American Burying Beetle (ABB) presence/absence survey was undertaken in accordance with the published ABB protocols to determine the presence/absence of the ABB within the proposed construction areas. No ABB were captured at any of the three trapping locations during the ABB presence/absence survey conducted from June 30 to July 5, 2014. The survey is included as Appendix G.

A discussion on state listed and other species is provided in the 2013 EA.

#### **4.0 POTENTIAL IMPACTS AND PROPOSED MITIGATION FOR THE PROPOSED PROJECT**

Both federal actions (real estate and Sections 404/10 permitting) were analyzed in the 2013 EA and resulted in a FONSI on May 2, 2013 where it was determined that the real estate action to lease the land to the Port would have no significant adverse effects on the natural or human environment and that unavoidable impacts associated with the BFA would be mitigated. The change of real estate mechanism from lease to exchange is not expected to cause any change to this determination.

With regard to the construction of the BFA, the changed status under the Endangered Species Act of several species potentially found in the study area has prompted an updated analysis of potential impacts. In addition, a new EDR Report was generated and reviewed to supplement the findings of the 2013 EA.

##### **4.1 Threatened and Endangered Species**

Based on analysis of the new proposed action addressed in this SEA, review of suitable habitat in the project vicinity, occurrence records and the best available scientific and commercial data, USACE finds the land exchange as proposed in this SEA will have no effect on Neosho mucket mussel, rabbitsfoot mussel or Northern Long-eared bat. In addition, no effect determinations for other federally-listed species as described in the 2013 EA remain unchanged.

##### **4.2 Hazardous Waste**

The OKG Bulkhandling site listed in the 2015 EDR Report was not considered to pose an environmental concern in the 2013 EA, and there is no change to that finding as a result of this SEA. All other impacts associated with hazardous wastes are fully described in the 2013 EA.

## **5.0 AGENCY COORDINATION, PUBLIC INVOLVEMENT AND PERMITS**

### **5.1 Agency Coordination**

The Port and/or its consultants have coordinated closely with regional, federal, state and county agencies over the course of the development of the proposed project. This coordination has been performed in such a way that the relevant concerns of the agencies have been considered in the development of the proposed project's design, and in the assessment of environmental impacts.

The 2013 EA contains a list of all meetings held with regional, state and county agencies, as well as with local governing bodies and others with whom coordination had occurred from 2009-2013.

On January 20, 2015 and February 2, 2015, meetings were held between the Port and the USACE regarding the preparation of this SEA. In addition, letters will be sent to all persons and organizations that received notification of the 2013 EA, to inform them of the availability of this SEA. A list of those individuals and agencies that will be notified for comment on this SEA is provided in Appendix H.

### **5.2 Public Involvement**

In consideration of the limited nature of this action and the expectation of no significant environmental impacts, there are no additional public meetings on this topic proposed at this time. The Draft SEA will be available for public/agency review for a period of 30 calendar days.

### **5.3 Permits**

The following provides a summary of permits that have been obtained since the issuance of the FONSI in May 2013:

As noted previously, the Port was issued DA Permit No. SWT-2012-947 on September 13, 2013 and the Port will comply with the conditions and requirements therein.

A Section 401 Water Quality Certificate was issued by the Oklahoma Department of Environmental Quality (ODEQ) on August 1, 2013 certifying that the proposed project will not violate the water quality standards of the State.

A Storm Water Pollution Prevention Plan (SWPPP) was required to certify that sediment will not be deposited into the Verdigris River watershed as a result of construction activities. This plan was prepared and reviewed in accordance with the ODEQ authorization to Discharge under the Oklahoma Pollution Discharge Elimination System (OPDES) Stormwater Construction General Permit OKR10 (Authorization No. OKR1025521), issued on April 6, 2015.

Conditional Letters of Map Revision (CLOMR) were issued by FEMA on December 7, 2015 for the City of Catoosa, City of Tulsa, and Rogers County along Bird Creek within the limits of the Tulsa Port of Catoosa.

## **6.0 LIST OF PREPARERS**

### **Dewberry Engineers Inc.**

Craig Swengle, P.E., Project Manager  
Bachelor of Science, Civil Engineering, Pennsylvania State University

Ileana Ivanciu, PG, PhD, Environmental Director  
Master of Science, Geology and Geophysics, University of Bucharest  
Bachelor of Science, Geology and Geophysics, University of Bucharest

Brian Sayre, CFM, Senior Natural Resources Specialist  
Master of Arts, Environmental Studies, Montclair State University  
Bachelor of Arts, Environmental Sciences, University of Virginia

Laura Sliker, REP, Planner  
Master of Studies in Environmental Law, Vermont Law School  
Bachelor of Science, Environmental Sciences, Northern Arizona University

Steve Hodapp, Senior Environmental Specialist  
Bachelor of Science, Zoology and Wildlife Management, University of Wyoming

Clifford Moore, Senior CADD/GIS Specialist  
Bachelor of Arts, Geography/Cartography, Rutgers University

### **USACE – Tulsa District**

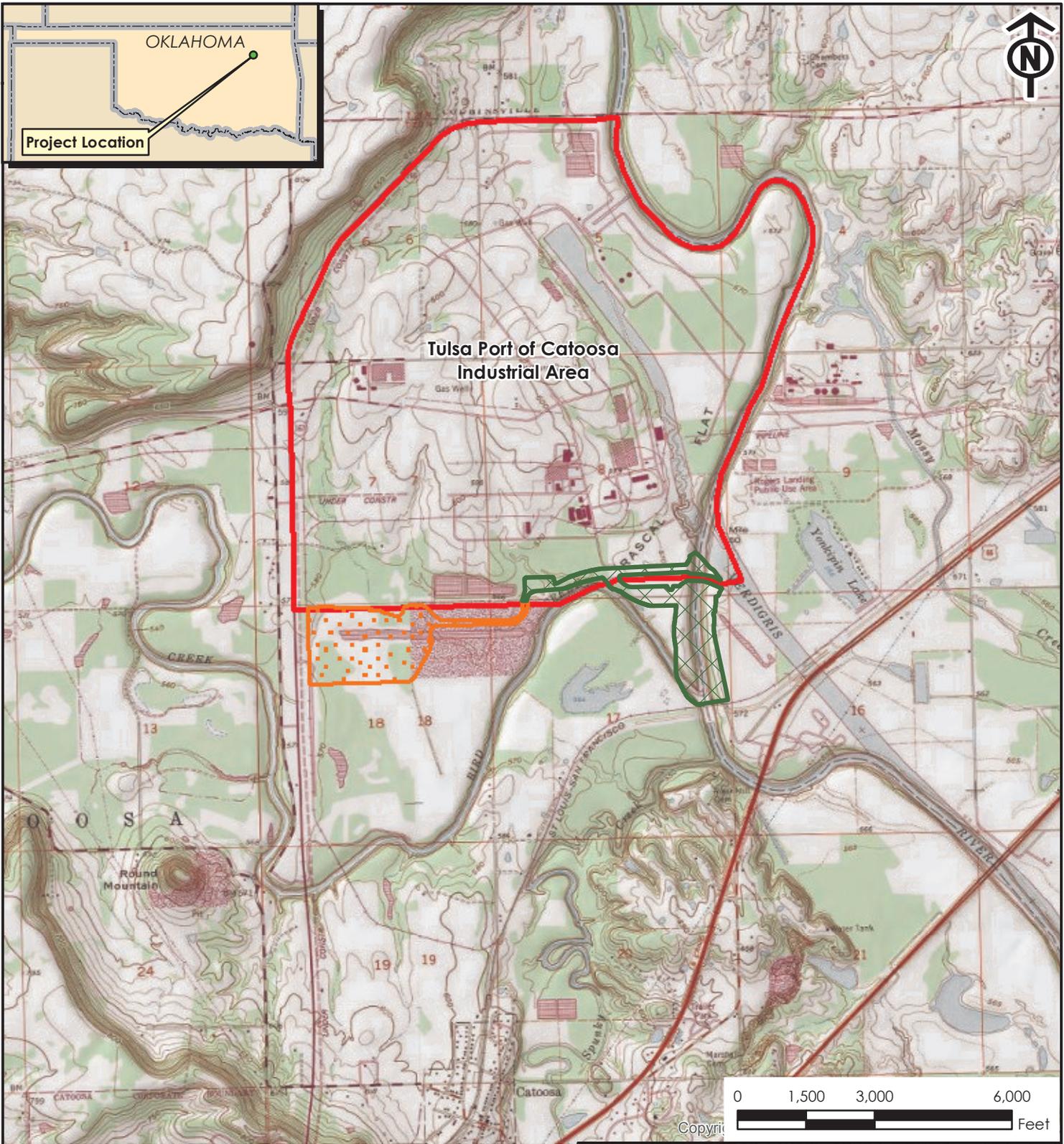
Velma (Dawn) Rice, Project Manager  
M.S. Environmental Engineering, Oklahoma State University  
B.S. Civil Engineering, Oklahoma State University

Stephen Nolen, Chief – Natural Resources and Recreation Branch  
M.S. Environmental Engineering, Oklahoma State University  
M.S. Zoology, Oklahoma State University  
B.S. Zoology, Oklahoma State University

## 7.0 REFERENCES

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- USACE. (2013) *Draft Final Environmental Assessment. Tulsa Port of Catoosa Barge Fleeting Area Project; Rogers County, Oklahoma*. USACE Tulsa District
- USACE. (2015) Memorandum Thru Commander , U.S. Army Corps of Engineers, Southwestern Division Subject: *Implementation Guidance for Sections 6005(c) and (g) of the Water Resources Reform and Development Act (WRRDA) 2014, Tulsa Port of Catoosa, Oklahoma*
- USFWS. (2016) *Endangered and Threatened Wildlife and Plants; 4(d) Rule for Northern Long-Eared Bat: Final Rule*. Washington DC: Federal Register Vol. 81, No. 9: 1900-1922.

## FIGURES



**LEGEND:**

-  Barge Fleeting Fill Area (BFFA)
-  Barge Fleeting Area (BFA)
-  Tulsa Port of Catoosa Industrial Area

**TULSA PORT OF CATOOSA  
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

**PROJECT LOCATION MAP**

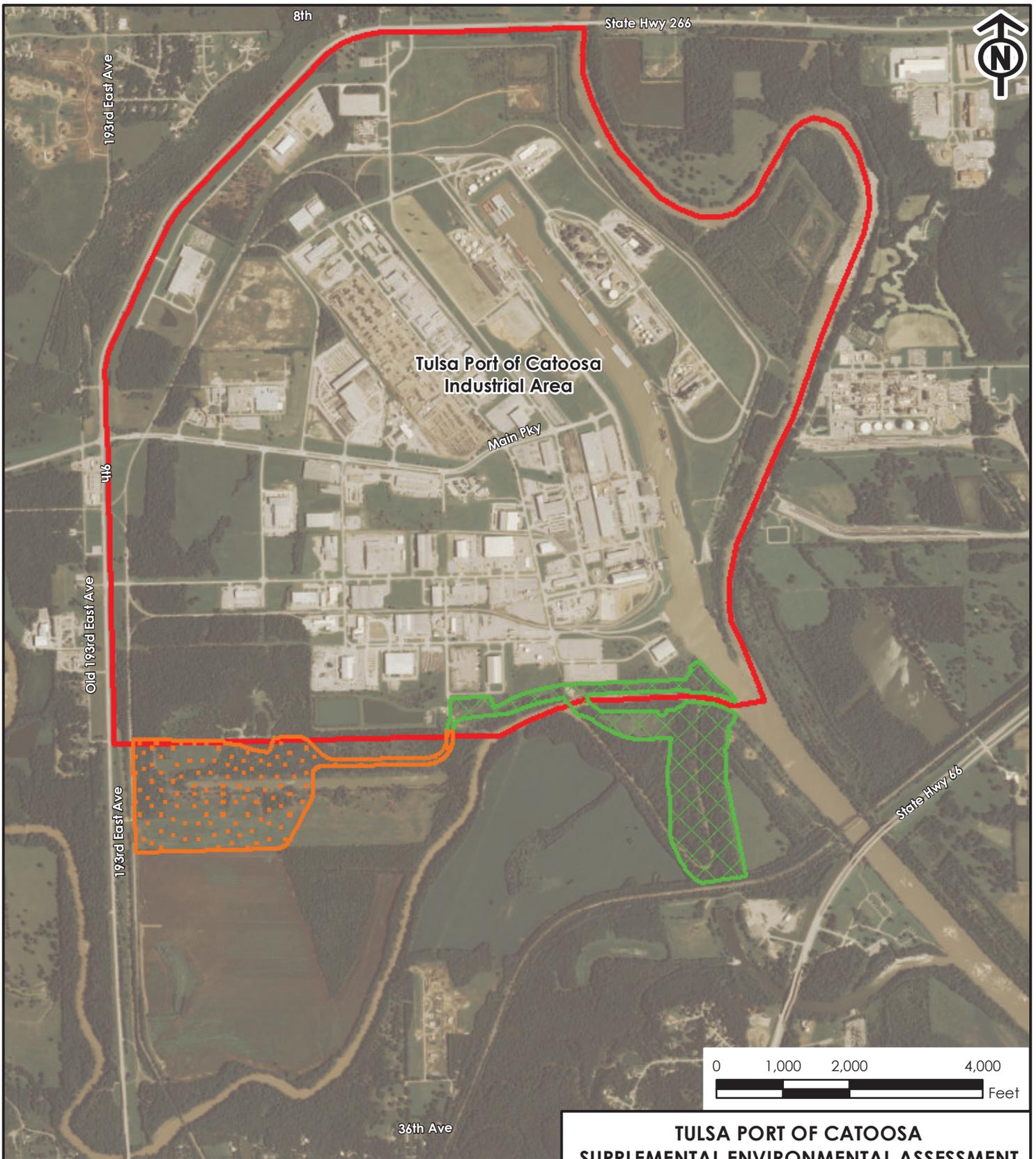
Tulsa Port of Catoosa  
Rogers County, Oklahoma

SCALE: 1" = 3000'

DATE: February 2016



**FIGURE 1-1**



**LEGEND:**

-  Barge Fleeting Fill Area (BFFA)
-  Barge Fleeting Area (BFA)
-  Tulsa Port of Catoosa Industrial Area

Source: World Imagery Online Service, ESRI



**TULSA PORT OF CATOOSA  
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

**SITE LOCATION MAP**

Tulsa Port of Catoosa  
Rogers County, Oklahoma

SCALE: 1" = 2000'

DATE: February 2016



**FIGURE 1-2**



Tulsa Port of Catoosa  
Industrial Area

PORT OF CATOOSA

BIRD CREEK

U.S. GOVERNMENT

NAVIGATION CHANNEL

U.S. GOVERNMENT

VERDIGERS RIVER

PORT OF CATOOSA

State Hwy 66



**LEGEND:**

- Property Boundary
-  Disposal Tract (77.055 Ac.)
-  Acquisition Tract (19.817 Ac.)
-  Tulsa Port of Catoosa Industrial Area

**TULSA PORT OF CATOOSA  
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

**PROPERTY LOCATION MAP**

Tulsa Port of Catoosa  
Rogers County, Oklahoma

SCALE: 1" = 1000'

DATE: February 2016



**FIGURE 1-3**



- LEGEND:**
- Proposed Contour
  - - - - - Haul Route
  - BFFA** Barge Fleeting Fill Area
  - BFA** Barge Fleeting Area
  - Tulsa Port of Catoosa Industrial Area

**TULSA PORT OF CATOOSA  
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

**ALTERNATIVE 4  
PREFERRED ALTERNATIVE**

Tulsa Port of Catoosa  
Rogers County, Oklahoma

SCALE: 1" = 500' DATE: February 2016



**FIGURE 2-1**

Path: G:\99601039\GIS\Map\Environmental Assessment\SU\_Build\_Con-2.mxd

Source: World Imagery Online Service, ESRI

**APPENDIX A**

**DEPARTMENT OF THE ARMY PERMIT**



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101ST EAST AVENUE  
TULSA, OKLAHOMA 74128-4609

SEP 13 2013

Regulatory Office

RECEIVED

SEP 18 2013

TULSA PORT OF CATOOSA

Mr. David Yarbrough  
The City of Tulsa – Rogers County Port Authority  
5350 Cimarron Road  
Catoosa, Oklahoma 74015

Dear Mr. Yarbrough:

Enclosed is an executed copy of your Department of the Army Permit No. SWT-2012-947. Please retain this copy for your files.

We request that in conjunction with this permit, you complete and return the enclosed self-addressed "Permittee Construction Schedule" form. Should construction be initiated prior to 30 days from receipt of this letter, please return the completed form as soon as possible. If you prefer, you may contact Mr. Ed Parisotto at 918-669-7549 to inform this office regarding the construction start date.

Following completion of your proposed activity, complete and return the enclosed self-addressed "Permittee Compliance Certification" form, as required by Permit Special Condition 2.

If you desire to complete a "Customer Service Survey" on your experience with the Corps Regulatory Program, you are invited to visit <http://per2.nwp.usace.army.mil/survey.html> on the internet at your convenience and submit your comments.

If you have any questions or concerns, please contact Mr. Ed Parisotto at 918-669-7549 or email [edward.parisotto@usace.army.mil](mailto:edward.parisotto@usace.army.mil).

Sincerely,

  
Richard A. Pratt  
Colonel, US Army  
District Commander

Enclosures

DEPARTMENT OF THE ARMY PERMIT

Permittee: Mr. David Yarbrough, City of Tulsa-Rogers County Port Authority

Permit No.: SWT-2012-947

Issuing Office: U.S. Army Corps of Engineers, Tulsa District, Regulatory Office

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** The Port shall construct, operate, and maintain a Barge Fleeting Area (BFA) within a former channel of the Verdigris River at approximately Verdigris River Mile (RM) 50. The BFA will be located west of the McClellan- Kerr Arkansas River Navigation System (MKARNS) channel, south of the Bird Creek Cut-off, east of the former Bird Creek channel and north of the Burlington Northern Santa Fe Railroad. The former channel of the Verdigris River was disconnected from the main river channel when a straighter, dredged connection to the Port was constructed in the early 1970s. The BFA will be used to store empty and loaded barges prior to and after transfer of cargo at the existing Port terminal. In effect, the BFA will serve as a temporary "parking lot" for the barges using the docks. In order for construction of the BFA to proceed, the Port will acquire approximately 87 acres through a lease of USACE-owned property located immediately south of and adjacent to the Port's existing facility. The property is a triangular "island" parcel bounded by the Bird Creek constructed channel (called the Bird Creek Cut-off) to the north, the former Bird Creek channel to the west, and the former Verdigris River channel to the east, all of which are shallow watercourses.

The BFA will have a 2,300-foot long, 300-foot wide toe-to-toe mooring area and a capacity to store more than 60 barges, assuming the barges are the standard, covered hopper barge size of 195 feet long by 35 feet wide. Barges will be moored three abreast on both sides of the BFA, with 90 feet of clear water between the moored barges to allow for towboat operations. The final grades will be constructed at three vertical to one horizontal, grassed side slopes, using the material excavated from the BFA (see enclosures for grading plans and cross sections). Rock riprap will be placed on the side slopes of the BFA from 10 feet above the normal pool water surface to the slope toe for stabilization due to minor wave action. Mooring deadmen and cables will be installed high on the side slopes along each bank for the barges to be attached (tied off) to. A maintenance road at the top of the east bank will be constructed to an elevation of 582.00 and to 584.00 on the west bank. The Maximum Possible Flood elevation is 580.00 along this stretch of the Verdigris River. The proposed BFA shall be constructed using conventional grading construction techniques. It is anticipated that native soils, sandstone and shale bedrock will be encountered. Excavation of the material should be possible with conventional equipment such as backhoes, loaders, etc, and blasting may not be required.

There shall be a total of approximately 1.55 million cubic yards (CY) of excavation; approximately 1.225 million CY of this material will be hauled to the proposed barge fleeting fill area (BFFA). The remaining excavated material will be used to achieve the final grades desired for the BFA. The BFFA consists of approximately 292 acres on the north side of Bird Creek, south of the existing Port Industrial Park. Soil will be placed in eight-inch lifts and compacted to 90 percent of Standard Proctor density. The proposed grading plans for the BFA and BFFA are included in the enclosures. The excavated material will be graded to an elevation approximately one foot higher than the 100-year floodwater surface elevation, which ranges from 575.00 at the Burlington Northern Santa Fe – Bird Creek Bridge to 572.00 at the northeast corner of the proposed BFFA.

A temporary single span structure will be installed across the Bird Creek Cut-off to allow earth material to be transported from the BFA to the BFFA. The 90-foot long single span structure will have a minimum vertical clearance of approximately 13 feet above 532.00 (ordinary water elevation). The location of the temporary structure was selected based upon the narrowest section of the Bird Creek Cut-off and will span the Cut-off approximately 70 feet between the rock walls of the channel. The bridge will be designed for HS20 vehicular traffic loads. Bridge abutments will be constructed of precast concrete blocks. The final design and selection of the temporary bridge structure and foundation will be the responsibility of the contractor, under the final approval by the Port's project engineer. Once construction of the BFA has been completed, the temporary haul road shall be removed, but the temporary Bird Creek Cut-off crossing will remain in place until a permanent vehicle bridge has been constructed. All disturbed areas will be restored to original grades and replanted with native vegetation in order to prevent erosion. Heavy equipment, such as scrapers, wide steel-tracked dozers, box blades with pneumatic tires, front-end loaders, dump trucks, sheep foot roller, and a pneumatic roller will be used to build the structures. All work will be performed in accordance with the enclosed plans (Enclosures 1 through 10).

**Project Location:** The project impacts the Verdigris River and Bird Creek cutoffs and an adjacent wetland, located just south of the Port of Catoosa. Proposed activity is located in Sections 8, 17, and 18, Township 20 North, Range 15 East, Rogers County, Oklahoma. Approximate center of project is Latitude North: 36.218172 Longitude West: 95.729290

**Permit Conditions:**

**General Conditions:**

1. The time limit for completing the work authorized ends on August 31, 2018. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below.

Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions:**

1. Permittee Construction Schedule: Prior to commencing construction, you shall complete and return the "Permittee Construction Schedule" form. Should construction be initiated prior to 30 days from validation of this permit, return the completed form as soon as possible. If you prefer, you may telephone 918-669-7549 to inform the U.S. Army Corps of Engineers regarding the construction start date. A copy of the "Permittee Construction Schedule" form will accompany the validated permit and final authorization letter.

2. Compliance Certification: Following completion of the authorized activity, the permittee shall submit a signed certification regarding the completed work and any required mitigation. A copy of the "Permittee Compliance Certification" form will accompany the validated permit and final authorization letter.

3. Erosion Control Measures (ECM): The ECM such as silt screen barriers shall be implemented and maintained during construction. Barriers shall remain in place and effective until sufficient vegetation coverage on exposed areas is established. Upon inspection of erosion control barriers, if there is any damage to the barrier, it shall be replaced or repaired within 24 hours of discovery. All exposed earthen areas, disturbed or newly created by the construction, shall be seeded immediately, replanted, or provided equivalent protection against subsequent erosion.

4. You shall contact the Rogers County Floodplain Administrator at 219 S. Missouri Ave., Suite 1-102, Claremore, OK 74017, telephone 918-341-0486, for review and compliance with flood plain requirements.

5. You shall not begin construction activities upon any Corps owned Fee lands until the appropriate real estate instrument is granted from the Tulsa District Real Estate Division (RE). You may contact the RE at 918-669-7412.

6. Mitigation Plan: The permittee shall implement the Mitigation Plan as written in the Final Wetlands Mitigation Plan (revised), dated July 29, 2013, submitted by Dewberry Engineers Inc. in addition to the following:

a. Preservation of Mitigation Area: The permittee shall deed restrict mitigation lands with a perpetual deed restriction, protecting against future development and/or disturbances. The location and amount of lands are described as figure a and b in the Final Wetlands Mitigation Plan (revised) dated July 29, 2013. The boundary of this property shall be posted with signs prohibiting disturbance. The signed deed restriction shall be recorded at the Rogers County Courthouse and a certified copy provided to the Corps, Regulatory Office prior to the start of construction. (See attached)

b. Monitoring Report: The permittee shall provide an annual monitoring report to the Corps no later than November 1st of each year for 5 years beyond the first complete growing season. This report shall assess and document the conditions and survival rates of the species mitigated for and address all performance measures per the Final Wetlands Mitigation Plan (revised) dated July 29, 2013. If performance measures are not being met, then provide a remediation strategy to attain the required measures.

c. Monitoring for Stream Impacts: The permittee shall monitor the impacted tributary for destabilization upstream and downstream of the bank protection project for a period of 5 years. If stream destabilization occurs during this period, the permittee shall be required to notify the Corps, Regulatory Office immediately in writing. This report shall assess the condition of the stream. The permittee shall include photographs of the stream channel and degraded area. After notification is made, the permittee may be required to submit a proposal to correct the destabilization of the stream channel.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:  
(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).  
(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).  
( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

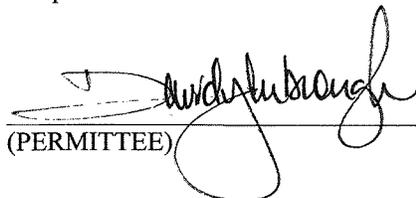
c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
  - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.
  - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.
6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

  
 (PERMITTEE)

9-30-2013  
 (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
\_\_\_\_\_  
(DISTRICT COMMANDER)      Richard A. Pratt      13SEP13  
Colonel, U.S. Army      (DATE)  
District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEEE)      (DATE)

**APPENDIX B**

**USACE WRRDA MEMO**



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000

**AUG 03 2015**

CEMP-CR

MEMORANDUM THRU COMMANDER, U.S. Army Corps of Engineers, Southwestern Division, ATTN: CESWD-PDR (Ms. Paula Johnson-Muic), 1100 Commerce Street, Room 8E9K, Dallas, Texas 75242

FOR COMMANDER, U.S. Army Corps of Engineers, Tulsa District, ATTN: CESWT-RE (Mr. Terry Rupe) 1645 S. 101st East Ave, Tulsa, OK 74128-4609

SUBJECT: Implementation Guidance for Sections 6005(c) and (g) of the Water Resources Reform and Development Act (WRRDA) 2014, Tulsa Port of Catoosa, Oklahoma

1. This memorandum provides implementation guidance on Section 6005(c) and (g) of WRRDA 2014 and provides for acquisition and conveyance of land in Rogers County, Oklahoma. A copy of Sections 6005(c) and (g) is enclosed. This memorandum is premised upon the assumption that no 16 U.S.C. 460d lease will be executed for the use of United States Tracts 413 and 427 prior to completion of the land exchange. If circumstances change and a lease execution is contemplated, the District must first seek approval from this office and obtain additional guidance.
2. Acting under this authority, the Corps is authorized to accept a warranty deed for approximately 34 acres of land situated in Rogers County, Oklahoma owned by the Tulsa Port of Catoosa (acquisition tract) that lies immediately south and east of the Federal land. In exchange, the Corps will convey to the Tulsa Port of Catoosa by quitclaim deed approximately 87 acres situated in Rogers County, Oklahoma, contained within United States Tracts 413 and 427 and acquired for the McClellan-Kerr Arkansas River Navigation System (disposal tract). Exact legal descriptions and acreages will be based on land surveys acceptable to the Corps.
3. On conveyance via warranty deed by the Tulsa Port of Catoosa to the United States of all right, title, and interest in and to the acquisition tract, the Corps shall convey via quitclaim deed to Tulsa Port of Catoosa all right, title, and interest of the United States in and to the disposal tract. The basis for the exchange will be a fair market value appraisal of both the disposal tract and the acquisition tract. The appraisals shall be satisfactory to the Corps. If the appraised fair market value of the disposal tract exceeds the appraised fair market value of the acquisition tract, Tulsa Port of Catoosa shall make a cash payment to the United States reflecting the difference in the appraised fair market values.

CEMP-CR

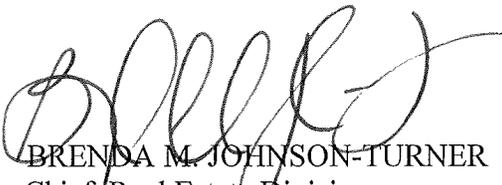
SUBJECT: Implementation Guidance for Sections 6005(c) and (g) of the Water Resources Reform and Development Act (WRRDA) 2014, Tulsa Port of Catoosa, Oklahoma

4. WRRDA 2014 expressly exempts this land exchange from the screening provisions of Title 10 USC Section 2696. All other applicable Federal Statutes, Code of Federal Regulations, Army Regulations, Engineer Regulations/Circulars, Real Estate Policy Guidance Letters, and state laws will be followed. CESWT-RE will submit an exchange package thru CESWD-PDR to CEMP-CR for review and approval. The exchange package will include an Offer to Exchange and Warranty deed executed by the Tulsa Port of Catoosa for the acquisition tract; title evidence and Negotiator's Report for the acquisition tract; a CESWT-OD exchange approval memo; a draft of the Determination Approving Exchange of Real Property prepared for Chief of Operations and Regulatory signature; and a draft quitclaim deed for disposal tract prepared for Director of Real Estate signature. In addition, a Disposal Report must be completed with appropriate environmental documentation in conformance with all applicable laws. The Tulsa Port of Catoosa shall be advised that HQUSACE will have final approval of the conveyance documents and terms of the exchange.

5. In accordance with Section 6005(g)(3), additional necessary and appropriate terms and conditions may be placed in conveyance documents to protect the interests of the United States. The Tulsa Port of Catoosa is responsible for all reasonable and necessary real estate transaction costs, including but not limited to survey, appraisal, title evidence, legal review, and environmental documentation costs required to convey the acquisition tract to the United States and to convey the disposal tract to the Tulsa Port of Catoosa. The Tulsa Port of Catoosa shall hold the United States harmless from any liability with respect to activities carried out, on or after the date of the conveyance, on the Federal land conveyed. The United States shall remain responsible for any liability with respect to activities carried out, before such date, on the Federal land conveyed.

8. Any questions regarding this guidance should be addressed to Theodore Nettles, CEMP-CR, at 202-761-5542.

FOR THE COMMANDER:

  
BRENDA M. JOHNSON-TURNER  
Chief, Real Estate Division  
Directorate of Military Programs

Encl

CEMP-CR

SUBJECT: Implementation Guidance for Sections 6005(c) and (g) of the Water Resources Reform and Development Act (WRRDA) 2014, Tulsa Port of Catoosa, Oklahoma

**SEC. 6005 of WRRDA 2014**

**(c) TULSA PORT OF CATOOSA, ROGERS COUNTY, OKLAHOMA, LAND EXCHANGE.—**

**(1) DEFINITIONS.—**In this subsection:

**(A) FEDERAL LAND.—**The term “Federal land” means the approximately 87 acres of land situated in Rogers County, Oklahoma, contained within United States Tracts 413 and 427 and acquired for the McClellan-Kerr Arkansas Navigation System.

**(B) NON-FEDERAL LAND.—**The term “non-Federal land” means the approximately 34 acres of land situated in Rogers County, Oklahoma, and owned by the Tulsa Port of Catoosa that lie immediately south and east of the Federal land.

**(2) LAND EXCHANGE.—**On conveyance by the Tulsa Port of Catoosa to the United States of all right, title, and interest in and to the non-Federal land, the Secretary shall convey to the Tulsa Port of Catoosa all right, title, and interest of the United States in and to the Federal land.

**(3) SPECIFIC CONDITIONS.—**

**(A) DEEDS.—**

**(i) DEED TO NON-FEDERAL LAND.—**The Secretary may only accept conveyance of the non-Federal land by warranty deed, as determined acceptable by the Secretary.

**(ii) DEED TO FEDERAL LAND.—**The Secretary shall convey the Federal land to the Tulsa Port of Catoosa by quitclaim deed and subject to any reservations, terms, and conditions the Secretary determines necessary to allow the United States to operate and maintain the McClellan-Kerr Arkansas River Navigation System.

**(iii) CASH PAYMENT.—**If the appraised fair market value of the Federal land, as determined by the Secretary, exceeds the appraised fair market value of the non-Federal land, as determined by the Secretary, the Tulsa Port of Catoosa shall make a cash payment to the United States reflecting the difference in the appraised fair market values.

**(g) GENERALLY APPLICABLE PROVISIONS.—**

**(1) SURVEY TO OBTAIN LEGAL DESCRIPTION.—**The exact acreage and the legal description of any real property to be conveyed under this section shall be determined by a survey that is satisfactory to the Secretary.

**(2) APPLICABILITY OF PROPERTY SCREENING PROVISIONS.—**Section 2696 of title 10, United States Code, shall not apply to any conveyance under this section.

CEMP-CR

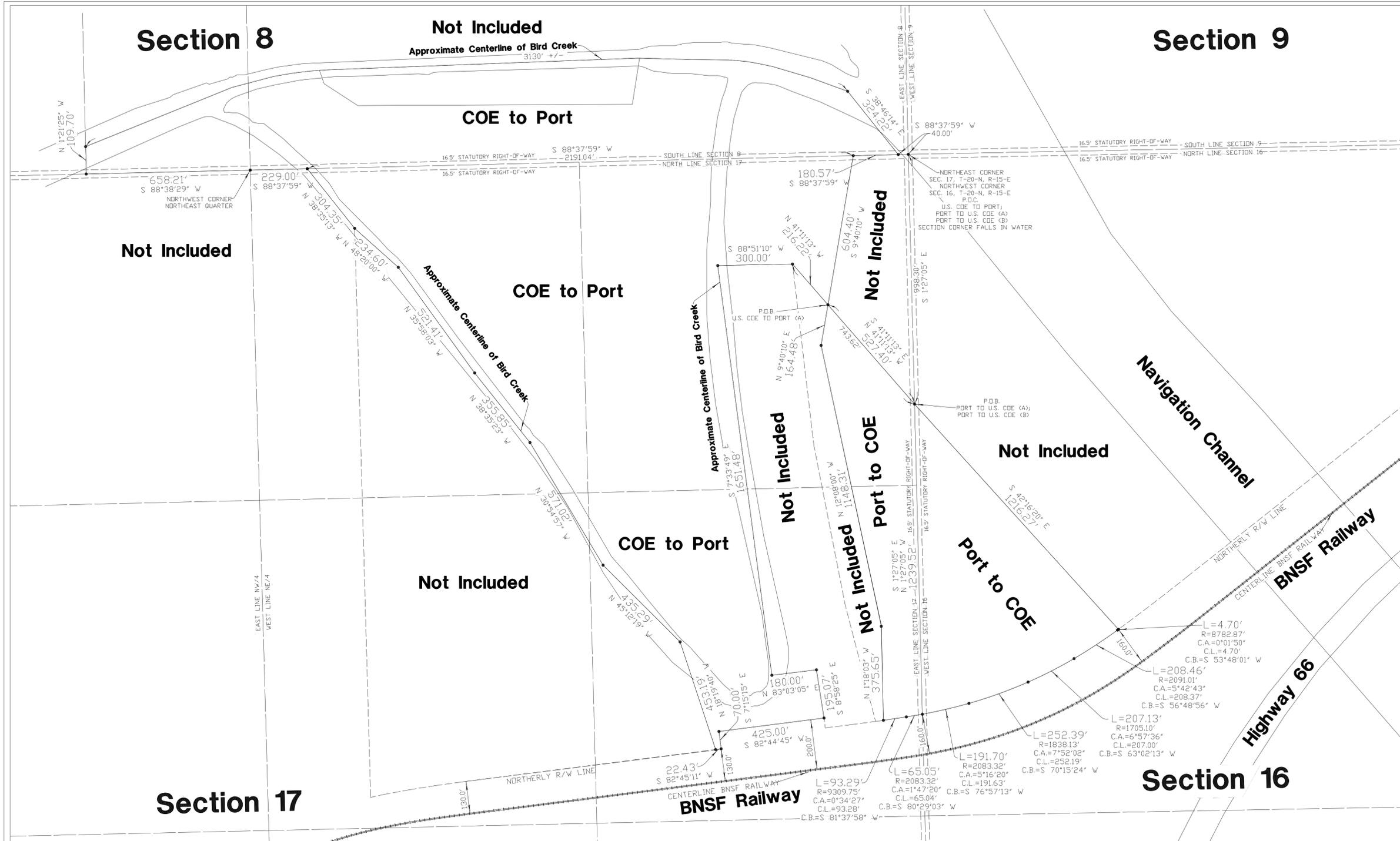
SUBJECT: Implementation Guidance for Sections 6005(c) and (g) of the Water Resources Reform and Development Act (WRRDA) 2014, Tulsa Port of Catoosa, Oklahoma

(3) ADDITIONAL TERMS AND CONDITIONS.—The Secretary may require that any conveyance under this section be subject to such additional terms and conditions as the Secretary considers necessary and appropriate to protect the interests of the United States.

(4) COSTS OF CONVEYANCE.—An entity to which a conveyance is made under this section shall be responsible for all reasonable and necessary costs, including real estate transaction and environmental documentation costs, associated with the conveyance.

(5) LIABILITY.—An entity to which a conveyance is made under this section shall hold the United States harmless from any liability with respect to activities carried out, on or after the date of the conveyance, on the real property conveyed. The United States shall remain responsible for any liability with respect to activities carried out, before such date, on the real property conveyed.

**APPENDIX C**  
**LAND SURVEY**

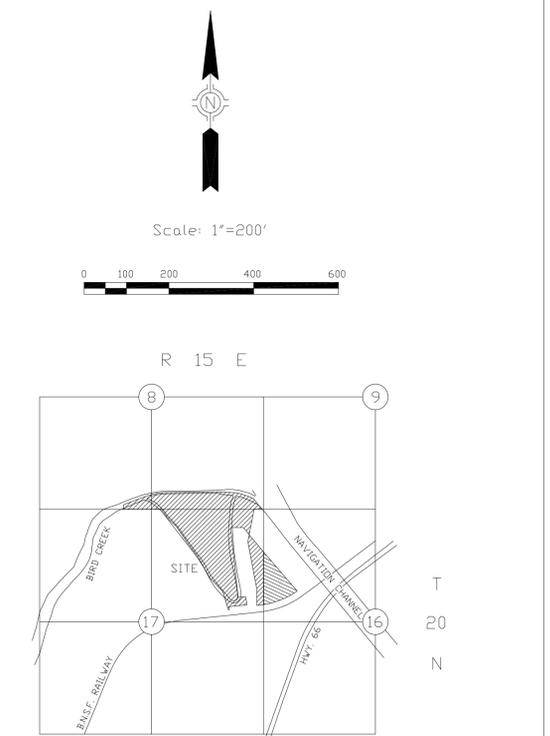


- Notes
1. ABSTRACT OF TITLE OR ATTORNEY'S TITLE OPINION NOT AVAILABLE TO SURVEYOR AT DATE OF SURVEY.
  2. THIS FIRM WAS NOT CONTRACTED TO RESEARCH EASEMENTS OR ENCUMBRANCES OF RECORD. NO ATTEMPT TO RESEARCH THE COUNTY RECORDS OR OTHER RECORD OFFICES WAS PERFORMED BY THIS FIRM, THEREFORE EASEMENTS MAY AFFECT THE SUBJECT TRACT THAT ARE NOT REFLECTED BY THIS PLAT.
  3. THE BEARING BASE FOR THIS IS GRID BEARINGS BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM WITH THE NORTH LINE OF SECTION 17 AS NORTH 88°37'59" EAST.
  4. 3/8" IRON PINS SET AT ALL PROPERTY CORNERS UNLESS OTHERWISE NOTED.

Legend

- C.A. CENTRAL ANGLE
- C.B. CHORD BEARING
- C.L. CHORD LENGTH
- L. LENGTH
- P.O.B. POINT OF BEGINNING
- P.O.C. POINT OF COMMENCEMENT
- COE CORPS OF ENGINEERS
- R/W RIGHT-OF-WAY
- R. RADIUS

THIS PLAT OR DRAWING IS NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF SISEMORE WEISZ & ASSOCIATES, INC. NOR IS IT TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT OBTAINING SAID WRITTEN PERMISSION AND CONSENT. ANY CHANGES MADE FROM THIS PLAT OR DRAWING WITHOUT CONSENT OF SISEMORE WEISZ & ASSOCIATES, INC. IS UNAUTHORIZED AND SHALL RELIEVE SISEMORE WEISZ & ASSOCIATES, INC. OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH CHANGES.



Legal Description - Port Authority to Corps of Engineers (A)

A TRACT OF LAND THAT IS PART OF THE NORTHWEST QUARTER (NW/4) OF SECTION SIXTEEN (16), TOWNSHIP TWENTY (20) NORTH, RANGE FIFTEEN (15) EAST OF THE INDIAN BASE AND MERIDIAN, ROGERS COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF, SAID TRACT OF LAND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 16; THENCE SOUTH 01°27'05" EAST ALONG THE WESTERLY LINE OF SAID NW/4 FOR 998.30 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND; THENCE SOUTH 42°16'20" EAST FOR 1216.27 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF THE BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 47°43'40" WEST, A CENTRAL ANGLE OF 00°01'50", A RADIUS OF 8782.87 FEET, A CHORD BEARING OF SOUTH 53°48'01" WEST, A CHORD LENGTH OF 4.70 FEET, FOR AN ARC LENGTH OF 4.70 FEET TO A POINT OF COMPOUND CURVE; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 53°57'34" WEST, A CENTRAL ANGLE OF 05°42'43", A RADIUS OF 2091.01 FEET, A CHORD BEARING OF SOUTH 56°48'56" WEST, A CHORD LENGTH OF 208.37 FEET, FOR AN ARC LENGTH OF 208.46 FEET TO A POINT OF COMPOUND CURVE; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 66°19'23" WEST, A CENTRAL ANGLE OF 07°52'02", A RADIUS OF 1838.13 FEET, A CHORD BEARING OF SOUTH 70°15'24" WEST, A CHORD LENGTH OF 252.39 FEET, FOR AN ARC LENGTH OF 252.39 FEET TO A POINT OF COMPOUND CURVE; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 74°19'03" WEST, A CENTRAL ANGLE OF 05°16'20", A RADIUS OF 2083.32 FEET, A CHORD BEARING OF SOUTH 76°57'13" WEST, A CHORD LENGTH OF 195.07 FEET, FOR AN ARC LENGTH OF 195.07 FEET TO A POINT ON THE WESTERLY LINE OF SAID NW/4; THENCE NORTH 01°27'05" WEST ALONG SAID WESTERLY LINE FOR 1239.52 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINING 521,191 SQUARE FEET OR 11.965 ACRES, MORE OR LESS.

Legal Description - Corps of Engineers to Port Authority

A TRACT OF LAND THAT IS PART OF THE NORTHEAST QUARTER (NE/4) AND PART OF THE NORTHWEST QUARTER (NW/4) OF SECTION SEVENTEEN (17), AND PART OF THE SOUTH HALF (S/2) OF SECTION EIGHT (8), ALL IN TOWNSHIP TWENTY (20) NORTH, RANGE FIFTEEN (15) EAST OF THE INDIAN BASE AND MERIDIAN, ROGERS COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF, SAID TRACT OF LAND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 17; THENCE SOUTH 01°27'05" EAST ALONG THE EASTERLY LINE OF SAID NE/4 FOR 998.30 FEET; THENCE NORTH 41°11'13" WEST FOR 527.40 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND; THENCE CONTINUING NORTH 41°11'13" WEST FOR 216.22 FEET; THENCE SOUTH 88°51'10" WEST FOR 300.00 FEET; THENCE SOUTH 07°33'49" EAST FOR 1651.48 FEET; THENCE NORTH 83°03'05" EAST FOR 180.00 FEET; THENCE SOUTH 08°58'25" EAST FOR 195.07 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF THE BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY; THENCE SOUTH 82°44'45" WEST ALONG SAID NORTHERLY RIGHT-OF-WAY LINE FOR 425.00 FEET; THENCE SOUTH 07°15'15" EAST ALONG SAID NORTHERLY RIGHT-OF-WAY LINE FOR 70.00 FEET; THENCE SOUTH 82°45'11" WEST ALONG SAID NORTHERLY RIGHT-OF-WAY LINE FOR 22.43 FEET; THENCE NORTH 81°19'40" WEST FOR 453.19 FEET; THENCE NORTH 45°12'19" WEST FOR 435.29 FEET; THENCE NORTH 30°54'57" WEST FOR 571.02 FEET; THENCE NORTH 38°35'23" WEST FOR 355.85 FEET; THENCE NORTH 35°58'03" WEST FOR 521.41 FEET; THENCE NORTH 48°20'00" WEST FOR 234.60 FEET; THENCE NORTH 38°35'13" WEST FOR 304.35 FEET TO A POINT ON THE NORTHERLY LINE OF SAID NE/4; THENCE SOUTH 88°37'59" WEST ALONG SAID NORTHERLY LINE FOR 229.90 FEET TO THE NORTHWEST CORNER OF SAID NE/4; THENCE SOUTH 88°38'29" WEST ALONG THE NORTHERLY LINE OF THE NW/4 FOR 658.21 FEET; THENCE NORTH 01°21'25" WEST FOR 109.70 FEET TO A POINT ON THE APPROXIMATE CENTERLINE OF BIRD CREEK; THENCE NORTHEASTERLY, EASTERLY, AND SOUTHEASTERLY ALONG THE APPROXIMATE CENTERLINE OF BIRD CREEK TO A POINT THAT IS NORTH 01°15'58" WEST A DISTANCE OF 257.13 FEET AND SAID NORTHERLY LINE FOR 229.90 FEET TO THE NORTHWEST CORNER OF SAID NE/4; THENCE SOUTH 88°44'02" WEST A DISTANCE OF 237.39 FEET FROM THE SOUTHEAST CORNER OF SECTION 8; THENCE SOUTH 38°46'14" EAST FOR 324.22 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID SECTION 8, THE SAME BEING A POINT ON THE NORTHERLY LINE OF SAID SECTION 17; THENCE SOUTH 88°37'59" WEST ALONG THE COMMON SECTION LINE FOR 180.57 FEET; THENCE SOUTH 09°40'10" WEST FOR 604.40 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINING 3,356,507 SQUARE FEET OR 77.055 ACRES, MORE OR LESS.

Legal Description - Port Authority to Corps of Engineers (B)

A TRACT OF LAND THAT IS PART OF THE NORTHEAST QUARTER (NE/4) OF SECTION SEVENTEEN (17), TOWNSHIP TWENTY (20) NORTH, RANGE FIFTEEN (15) EAST OF THE INDIAN BASE AND MERIDIAN, ROGERS COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF, SAID TRACT OF LAND BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 17; THENCE SOUTH 01°27'05" EAST ALONG THE EASTERLY LINE OF SAID NE/4 FOR 998.30 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND; THENCE CONTINUING SOUTH 01°27'05" EAST ALONG SAID EASTERLY LINE FOR 1239.52 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF THE BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 79°35'23" WEST, A CENTRAL ANGLE OF 01°47'20", A RADIUS OF 2083.32 FEET, A CHORD BEARING OF SOUTH 80°29'03" WEST, A CHORD LENGTH OF 65.04 FEET, FOR AN ARC LENGTH OF 65.05 FEET TO A POINT OF COMPOUND CURVE; THENCE SOUTHWESTERLY ALONG A CURVE TO THE RIGHT, AND ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, SAID CURVE HAVING AN INITIAL TANGENT BEARING OF SOUTH 81°20'45" WEST, A CENTRAL ANGLE OF 00°34'27", A RADIUS OF 9309.75 FEET, A CHORD BEARING OF SOUTH 81°37'58" WEST, A CHORD LENGTH OF 93.28 FEET, FOR AN ARC LENGTH OF 93.29 FEET; THENCE NORTH 01°18'03" WEST FOR 375.65 FEET; THENCE NORTH 12°08'00" WEST FOR 1148.31 FEET; THENCE NORTH 09°40'10" EAST FOR 164.48 FEET; THENCE SOUTH 41°11'13" EAST FOR 527.40 FEET TO THE POINT OF BEGINNING OF SAID TRACT OF LAND.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINING 342,021 SQUARE FEET OR 7.852 ACRES, MORE OR LESS.

# Exhibit Drawing

of

## Part of Sections 8, 16 & 17,

### T-20-N, R-15-E

#### Rogers County, State of Oklahoma

**SWA** Sisemore Weisz & Associates, Inc.

6111 EAST 32ND PLACE, TULSA, OKLAHOMA 74135  
 C.A. NO. 2421

PHONE: (918) 465-3600  
 FAX: (918) 665-8668  
 EXP. DATE: 6/30/17

REVISIONS	BY	DATE	FILE#	SURVEY BY:	DATE:
			2015.1700		1/20/2016
			17679	DRAWN BY: AGM	SCALE: 1" = 200'
				CHECKED BY: EDR	SHEET 1 OF 1

DRAWING: K1376791767995-EXHIBIT.DWG

## **APPENDIX D**

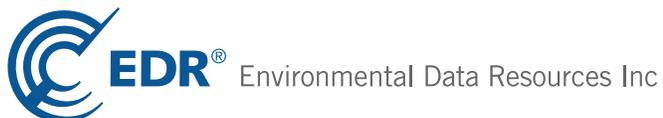
### **ENVIRONMENTAL DATA RESOURCES REPORT**

**Tulsa EA Update**

Fort Gibson Road/Bird Creek Ave  
Catoosa, OK 74015

Inquiry Number: 4466554.2s  
November 13, 2015

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
 Please contact EDR at 1-800-352-0050  
 with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

FORT GIBSON ROAD/BIRD CREEK AVE  
CATOOSA, OK 74015

#### COORDINATES

Latitude (North): 36.2194000 - 36° 13' 9.84"  
Longitude (West): 95.7420000 - 95° 44' 31.20"  
Universal Transverse Mercator: Zone 15  
UTM X (Meters): 253521.9  
UTM Y (Meters): 4011569.0  
Elevation: 560 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5924841 CATOOSA, OK  
Version Date: 2012  
  
Southwest Map: 5926382 MINGO, OK  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20100811, 20100810  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
FORT GIBSON ROAD/BIRD CREEK AVE  
CATOOSA, OK 74015

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>	OKG BULKHANDLING, IN	980 FT. GIBSON RD.	CERC-NFRAP	Higher	1705, 0.323, NNE

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

## EXECUTIVE SUMMARY

### **State- and tribal - equivalent CERCLIS**

SHWS..... The Land Report

### **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF..... Permitted Solid Waste Disposal & Processing Facilities

### **State and tribal leaking storage tank lists**

LUST..... Leaking Underground Storage Tank List  
LAST..... Leaking Aboveground Storage Tanks List  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing  
UST..... Underground Storage Tank Listing  
AST..... Aboveground Storage Tanks  
INDIAN UST..... Underground Storage Tanks on Indian Land

### **State and tribal institutional control / engineering control registries**

INST CONTROL..... Institutional Control Sites

### **State and tribal voluntary cleanup sites**

VCP..... Voluntary Cleanup Site Inventory  
INDIAN VCP..... Voluntary Cleanup Priority Listing

### **State and tribal Brownfields sites**

BROWNFIELDS..... Brownfield Sites

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

SWRCY..... Recycling Facilities  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory

#### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... National Clandestine Laboratory Register  
US CDL..... Clandestine Drug Labs

#### **Local Lists of Registered Storage Tanks**

HIST UST..... Underground Storage Tank List, List II Version

# EXECUTIVE SUMMARY

## **Local Land Records**

LIENS 2..... CERCLA Lien Information

## **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
OK COMPLAINT..... Oklahoma Complaint System Database

## **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PRP..... Potentially Responsible Parties  
PADS..... PCB Activity Database System  
ICIS..... Integrated Compliance Information System  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
MLTS..... Material Licensing Tracking System  
COAL ASH DOE..... Steam-Electric Plant Operation Data  
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List  
PCB TRANSFORMER..... PCB Transformer Registration Database  
RADINFO..... Radiation Information Database  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing  
DOT OPS..... Incident and Accident Data  
CONSENT..... Superfund (CERCLA) Consent Decrees  
INDIAN RESERV..... Indian Reservations  
UMTRA..... Uranium Mill Tailings Sites  
LEAD SMELTERS..... Lead Smelter Sites  
US AIRS..... Aerometric Information Retrieval System Facility Subsystem  
US MINES..... Mines Master Index File  
FINDS..... Facility Index System/Facility Registry System  
AIRS..... Permitted AIRS Facility Listing  
DRYCLEANERS..... Drycleaner Facility Listing  
Financial Assurance..... Financial Assurance Information Listing  
TIER 2..... Tier 2 Data Listing  
UIC..... Underground Injection Wells Database Listing

## **EDR HIGH RISK HISTORICAL RECORDS**

### **EDR Exclusive Records**

EDR MGP..... EDR Proprietary Manufactured Gas Plants

## EXECUTIVE SUMMARY

EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations  
EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List  
RGA LF..... Recovered Government Archive Solid Waste Facilities List  
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

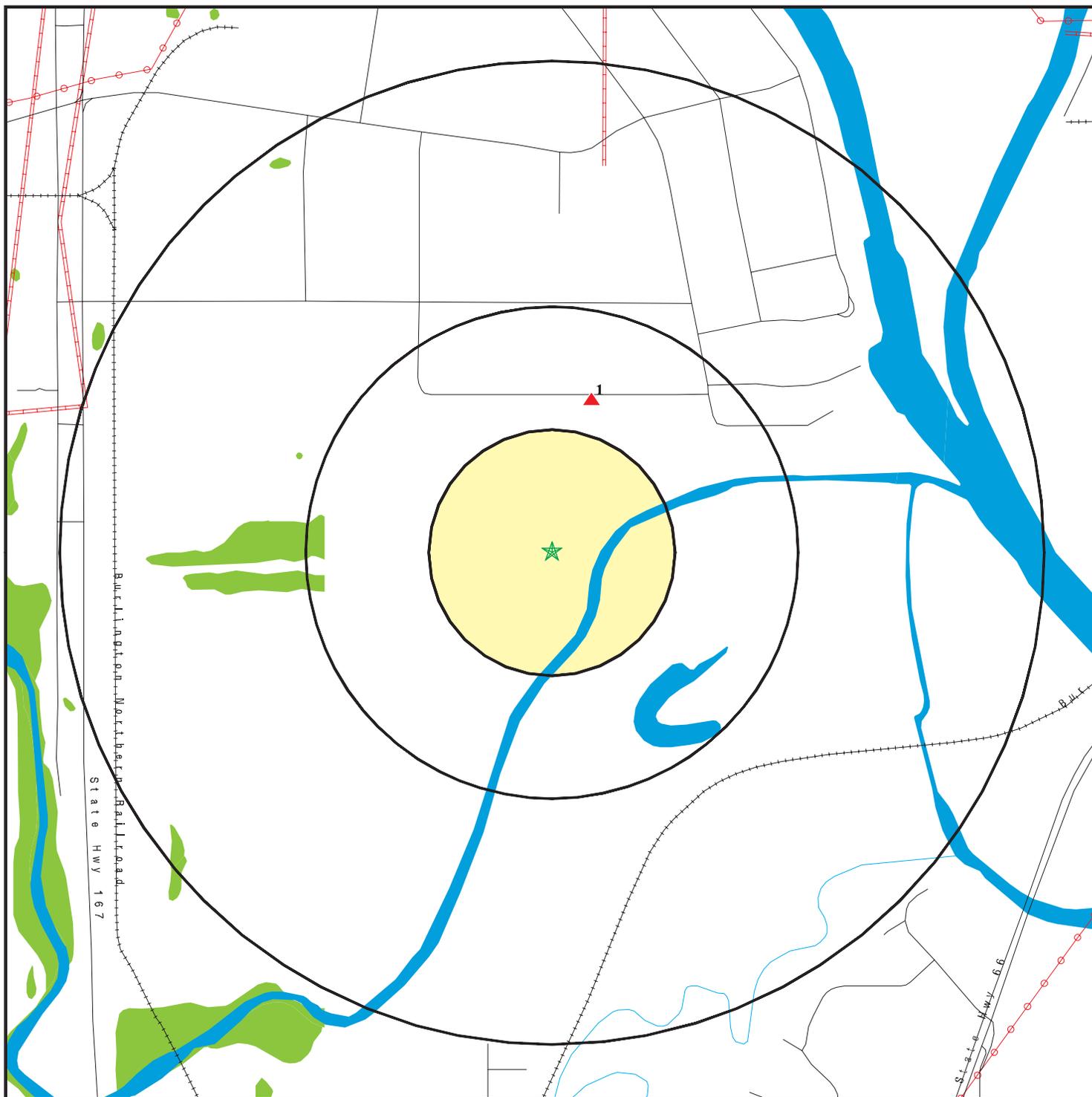
A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OKG BULKHANDLING, IN	980 FT. GIBSON RD.	NNE 1/4 - 1/2 (0.323 mi.)	1	7

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 4466554.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ☒ National Priority List Sites
- ☒ Dept. Defense Sites

- ☒ Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Pipelines
- National Wetland Inventory

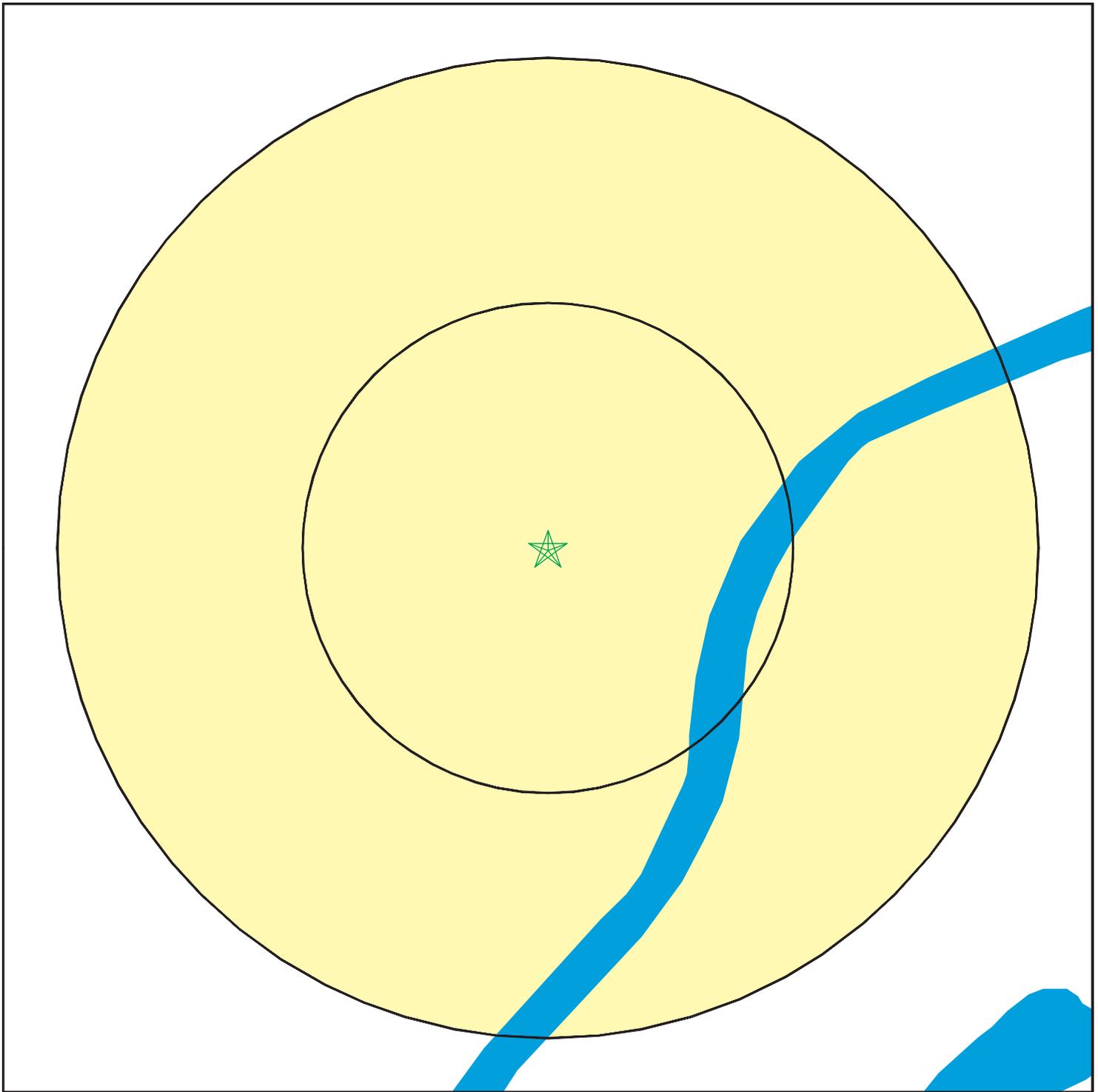


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson Road/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2194 / 95.742

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466554.2s  
 DATE: November 13, 2015 2:20 pm

# DETAIL MAP - 4466554.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites



▨ Indian Reservations BIA



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson Road/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2194 / 95.742

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466554.2s  
 DATE: November 13, 2015 2:21 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	0	NR	NR	0
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>State and tribal voluntary cleanup sites</i></b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b><i>Local Lists of Registered Storage Tanks</i></b>								
HIST UST	0.250		0	0	NR	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
OK COMPLAINT	TP		NR	NR	NR	NR	NR	0
<b><i>Other Ascertainable Records</i></b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**1**  
**NNE**  
**1/4-1/2**  
**0.323 mi.**  
**1705 ft.**

**OKG BULKHANDLING, INC.**  
**980 FT. GIBSON RD.**  
**CATOOSA (PT.OF), OK 74105**

**CERC-NFRAP**    **1003873936**  
**OKD980750459**

**Relative:**  
**Higher**

CERC-NFRAP:  
 Site ID: 0601394  
 Federal Facility: Not a Federal Facility  
 NPL Status: Not on the NPL  
 Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

**Actual:**  
**573 ft.**

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 6424526.00000  
 Person ID: 6270175.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
 Date Started: / /  
 Date Completed: 04/01/80  
 Priority Level: Not reported

Action: ARCHIVE SITE  
 Date Started: / /  
 Date Completed: 12/01/84  
 Priority Level: Not reported

Action: SITE INSPECTION  
 Date Started: 12/01/84  
 Date Completed: 12/01/84  
 Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: PRELIMINARY ASSESSMENT  
 Date Started: 05/01/84  
 Date Completed: 05/01/84  
 Priority Level: Low priority for further assessment

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

#### NPL Site Boundaries

##### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 10/09/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 08/28/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 08/28/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

### **RCRA-TSDF: RCRA - Treatment, Storage and Disposal**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

### **RCRA-LQG: RCRA - Large Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

### **RCRA-SQG: RCRA - Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal institutional controls / engineering controls registries***

### **LUCIS: Land Use Control Information System**

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 09/28/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

### **US ENG CONTROLS: Engineering Controls Sites List**

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

### **US INST CONTROL: Sites with Institutional Controls**

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

## ***Federal ERNS list***

### **ERNS: Emergency Response Notification System**

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-267-2180
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 09/29/2015
Number of Days to Update: 82	Next Scheduled EDR Contact: 01/11/2016
	Data Release Frequency: Annually

## ***State- and tribal - equivalent CERCLIS***

### **SHWS: Voluntary Cleanup & Superfund Site Status Report**

Land restoration projects carried out in several DEQ programs.

Date of Government Version: 12/31/2009	Source: Department of Environmental Quality
Date Data Arrived at EDR: 05/28/2010	Telephone: 405-702-5100
Date Made Active in Reports: 07/13/2010	Last EDR Contact: 08/21/2015
Number of Days to Update: 46	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## ***State and tribal landfill and/or solid waste disposal site lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SWF/LF: Permitted Solid Waste Disposal & Processing Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/18/2014  
Date Data Arrived at EDR: 11/05/2014  
Date Made Active in Reports: 01/05/2015  
Number of Days to Update: 61

Source: Department of Environmental Quality  
Telephone: 405-702-5184  
Last EDR Contact: 11/07/2015  
Next Scheduled EDR Contact: 02/15/2016  
Data Release Frequency: Semi-Annually

## State and tribal leaking storage tank lists

### LAST: Leaking Aboveground Storage Tanks List

Leaking aboveground storage tank site locations.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-522-4640  
Last EDR Contact: 10/14/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

### LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/14/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

### INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 07/30/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

### INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/21/2015  
Date Data Arrived at EDR: 07/29/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 76

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/13/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 07/28/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 08/07/2015	Telephone: 312-886-7439
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 10/30/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

## INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6271
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015	Source: EPA Region 1
Date Data Arrived at EDR: 04/30/2015	Telephone: 617-918-1313
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/27/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

### **State and tribal registered storage tank lists**

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/08/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Varies

#### UST: Underground Storage Tank Listing

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

AST: Aboveground Storage Tanks  
Registered Aboveground Storage Tanks.

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 07/28/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/13/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014  
Date Data Arrived at EDR: 02/13/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 28

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/30/2015  
Next Scheduled EDR Contact: 02/09/2016  
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014  
Date Data Arrived at EDR: 11/25/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 65

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/03/2015  
Date Data Arrived at EDR: 04/30/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 53

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/27/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/28/2015  
Date Data Arrived at EDR: 08/14/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 60

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 07/21/2015  
Date Data Arrived at EDR: 07/29/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 76

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 07/30/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

## ***State and tribal institutional control / engineering control registries***

### INST CONTROL: Institutional Control Sites

Sites with institutional controls in place.

Date of Government Version: 08/06/2015  
Date Data Arrived at EDR: 08/19/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 27

Source: Department of Environmental Quality  
Telephone: 405-702-5100  
Last EDR Contact: 08/19/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## ***State and tribal voluntary cleanup sites***

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 04/20/2009  
Next Scheduled EDR Contact: 07/20/2009  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: 617-918-1102
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 09/29/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/11/2016
	Data Release Frequency: Varies

## VCP: Voluntary Cleanup Site Inventory

Investigations and cleanups by groups or individuals participating in the Voluntary Cleanup Program (VCP).

Date of Government Version: 08/06/2015	Source: Department of Environmental Quality
Date Data Arrived at EDR: 08/19/2015	Telephone: 405-702-5100
Date Made Active in Reports: 09/15/2015	Last EDR Contact: 08/19/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## **State and tribal Brownfields sites**

### BROWNFIELDS: Brownfield Sites

Brownfields are defined by Oklahoma law as abandoned, idled or under used industrial or commercial facilities or other real property at which expansion or redevelopment of the real property is complicated by environmental contamination caused by regulated substances. This program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 09/07/2012	Source: Department of Environmental Quality
Date Data Arrived at EDR: 09/07/2012	Telephone: 405-702-5100
Date Made Active in Reports: 10/10/2012	Last EDR Contact: 08/12/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: No Update Planned

### BROWNFIELDS 2: Brownfields Public Record Listing

The Brownfields program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 07/28/2015	Source: Department of Environmental Quality
Date Data Arrived at EDR: 08/21/2015	Telephone: 405-702-5100
Date Made Active in Reports: 09/15/2015	Last EDR Contact: 08/17/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/22/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/24/2015	Telephone: 202-566-2777
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 09/23/2015
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/04/2016
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### SWRCY: Recycling Facilities

A listing of recycling facility locations.

Date of Government Version: 07/20/2015

Date Data Arrived at EDR: 07/24/2015

Date Made Active in Reports: 08/19/2015

Number of Days to Update: 26

Source: Department of Environmental Quality

Telephone: 405-702-5100

Last EDR Contact: 10/20/2015

Next Scheduled EDR Contact: 02/01/2016

Data Release Frequency: Varies

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998

Date Data Arrived at EDR: 12/03/2007

Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 11/06/2015

Next Scheduled EDR Contact: 02/15/2016

Data Release Frequency: Varies

### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985

Date Data Arrived at EDR: 08/09/2004

Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346

Last EDR Contact: 06/09/2004

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Date Data Arrived at EDR: 05/07/2009

Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9

Telephone: 415-947-4219

Last EDR Contact: 10/26/2015

Next Scheduled EDR Contact: 02/08/2016

Data Release Frequency: No Update Planned

## **Local Lists of Hazardous waste / Contaminated Sites**

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/12/2015

Date Data Arrived at EDR: 09/04/2015

Date Made Active in Reports: 11/03/2015

Number of Days to Update: 60

Source: Drug Enforcement Administration

Telephone: 202-307-1000

Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015

Data Release Frequency: No Update Planned

### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/12/2015  
Date Data Arrived at EDR: 09/04/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 60

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/31/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Quarterly

## **Local Lists of Registered Storage Tanks**

HIST UST: Underground Storage Tank List, List II Version

This underground storage tank listing includes tank information through March 2003. This listing is no longer updated by the Oklahoma Corporation Commission.

Date of Government Version: 03/21/2003  
Date Data Arrived at EDR: 04/28/2003  
Date Made Active in Reports: 05/27/2003  
Number of Days to Update: 29

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 01/19/2009  
Next Scheduled EDR Contact: 04/19/2009  
Data Release Frequency: No Update Planned

## **Local Land Records**

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014  
Date Data Arrived at EDR: 03/18/2014  
Date Made Active in Reports: 04/24/2014  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 10/30/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

## **Records of Emergency Release Reports**

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 68

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 09/30/2014  
Date Data Arrived at EDR: 06/02/2015  
Date Made Active in Reports: 06/04/2015  
Number of Days to Update: 2

Source: Oklahoma Corporation Commission  
Telephone: 405-521-2384  
Last EDR Contact: 10/05/2015  
Next Scheduled EDR Contact: 01/18/2016  
Data Release Frequency: Varies

## **Other Ascertainable Records**

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015  
Date Data Arrived at EDR: 07/08/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 09/11/2015  
Next Scheduled EDR Contact: 12/21/2015  
Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: Semi-Annually

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 02/06/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 339

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: N/A

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 08/21/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015  
Date Data Arrived at EDR: 09/03/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 61

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 08/12/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 11/10/2015
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 11/13/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: 202-260-5521
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 09/25/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/04/2016
	Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013	Source: EPA
Date Data Arrived at EDR: 02/12/2015	Telephone: 202-566-0250
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 08/28/2015
Number of Days to Update: 110	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 10/26/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013	Source: EPA
Date Data Arrived at EDR: 12/12/2013	Telephone: 703-416-0223
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 09/11/2015
Number of Days to Update: 74	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/26/2015	Telephone: 202-564-8600
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/13/2015
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/29/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/24/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/24/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/26/2015	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/10/2015	Telephone: 301-415-7169
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 09/03/2015
Number of Days to Update: 95	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Quarterly

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 07/13/2015
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/11/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/29/2015
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: 202-343-9775
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 10/07/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 11/07/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/15/2016
	Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/02/2015  
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 08/28/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: Semi-Annually

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 08/25/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014  
Date Data Arrived at EDR: 11/26/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 64

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 10/05/2015  
Next Scheduled EDR Contact: 01/18/2016  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/14/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 09/01/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 09/04/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 09/04/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Varies

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015  
Date Data Arrived at EDR: 09/09/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 55

Source: EPA  
Telephone: (214) 665-2200  
Last EDR Contact: 09/09/2015  
Next Scheduled EDR Contact: 12/21/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AIRS: Permitted AIRS Facility Listing

A listing of permitted AIRS facility locations.

Date of Government Version: 06/23/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 39

Source: Department of Environmental Quality  
Telephone: 405-702-4100  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

Date of Government Version: 06/23/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 39

Source: Department of Environmental Quality  
Telephone: 405-702-9100  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information.

Date of Government Version: 07/25/2014  
Date Data Arrived at EDR: 11/06/2014  
Date Made Active in Reports: 01/13/2015  
Number of Days to Update: 68

Source: Department of Environmental Quality  
Telephone: 405-702-5105  
Last EDR Contact: 10/06/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## Financial Assurance 2: Financial Assurance Information Listing

Financial Assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/10/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 01/24/2014  
Number of Days to Update: 43

Source: Department of Environmental Quality  
Telephone: 405-702-5100  
Last EDR Contact: 10/06/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## TIER 2: Tier 2 Data Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 06/29/2012  
Date Made Active in Reports: 08/29/2012  
Number of Days to Update: 61

Source: Department of Environmental Quality  
Telephone: 405-702-1000  
Last EDR Contact: 09/14/2015  
Next Scheduled EDR Contact: 12/28/2015  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Database Listing

Class I injection wells. CLASS I wells are used to inject liquid hazardous and non-hazardous wastes beneath the lower most Underground Sources of Drinking Water (USDW).

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 06/12/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 53

Source: Department of Environmental Quality  
Telephone: 405-702-5188  
Last EDR Contact: 11/07/2016  
Next Scheduled EDR Contact: 02/01/2016  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/03/2014  
Number of Days to Update: 186

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/20/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 203	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Oklahoma Corporation Commission in Oklahoma.

Date of Government Version: N/A	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/27/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 179	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

## CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 08/17/2015
Number of Days to Update: 45	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: No Update Planned

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/06/2015	Telephone: 518-402-8651
Date Made Active in Reports: 08/24/2015	Last EDR Contact: 11/08/2015
Number of Days to Update: 18	Next Scheduled EDR Contact: 02/15/2016
	Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014	Source: Department of Natural Resources
Date Data Arrived at EDR: 03/19/2015	Telephone: N/A
Date Made Active in Reports: 04/07/2015	Last EDR Contact: 09/10/2015
Number of Days to Update: 19	Next Scheduled EDR Contact: 12/28/2015
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Oil/Gas Pipelines

Source: PennWell Corporation  
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

### Electric Power Transmission Line Data

Source: PennWell Corporation  
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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Day Care Centers

Source: Department of Human Services  
Telephone: 405-521-3561

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

TULSA EA UPDATE  
FORT GIBSON ROAD/BIRD CREEK AVE  
CATOOSA, OK 74015

### TARGET PROPERTY COORDINATES

Latitude (North): 36.2194 - 36° 13' 9.84"  
Longitude (West): 95.742 - 95° 44' 31.20"  
Universal Tranverse Mercator: Zone 15  
UTM X (Meters): 253521.9  
UTM Y (Meters): 4011569.0  
Elevation: 560 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5924841 CATOOSA, OK  
Version Date: 2012  
  
Southwest Map: 5926382 MINGO, OK  
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

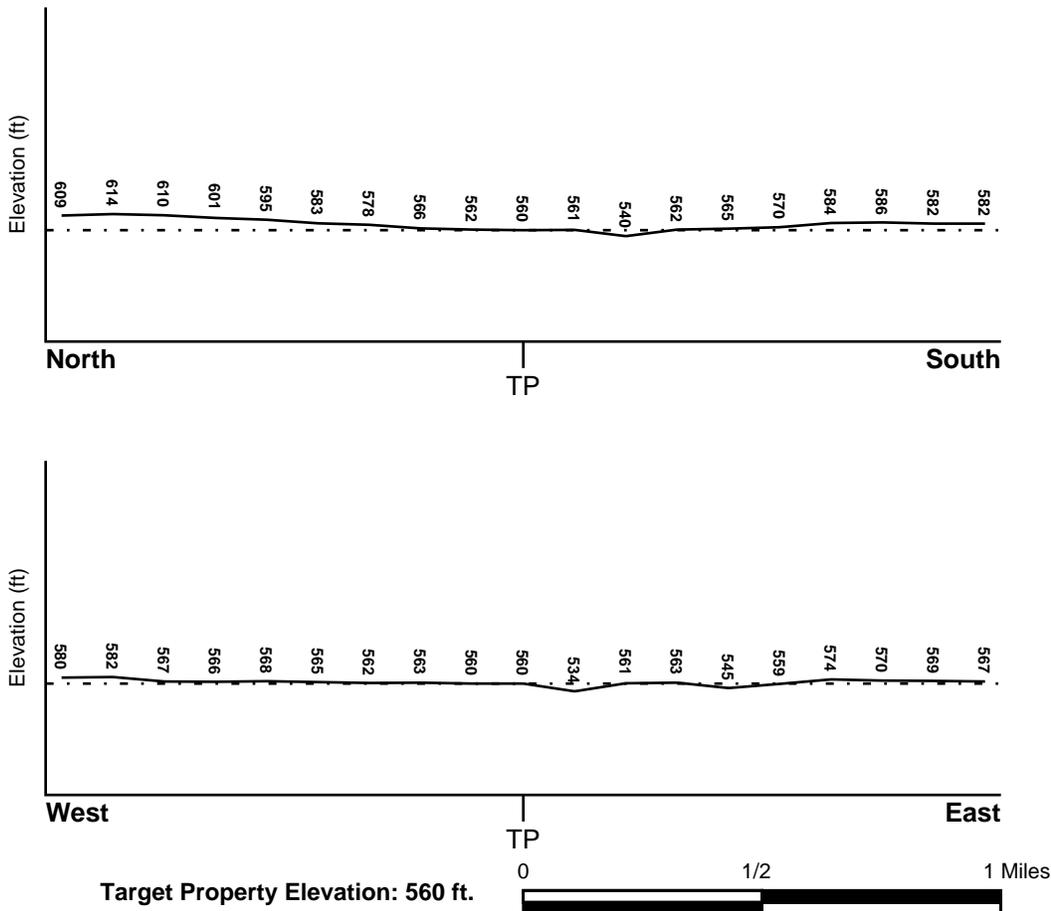
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## **HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
ROGERS, OK	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
CATOOSA	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

Era:	Paleozoic
System:	Pennsylvanian
Series:	Des Moinesian Series
Code:	PP2 ( <i>decoded above as Era, System &amp; Series</i> )

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 4466554.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Tulsa EA Update  
ADDRESS: Fort Gibson Road/Bird Creek Ave  
Catoosa OK 74015  
LAT/LONG: 36.2194 / 95.742

CLIENT: Dewberry Engineers Inc.  
CONTACT: Ami Gulden  
INQUIRY #: 4466554.2s  
DATE: November 13, 2015 2:21 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: Barge

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Not reported	Not reported	Max: 4.233 Min: 1.4114	Max: 7.8 Min: 6.1
2	7 inches	72 inches	silty clay loam	Not reported	Not reported	Max: 4.233 Min: 1.4114	Max: 7.8 Min: 6.1

### Soil Map ID: 2

Soil Component Name: Water

Soil Surface Texture: water

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:  
Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	79 inches	water	Not reported	Not reported	Max: Min:	Max: Min:

### Soil Map ID: 3

Soil Component Name: Verdigris

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6
2	16 inches	79 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6

### Soil Map ID: 4

Soil Component Name: Verdigris

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6
2	16 inches	79 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6

### Soil Map ID: 5

Soil Component Name: Osage

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 7.8 Min: 5.1
2	22 inches	59 inches	clay	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 7.8 Min: 5.6

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	OK5000000145360	1/8 - 1/4 Mile NNE
A2	OK5000000154308	1/4 - 1/2 Mile North
A3	OK5000000150400	1/4 - 1/2 Mile NNE
4	OK5000000150401	1/4 - 1/2 Mile NNE
B5	OK5000000060400	1/2 - 1 Mile NNE
B6	OK5000000060399	1/2 - 1 Mile NNE
B7	OK5000000060402	1/2 - 1 Mile NNE
B8	OK5000000060401	1/2 - 1 Mile NNE
9	OK5000000106184	1/2 - 1 Mile South
10	OK5000000146535	1/2 - 1 Mile NW
11	OK5000000154309	1/2 - 1 Mile NNE
C12	OK5000000141047	1/2 - 1 Mile NNE
13	OK5000000069470	1/2 - 1 Mile NNW
C14	OK5000000138938	1/2 - 1 Mile NNE
15	OK5000000143506	1/2 - 1 Mile NW

## OTHER STATE DATABASE INFORMATION

### STATE OIL/GAS WELL INFORMATION

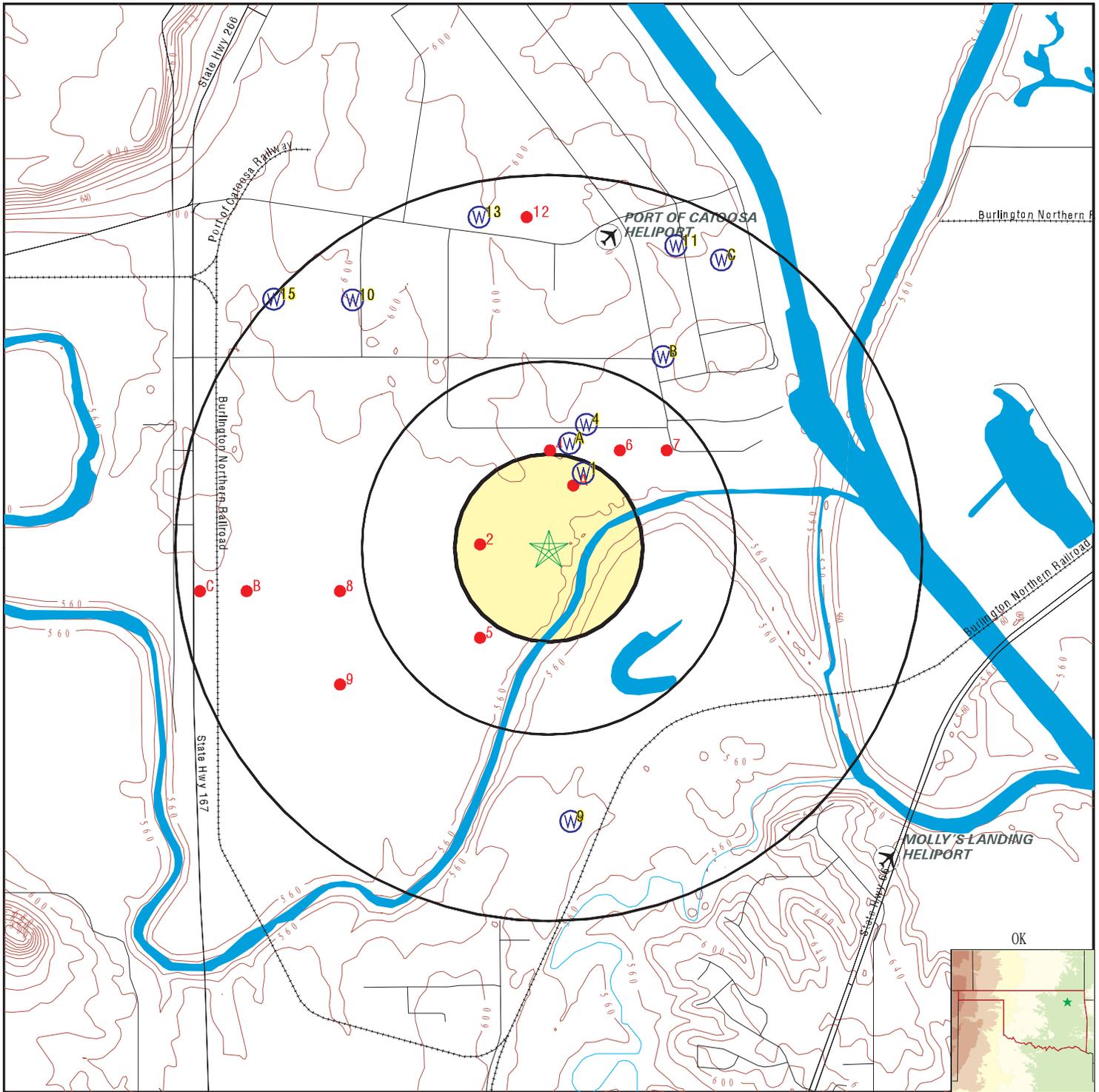
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	OKOG20000332756	1/8 - 1/4 Mile NNE

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE OIL/GAS WELL INFORMATION

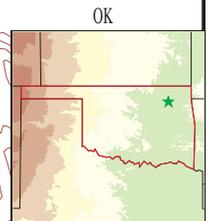
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
2	OKOG20000336922	1/8 - 1/4 Mile West
A3	OKOG20000332755	1/8 - 1/4 Mile NNE
4	OKOG20000332754	1/4 - 1/2 Mile North
5	OKOG20000332769	1/4 - 1/2 Mile SW
6	OKOG20000332752	1/4 - 1/2 Mile NE
7	OKOG20000332753	1/4 - 1/2 Mile NE
8	OKOG20000332766	1/2 - 1 Mile WSW
9	OKOG20000332767	1/2 - 1 Mile WSW
B10	OKOG20000332763	1/2 - 1 Mile West
B11	OKOG20000332778	1/2 - 1 Mile West
12	OKOG20000332758	1/2 - 1 Mile North
C13	OKOG20000332764	1/2 - 1 Mile West
C14	OKOG20000332762	1/2 - 1 Mile West

# PHYSICAL SETTING SOURCE MAP - 4466554.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells



SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson Road/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2194 / 95.742

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466554.2s  
 DATE: November 13, 2015 2:21 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**NNE**  
**1/8 - 1/4 Mile**  
**Higher**

**OK WELLS      OK5000000145360**

Latitude:	36.222308	El method:	Not Reported
Longitude:	-95.740343	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148574	Quarter1:	SE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	28.5	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	08-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148574">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148574</a>		
Site id:	OK5000000145360		

**A2**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**OK WELLS      OK5000000154308**

Latitude:	36.223238	El method:	Not Reported
Longitude:	-95.741566	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148575	Quarter1:	NE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	23	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	08-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148575">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148575</a>		
Site id:	OK5000000154308		

**A3**  
**NNE**  
**1/4 - 1/2 Mile**  
**Higher**

**OK WELLS      OK5000000150400**

Latitude:	36.223691	El method:	Not Reported
Longitude:	-95.740439	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148573	Quarter1:	NE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI		
Total dpth:	31.5		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Approx yld:	0	LI method:	GPS-uncorrected data
Const date:	08-JAN-13	Aquifer co:	Not Reported
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148573">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148573</a>		
Site id:	OK5000000150400		

**4**  
**NNE**  
**1/4 - 1/2 Mile**  
**Higher**

**OK WELLS      OK5000000150401**

Latitude:	36.224198	El method:	Not Reported
Longitude:	-95.740196	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148576	Quarter1:	SE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	NW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	30.5	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	09-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148576">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148576</a>		
Site id:	OK5000000150401		

**B5**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**OK WELLS      OK5000000060400**

Latitude:	36.226834	El method:	Not Reported
Longitude:	-95.736521	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	60045	Quarter1:	NE
Work type:	Geotechnical Boring	Quarter3:	SW
Owner name:	Reinforcing Services Inc.	Township:	20N
Quarter2:	NE	Use class:	Soil Evaluation
Section:	08	First wtr:	0
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	25	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	24-APR-01		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60045">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60045</a>		
Site id:	OK5000000060400		

**B6**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**OK WELLS      OK5000000060399**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude:	36.226834	El method:	Not Reported
Longitude:	-95.736521	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	60044	Quarter1:	NE
Work type:	Geotechnical Boring	Quarter3:	SW
Owner name:	Reinforcing Services, Inc.	Township:	20N
Quarter2:	NE	Use class:	Soil Evaluation
Section:	08	First wtr:	0
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	23	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	24-APR-01		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60044">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60044</a>		
Site id:	OK500000060399		

**B7**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**OK WELLS      OK500000060402**

Latitude:	36.226834	El method:	Not Reported
Longitude:	-95.736521	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	60047	Quarter1:	NE
Work type:	Geotechnical Boring	Quarter3:	SW
Owner name:	Reinforcing Services Inc.	Township:	20N
Quarter2:	NE	Use class:	Soil Evaluation
Section:	08	First wtr:	0
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	18	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	24-APR-01		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60047">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60047</a>		
Site id:	OK500000060402		

**B8**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**OK WELLS      OK500000060401**

Latitude:	36.226834	El method:	Not Reported
Longitude:	-95.736521	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	60046	Quarter1:	NE
Work type:	Geotechnical Boring	Quarter3:	SW
Owner name:	Reinforcing Service Inc.	Township:	20N
Quarter2:	NE	Use class:	Soil Evaluation
Section:	08	First wtr:	0
Range:	15EI		
Total dpth:	18		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Approx yld:	0	LI method:	Interpolation from PLSS
Const date:	24-APR-01	Aquifer co:	Not Reported
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60046">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60046</a>		
Site id:	OK5000000060401		

**9  
South  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000106184**

Latitude:	36.208775	El method:	Not Reported
Longitude:	-95.740941	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	106812	Quarter1:	NE
Work type:	Groundwater Well	Quarter3:	SW
Owner name:	City of Tulsa	Township:	20N
Quarter2:	SW	Use class:	Industrial
Section:	17	First wtr:	0
Range:	15E1	LI method:	Mathematical conversion program
Total dpth:	0	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	30-DEC-99		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106812">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106812</a>		
Site id:	OK5000000106184		

**10  
NW  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000146535**

Latitude:	36.229037	El method:	Not Reported
Longitude:	-95.751392	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	152384	Quarter1:	SW
Work type:	Monitoring Well	Quarter3:	NE
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	07	First wtr:	0
Range:	15E1	LI method:	GPS-uncorrected data
Total dpth:	25	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	20-MAY-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152384">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152384</a>		
Site id:	OK5000000146535		

**11  
NNE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000154309**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude:	36.231147	El method:	Not Reported
Longitude:	-95.735911	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148577	Quarter1:	NE
Work type:	Monitoring Well	Quarter3:	NW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SE	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	16	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	10-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148577">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148577</a>		
Site id:	OK5000000154309		

**C12  
NNE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000141047**

Latitude:	36.23058	El method:	Not Reported
Longitude:	-95.734088	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	146360	Quarter1:	NW
Work type:	Monitoring Well	Quarter3:	NE
Owner name:	Thomas Russell Co.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	30	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	09-OCT-12		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=146360">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=146360</a>		
Site id:	OK5000000141047		

**13  
NNW  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000069470**

Latitude:	36.232255	El method:	Not Reported
Longitude:	-95.745336	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	69274	Quarter1:	SE
Work type:	Geotechnical Boring	Quarter3:	NE
Owner name:	Dewberry Design Group Inc.	Township:	20N
Quarter2:	NE	Use class:	Soil Evaluation
Section:	07	First wtr:	0
Range:	15EI		
Total dpth:	15		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Approx yld:	0	LI method:	Interpolation from PLSS
Const date:	07-MAY-01	Aquifer co:	Not Reported
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=69274">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=69274</a>		
Site id:	OK5000000069470		

**C14  
NNE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000138938**

Latitude:	36.230598	LI method:	Not Reported
Longitude:	-95.733362	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	146361	Quarter1:	NW
Work type:	Monitoring Well	Quarter3:	NE
Owner name:	Thomas Russell Co.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15E1	LI method:	GPS-uncorrected data
Total dpth:	31	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	09-OCT-12		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=146361">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=146361</a>		
Site id:	OK5000000138938		

**15  
NW  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000143506**

Latitude:	36.229067	LI method:	Not Reported
Longitude:	-95.755171	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	152383	Quarter1:	SE
Work type:	Monitoring Well	Quarter3:	NW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SE	Use class:	Site Assessment
Section:	07	First wtr:	0
Range:	15E1	LI method:	GPS-uncorrected data
Total dpth:	25	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	20-MAY-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152383">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152383</a>		
Site id:	OK5000000143506		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

**A1**  
**NNE**  
**1/8 - 1/4 Mile**

**OIL\_GAS OKOG20000332756**

Fid:	332755	Api county:	131
Api number:	00899	Well name:	VAUN RUTH
Well no:	3		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.221278	Longitude:	-95.740564
G elevatio:	0	D el:	0
Completion:	1917-01-15	Dept:	0
Site id:	OKOG20000332756		

**2**  
**West**  
**1/8 - 1/4 Mile**

**OIL\_GAS OKOG20000336922**

Fid:	336921	Api county:	131
Api number:	05140	Well name:	MARTIN ENIS
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	NE	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.219439	Longitude:	-95.74503
G elevatio:	0	D el:	0
Completion:	1925-10-10	Dept:	0
Site id:	OKOG20000336922		

**A3**  
**NNE**  
**1/8 - 1/4 Mile**

**OIL\_GAS OKOG20000332755**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332754	Api county:	131
Api number:	00898	Well name:	VAUN RUTH
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	E2
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.222185	Longitude:	-95.740564
G elevatio:	0	D el:	0
Completion:	1917-01-05	Dept:	0
Site id:	OKOG20000332755		

**4**

**North  
1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332754**

Fid:	332753	Api county:	131
Api number:	00897	Well name:	VAUN RUTH
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	N2
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.74168
G elevatio:	0	D el:	0
Completion:	1917-01-05	Dept:	0
Site id:	OKOG20000332754		

**5**

**SW  
1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332769**

Fid:	332768	Api county:	131
Api number:	00912	Well name:	BLOSSOM NED
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.215813	Longitude:	-95.74503
G elevatio:	0	D el:	0
Completion:	1917-03-01	Dept:	0
Site id:	OKOG20000332769		

**6**

**NE**

**1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332752**

Fid:	332751	Api county:	131
Api number:	00895	Well name:	BAILY LILIAN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	SE	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.73833
G elevatio:	0	D el:	0
Completion:	1917-01-09	Dept:	0
Site id:	OKOG20000332752		

**7**

**NE**

**1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332753**

Fid:	332752	Api county:	131
Api number:	00896	Well name:	BAILEY LILIAN
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.736089
G elevatio:	0	D el:	0
Completion:	1927-07-23	Dept:	0
Site id:	OKOG20000332753		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database      EDR ID Number

**8**

**WSW**

**1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000332766**

Fid:	332765	Api county:	131
Api number:	00909	Well name:	HOGUE & LEVEIN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217626	Longitude:	-95.75174
G elevatio:	0	D el:	0
Completion:	1917-02-17	Dept:	0
Site id:	OKOG20000332766		

**9**

**WSW**

**1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000332767**

Fid:	332766	Api county:	131
Api number:	00910	Well name:	HOGUE & LEVINE
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	SW	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.213999	Longitude:	-95.751736
G elevatio:	0	D el:	0
Completion:	1916-09-01	Dept:	0
Site id:	OKOG20000332767		

**B10**

**West**

**1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000332763**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332762	Api county:	131
Api number:	00906	Well name:	BRADFORD JAS
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NE	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75621
G elevatio:	0	D el:	0
Completion:	1916-09-03	Dept:	0
Site id:	OKOG20000332763		

**B11  
West  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332778**

Fid:	332777	Api county:	131
Api number:	00921	Well name:	BEEMAN
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NE	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75621
G elevatio:	0	D el:	0
Completion:	1923-01-01	Dept:	0
Site id:	OKOG20000332778		

**12  
North  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332758**

Fid:	332757	Api county:	131
Api number:	00901	Well name:	ZILLINER FRANK
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NW
Feet ns:	4210	Direct ns:	S
Feet ew:	170	Direct ew:	W
Latitude:	36.232156	Longitude:	-95.7428
G elevatio:	0	D el:	0
Completion:	1962-08-05	Dept:	0
Site id:	OKOG20000332758		

**C13**  
West  
1/2 - 1 Mile

**OIL\_GAS      OKOG20000332764**

Fid:	332763	Api county:	131
Api number:	00907	Well name:	BRADFORD JAS
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217624	Longitude:	-95.758447
G elevatio:	0	D el:	0
Completion:	1916-10-08	Dept:	0
Site id:	OKOG20000332764		

**C14**  
West  
1/2 - 1 Mile

**OIL\_GAS      OKOG20000332762**

Fid:	332761	Api county:	131
Api number:	00905	Well name:	BEEMAN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75845
G elevatio:	0	D el:	0
Completion:	1923-01-01	Dept:	0
Site id:	OKOG20000332762		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: OK Radon

### Radon Test Results

Zipcode	Num Tests	# > 4 pCi/L	Maximum	Average
74015	7	0	3.3	1.714

Federal EPA Radon Zone for ROGERS County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for Zip Code: 74015

Number of sites tested: 7

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.571 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Reported Well Locations in Oklahoma

Source: Oklahoma Water Resources Board

Telephone: 405-530-8800

## OTHER STATE DATABASE INFORMATION

#### Oil and Gas Well Listing

Source: Oklahoma Corporation Commission

Telephone: 405-521-3636

Oil and gas well locations in the state.

#### Oil and Gas Well Listing

Source: Osage Nation Environmental and Natural Resources

Telephone: 918-287-5333

Oil and gas well locations.

### RADON

#### State Database: OK Radon

Source: Department of Environmental Quality

Telephone: 405-702-5100

Radon Information

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### **STREET AND ADDRESS INFORMATION**

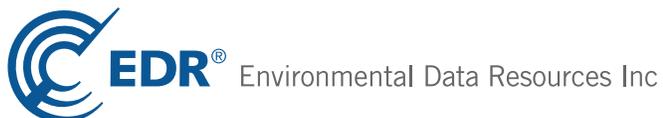
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**Tulsa EA Update**

Fort Gibson/Bird Creek Ave  
Catoosa, OK 74015

Inquiry Number: 4466923.2s  
November 13, 2015

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

FORT GIBSON/BIRD CREEK AVE  
CATOOSA, OK 74015

#### COORDINATES

Latitude (North): 36.2129000 - 36° 12' 46.44"  
Longitude (West): 95.7463000 - 95° 44' 46.68"  
Universal Transverse Mercator: Zone 15  
UTM X (Meters): 253114.8  
UTM Y (Meters): 4010858.8  
Elevation: 564 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5924841 CATOOSA, OK  
Version Date: 2012  
  
Southwest Map: 5926382 MINGO, OK  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20100811, 20100810  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
FORT GIBSON/BIRD CREEK AVE  
CATOOSA, OK 74015

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
--------	-----------	---------	-------------------	--------------------	----------------------------

NO MAPPED SITES FOUND

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List

## EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

### **Federal ERNS list**

ERNS..... Emergency Response Notification System

### **State- and tribal - equivalent CERCLIS**

SHWS..... The Land Report

### **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF..... Permitted Solid Waste Disposal & Processing Facilities

### **State and tribal leaking storage tank lists**

LUST..... Leaking Underground Storage Tank List  
LAST..... Leaking Aboveground Storage Tanks List  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing  
UST..... Underground Storage Tank Listing  
AST..... Aboveground Storage Tanks  
INDIAN UST..... Underground Storage Tanks on Indian Land

### **State and tribal institutional control / engineering control registries**

INST CONTROL..... Institutional Control Sites

### **State and tribal voluntary cleanup sites**

VCP..... Voluntary Cleanup Site Inventory  
INDIAN VCP..... Voluntary Cleanup Priority Listing

### **State and tribal Brownfields sites**

BROWNFIELDS..... Brownfield Sites

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

### **Local Lists of Landfill / Solid Waste Disposal Sites**

SWRCY..... Recycling Facilities  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... National Clandestine Laboratory Register

## EXECUTIVE SUMMARY

US CDL..... Clandestine Drug Labs

### **Local Lists of Registered Storage Tanks**

HIST UST..... Underground Storage Tank List, List II Version

### **Local Land Records**

LIENS 2..... CERCLA Lien Information

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System

OK COMPLAINT..... Oklahoma Complaint System Database

### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated

FUDS..... Formerly Used Defense Sites

DOD..... Department of Defense Sites

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION..... 2020 Corrective Action Program List

TSCA..... Toxic Substances Control Act

TRIS..... Toxic Chemical Release Inventory System

SSTS..... Section 7 Tracking Systems

ROD..... Records Of Decision

RMP..... Risk Management Plans

RAATS..... RCRA Administrative Action Tracking System

PRP..... Potentially Responsible Parties

PADS..... PCB Activity Database System

ICIS..... Integrated Compliance Information System

FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

MLTS..... Material Licensing Tracking System

COAL ASH DOE..... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER..... PCB Transformer Registration Database

RADINFO..... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS..... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File

FINDS..... Facility Index System/Facility Registry System

AIRS..... Permitted AIRS Facility Listing

DRYCLEANERS..... Drycleaner Facility Listing

Financial Assurance..... Financial Assurance Information Listing

TIER 2..... Tier 2 Data Listing

UIC..... Underground Injection Wells Database Listing

### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR MGP..... EDR Proprietary Manufactured Gas Plants

## EXECUTIVE SUMMARY

EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations  
EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List  
RGA LF..... Recovered Government Archive Solid Waste Facilities List  
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 4466923.2S



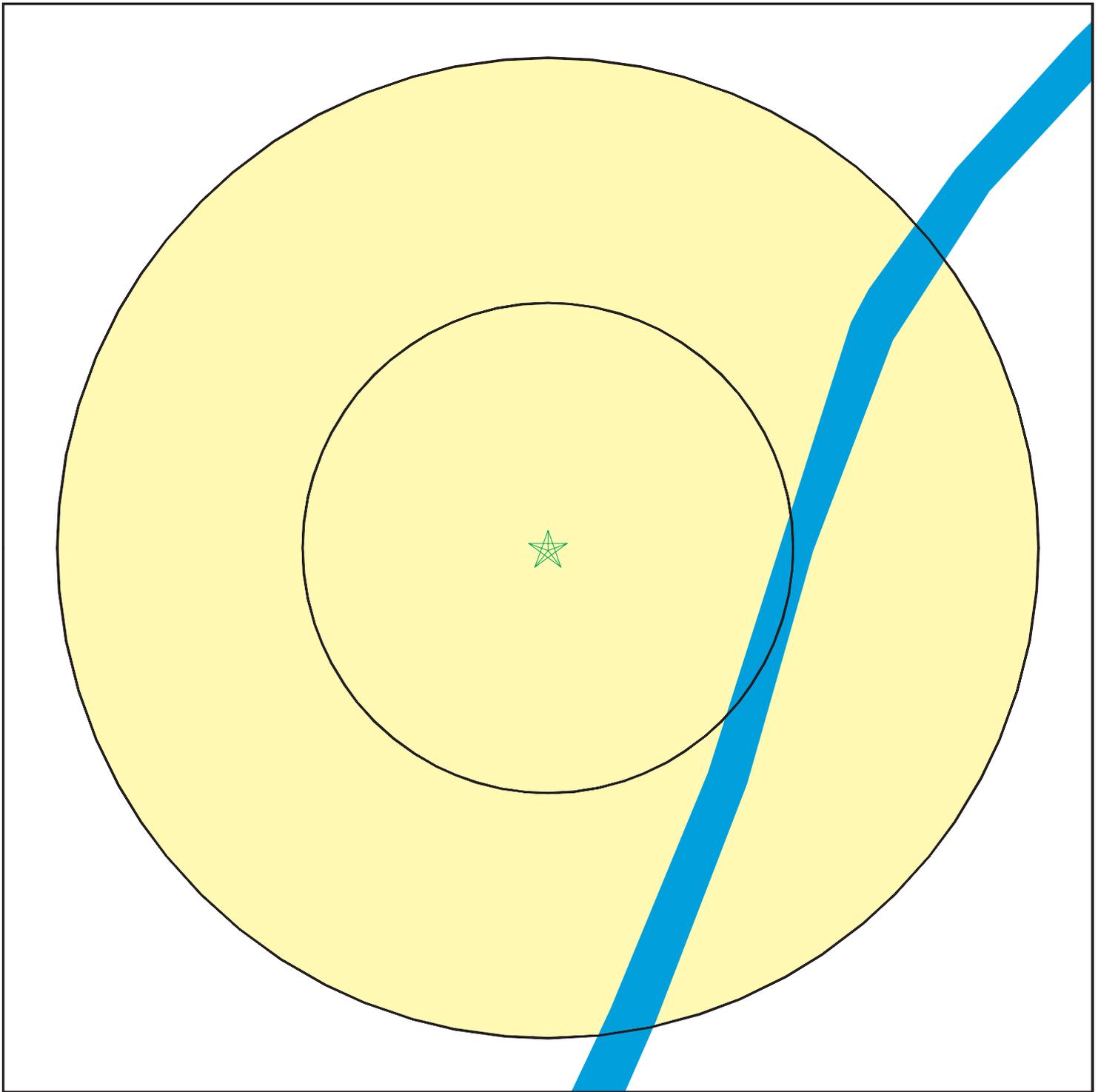
- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2129 / 95.7463

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466923.2s  
 DATE: November 13, 2015 5:39 pm

# DETAIL MAP - 4466923.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites



 Indian Reservations BIA



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2129 / 95.7463

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466923.2s  
 DATE: November 13, 2015 5:41 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	0	NR	NR	0
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>State and tribal voluntary cleanup sites</i></b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b><i>Local Lists of Registered Storage Tanks</i></b>								
HIST UST	0.250		0	0	NR	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
OK COMPLAINT	TP		NR	NR	NR	NR	NR	0
<b><i>Other Ascertainable Records</i></b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

NO SITES FOUND

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 11/07/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 10/09/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 08/28/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 08/28/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

### **RCRA-TSDF: RCRA - Treatment, Storage and Disposal**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

### **RCRA-LQG: RCRA - Large Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

### **RCRA-SQG: RCRA - Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Quarterly

### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal institutional controls / engineering controls registries***

### **LUCIS: Land Use Control Information System**

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 09/28/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

### **US ENG CONTROLS: Engineering Controls Sites List**

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

### **US INST CONTROL: Sites with Institutional Controls**

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

## ***Federal ERNS list***

### **ERNS: Emergency Response Notification System**

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-267-2180
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 09/29/2015
Number of Days to Update: 82	Next Scheduled EDR Contact: 01/11/2016
	Data Release Frequency: Annually

## ***State- and tribal - equivalent CERCLIS***

### **SHWS: Voluntary Cleanup & Superfund Site Status Report**

Land restoration projects carried out in several DEQ programs.

Date of Government Version: 12/31/2009	Source: Department of Environmental Quality
Date Data Arrived at EDR: 05/28/2010	Telephone: 405-702-5100
Date Made Active in Reports: 07/13/2010	Last EDR Contact: 08/21/2015
Number of Days to Update: 46	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## ***State and tribal landfill and/or solid waste disposal site lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SWF/LF: Permitted Solid Waste Disposal & Processing Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/18/2014  
Date Data Arrived at EDR: 11/05/2014  
Date Made Active in Reports: 01/05/2015  
Number of Days to Update: 61

Source: Department of Environmental Quality  
Telephone: 405-702-5184  
Last EDR Contact: 11/07/2015  
Next Scheduled EDR Contact: 02/15/2016  
Data Release Frequency: Semi-Annually

## State and tribal leaking storage tank lists

### LAST: Leaking Aboveground Storage Tanks List

Leaking aboveground storage tank site locations.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-522-4640  
Last EDR Contact: 10/14/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

### LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/14/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

### INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 07/30/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

### INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/21/2015  
Date Data Arrived at EDR: 07/29/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 76

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/13/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 07/28/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 08/07/2015	Telephone: 312-886-7439
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 10/30/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

## INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6271
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015	Source: EPA Region 1
Date Data Arrived at EDR: 04/30/2015	Telephone: 617-918-1313
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 10/27/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

### **State and tribal registered storage tank lists**

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/08/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Varies

#### UST: Underground Storage Tank Listing

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

AST: Aboveground Storage Tanks  
Registered Aboveground Storage Tanks.

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 36

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 07/28/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/13/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014  
Date Data Arrived at EDR: 02/13/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 28

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/30/2015  
Next Scheduled EDR Contact: 02/09/2016  
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014  
Date Data Arrived at EDR: 11/25/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 65

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/03/2015  
Date Data Arrived at EDR: 04/30/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 53

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/27/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/28/2015  
Date Data Arrived at EDR: 08/14/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 60

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 07/21/2015  
Date Data Arrived at EDR: 07/29/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 76

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Quarterly

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 07/30/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 67

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 10/26/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Semi-Annually

## ***State and tribal institutional control / engineering control registries***

### INST CONTROL: Institutional Control Sites

Sites with institutional controls in place.

Date of Government Version: 08/06/2015  
Date Data Arrived at EDR: 08/19/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 27

Source: Department of Environmental Quality  
Telephone: 405-702-5100  
Last EDR Contact: 08/19/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## ***State and tribal voluntary cleanup sites***

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 04/20/2009  
Next Scheduled EDR Contact: 07/20/2009  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: 617-918-1102
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 09/29/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/11/2016
	Data Release Frequency: Varies

## VCP: Voluntary Cleanup Site Inventory

Investigations and cleanups by groups or individuals participating in the Voluntary Cleanup Program (VCP).

Date of Government Version: 08/06/2015	Source: Department of Environmental Quality
Date Data Arrived at EDR: 08/19/2015	Telephone: 405-702-5100
Date Made Active in Reports: 09/15/2015	Last EDR Contact: 08/19/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## **State and tribal Brownfields sites**

### BROWNFIELDS: Brownfield Sites

Brownfields are defined by Oklahoma law as abandoned, idled or under used industrial or commercial facilities or other real property at which expansion or redevelopment of the real property is complicated by environmental contamination caused by regulated substances. This program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 09/07/2012	Source: Department of Environmental Quality
Date Data Arrived at EDR: 09/07/2012	Telephone: 405-702-5100
Date Made Active in Reports: 10/10/2012	Last EDR Contact: 08/12/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: No Update Planned

### BROWNFIELDS 2: Brownfields Public Record Listing

The Brownfields program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 07/28/2015	Source: Department of Environmental Quality
Date Data Arrived at EDR: 08/21/2015	Telephone: 405-702-5100
Date Made Active in Reports: 09/15/2015	Last EDR Contact: 08/17/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/22/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/24/2015	Telephone: 202-566-2777
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 09/23/2015
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/04/2016
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### SWRCY: Recycling Facilities

A listing of recycling facility locations.

Date of Government Version: 07/20/2015

Date Data Arrived at EDR: 07/24/2015

Date Made Active in Reports: 08/19/2015

Number of Days to Update: 26

Source: Department of Environmental Quality

Telephone: 405-702-5100

Last EDR Contact: 10/20/2015

Next Scheduled EDR Contact: 02/01/2016

Data Release Frequency: Varies

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998

Date Data Arrived at EDR: 12/03/2007

Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 11/06/2015

Next Scheduled EDR Contact: 02/15/2016

Data Release Frequency: Varies

### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985

Date Data Arrived at EDR: 08/09/2004

Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346

Last EDR Contact: 06/09/2004

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Date Data Arrived at EDR: 05/07/2009

Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9

Telephone: 415-947-4219

Last EDR Contact: 10/26/2015

Next Scheduled EDR Contact: 02/08/2016

Data Release Frequency: No Update Planned

## **Local Lists of Hazardous waste / Contaminated Sites**

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/12/2015

Date Data Arrived at EDR: 09/04/2015

Date Made Active in Reports: 11/03/2015

Number of Days to Update: 60

Source: Drug Enforcement Administration

Telephone: 202-307-1000

Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015

Data Release Frequency: No Update Planned

### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/12/2015  
Date Data Arrived at EDR: 09/04/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 60

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/31/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Quarterly

## **Local Lists of Registered Storage Tanks**

HIST UST: Underground Storage Tank List, List II Version

This underground storage tank listing includes tank information through March 2003. This listing is no longer updated by the Oklahoma Corporation Commission.

Date of Government Version: 03/21/2003  
Date Data Arrived at EDR: 04/28/2003  
Date Made Active in Reports: 05/27/2003  
Number of Days to Update: 29

Source: Oklahoma Corporation Commission  
Telephone: 405-521-3107  
Last EDR Contact: 01/19/2009  
Next Scheduled EDR Contact: 04/19/2009  
Data Release Frequency: No Update Planned

## **Local Land Records**

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014  
Date Data Arrived at EDR: 03/18/2014  
Date Made Active in Reports: 04/24/2014  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 10/30/2015  
Next Scheduled EDR Contact: 02/08/2016  
Data Release Frequency: Varies

## **Records of Emergency Release Reports**

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 68

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 09/30/2014  
Date Data Arrived at EDR: 06/02/2015  
Date Made Active in Reports: 06/04/2015  
Number of Days to Update: 2

Source: Oklahoma Corporation Commission  
Telephone: 405-521-2384  
Last EDR Contact: 10/05/2015  
Next Scheduled EDR Contact: 01/18/2016  
Data Release Frequency: Varies

## **Other Ascertainable Records**

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: 214-665-6444  
Last EDR Contact: 09/29/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015  
Date Data Arrived at EDR: 07/08/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 09/11/2015  
Next Scheduled EDR Contact: 12/21/2015  
Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: Semi-Annually

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 02/06/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 339

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: N/A

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 08/21/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015  
Date Data Arrived at EDR: 09/03/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 61

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 08/12/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 11/10/2015
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 11/13/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: 202-260-5521
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 09/25/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/04/2016
	Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013	Source: EPA
Date Data Arrived at EDR: 02/12/2015	Telephone: 202-566-0250
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 08/28/2015
Number of Days to Update: 110	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 10/26/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013	Source: EPA
Date Data Arrived at EDR: 12/12/2013	Telephone: 703-416-0223
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 09/11/2015
Number of Days to Update: 74	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Annually

### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/26/2015	Telephone: 202-564-8600
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/13/2015
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/22/2016
	Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/29/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 10/08/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/25/2016
	Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/24/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/24/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/07/2015
	Data Release Frequency: Quarterly

### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/26/2015	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/10/2015	Telephone: 301-415-7169
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 09/03/2015
Number of Days to Update: 95	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Quarterly

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 07/13/2015
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/11/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/21/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/29/2015
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: 202-343-9775
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 10/07/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/18/2016
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 11/07/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/15/2016
	Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/02/2015  
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 08/28/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/16/2015  
Next Scheduled EDR Contact: 01/25/2016  
Data Release Frequency: Semi-Annually

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 08/25/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014  
Date Data Arrived at EDR: 11/26/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 64

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 10/05/2015  
Next Scheduled EDR Contact: 01/18/2016  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/14/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 09/01/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 09/04/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 09/04/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Varies

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015  
Date Data Arrived at EDR: 09/09/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 55

Source: EPA  
Telephone: (214) 665-2200  
Last EDR Contact: 09/09/2015  
Next Scheduled EDR Contact: 12/21/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## AIRS: Permitted AIRS Facility Listing

A listing of permitted AIRS facility locations.

Date of Government Version: 06/23/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 39

Source: Department of Environmental Quality  
Telephone: 405-702-4100  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

Date of Government Version: 06/23/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 39

Source: Department of Environmental Quality  
Telephone: 405-702-9100  
Last EDR Contact: 09/28/2015  
Next Scheduled EDR Contact: 01/11/2016  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information.

Date of Government Version: 07/25/2014  
Date Data Arrived at EDR: 11/06/2014  
Date Made Active in Reports: 01/13/2015  
Number of Days to Update: 68

Source: Department of Environmental Quality  
Telephone: 405-702-5105  
Last EDR Contact: 10/06/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## Financial Assurance 2: Financial Assurance Information Listing

Financial Assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/10/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 01/24/2014  
Number of Days to Update: 43

Source: Department of Environmental Quality  
Telephone: 405-702-5100  
Last EDR Contact: 10/06/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## TIER 2: Tier 2 Data Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 06/29/2012  
Date Made Active in Reports: 08/29/2012  
Number of Days to Update: 61

Source: Department of Environmental Quality  
Telephone: 405-702-1000  
Last EDR Contact: 09/14/2015  
Next Scheduled EDR Contact: 12/28/2015  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Database Listing

Class I injection wells. CLASS I wells are used to inject liquid hazardous and non-hazardous wastes beneath the lower most Underground Sources of Drinking Water (USDW).

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 06/12/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 53

Source: Department of Environmental Quality  
Telephone: 405-702-5188  
Last EDR Contact: 11/07/2016  
Next Scheduled EDR Contact: 02/01/2016  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/03/2014  
Number of Days to Update: 186

Source: Department of Environmental Quality  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/20/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 203	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Oklahoma Corporation Commission in Oklahoma.

Date of Government Version: N/A	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/27/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 179	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

## CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 08/17/2015
Number of Days to Update: 45	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: No Update Planned

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2015	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/06/2015	Telephone: 518-402-8651
Date Made Active in Reports: 08/24/2015	Last EDR Contact: 11/08/2015
Number of Days to Update: 18	Next Scheduled EDR Contact: 02/15/2016
	Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014	Source: Department of Natural Resources
Date Data Arrived at EDR: 03/19/2015	Telephone: N/A
Date Made Active in Reports: 04/07/2015	Last EDR Contact: 09/10/2015
Number of Days to Update: 19	Next Scheduled EDR Contact: 12/28/2015
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## Electric Power Transmission Line Data

Source: PennWell Corporation

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

## Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

## Daycare Centers: Day Care Centers

Source: Department of Human Services

Telephone: 405-521-3561

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

## Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

TULSA EA UPDATE  
FORT GIBSON/BIRD CREEK AVE  
CATOOSA, OK 74015

### TARGET PROPERTY COORDINATES

Latitude (North): 36.2129 - 36° 12' 46.44"  
Longitude (West): 95.7463 - 95° 44' 46.68"  
Universal Transverse Mercator: Zone 15  
UTM X (Meters): 253114.8  
UTM Y (Meters): 4010858.8  
Elevation: 564 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5924841 CATOOSA, OK  
Version Date: 2012  
  
Southwest Map: 5926382 MINGO, OK  
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

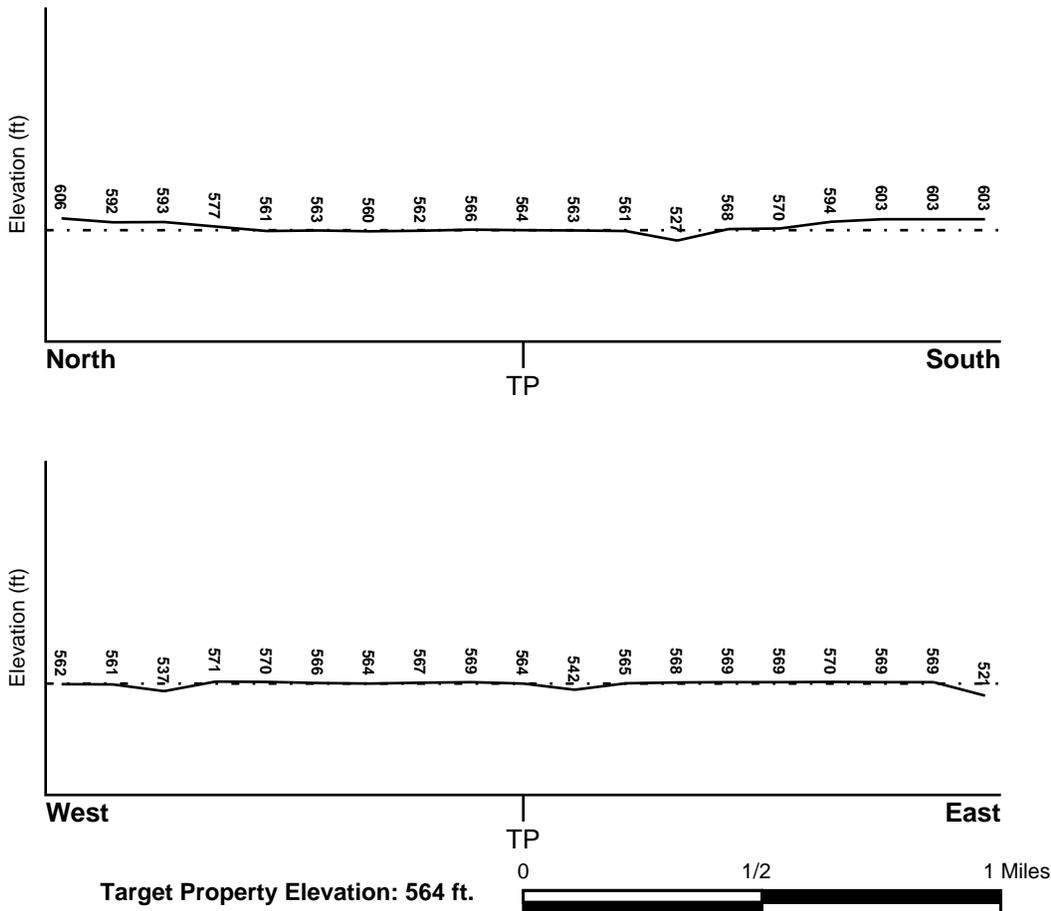
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SE

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## **HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
ROGERS, OK	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
CATOOSA	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

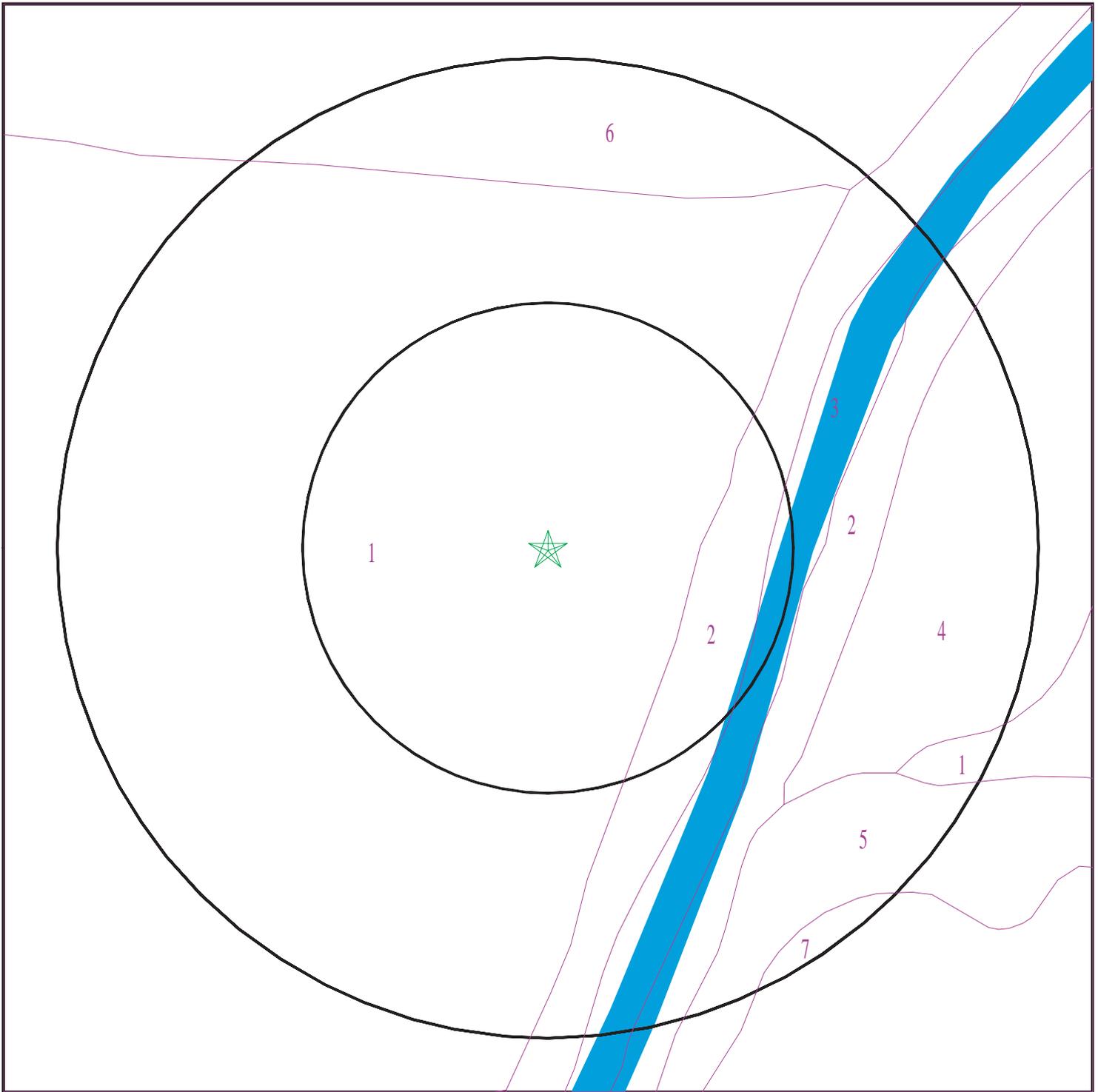
Era:	Paleozoic
System:	Pennsylvanian
Series:	Des Moinesian Series
Code:	PP2 ( <i>decoded above as Era, System &amp; Series</i> )

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 4466923.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Tulsa EA Update  
ADDRESS: Fort Gibson/Bird Creek Ave  
Catoosa OK 74015  
LAT/LONG: 36.2129 / 95.7463

CLIENT: Dewberry Engineers Inc.  
CONTACT: Ami Gulden  
INQUIRY #: 4466923.2s  
DATE: November 13, 2015 5:41 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: Osage

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 7.8 Min: 5.1
2	22 inches	59 inches	clay	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 7.8 Min: 5.6

### Soil Map ID: 2

Soil Component Name: Verdigris

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6
2	16 inches	79 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6

### Soil Map ID: 3

Soil Component Name: Water

Soil Surface Texture: water

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:  
Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	79 inches	water	Not reported	Not reported	Max: Min:	Max: Min:

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 4

Soil Component Name: Verdigris

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6
2	16 inches	79 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.6

### Soil Map ID: 5

Soil Component Name: Shidler

Soil Surface Texture: stony silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 20 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	stony silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 8.4 Min: 6.1
2	7 inches	9 inches	bedrock	Not reported	Not reported	Max: 0.0106 Min: 0	Max: Min:

### Soil Map ID: 6

Soil Component Name: Barge

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Not reported	Not reported	Max: 4.233 Min: 1.4114	Max: 7.8 Min: 6.1
2	7 inches	72 inches	silty clay loam	Not reported	Not reported	Max: 4.233 Min: 1.4114	Max: 7.8 Min: 6.1

### Soil Map ID: 7

Soil Component Name: Catoosa

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 96 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 6.5 Min: 5.6
2	14 inches	37 inches	silty clay loam	Not reported	Not reported	Max: 14.114 Min: 4.233	Max: 7.3 Min: 5.1
3	37 inches	59 inches	bedrock	Not reported	Not reported	Max: 0.0106 Min: 0	Max: Min:

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

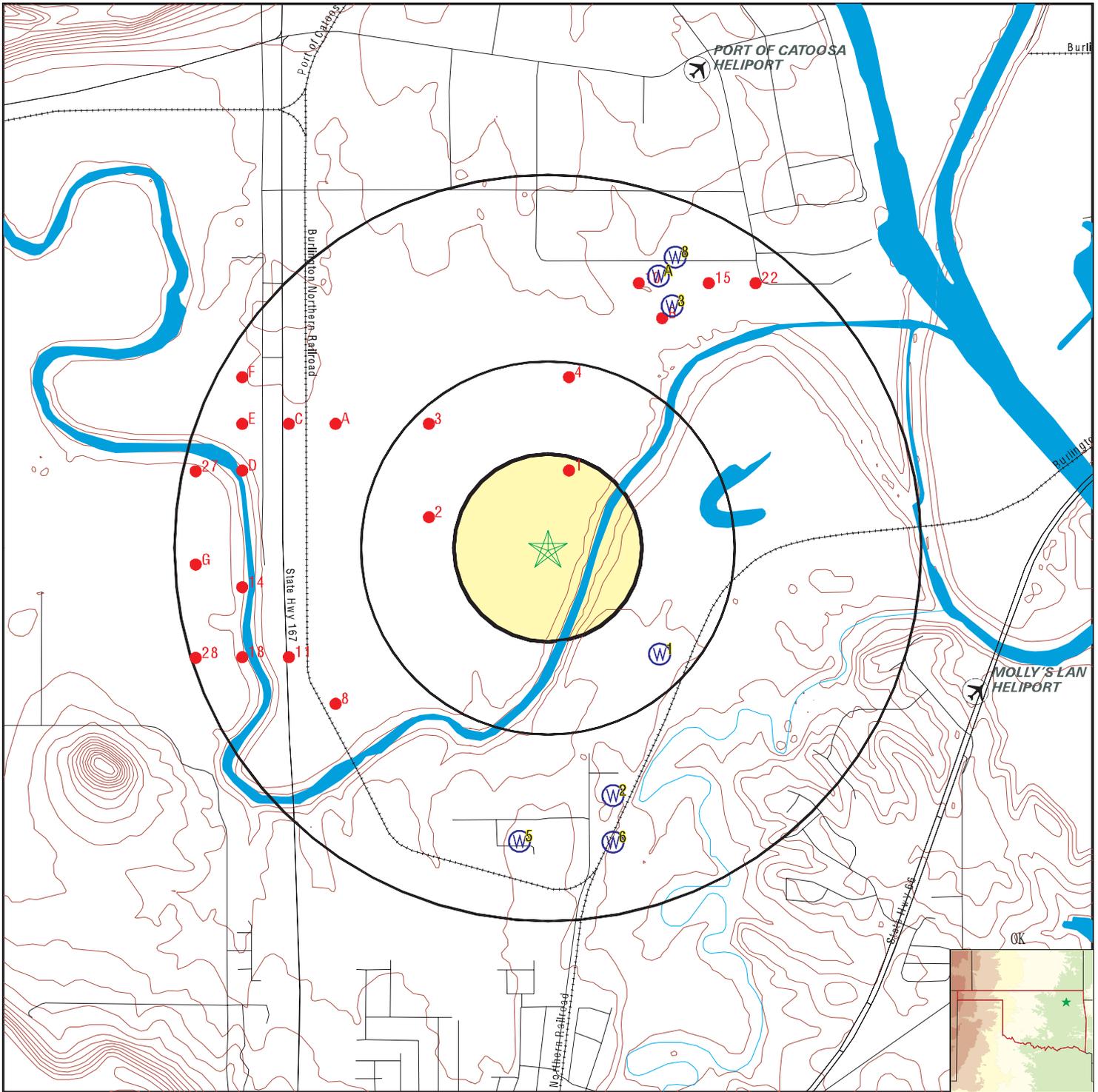
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	OK5000000106184	1/4 - 1/2 Mile SE
2	OK5000000026053	1/2 - 1 Mile SSE
3	OK5000000145360	1/2 - 1 Mile NNE
A4	OK5000000154308	1/2 - 1 Mile NNE
5	OK5000000031779	1/2 - 1 Mile South
6	OK5000000013379	1/2 - 1 Mile SSE
A7	OK5000000150400	1/2 - 1 Mile NNE
8	OK5000000150401	1/2 - 1 Mile NNE

## OTHER STATE DATABASE INFORMATION

## STATE OIL/GAS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	OKOG20000332769	1/8 - 1/4 Mile NNE
2	OKOG20000332767	1/4 - 1/2 Mile WNW
3	OKOG20000332766	1/4 - 1/2 Mile NW
4	OKOG20000336922	1/4 - 1/2 Mile North
A5	OKOG20000332763	1/2 - 1 Mile WNW
A6	OKOG20000332778	1/2 - 1 Mile WNW
B7	OKOG20000332756	1/2 - 1 Mile NNE
8	OKOG20000332768	1/2 - 1 Mile SW
B9	OKOG20000332755	1/2 - 1 Mile NNE
10	OKOG20000332754	1/2 - 1 Mile NNE
11	OKOG20000332765	1/2 - 1 Mile WSW
C12	OKOG20000332764	1/2 - 1 Mile WNW
C13	OKOG20000332762	1/2 - 1 Mile WNW
14	OKOG20000332771	1/2 - 1 Mile West
15	OKOG20000332752	1/2 - 1 Mile NNE
D16	OKOG20000332777	1/2 - 1 Mile WNW
D17	OKOG20000332772	1/2 - 1 Mile WNW
18	OKOG20000332770	1/2 - 1 Mile WSW
E20	OKOG20000332776	1/2 - 1 Mile WNW
E19	OKOG20000332761	1/2 - 1 Mile WNW
E21	OKOG20000332774	1/2 - 1 Mile WNW
22	OKOG20000332753	1/2 - 1 Mile NE
F23	OKOG20000332773	1/2 - 1 Mile WNW
F24	OKOG20000332775	1/2 - 1 Mile WNW
G25	OKOG20000334540	1/2 - 1 Mile West
G26	OKOG20000334541	1/2 - 1 Mile West
27	OKOG20000334545	1/2 - 1 Mile WNW
28	OKOG20000334539	1/2 - 1 Mile WSW

# PHYSICAL SETTING SOURCE MAP - 4466923.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME: Tulsa EA Update  
 ADDRESS: Fort Gibson/Bird Creek Ave  
 Catoosa OK 74015  
 LAT/LONG: 36.2129 / 95.7463

CLIENT: Dewberry Engineers Inc.  
 CONTACT: Ami Gulden  
 INQUIRY #: 4466923.2s  
 DATE: November 13, 2015 5:41 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**SE**  
**1/4 - 1/2 Mile**  
**Higher**

**OK WELLS      OK5000000106184**

Latitude:	36.208775	El method:	Not Reported
Longitude:	-95.740941	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	106812	Quarter1:	NE
Work type:	Groundwater Well	Quarter3:	SW
Owner name:	City of Tulsa	Township:	20N
Quarter2:	SW	Use class:	Industrial
Section:	17	First wtr:	0
Range:	15EI	LI method:	Mathematical conversion program
Total dpth:	0	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	30-DEC-99		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106812">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106812</a>		
Site id:	OK5000000106184		

**2**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**OK WELLS      OK5000000026053**

Latitude:	36.203277	El method:	Not Reported
Longitude:	-95.743177	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	26089	Quarter1:	SW
Work type:	Groundwater Well	Quarter3:	NW
Owner name:	donald creekmore	Township:	20N
Quarter2:	NW	Use class:	Domestic
Section:	20	First wtr:	8
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	50	Aquifer co:	Not Reported
Approx yld:	4		
Const date:	07-SEP-91		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=26089">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=26089</a>		
Site id:	OK5000000026053		

**3**  
**NNE**  
**1/2 - 1 Mile**  
**Lower**

**OK WELLS      OK5000000145360**

Latitude:	36.222308	El method:	Not Reported
Longitude:	-95.740343	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148574	Quarter1:	SE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI		
Total dpth:	28.5		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Approx yld:	0	LI method:	GPS-uncorrected data
Const date:	08-JAN-13	Aquifer co:	Not Reported
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148574">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148574</a>		
Site id:	OK5000000145360		

**A4  
NNE  
1/2 - 1 Mile  
Lower**

**OK WELLS      OK5000000154308**

Latitude:	36.223238	LI method:	Not Reported
Longitude:	-95.741566	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148575	Quarter1:	NE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	23	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	08-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148575">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148575</a>		
Site id:	OK5000000154308		

**5  
South  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000031779**

Latitude:	36.2015	LI method:	Not Reported
Longitude:	-95.747654	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	31254	Quarter1:	NW
Work type:	Groundwater Test Hole	Quarter3:	NE
Owner name:	jim carter	Township:	20N
Quarter2:	SE	Use class:	Water Location
Section:	19	First wtr:	0
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	50	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	07-AUG-86		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=31254">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=31254</a>		
Site id:	OK5000000031779		

**6  
SSE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000013379**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude:	36.20147	El method:	Not Reported
Longitude:	-95.743177	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	15751	Quarter1:	NW
Work type:	Groundwater Well	Quarter3:	NW
Owner name:	shirley smith	Township:	20N
Quarter2:	SW	Use class:	Domestic
Section:	20	First wtr:	12
Range:	15EI	LI method:	Interpolation from PLSS
Total dpth:	22	Aquifer co:	Not Reported
Approx yld:	18		
Const date:	26-OCT-86		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=15751">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=15751</a>		
Site id:	OK500000013379		

**A7  
NNE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000150400**

Latitude:	36.223691	El method:	Not Reported
Longitude:	-95.740439	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148573	Quarter1:	NE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	SW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI	LI method:	GPS-uncorrected data
Total dpth:	31.5	Aquifer co:	Not Reported
Approx yld:	0		
Const date:	08-JAN-13		
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148573">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148573</a>		
Site id:	OK5000000150400		

**8  
NNE  
1/2 - 1 Mile  
Higher**

**OK WELLS      OK5000000150401**

Latitude:	36.224198	El method:	Not Reported
Longitude:	-95.740196	County:	Rogers
Elevation:	0	Permit:	Not Reported
Well id:	148576	Quarter1:	SE
Work type:	Monitoring Well	Quarter3:	SW
Owner name:	Honeywell International, Inc.	Township:	20N
Quarter2:	NW	Use class:	Site Assessment
Section:	08	First wtr:	0
Range:	15EI		
Total dpth:	30.5		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Approx yld:	0	LI method:	GPS-uncorrected data
Const date:	09-JAN-13	Aquifer co:	Not Reported
Basin code:	Not Reported		
Url:	<a href="http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148576">http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148576</a>		
Site id:	OK5000000150401		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database      EDR ID Number

**1**

**NNE**

**1/8 - 1/4 Mile**

**OIL\_GAS**

**OKOG20000332769**

Fid:	332768	Api county:	131
Api number:	00912	Well name:	BLOSSOM NED
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.215813	Longitude:	-95.74503
G elevatio:	0	D el:	0
Completion:	1917-03-01	Dept:	0
Site id:	OKOG20000332769		

**2**

**WNW**

**1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332767**

Fid:	332766	Api county:	131
Api number:	00910	Well name:	HOGUE & LEVINE
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	SW	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.213999	Longitude:	-95.751736
G elevatio:	0	D el:	0
Completion:	1916-09-01	Dept:	0
Site id:	OKOG20000332767		

**3**

**NW**

**1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000332766**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332765	Api county:	131
Api number:	00909	Well name:	HOGUE & LEVEIN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217626	Longitude:	-95.75174
G elevatio:	0	D el:	0
Completion:	1917-02-17	Dept:	0
Site id:	OKOG20000332766		

**4**

**North  
1/4 - 1/2 Mile**

**OIL\_GAS**

**OKOG20000336922**

Fid:	336921	Api county:	131
Api number:	05140	Well name:	MARTIN ENIS
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	NE	Quarter4:	NE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.219439	Longitude:	-95.74503
G elevatio:	0	D el:	0
Completion:	1925-10-10	Dept:	0
Site id:	OKOG20000336922		

**A5**

**WNW  
1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000332763**

Fid:	332762	Api county:	131
Api number:	00906	Well name:	BRADFORD JAS
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NE	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75621
G elevatio:	0	D el:	0
Completion:	1916-09-03	Dept:	0
Site id:	OKOG20000332763		

**A6  
WNW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332778**

Fid:	332777	Api county:	131
Api number:	00921	Well name:	BEEMAN
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NE	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75621
G elevatio:	0	D el:	0
Completion:	1923-01-01	Dept:	0
Site id:	OKOG20000332778		

**B7  
NNE  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332756**

Fid:	332755	Api county:	131
Api number:	00899	Well name:	VAUN RUTH
Well no:	3		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.221278	Longitude:	-95.740564
G elevatio:	0	D el:	0
Completion:	1917-01-15	Dept:	0
Site id:	OKOG20000332756		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

**8**  
**SW**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332768**

Fid:	332767	Api county:	131
Api number:	00911	Well name:	MOORE & JOHNSON
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	SE	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.206748	Longitude:	-95.75621
G elevatio:	0	D el:	0
Completion:	1917-04-25	Dept:	0
Site id:	OKOG20000332768		

**B9**  
**NNE**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332755**

Fid:	332754	Api county:	131
Api number:	00898	Well name:	VAUN RUTH
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	E2
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.222185	Longitude:	-95.740564
G elevatio:	0	D el:	0
Completion:	1917-01-05	Dept:	0
Site id:	OKOG20000332755		

**10**  
**NNE**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332754**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332753	Api county:	131
Api number:	00897	Well name:	VAUN RUTH
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	N2
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.74168
G elevatio:	0	D el:	0
Completion:	1917-01-05	Dept:	0
Site id:	OKOG20000332754		

**11**  
**WSW**  
**1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332765**

Fid:	332764	Api county:	131
Api number:	00908	Well name:	FOREMAN ZACH
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.208561	Longitude:	-95.75845
G elevatio:	0	D el:	0
Completion:	1916-04-25	Dept:	0
Site id:	OKOG20000332765		

**C12**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332764**

Fid:	332763	Api county:	131
Api number:	00907	Well name:	BRADFORD JAS
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217624	Longitude:	-95.758447
G elevatio:	0	D el:	0
Completion:	1916-10-08	Dept:	0
Site id:	OKOG20000332764		

**C13  
WNW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332762**

Fid:	332761	Api county:	131
Api number:	00905	Well name:	BEEMAN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SE
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.75845
G elevatio:	0	D el:	0
Completion:	1923-01-01	Dept:	0
Site id:	OKOG20000332762		

**14  
West  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332771**

Fid:	332770	Api county:	131
Api number:	00914	Well name:	MARTIN E G
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	W2
Quarter3:	NW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.21128	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1916-11-10	Dept:	0
Site id:	OKOG20000332771		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

**15**  
**NNE**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332752**

Fid:	332751	Api county:	131
Api number:	00895	Well name:	BAILY LILIAN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	SE	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.73833
G elevatio:	0	D el:	0
Completion:	1917-01-09	Dept:	0
Site id:	OKOG20000332752		

**D16**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332777**

Fid:	332776	Api county:	131
Api number:	00920	Well name:	MARTIN
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	SW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.215812	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1926-01-09	Dept:	0
Site id:	OKOG20000332777		

**D17**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332772**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332771	Api county:	131
Api number:	00915	Well name:	MARTIN E G
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	SW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.215811	Longitude:	-95.760683
G elevatio:	0	D el:	0
Completion:	1917-09-01	Dept:	0
Site id:	OKOG20000332772		

**18  
WSW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332770**

Fid:	332769	Api county:	131
Api number:	00913	Well name:	FOREMAN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	SW	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.20856	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1916-10-18	Dept:	0
Site id:	OKOG20000332770		

**E20  
WNW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332776**

Fid:	332775	Api county:	131
Api number:	00919	Well name:	WILSON
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1916-08-07	Dept:	0
Site id:	OKOG20000332776		

**E19  
WNW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332761**

Fid:	332760	Api county:	131
Api number:	00904	Well name:	DEARSTONE C E
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217625	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1931-10-30	Dept:	0
Site id:	OKOG20000332761		

**E21  
WNW  
1/2 - 1 Mile**

**OIL\_GAS      OKOG20000332774**

Fid:	332773	Api county:	131
Api number:	00917	Well name:	WATTS CHAS
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	SW
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.217624	Longitude:	-95.760683
G elevatio:	0	D el:	0
Completion:	1918-01-01	Dept:	0
Site id:	OKOG20000332774		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

**22**  
**NE**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332753**

Fid:	332752	Api county:	131
Api number:	00896	Well name:	BAILEY LILIAN
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	8
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	SW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.223092	Longitude:	-95.736089
G elevatio:	0	D el:	0
Completion:	1927-07-23	Dept:	0
Site id:	OKOG20000332753		

**F23**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332773**

Fid:	332772	Api county:	131
Api number:	00916	Well name:	WATTS
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.219438	Longitude:	-95.76068
G elevatio:	0	D el:	0
Completion:	1916-08-06	Dept:	0
Site id:	OKOG20000332773		

**F24**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS OKOG20000332775**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	332774	Api county:	131
Api number:	00918	Well name:	WATTS R
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	18
Township:	20N		
Range :	15E		
Quarter1:	Not Reported	Quarter2:	NW
Quarter3:	NW	Quarter4:	NW
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.219437	Longitude:	-95.760683
G elevatio:	0	D el:	0
Completion:	1916-09-15	Dept:	0
Site id:	OKOG20000332775		

**G25**  
**West**  
**1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000334540**

Fid:	334539	Api county:	131
Api number:	02719	Well name:	WARREN
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	13
Township:	20N		
Range :	14E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	NE	Quarter4:	SE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.212157	Longitude:	-95.76291
G elevatio:	0	D el:	0
Completion:	1916-01-01	Dept:	0
Site id:	OKOG20000334540		

**G26**  
**West**  
**1/2 - 1 Mile**

**OIL\_GAS**

**OKOG20000334541**

Fid:	334540	Api county:	131
Api number:	02720	Well name:	WARREN JOHN H
Well no:	1		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	13
Township:	20N		
Range :	14E		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	NE	Quarter4:	SE
Feet ns:	0	Direct ns:	Not Reported
Feet ew:	0	Direct ew:	Not Reported
Latitude:	36.212157	Longitude:	-95.76291
G elevatio:	0	D el:	0
Completion:	1916-01-01	Dept:	0
Site id:	OKOG20000334541		

**27**  
**WNW**  
**1/2 - 1 Mile**

**OIL\_GAS      OKOG20000334545**

Fid:	334544	Api county:	131
Api number:	02724	Well name:	KENTON H R
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	13
Township:	20N		
Range :	14E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	NE
Feet ns:	1120	Direct ns:	S
Feet ew:	200	Direct ew:	E
Latitude:	36.215782	Longitude:	-95.76291
G elevatio:	0	D el:	0
Completion:	1916-09-01	Dept:	0
Site id:	OKOG20000334545		

**28**  
**WSW**  
**1/2 - 1 Mile**

**OIL\_GAS      OKOG20000334539**

Fid:	334538	Api county:	131
Api number:	02718	Well name:	KENTON H R
Well no:	2		
Oper name:	OTC/OCC NOT ASSIGNED		
Oper no:	9998	Status :	AC
Well class:	Not Reported		
Operstatus:	Not Reported	Countycode:	131
Meridan:	IM	Section:	13
Township:	20N		
Range :	14E		
Quarter1:	Not Reported	Quarter2:	NE
Quarter3:	SE	Quarter4:	SE
Feet ns:	1120	Direct ns:	S
Feet ew:	200	Direct ew:	E
Latitude:	36.208531	Longitude:	-95.76291
G elevatio:	0	D el:	0
Completion:	1916-08-31	Dept:	0
Site id:	OKOG20000334539		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: OK Radon

### Radon Test Results

Zipcode	Num Tests	# > 4 pCi/L	Maximum	Average
74015	7	0	3.3	1.714

Federal EPA Radon Zone for ROGERS County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 74015

Number of sites tested: 7

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.571 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Reported Well Locations in Oklahoma

Source: Oklahoma Water Resources Board

Telephone: 405-530-8800

## OTHER STATE DATABASE INFORMATION

#### Oil and Gas Well Listing

Source: Oklahoma Corporation Commission

Telephone: 405-521-3636

Oil and gas well locations in the state.

#### Oil and Gas Well Listing

Source: Osage Nation Environmental and Natural Resources

Telephone: 918-287-5333

Oil and gas well locations.

### RADON

#### State Database: OK Radon

Source: Department of Environmental Quality

Telephone: 405-702-5100

Radon Information

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### **STREET AND ADDRESS INFORMATION**

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**APPENDIX E**

**OKLAHOMA NATURAL HERITAGE LETTER**

**AND**

**US FISH & WILDLIFE SERVICE IPaC TRUST RESOURCE REPORT**

OBS Ref. 2016-045-BUS-DEW

Dear Mr. Hodapp,

Feb. 4, 2016

We have reviewed occurrence information on federal and state threatened, endangered or candidate species, as well as non-regulatory rare species and ecological systems of importance currently in the Oklahoma Natural Heritage Inventory database for the following location you provided:

Portions of T20N-R14E and T20N-R15E, Rogers County

We found 1 occurrence(s) of relevant species within the vicinity of the project location as described.

Rabbitsfoot (*Quadrula cylindrica*), a federally listed threatened species, one occurrence in Sec. 27-T20N-R15E, Rogers County

Other information requested:

Northern myotis (*Myotis septentrionalis*), a federally listed threatened species, closest observation to study area boundary: Sec. 19-T16N-R20E, Cherokee County, observation date 8/4/1981. Approximately 58.7 km from study area.

Northern myotis (*Myotis septentrionalis*), a federally listed threatened species, closest recent observation to study area boundary: Sec. 19-T22N-R22E, Delaware County, observation date 6/28/2015. Approximately 64.5 km from study area.

Additionally, absence from our database does not preclude such species from occurring in the area.

If you have any questions about this response, please send me an email, or call us at the number given below.

Although not specific to your project, you may find the following links helpful.

ONHI, guide to ranking codes for endangered and threatened species:  
[http://vmpinzel.ou.edu/heritage/ranking\\_guide.html](http://vmpinzel.ou.edu/heritage/ranking_guide.html)

Information regarding the Oklahoma Natural Areas Registry:  
[http://www.oknaturalheritage.ou.edu/registry\\_faq.htm](http://www.oknaturalheritage.ou.edu/registry_faq.htm)

Todd Fagin  
Oklahoma Natural Heritage Inventory  
(405) 325-4700  
tfagin@ou.edu

# Tulsa Port of Catoosa

## *IPaC Trust Resource Report*

Generated February 12, 2016 07:43 AM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

# IPaC Trust Resource Report



NAME

Tulsa Port of Catoosa

LOCATION

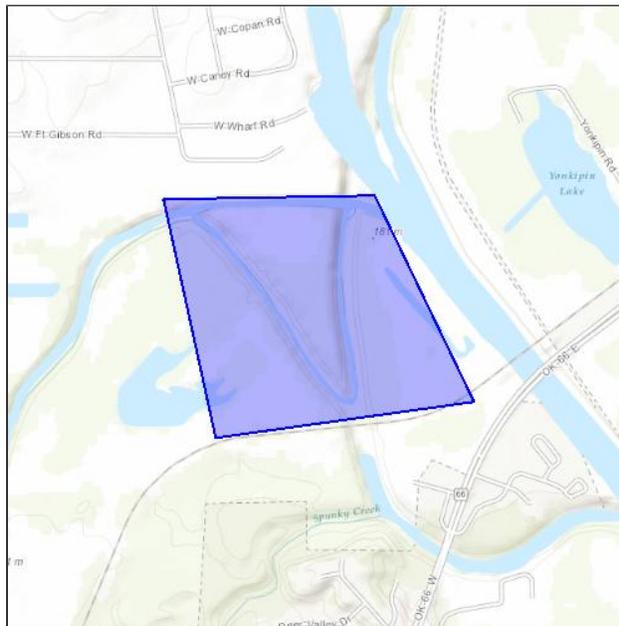
Rogers County, Oklahoma

DESCRIPTION

real estate land exchange 2/12/16

IPAC LINK

<https://ecos.fws.gov/ipac/project/V3QOT-O6RQF-A5JEE-GGO7Z-RZQY2Y>



## U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

**Oklahoma Ecological Services Field Office**

9014 East 21st Street  
Tulsa, OK 74129-1428  
(918) 581-7458

# Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

**This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.**

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

**A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.**

The list of species below are those that may occur or could potentially be affected by activities in this location:

## Birds

<p><b>Least Tern</b> <i>Sterna antillarum</i></p> <p>THIS SPECIES ONLY NEEDS TO BE CONSIDERED IF ANY OF THE FOLLOWING CONDITIONS APPLY</p> <p>Towers (i.e. radio, television, cellular, microwave, meterological)</p> <p>Wind Turbines and Wind Farms</p> <p>CRITICAL HABITAT</p> <p><b>No critical habitat</b> has been designated for this species.</p> <p><a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07N">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07N</a></p>	<p>Endangered</p>
<p><b>Piping Plover</b> <i>Charadrius melodus</i></p> <p>CRITICAL HABITAT</p> <p>There is <b>final</b> critical habitat designated for this species.</p> <p><a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B079">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B079</a></p>	<p>Threatened</p>
<p><b>Red Knot</b> <i>Calidris canutus rufa</i></p> <p>CRITICAL HABITAT</p> <p><b>No critical habitat</b> has been designated for this species.</p> <p><a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM</a></p>	<p>Threatened</p>
<p><b>Whooping Crane</b> <i>Grus americana</i></p> <p>CRITICAL HABITAT</p> <p>There is <b>final</b> critical habitat designated for this species.</p> <p><a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B003">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B003</a></p>	<p>Endangered</p>

## Clams

**Neosho Mucket** *Lampsilis rafinesqueana* Endangered

CRITICAL HABITAT

There is **proposed** critical habitat designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=F00F](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=F00F)

**Rabbitsfoot** *Quadrula cylindrica cylindrica* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=F03X](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=F03X)

## Fishes

**Arkansas Darter** *Etheostoma cragini* Candidate

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=E06H](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E06H)

## Insects

**American Burying Beetle** *Nicrophorus americanus* Endangered

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=I028](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I028)

## Mammals

**Northern Long-eared Bat** *Myotis septentrionalis* Threatened

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=A0JE](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0JE)

## Critical Habitats

**There are no critical habitats in this location**

# Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern  
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

<b>Acadian Flycatcher</b> <i>Empidonax virescens</i> Season: Breeding	Bird of conservation concern
<b>Bachman's Sparrow</b> <i>Aimophila aestivalis</i> Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B07F">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B07F</a>	Bird of conservation concern
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> Year-round <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008</a>	Bird of conservation concern
<b>Bell's Vireo</b> <i>Vireo bellii</i> Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0JX">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0JX</a>	Bird of conservation concern
<b>Bewick's Wren</b> <i>Thryomanes bewickii</i> ssp. <i>bewickii</i> Year-round	Bird of conservation concern
<b>Black-crowned Night-heron</b> <i>Nycticorax nycticorax</i> Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0EU">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0EU</a>	Bird of conservation concern
<b>Dickcissel</b> <i>Spiza americana</i> Season: Breeding	Bird of conservation concern

<b>Field Sparrow</b> <i>Spizella pusilla</i> Year-round	Bird of conservation concern
<b>Fox Sparrow</b> <i>Passerella iliaca</i> Season: Wintering	Bird of conservation concern
<b>Golden Eagle</b> <i>Aquila chrysaetos</i> Season: Wintering <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0DV">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0DV</a>	Bird of conservation concern
<b>Harris's Sparrow</b> <i>Zonotrichia querula</i> Season: Wintering	Bird of conservation concern
<b>Hudsonian Godwit</b> <i>Limosa haemastica</i> Season: Migrating	Bird of conservation concern
<b>Kentucky Warbler</b> <i>Oporornis formosus</i> Season: Breeding	Bird of conservation concern
<b>Le Conte's Sparrow</b> <i>Ammodramus leconteii</i> Season: Wintering	Bird of conservation concern
<b>Least Bittern</b> <i>Ixobrychus exilis</i> Season: Breeding	Bird of conservation concern
<b>Loggerhead Shrike</b> <i>Lanius ludovicianus</i> Year-round <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0FY">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0FY</a>	Bird of conservation concern
<b>Mississippi Kite</b> <i>Ictinia mississippiensis</i> Season: Breeding	Bird of conservation concern
<b>Northern Flicker</b> <i>Colaptes auratus</i> Year-round	Bird of conservation concern
<b>Painted Bunting</b> <i>Passerina ciris</i> Season: Breeding	Bird of conservation concern
<b>Prairie Warbler</b> <i>Dendroica discolor</i> Season: Breeding	Bird of conservation concern
<b>Prothonotary Warbler</b> <i>Protonotaria citrea</i> Season: Breeding	Bird of conservation concern
<b>Red-headed Woodpecker</b> <i>Melanerpes erythrocephalus</i> Year-round	Bird of conservation concern
<b>Rufous-crowned Sparrow</b> <i>Aimophila ruficeps</i> Year-round <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0MX">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0MX</a>	Bird of conservation concern
<b>Rusty Blackbird</b> <i>Euphagus carolinus</i> Season: Wintering	Bird of conservation concern
<b>Short-eared Owl</b> <i>Asio flammeus</i> Season: Wintering <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HD">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HD</a>	Bird of conservation concern
<b>Swainson's Hawk</b> <i>Buteo swainsoni</i> Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B070">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B070</a>	Bird of conservation concern

## Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

**There are no refuges in this location**

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

## DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

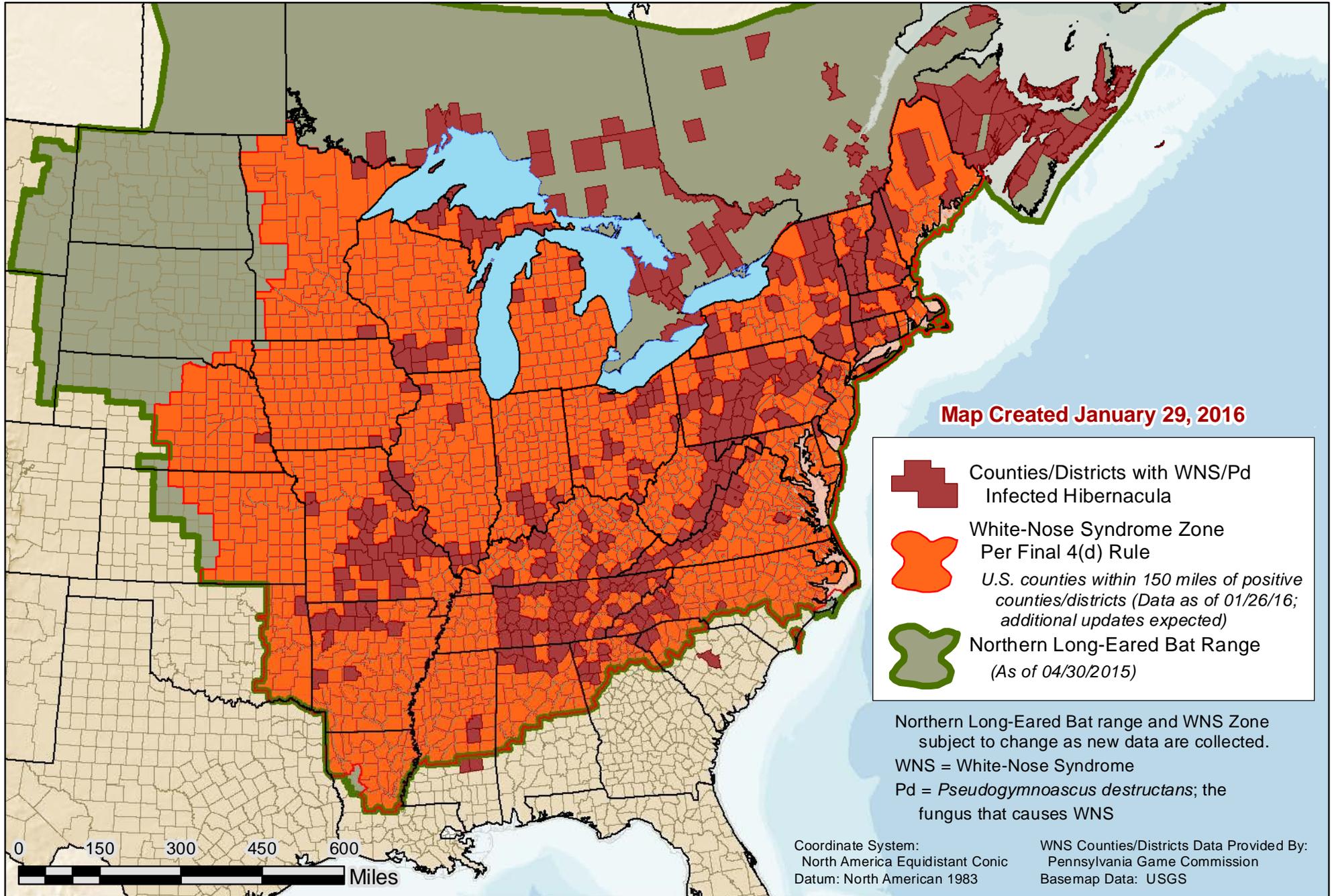
**APPENDIX F**  
**WNS ZONE MAP**



U.S. Fish & Wildlife Service

# Northern Long-Eared Bat Final 4(d) Rule

## White-Nose Syndrome Zone Around WNS/Pd Positive Counties/Districts



**APPENDIX G**

**AMERICAN BURYING BEETLE SURVEY**

**AMERICAN BURYING BEETLE SURVEY**

**Construction Project  
Rogers County, Oklahoma**

*Prepared for:*

**Port of Catoosa  
5350 Cimarron Road  
Catoosa, Oklahoma 74015**

*Prepared by:*



**Eagle Environmental  
Consulting, Inc.**

**P.O. Box 335  
Vinita, Oklahoma 74301  
Ph: 918-272-7656  
Fax: 918-256-6131**

**P.O. Box 5446  
Fort Smith, Arkansas 72913  
Ph: 918-697-3936  
Fax: 479-646-9406**

**July 2014**

**AMERICAN BURYING BEETLE SURVEY**

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**July 2014**



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**Steven R. Votaw  
President**

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# AMERICAN BURYING BEETLE SURVEY

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## Port of Catoosa Construction Rogers County, Oklahoma

### I. Introduction

The subject survey effort was conducted to identify the presence or absence of American Burying Beetles (*Nicrophorus americanus*) (ABB) associated with the proposed construction project at the Port of Catoosa in Rogers County, Oklahoma. The proposed project location is shown on (Figure 1). The area of potential effect is about 725 acres.

Trapping began the night of June 30, 2014 and continued until July 5, 2014 during which no ABB's were captured. Three trap locations were deployed and maintained for 5 nights. Trap 1 is underlain by the Barge Silt Loam, Trap 2 is underlain by the Osage Clay and Trap 3 is underlain by the Verdigris silty clay loam and shown on **Figure 2**. The ABB has been a federally listed endangered species since 1989 and is also recognized as endangered at the State level. Based on the potential for impact to individuals of ABB, these surveys were performed in compliance with the Endangered Species Act of 1973 (16 U.S.C. 1539, et seq.) and the U.S. Fish and Wildlife Service Regulations (50 C.F.R. 17.22) under Endangered Species permit number TE043399-0.

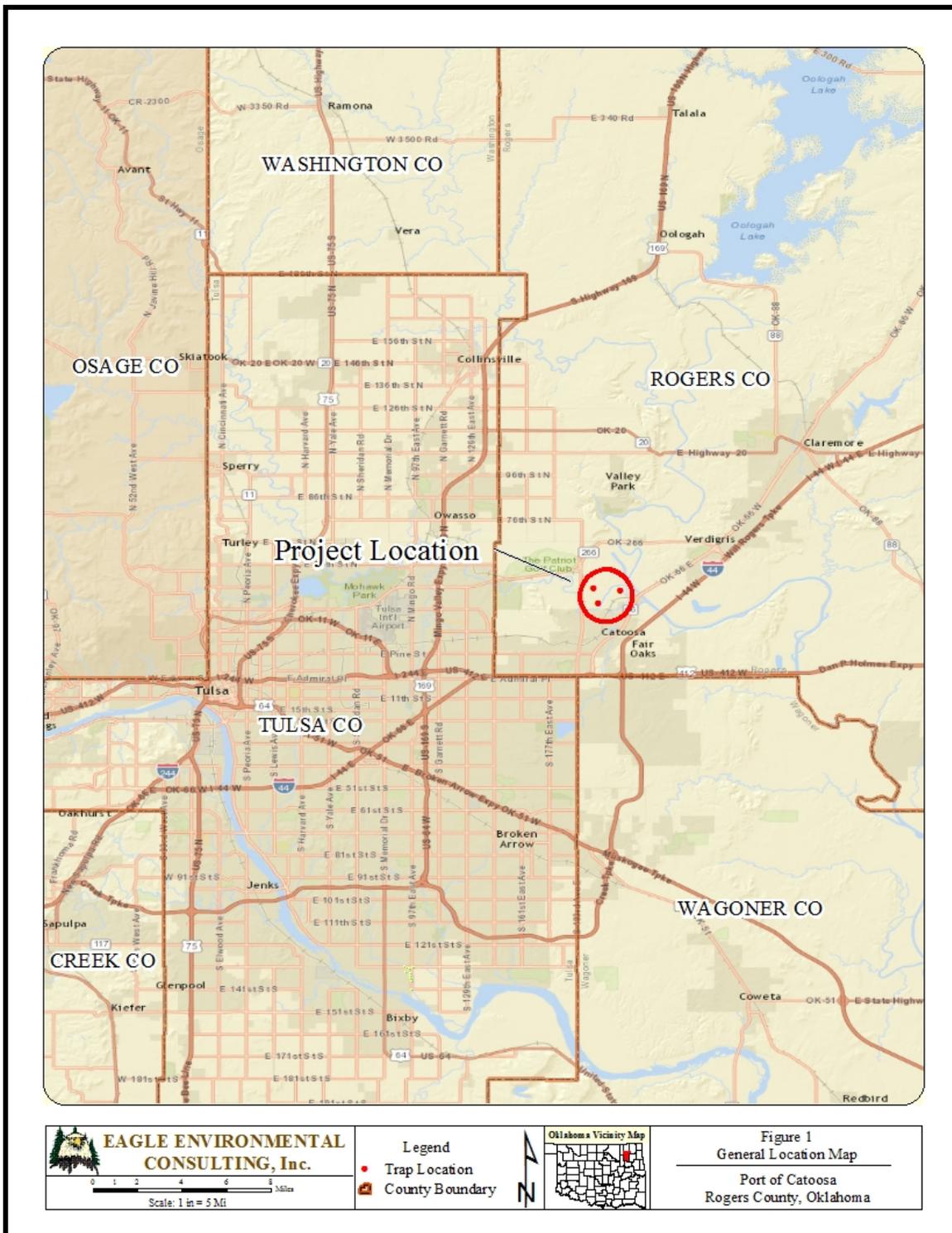
### II. General Site Description

The survey corridor is located within the undulating landscape of the Southern Cross Timbers Ecoregion of Oklahoma (Woods, et.al, 2005). The majority of the lands within this ecoregion are associated with uplands on rolling hills with moderately steep slopes to medium and/or low gradient areas of topographic relief along drainages and waterways. Dominant species observed at Trap 1 included green ash, musk thistle, black willow, American elm, hackberry, serecia, nut sedge, little barley and Johnson grass. Species observed at Trap 2 consisted of hackberry, hawthorn, poison ivy, Virginia creeper, pecan, nut sedge, wild grape, black walnut, and little barley. Trap 3 species consisted of American elm, pecan, box elder, hackberry, blackberry, little barley, Johnson grass, crabgrass and nightshade.

### III. Sampling Methodology

The ABB is large (1-1.5 inches) and has a shiny black appearance with four orange-red spots on the wing covers (elytra). A large red spot on the pronotum of the beetle is indicative of the species. The habitat requirements for this beetle are

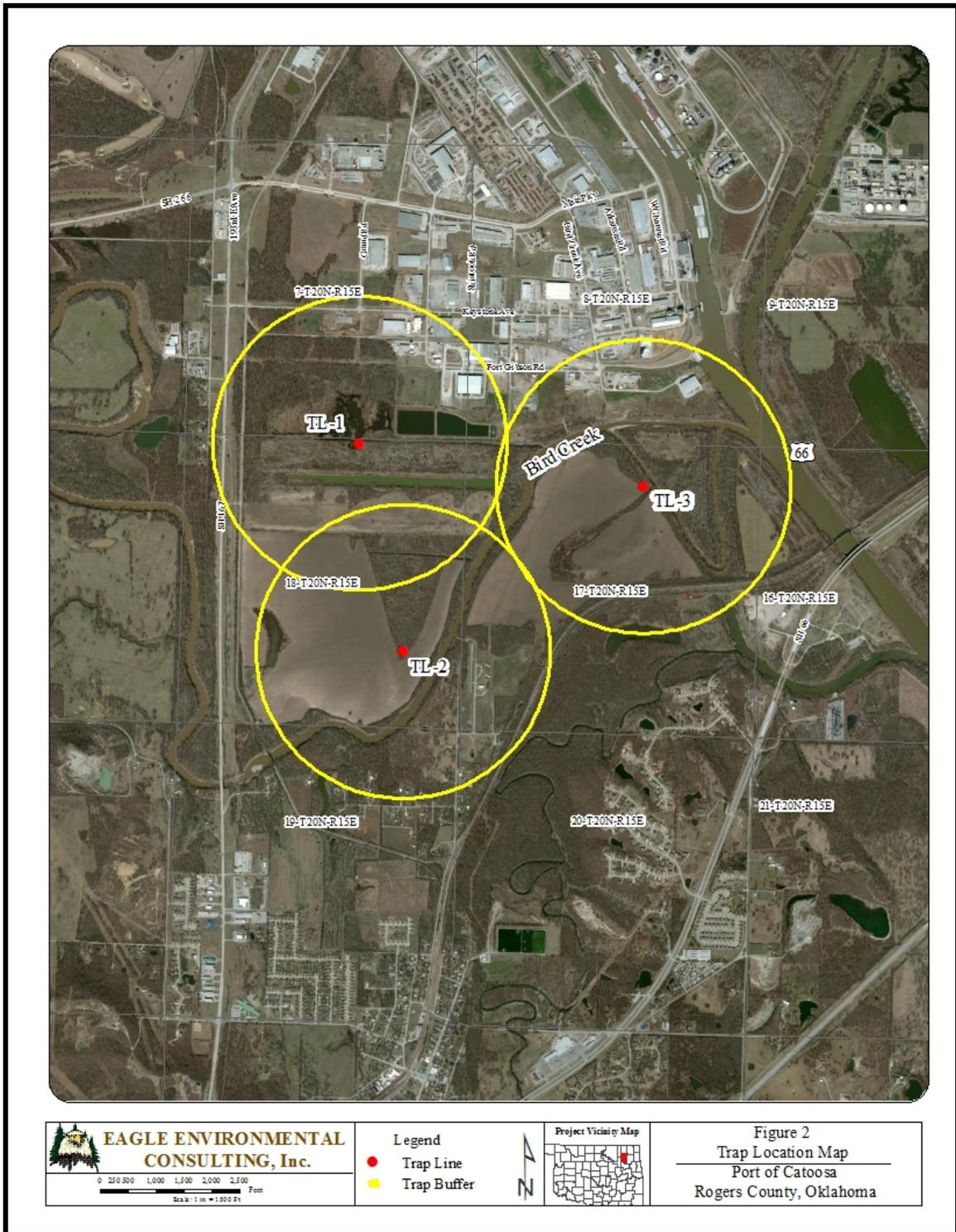
# AMERICAN BURYING BEETLE SURVEY



Port of Catoosa Construction  
Rogers County, Oklahoma

Eagle Environmental Consulting, Inc.  
July 2014

# AMERICAN BURYING BEETLE SURVEY



## AMERICAN BURYING BEETLE SURVEY

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not fully known; however, the ABB is considered a habitat generalist and is known to occupy a diverse range of habitats. Habitats associated with the ABB include open grasslands, forests, as well as transitional areas. The beetle is a carrion feeder and utilizes small vertebrate carcasses for food and reproductive purposes. The ABB occurs in a variety of habitat types and will exploit virtually any possibilities where suitable forage and soil conditions may be found.

Three transects were selected to ensure appropriate survey coverage of the anticipated area of disturbance. The trapping method for the ABB survey was performed according to the Draft American Burying Beetle Range Wide Presence/Absence Live-trapping Survey Guidance (USFWS, 2014). One five gallon bucket pitfall trap was used at each trap location. Bait consisted of a whole extra large rat carcass with hair intact and placed on 3 to 4 inches of soil.

According to the U.S. Fish and Wildlife Service a minimum of 5 successive trap-nights are required to establish a sampling effort. Temperatures cannot fall below 60°F and wind speed cannot exceed 10 miles per hour for greater than 20% of the trap night between 9 pm and 4 am (1 Hour 24 minutes). Failure to meet such specified trapping effort criteria would result in an additional trap night or trap nights. Meteorological data for this ABB survey effort was obtained from Weather Underground.

### IV. Survey Findings

No American Burying Beetles were captured during the survey effort. Fifteen *N. pustulatus*, 28 *N. orbicollis*, one *N. marginatus* and several species of crickets (*Gryllidae*), arachnids, isopods, arthropods and various other insects were collected. Atmospheric conditions during the rest of the ABB survey were fair with normal temperatures and wind velocities ranging from calm to moderate (0 to less than 10 mph). Nighttime low temperatures ranged between 61 and 79 degrees while daytime highs ranged between 72 and 86 (°F). The field survey data forms and survey summary sheet are found in **Appendix A**. Meteorological data is provided in **Appendix B**. A representative photograph of each trap location is provided in **Appendix C**.

# AMERICAN BURYING BEETLE SURVEY

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## V. Conclusion

The subject survey was performed in an effort to identify the presence of American Burying Beetles at or near the proposed construction area. Three transects were deployed near the proposed construction area to ensure adequate coverage and maintained for 5 trap nights. No American Burying Beetles were captured. Fifteen *N. pustulatus*, 28 *N. orbicollis*, one *N. marginatus* and several species of crickets (*Gryllidae*), arachnids, isopods, arthropods and various other insects were collected which indicates trapping efforts and techniques were adequate and functional. Meteorological conditions during the survey were favorable for ABB activity.

# AMERICAN BURYING BEETLE SURVEY

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## VI. References

United States Department of Agriculture. Natural Resources Conservation Service, Soil Survey Staff. Web Soil Survey for Rogers County, OK. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed July 7, 2014.

USGS. 7.5-Minute Topographic Map

United States Fish and Wildlife Service. 2014. American Burying Beetle *Nicrophorus americanus* Oklahoma Presence/Absence Live-trapping Survey Guidance. 15 pages.

<http://www.wunderground.com>

Woods, et al 2005. Oklahoma (color poster with map, Ecoregions of descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,000,000).

## **Appendix A**

### **Survey Data Forms**

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0738 Date Checked<sup>1</sup>: 1 July 14 Transect #: T1 Survey Night : 1

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S7T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2202 / -95.7508 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Barge Silty Loam Soil Moisture<sup>4</sup>: 1.3873  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 79 Max 86.1 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

### AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0723 Date Checked<sup>1</sup>: 2 July 14 Transect #: T1 Survey Night : 2

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S7T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2202 / -95.7508 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Barge Silty Loam Soil Moisture<sup>4</sup>: 1.5168  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 71.1 Max 77.8 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	1-Necrophilia americana
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0740 Date Checked<sup>1</sup>: 3 July 14 Transect #: T1 Survey Night : 3

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S7T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2202 / -95.7508 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Barge Silty Loam Soil Moisture<sup>4</sup>: 1.6909  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 61.0 Max 72.5 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	3-Necrophilia americana
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0815 Date Checked<sup>1</sup>: 4 July 14 Transect #: T1 Survey Night : 4

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S7T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2202 / -95.7508 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Barge Silty Loam Soil Moisture<sup>4</sup>: 1.8121  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 73.2 Max 61.9 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0800 Date Checked<sup>1</sup>: 5 July 14 Transect #: T1 Survey Night : 5

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S7T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2202 / -95.7508 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Barge Silty Loam Soil Moisture<sup>4</sup>: 1.8926  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 70.6 Max 81.3 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	2	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0745 Date Checked<sup>1</sup>: 1 July 14 Transect #: T2 Survey Night : 1

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S18T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2102 / -95.7478 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Osage Clay Soil Moisture<sup>4</sup>: 1.3873  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 79 Max 86.1 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	1	0	0	0	0	0	1-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0745 Date Checked<sup>1</sup>: 2 July 14 Transect #: T2 Survey Night : 2

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S18T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2102 / -95.7478 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Osage Clay Soil Moisture<sup>4</sup>: 1.5168  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 71.1 Max 77.8 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	3	1	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0755 Date Checked<sup>1</sup>: 3 July 14 Transect #: T2 Survey Night : 3

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S18T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2102 / -95.7478 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Osage Clay Soil Moisture<sup>4</sup>: 1.6909  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 61.0 Max 72.5 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	1	0	1	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0830 Date Checked<sup>1</sup>: 4 July 14 Transect #: T2 Survey Night : 4

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S18T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2102 / -95.7478 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Osage Clay Soil Moisture<sup>4</sup>: 1.8121  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 73.2 Max 61.9 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0810 Date Checked<sup>1</sup>: 5 July 14 Transect #: T2 Survey Night : 5

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S18T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2102 / -95.7478 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Osage Clay Soil Moisture<sup>4</sup>: 1.8926  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 70.6 Max 81.3 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	0
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0830 Date Checked<sup>1</sup>: 1 July 14 Transect #: T3 Survey Night : 1

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S17T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2185 / -95.7335 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Verdigris Silty Clay Loam Soil Moisture<sup>4</sup>: 1.3873  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 79.0 Max 86.1 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	8	0	3	0	0	0	4-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

### AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0838 Date Checked<sup>1</sup>: 2 July 14 Transect #: T3 Survey Night : 2

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S17T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2185 / -95.7335 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Verdigris Silty Clay Loam Soil Moisture<sup>4</sup>: 1.5168  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 71.1 Max 77.8 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	0	0	0	0	0	0	1-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

### AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0830 Date Checked<sup>1</sup>: 3 July 14 Transect #: T3 Survey Night : 3

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S17T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2185 / -95.7335 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Verdigris Silty Clay Loam Soil Moisture<sup>4</sup>: 1.6909  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 61.0 Max 72.5 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	3	0	0	0	0	0	4-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0900 Date Checked<sup>1</sup>: 4 July 14 Transect #: T3 Survey Night : 4

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S17T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2185 / -95.7335 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Verdigris Silty Clay Loam Soil Moisture<sup>4</sup>: 1.8121  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 73.2 Max 61.9 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	1	0	0	0	0	0	1-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

1. Date and time refer to when trap is checked;
2. Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
3. Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
4. Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
5. Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
6. Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
7. Additional trapping required if any metrics exceed the allowable thresholds.
8. Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
9. OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
10. Recaptures refer to color and number of bee tag on beetles that have been previously marked.
11. Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## AMERICAN BURYING BEETLE SURVEY DATA COLLECTION FORM

Project Name: Port of Catoosa Project Description: port construction

Time Checked<sup>1</sup>: 0855 Date Checked<sup>1</sup>: 5 July 14 Transect #: T3 Survey Night : 5

Survey Company: Eagle Env Con Permittee: Everett Laney Permittee Number: TE 043399-2  
(Spell out)

State: Ok County: Rogers Legal Description<sup>2</sup>: S17T20NR15E General Location: north of Catoosa  
(Sec Township Range) (nearest town, city, landmark)

Decimal Degrees<sup>2</sup>: 36.2185 / -95.7335 Type of transect: pitfall  
(NAD 83) (above-ground or pitfall traps)

Vegetation Type: woodland Action Agency/Proponent: Port of Catoosa  
(Prairie, woodland, forest, pasture)

Primary Soil Type: Verdigris Silty Clay Loam Soil Moisture<sup>4</sup>: 1.8926  
(Refer to County Soil Survey)

Temp<sup>3</sup>: Min 70.6 Max 81.3 ° Heavy Rainfall<sup>5</sup> no Wind >10 mph<sup>6</sup> no  
(Yes/No) (Yes/No)

Additional number of survey night(s) required because of wind, temperature, or rain?<sup>7</sup> 0

Trap No.	Disturbed (Y/N)	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>pustulatus</i>	<i>marginatus</i>	<i>carolinus</i>	<i>sayi</i>	Other carrion beetles
1.	n	0	14	0	6	0	0	0	2-Necrophila
Totals									

Number of disturbed traps and/or bait (D): 0

Additional survey night(s) required because of disturbance?<sup>8</sup> : no  
(Yes/No)

List each individual American burying beetle captured below and complete the appropriate columns.

ABB	Male	Female	Old <sup>9</sup>	New <sup>9</sup>	Age Unknown <sup>9</sup>	Recapture <sup>10</sup>	Newly Marked <sup>11</sup>	Tag #	Death	Pronotum Width
1										
2										
3										
4										
5										

Comments: \_\_\_\_\_

- Date and time refer to when trap is checked;
- Check that legal description fits decimal degrees location. Lat/long MUST be in decimal degrees, NAD 83
- Max/Min temp from 9 pm to 4 am prior to checking traps, must use data from [www.wunderground.com](http://www.wunderground.com)
- Soil moisture must be obtained by obtaining the TR-05 report from [http://www.mesonet.org/index.php/weather/daily\\_data\\_retrieval](http://www.mesonet.org/index.php/weather/daily_data_retrieval).
- Rain from 9 pm to 4 am, must use data from [www.wunderground.com](http://www.wunderground.com)
- Wind exceeds 10 mph > than 20% of time between 9 pm to 4 am
- Additional trapping required if any metrics exceed the allowable thresholds.
- Determine total number of disturbed traps over all 5 survey nights. Any disturbance to 5-gallon traps requires an additional night of survey effort.
- OLD=breeding adult; NEW=newly enclosed adult; UNK=age cannot be determined.
- Recaptures refer to color and number of bee tag on beetles that have been previously marked.
- Newly marked males and females refers to color, number of bee tag, and age of beetle (e.g. R54[old]).

**Heavy Rain** is defined by the World Meteorological Organization (<http://severe.worldweather.org/raindoc.html>) as "Rainfall greater than or equal to 50 mm [1.9685 inches] in the past 24 hours."

## **Appendix B**

### **Weather Data**

Catoosa **KOKCATOO2**

**Weather History Table, June 30, 2014**

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:03 AM	80.5 °F	73.4 °F	79 %	South	2.7 mph	3.5 mph	29.84 in	0 in	0 in
12:08 AM	80.4 °F	73.3 °F	79 %	SSE	3.8 mph	8.1 mph	29.84 in	0 in	0 in
12:13 AM	80.3 °F	73.6 °F	80 %	SE	1.6 mph	3.5 mph	29.84 in	0 in	0 in
12:18 AM	80.2 °F	73.5 °F	80 %	South	2.2 mph	4.6 mph	29.83 in	0 in	0 in
12:23 AM	80.1 °F	73.4 °F	80 %	SSE	1.4 mph	2.3 mph	29.83 in	0 in	0 in
12:28 AM	80 °F	73.3 °F	80 %	South	1.8 mph	2 mph	29.83 in	0 in	0 in
12:33 AM	79.9 °F	73.2 °F	80 %	SSE	2.5 mph	3 mph	29.83 in	0 in	0 in
12:38 AM	79.7 °F	73.3 °F	81 %	SSE	1.8 mph	3.5 mph	29.84 in	0 in	0 in
12:43 AM	79.6 °F	73.3 °F	81 %	SSE	0.2 mph	2.3 mph	29.83 in	0 in	0 in
12:48 AM	79.4 °F	73.1 °F	81 %	SSE	1.8 mph	3.5 mph	29.84 in	0 in	0 in
12:53 AM	79.3 °F	73.3 °F	82 %	SE	0.8 mph	3.5 mph	29.84 in	0 in	0 in
12:58 AM	79.2 °F	73.2 °F	82 %	SE	0.8 mph	2.3 mph	29.84 in	0 in	0 in
1:03 AM	79.1 °F	73.1 °F	82 %	SE	0.2 mph	2 mph	29.83 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:08 AM	78.9 °F	72.9 °F	82 %	SE	1.2 mph	2.3 mph	29.83 in	0 in	0 in
1:13 AM	78.8 °F	72.8 °F	82 %	SE	1.6 mph	3.5 mph	29.83 in	0 in	0 in
1:18 AM	78.7 °F	73.1 °F	83 %	SSE	2.6 mph	3.5 mph	29.83 in	0 in	0 in
1:23 AM	78.5 °F	72.9 °F	83 %	SSE	2.1 mph	3.5 mph	29.83 in	0 in	0 in
1:28 AM	78.5 °F	72.9 °F	83 %	SSE	0.2 mph	1.2 mph	29.83 in	0 in	0 in
1:33 AM	78.3 °F	72.7 °F	83 %	SSE	1.3 mph	2.3 mph	29.83 in	0 in	0 in
1:38 AM	78.2 °F	73 °F	84 %	SSE	1.2 mph	2.3 mph	29.83 in	0 in	0 in
1:43 AM	78 °F	72.8 °F	84 %	SSE	0.5 mph	1.2 mph	29.82 in	0 in	0 in
1:48 AM	77.9 °F	72.7 °F	84 %	SSE	0.9 mph	2.3 mph	29.82 in	0 in	0 in
1:53 AM	77.7 °F	72.8 °F	85 %	SE	2.7 mph	4.6 mph	29.82 in	0 in	0 in
1:58 AM	77.6 °F	72.7 °F	85 %	SE	1.7 mph	3.5 mph	29.82 in	0 in	0 in
2:03 AM	77.5 °F	72.6 °F	85 %	SE	1.3 mph	3.5 mph	29.82 in	0 in	0 in
2:08 AM	77.4 °F	72.5 °F	85 %	SSE	0.6 mph	2.3 mph	29.82 in	0 in	0 in
2:13 AM	77.3 °F	72.4 °F	85 %	SSE	1.6 mph	2.3 mph	29.82 in	0 in	0 in
2:18 AM	77.2 °F	72.7 °F	86 %	SSE	0.6 mph	1 mph	29.82 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:23 AM	77.2 °F	72.7 °F	86 %	SSE	0 mph	2.3 mph	29.82 in	0 in	0 in
2:28 AM	77.1 °F	72.6 °F	86 %	SSE	1.1 mph	2.3 mph	29.82 in	0 in	0 in
2:33 AM	77.1 °F	72.6 °F	86 %	SSE	1.4 mph	2.3 mph	29.82 in	0 in	0 in
2:38 AM	77.1 °F	72.6 °F	86 %	SSE	1.6 mph	2.3 mph	29.82 in	0 in	0 in
2:43 AM	77.1 °F	72.6 °F	86 %	SSE	1.4 mph	2.3 mph	29.82 in	0 in	0 in
2:48 AM	77 °F	72.5 °F	86 %	SSE	0.9 mph	3.5 mph	29.82 in	0 in	0 in
2:53 AM	77 °F	72.5 °F	86 %	SSE	2.1 mph	2.1 mph	29.81 in	0 in	0 in
2:58 AM	76.9 °F	72.4 °F	86 %	South	1.3 mph	3.5 mph	29.81 in	0 in	0 in
3:03 AM	76.9 °F	72.4 °F	86 %	SSE	1.7 mph	2.3 mph	29.81 in	0 in	0 in
3:08 AM	76.9 °F	72.4 °F	86 %	SSE	1.3 mph	3.5 mph	29.81 in	0 in	0 in
3:13 AM	76.9 °F	72.4 °F	86 %	SSE	1.6 mph	3.5 mph	29.81 in	0 in	0 in
3:18 AM	76.9 °F	72.4 °F	86 %	SSE	1.9 mph	4 mph	29.81 in	0 in	0 in
3:23 AM	76.9 °F	72.4 °F	86 %	SSE	1.6 mph	3.5 mph	29.81 in	0 in	0 in
3:28 AM	76.9 °F	72.4 °F	86 %	SE	2.4 mph	3 mph	29.81 in	0 in	0 in
3:33 AM	76.9 °F	72.4 °F	86 %	SSE	2.6 mph	6.9 mph	29.81 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:38 AM	76.9 °F	72.4 °F	86 %	SSE	0.8 mph	2.3 mph	29.81 in	0 in	0 in
3:43 AM	76.9 °F	72.4 °F	86 %	SSE	1.6 mph	3 mph	29.81 in	0 in	0 in
3:48 AM	76.9 °F	72.4 °F	86 %	SSE	1.4 mph	2.3 mph	29.81 in	0 in	0 in
3:53 AM	76.9 °F	72.4 °F	86 %	SSE	1.2 mph	3.5 mph	29.81 in	0 in	0 in
3:58 AM	76.9 °F	72.4 °F	86 %	SSE	1 mph	2.3 mph	29.81 in	0 in	0 in
4:03 AM	76.8 °F	72.3 °F	86 %	SSE	1.4 mph	3.5 mph	29.81 in	0 in	0 in
4:08 AM	76.8 °F	72.3 °F	86 %	SSE	2.3 mph	6.9 mph	29.81 in	0 in	0 in
4:13 AM	76.9 °F	72.4 °F	86 %	SSE	1 mph	2.3 mph	29.81 in	0 in	0 in
4:18 AM	76.9 °F	72.4 °F	86 %	SSE	0.2 mph	1.2 mph	29.81 in	0 in	0 in
4:23 AM	76.8 °F	72.3 °F	86 %	SSE	1.1 mph	3.5 mph	29.81 in	0 in	0 in
4:28 AM	76.7 °F	72.5 °F	87 %	SSE	1.2 mph	2.3 mph	29.81 in	0 in	0 in
4:33 AM	76.6 °F	72.4 °F	87 %	SSE	0.9 mph	2.3 mph	29.81 in	0 in	0 in
4:38 AM	76.6 °F	72.4 °F	87 %	SSE	0 mph	0 mph	29.81 in	0 in	0 in
4:43 AM	76.5 °F	72.3 °F	87 %	SSE	1.3 mph	2.3 mph	29.81 in	0 in	0 in
4:48 AM	76.4 °F	72.2 °F	87 %	SSE	0.1 mph	2.3 mph	29.82 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:53 AM	76.4 °F	72.6 °F	88 %	SSE	0.1 mph	1.2 mph	29.82 in	0 in	0 in
4:58 AM	76.3 °F	72.5 °F	88 %	SSE	1.3 mph	3.5 mph	29.82 in	0 in	0 in
5:03 AM	76.3 °F	72.5 °F	88 %	SSE	0.7 mph	3.5 mph	29.82 in	0 in	0 in
5:08 AM	76.2 °F	72.4 °F	88 %	SSE	1.5 mph	3.5 mph	29.82 in	0 in	0 in
5:13 AM	76.2 °F	72.4 °F	88 %	SSE	1.3 mph	3.5 mph	29.82 in	0 in	0 in
5:18 AM	76.2 °F	72.4 °F	88 %	SSE	1.9 mph	4.6 mph	29.82 in	0 in	0 in
5:23 AM	76.1 °F	72.3 °F	88 %	SSE	0.6 mph	2.3 mph	29.82 in	0 in	0 in
5:28 AM	76.1 °F	72.3 °F	88 %	SSE	0.3 mph	2.3 mph	29.82 in	0 in	0 in
5:33 AM	76 °F	72.2 °F	88 %	SSE	0.7 mph	2.3 mph	29.82 in	0 in	0 in
5:38 AM	76 °F	72.2 °F	88 %	SSE	1.8 mph	3.5 mph	29.82 in	0 in	0 in
5:43 AM	76 °F	72.2 °F	88 %	SSE	1.6 mph	3.5 mph	29.82 in	0 in	0 in
5:48 AM	76 °F	72.2 °F	88 %	SSE	1 mph	3.5 mph	29.82 in	0 in	0 in
5:53 AM	76 °F	72.2 °F	88 %	South	1.4 mph	2.3 mph	29.83 in	0 in	0 in
5:58 AM	76 °F	72.2 °F	88 %	SSE	1.1 mph	2.3 mph	29.83 in	0 in	0 in
6:03 AM	76 °F	72.2 °F	88 %	SE	1.1 mph	2.3 mph	29.83 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:08 AM	76.1 °F	72.3 °F	88 %	SE	1.5 mph	2.3 mph	29.83 in	0 in	0 in
6:13 AM	76.1 °F	72.3 °F	88 %	SE	2.1 mph	3.5 mph	29.83 in	0 in	0 in
6:18 AM	76.2 °F	72.4 °F	88 %	SSE	1.6 mph	3.5 mph	29.83 in	0 in	0 in
6:23 AM	76.2 °F	72.4 °F	88 %	SSE	1.8 mph	3.5 mph	29.83 in	0 in	0 in
6:28 AM	76.2 °F	72.4 °F	88 %	SSE	0.8 mph	3.5 mph	29.83 in	0 in	0 in
6:33 AM	76.3 °F	72.5 °F	88 %	SSE	0.7 mph	2.3 mph	29.83 in	0 in	0 in
6:38 AM	76.3 °F	72.5 °F	88 %	SSE	1.2 mph	2.3 mph	29.83 in	0 in	0 in
6:43 AM	76.4 °F	72.6 °F	88 %	SSE	1.3 mph	4.6 mph	29.83 in	0 in	0 in
6:48 AM	76.5 °F	72.7 °F	88 %	SSE	0.9 mph	3.5 mph	29.84 in	0 in	0 in
6:53 AM	76.6 °F	72.8 °F	88 %	SE	2.3 mph	6.9 mph	29.83 in	0 in	0 in
6:58 AM	76.7 °F	72.9 °F	88 %	SSE	1 mph	4.6 mph	29.83 in	0 in	0 in
7:04 AM	76.9 °F	72.7 °F	87 %	SSE	2.7 mph	4.6 mph	29.83 in	0 in	0 in
7:09 AM	77 °F	72.8 °F	87 %	SSE	2.1 mph	4.6 mph	29.83 in	0 in	0 in
7:14 AM	77.2 °F	73 °F	87 %	SSE	2.1 mph	3.5 mph	29.83 in	0 in	0 in
7:19 AM	77.4 °F	73.2 °F	87 %	SSE	2.9 mph	4 mph	29.84 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:24 AM	77.6 °F	73.1 °F	86 %	SE	3.4 mph	9.2 mph	29.84 in	0 in	0 in
7:29 AM	78 °F	73.5 °F	86 %	SSE	3.3 mph	6.9 mph	29.84 in	0 in	0 in
7:34 AM	78.4 °F	73.5 °F	85 %	SE	5 mph	9.2 mph	29.84 in	0 in	0 in
7:39 AM	78.7 °F	73.5 °F	84 %	South	3.4 mph	4 mph	29.84 in	0 in	0 in
7:44 AM	79 °F	73.7 °F	84 %	SSE	1.7 mph	4.6 mph	29.84 in	0 in	0 in
7:49 AM	79.3 °F	73.7 °F	83 %	SSE	1.7 mph	4.6 mph	29.85 in	0 in	0 in
7:54 AM	79.5 °F	73.9 °F	83 %	South	5.5 mph	9.2 mph	29.85 in	0 in	0 in
7:59 AM	79.8 °F	73.8 °F	82 %	South	3.6 mph	10 mph	29.85 in	0 in	0 in
8:04 AM	80.1 °F	74.1 °F	82 %	SE	2.2 mph	4.6 mph	29.85 in	0 in	0 in
8:09 AM	80.3 °F	74.3 °F	82 %	South	1.6 mph	2.3 mph	29.85 in	0 in	0 in
8:14 AM	80.5 °F	74.1 °F	81 %	SSW	2.3 mph	5.8 mph	29.85 in	0 in	0 in
8:19 AM	80.8 °F	74 °F	80 %	SSE	3.8 mph	5.8 mph	29.85 in	0 in	0 in
8:24 AM	81 °F	74.2 °F	80 %	ESE	2.2 mph	5.8 mph	29.85 in	0 in	0 in
8:29 AM	81.3 °F	74.2 °F	79 %	SSE	2.3 mph	3.5 mph	29.84 in	0 in	0 in
8:34 AM	81.6 °F	74.5 °F	79 %	South	3.3 mph	10.4 mph	29.84 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:39 AM	81.8 °F	74.3 °F	78 %	SSE	3.9 mph	10 mph	29.85 in	0 in	0 in
8:44 AM	82 °F	74.8 °F	79 %	SSE	1.7 mph	3.5 mph	29.85 in	0 in	0 in
8:49 AM	82.4 °F	74.8 °F	78 %	SSE	5.7 mph	6 mph	29.85 in	0 in	0 in
8:54 AM	82.6 °F	74.7 °F	77 %	South	2.1 mph	4.6 mph	29.85 in	0 in	0 in
8:59 AM	82.8 °F	74.5 °F	76 %	South	2.2 mph	3.5 mph	29.85 in	0 in	0 in
9:04 AM	83.1 °F	75.1 °F	77 %	SE	0.7 mph	3.5 mph	29.85 in	0 in	0 in
9:09 AM	83.5 °F	75.1 °F	76 %	SSE	2.5 mph	3.5 mph	29.84 in	0 in	0 in
9:14 AM	83.8 °F	75 °F	75 %	SSE	3.1 mph	10.4 mph	29.85 in	0 in	0 in
9:19 AM	84 °F	74.8 °F	74 %	South	2.9 mph	5.8 mph	29.84 in	0 in	0 in
9:24 AM	84.3 °F	75.5 °F	75 %	South	2.3 mph	5 mph	29.85 in	0 in	0 in
9:29 AM	84.5 °F	75.3 °F	74 %	South	4.9 mph	9.2 mph	29.85 in	0 in	0 in
9:34 AM	84.7 °F	75.5 °F	74 %	SSW	4.3 mph	6.9 mph	29.84 in	0 in	0 in
9:39 AM	84.9 °F	75.3 °F	73 %	SSE	4.8 mph	6.9 mph	29.84 in	0 in	0 in
9:44 AM	85 °F	75 °F	72 %	West	4.3 mph	11.5 mph	29.84 in	0 in	0 in
9:49 AM	84.9 °F	74.9 °F	72 %	SW	4 mph	6.9 mph	29.84 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:54 AM	85.4 °F	75.3 °F	72 %	SSE	4 mph	9.2 mph	29.84 in	0 in	0 in
9:59 AM	85.7 °F	75.2 °F	71 %	South	7.1 mph	11.5 mph	29.84 in	0 in	0 in
10:04 AM	85.7 °F	75.6 °F	72 %	SW	3.5 mph	11.5 mph	29.83 in	0 in	0 in
10:09 AM	85.9 °F	75.8 °F	72 %	South	2.6 mph	6.9 mph	29.83 in	0 in	0 in
10:14 AM	86.3 °F	75.8 °F	71 %	SSE	3.1 mph	4 mph	29.83 in	0 in	0 in
10:19 AM	86.5 °F	75.5 °F	70 %	SSW	4 mph	5.8 mph	29.83 in	0 in	0 in
10:24 AM	86.7 °F	75.7 °F	70 %	West	1.9 mph	8.1 mph	29.83 in	0 in	0 in
10:29 AM	86.7 °F	75.3 °F	69 %	West	4.1 mph	12.7 mph	29.83 in	0 in	0 in
10:34 AM	86.8 °F	75.8 °F	70 %	ESE	4.1 mph	13.8 mph	29.83 in	0 in	0 in
10:39 AM	86.7 °F	75.3 °F	69 %	SSE	4.7 mph	11.5 mph	29.83 in	0 in	0 in
10:44 AM	86.8 °F	75.4 °F	69 %	SSW	5.2 mph	8.1 mph	29.83 in	0 in	0 in
10:49 AM	86.9 °F	75.5 °F	69 %	SE	4.6 mph	11.5 mph	29.83 in	0 in	0 in
10:54 AM	87.2 °F	75.8 °F	69 %	SSE	5.3 mph	11.5 mph	29.83 in	0 in	0 in
10:59 AM	87.5 °F	75.6 °F	68 %	SSE	2.3 mph	6 mph	29.82 in	0 in	0 in
11:04 AM	87.5 °F	75.6 °F	68 %	SSW	3.7 mph	5.8 mph	29.82 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:09 AM	87.6 °F	75.7 °F	68 %	SSE	3 mph	9.2 mph	29.82 in	0 in	0 in
11:14 AM	87.9 °F	75.6 °F	67 %	South	4.4 mph	13.8 mph	29.82 in	0 in	0 in
11:19 AM	88.1 °F	75.3 °F	66 %	South	6.8 mph	19.6 mph	29.82 in	0 in	0 in
11:24 AM	88.3 °F	75.9 °F	67 %	SSE	7.7 mph	17.3 mph	29.82 in	0 in	0 in
11:29 AM	88.2 °F	75.9 °F	67 %	SE	1.7 mph	3.5 mph	29.82 in	0 in	0 in
11:34 AM	88.4 °F	75.6 °F	66 %	SSE	4.8 mph	10.4 mph	29.82 in	0 in	0 in
11:39 AM	88.7 °F	77.2 °F	69 %	SSE	6.4 mph	7 mph	29.81 in	0 in	0 in
11:44 AM	88.9 °F	75.6 °F	65 %	South	3.9 mph	15 mph	29.81 in	0 in	0 in
11:49 AM	88.8 °F	76 °F	66 %	SSE	8.2 mph	10.4 mph	29.81 in	0 in	0 in
11:54 AM	88.7 °F	75.9 °F	66 %	SE	3.7 mph	11.5 mph	29.8 in	0 in	0 in
11:59 AM	89.1 °F	76.3 °F	66 %	South	5.2 mph	6 mph	29.81 in	0 in	0 in
12:04 PM	89.2 °F	76.8 °F	67 %	South	5.5 mph	11.5 mph	29.81 in	0 in	0 in
12:09 PM	89.3 °F	76.9 °F	67 %	SE	7.4 mph	8 mph	29.8 in	0 in	0 in
12:14 PM	89 °F	75.7 °F	65 %	South	4.3 mph	13.8 mph	29.8 in	0 in	0 in
12:19 PM	89 °F	75.7 °F	65 %	South	6.3 mph	13.8 mph	29.8 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:24 PM	89.2 °F	75.4 °F	64 %	ESE	5.4 mph	10.4 mph	29.8 in	0 in	0 in
12:29 PM	89.2 °F	75.4 °F	64 %	SE	7.9 mph	15 mph	29.79 in	0 in	0 in
12:34 PM	88.9 °F	74.7 °F	63 %	SSE	8.1 mph	10.4 mph	29.79 in	0 in	0 in
12:39 PM	89 °F	74.8 °F	63 %	South	4.5 mph	11.5 mph	29.79 in	0 in	0 in
12:44 PM	89.2 °F	74.5 °F	62 %	SSW	8 mph	19.6 mph	29.78 in	0 in	0 in
12:49 PM	89.5 °F	74.8 °F	62 %	SSW	4.1 mph	16.1 mph	29.78 in	0 in	0 in
12:54 PM	89.7 °F	74 °F	60 %	South	5 mph	11.5 mph	29.78 in	0 in	0 in
12:59 PM	90 °F	73.7 °F	59 %	South	2.8 mph	11.5 mph	29.78 in	0 in	0 in
1:04 PM	90.1 °F	73.8 °F	59 %	SSE	3.4 mph	9.2 mph	29.78 in	0 in	0 in
1:09 PM	90.4 °F	74.1 °F	59 %	SSE	5.5 mph	10.4 mph	29.77 in	0 in	0 in
1:14 PM	90.4 °F	74.6 °F	60 %	South	6.4 mph	12 mph	29.77 in	0 in	0 in
1:19 PM	90.1 °F	75.3 °F	62 %	WSW	2.7 mph	5.8 mph	29.77 in	0 in	0 in
1:24 PM	90.3 °F	74.5 °F	60 %	South	5.3 mph	6.9 mph	29.77 in	0 in	0 in
1:29 PM	90.2 °F	73.9 °F	59 %	SSW	3.5 mph	6 mph	29.77 in	0 in	0 in
1:34 PM	90.4 °F	74.1 °F	59 %	SSE	5 mph	5 mph	29.77 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:39 PM	90.3 °F	74 °F	59 %	SSW	5.2 mph	10.4 mph	29.77 in	0 in	0 in
1:44 PM	90.5 °F	74.2 °F	59 %	East	4.7 mph	11.5 mph	29.76 in	0 in	0 in
1:49 PM	90.9 °F	74.6 °F	59 %	SE	4.5 mph	10.4 mph	29.76 in	0 in	0 in
1:54 PM	91.1 °F	74.8 °F	59 %	SSE	7 mph	9.2 mph	29.76 in	0 in	0 in
1:59 PM	91.2 °F	74.9 °F	59 %	SSW	2.6 mph	5.8 mph	29.76 in	0 in	0 in
2:04 PM	91.1 °F	74.3 °F	58 %	West	3.2 mph	10.4 mph	29.76 in	0 in	0 in
2:09 PM	91.2 °F	75.4 °F	60 %	SW	3.9 mph	11.5 mph	29.76 in	0 in	0 in
2:14 PM	91.1 °F	74.3 °F	58 %	South	7.9 mph	15 mph	29.76 in	0 in	0 in
2:19 PM	91.1 °F	74.8 °F	59 %	SSE	6.7 mph	9.2 mph	29.75 in	0 in	0 in
2:24 PM	91.5 °F	74.6 °F	58 %	SSE	3 mph	10.4 mph	29.76 in	0 in	0 in
2:29 PM	91.5 °F	74.1 °F	57 %	SE	6.5 mph	12.7 mph	29.75 in	0 in	0 in
2:34 PM	91.4 °F	74.5 °F	58 %	SSE	4.7 mph	10.4 mph	29.75 in	0 in	0 in
2:39 PM	91.5 °F	74.6 °F	58 %	SSE	4.3 mph	6 mph	29.75 in	0 in	0 in
2:44 PM	91.4 °F	75.1 °F	59 %	South	4.7 mph	16.1 mph	29.75 in	0 in	0 in
2:49 PM	91.7 °F	74.3 °F	57 %	SSE	5.3 mph	16.1 mph	29.75 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:54 PM	92 °F	74.6 °F	57 %	SSE	5 mph	9.2 mph	29.75 in	0 in	0 in
2:59 PM	92.3 °F	75.4 °F	58 %	SSW	3.2 mph	7 mph	29.75 in	0 in	0 in
3:04 PM	92.4 °F	74.4 °F	56 %	South	4.5 mph	9.2 mph	29.75 in	0 in	0 in
3:09 PM	92.2 °F	74.2 °F	56 %	SSE	4.7 mph	13 mph	29.75 in	0 in	0 in
3:14 PM	92.3 °F	74.3 °F	56 %	SE	4 mph	7 mph	29.75 in	0 in	0 in
3:19 PM	92.6 °F	74.6 °F	56 %	West	2.4 mph	4 mph	29.74 in	0 in	0 in
3:24 PM	92.7 °F	73.1 °F	53 %	South	8 mph	8.1 mph	29.75 in	0 in	0 in
3:29 PM	92.6 °F	71.8 °F	51 %	SSE	4.8 mph	11.5 mph	29.75 in	0 in	0 in
3:34 PM	92.7 °F	73.6 °F	54 %	SSE	2 mph	5.8 mph	29.74 in	0 in	0 in
3:39 PM	92.7 °F	73.1 °F	53 %	SSW	3.5 mph	13.8 mph	29.74 in	0 in	0 in
3:44 PM	92.8 °F	72 °F	51 %	South	5.1 mph	9.2 mph	29.74 in	0 in	0 in
3:49 PM	92.9 °F	72.1 °F	51 %	South	3.6 mph	16.1 mph	29.74 in	0 in	0 in
3:54 PM	92.9 °F	72.7 °F	52 %	SSE	2 mph	4 mph	29.73 in	0 in	0 in
3:59 PM	93.1 °F	71.1 °F	49 %	South	3.6 mph	11.5 mph	29.73 in	0 in	0 in
4:04 PM	93.2 °F	70 °F	47 %	SE	3.3 mph	10.4 mph	29.73 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:09 PM	93.3 °F	70.1 °F	47 %	South	7.9 mph	10 mph	29.73 in	0 in	0 in
4:14 PM	93.2 °F	70 °F	47 %	South	5.1 mph	8.1 mph	29.73 in	0 in	0 in
4:19 PM	93.2 °F	69.3 °F	46 %	SSE	5.9 mph	15 mph	29.73 in	0 in	0 in
4:24 PM	93.4 °F	70.8 °F	48 %	ESE	2 mph	9.2 mph	29.73 in	0 in	0 in
4:29 PM	93.6 °F	69.7 °F	46 %	WSW	6.3 mph	13.8 mph	29.72 in	0 in	0 in
4:34 PM	93.8 °F	70.5 °F	47 %	WNW	5.4 mph	8.1 mph	29.72 in	0 in	0 in
4:39 PM	93.9 °F	70.6 °F	47 %	SSE	2.3 mph	6.9 mph	29.72 in	0 in	0 in
4:44 PM	94 °F	71.3 °F	48 %	ESE	3.5 mph	7 mph	29.72 in	0 in	0 in
4:49 PM	94 °F	69.4 °F	45 %	SW	3.9 mph	6.9 mph	29.72 in	0 in	0 in
4:54 PM	94 °F	69.4 °F	45 %	South	5.5 mph	9.2 mph	29.72 in	0 in	0 in
4:59 PM	93.8 °F	69.2 °F	45 %	South	6.2 mph	11.5 mph	29.72 in	0 in	0 in
5:04 PM	93.6 °F	69.7 °F	46 %	SSW	3.7 mph	8.1 mph	29.71 in	0 in	0 in
5:09 PM	93.6 °F	69.7 °F	46 %	SE	3.7 mph	8 mph	29.71 in	0 in	0 in
5:14 PM	93.7 °F	70.4 °F	47 %	SSE	2.7 mph	5.8 mph	29.72 in	0 in	0 in
5:19 PM	93.7 °F	69.8 °F	46 %	South	3.8 mph	11 mph	29.72 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:24 PM	93.9 °F	70 °F	46 %	SSE	3.1 mph	8 mph	29.72 in	0 in	0 in
5:29 PM	94 °F	69.4 °F	45 %	SSE	3.3 mph	9.2 mph	29.72 in	0 in	0 in
5:34 PM	94 °F	69.4 °F	45 %	South	4.7 mph	10.4 mph	29.72 in	0 in	0 in
5:39 PM	93.9 °F	69.3 °F	45 %	SSW	1.3 mph	3.5 mph	29.72 in	0 in	0 in
5:44 PM	93.8 °F	69.2 °F	45 %	SW	3.4 mph	5.8 mph	29.72 in	0 in	0 in
5:49 PM	93.7 °F	69.8 °F	46 %	SW	2.4 mph	5.8 mph	29.72 in	0 in	0 in
5:54 PM	93.8 °F	68.6 °F	44 %	SW	3.3 mph	10.4 mph	29.72 in	0 in	0 in
5:59 PM	93.6 °F	68.4 °F	44 %	SW	4 mph	4.6 mph	29.72 in	0 in	0 in
6:04 PM	93.5 °F	69 °F	45 %	WSW	4.8 mph	5 mph	29.72 in	0 in	0 in
6:09 PM	93.5 °F	69.6 °F	46 %	WSW	3.7 mph	8.1 mph	29.71 in	0 in	0 in
6:14 PM	93.4 °F	69.5 °F	46 %	WSW	2 mph	5.8 mph	29.71 in	0 in	0 in
6:19 PM	93.2 °F	69.3 °F	46 %	NNW	3.8 mph	4.6 mph	29.71 in	0 in	0 in
6:24 PM	92.9 °F	69.7 °F	47 %	South	1.8 mph	5 mph	29.72 in	0 in	0 in
6:29 PM	92.7 °F	69.5 °F	47 %	SSW	2.2 mph	2.3 mph	29.71 in	0 in	0 in
6:34 PM	92.6 °F	68.8 °F	46 %	ESE	2 mph	5.8 mph	29.71 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:39 PM	92.4 °F	68.6 °F	46 %	SE	2.6 mph	6.9 mph	29.71 in	0 in	0 in
6:44 PM	92.2 °F	68.4 °F	46 %	South	2 mph	10.4 mph	29.71 in	0 in	0 in
6:49 PM	92 °F	68.9 °F	47 %	SSW	2.3 mph	4.6 mph	29.71 in	0 in	0 in
6:54 PM	91.8 °F	68.7 °F	47 %	SSW	2 mph	5.8 mph	29.71 in	0 in	0 in
6:59 PM	91.7 °F	68.6 °F	47 %	South	5.2 mph	11.5 mph	29.71 in	0 in	0 in
7:04 PM	91.5 °F	68.4 °F	47 %	West	2.9 mph	10.4 mph	29.72 in	0 in	0 in
7:09 PM	91.4 °F	69 °F	48 %	South	2.9 mph	10.4 mph	29.72 in	0 in	0 in
7:14 PM	91.2 °F	68.8 °F	48 %	SSE	2.6 mph	4.6 mph	29.72 in	0 in	0 in
7:19 PM	91.1 °F	68.7 °F	48 %	SW	2 mph	6.9 mph	29.72 in	0 in	0 in
7:24 PM	91 °F	68.6 °F	48 %	SW	2.7 mph	8.1 mph	29.72 in	0 in	0 in
7:29 PM	90.9 °F	68.5 °F	48 %	SSE	1.5 mph	4.6 mph	29.72 in	0 in	0 in
7:34 PM	90.7 °F	69.5 °F	50 %	SSE	0.8 mph	3.5 mph	29.73 in	0 in	0 in
7:39 PM	90.4 °F	69.2 °F	50 %	SE	2.2 mph	5.8 mph	29.73 in	0 in	0 in
7:44 PM	90.2 °F	69 °F	50 %	SSE	1.3 mph	3.5 mph	29.73 in	0 in	0 in
7:49 PM	90 °F	69.4 °F	51 %	East	1.9 mph	3.5 mph	29.73 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:54 PM	89.8 °F	69.8 °F	52 %	SE	1.8 mph	3.5 mph	29.73 in	0 in	0 in
7:59 PM	89.6 °F	69.6 °F	52 %	SSE	0.9 mph	2.3 mph	29.73 in	0 in	0 in
8:04 PM	89.4 °F	69.5 °F	52 %	SSE	1.2 mph	3.5 mph	29.73 in	0 in	0 in
8:09 PM	89.3 °F	69.4 °F	52 %	SE	1.3 mph	4 mph	29.73 in	0 in	0 in
8:14 PM	89.1 °F	69.7 °F	53 %	SSE	2.6 mph	3.5 mph	29.73 in	0 in	0 in
8:19 PM	88.9 °F	70.1 °F	54 %	SE	0.9 mph	3.5 mph	29.73 in	0 in	0 in
8:24 PM	88.5 °F	70.3 °F	55 %	SE	0.9 mph	2.3 mph	29.73 in	0 in	0 in
8:29 PM	88.1 °F	71.5 °F	58 %	SSE	1.1 mph	6.9 mph	29.73 in	0 in	0 in
8:34 PM	87.6 °F	72 °F	60 %	SSE	3.9 mph	6.9 mph	29.73 in	0 in	0 in
8:39 PM	87.3 °F	72.2 °F	61 %	SSE	3.7 mph	6.9 mph	29.73 in	0 in	0 in
8:44 PM	87 °F	71.9 °F	61 %	SSE	1.3 mph	2.3 mph	29.73 in	0 in	0 in
8:49 PM	86.7 °F	72.1 °F	62 %	SE	2.1 mph	4.6 mph	29.73 in	0 in	0 in
8:54 PM	86.4 °F	72.3 °F	63 %	SE	1.8 mph	3 mph	29.73 in	0 in	0 in
8:59 PM	86.1 °F	72.5 °F	64 %	ESE	0.4 mph	1.2 mph	29.73 in	0 in	0 in
9:04 PM	85.8 °F	72.2 °F	64 %	ESE	1.2 mph	2.3 mph	29.73 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:09 PM	85.5 °F	71.9 °F	64 %	SSE	1.8 mph	3.5 mph	29.73 in	0 in	0 in
9:14 PM	85.2 °F	71.6 °F	64 %	SE	1.9 mph	3.5 mph	29.73 in	0 in	0 in
9:19 PM	85 °F	71.9 °F	65 %	SE	1.1 mph	3.5 mph	29.74 in	0 in	0 in
9:24 PM	84.8 °F	71.7 °F	65 %	SE	0.5 mph	2.3 mph	29.74 in	0 in	0 in
9:29 PM	84.7 °F	71.6 °F	65 %	SSE	2.2 mph	4.6 mph	29.73 in	0 in	0 in
9:34 PM	84.6 °F	71.5 °F	65 %	SSE	2.4 mph	3.5 mph	29.73 in	0 in	0 in
9:39 PM	84.5 °F	71.4 °F	65 %	SE	2.4 mph	5.8 mph	29.74 in	0 in	0 in
9:44 PM	84.4 °F	71.3 °F	65 %	SSE	2.8 mph	3.5 mph	29.74 in	0 in	0 in
9:49 PM	84.4 °F	70.9 °F	64 %	SE	2.3 mph	5.8 mph	29.74 in	0 in	0 in
9:54 PM	84.4 °F	70.9 °F	64 %	SSE	2.6 mph	4.6 mph	29.73 in	0 in	0 in
9:59 PM	84.4 °F	70.9 °F	64 %	SSE	2.8 mph	4.6 mph	29.73 in	0 in	0 in
10:04 PM	84.3 °F	70.8 °F	64 %	SSE	2.1 mph	4.6 mph	29.73 in	0 in	0 in
10:09 PM	84.2 °F	70.7 °F	64 %	SSE	1.6 mph	4.6 mph	29.73 in	0 in	0 in
10:14 PM	84.1 °F	70.6 °F	64 %	SSE	2.8 mph	3.5 mph	29.73 in	0 in	0 in
10:19 PM	83.9 °F	70.4 °F	64 %	South	3.3 mph	3.5 mph	29.73 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:24 PM	83.7 °F	70.7 °F	65 %	SSE	3.1 mph	4.6 mph	29.72 in	0 in	0 in
10:29 PM	83.4 °F	70.8 °F	66 %	SE	3.3 mph	5 mph	29.72 in	0 in	0 in
10:34 PM	83.2 °F	70.7 °F	66 %	SSE	1.9 mph	3.5 mph	29.72 in	0 in	0 in
10:39 PM	83 °F	70.5 °F	66 %	SSE	2.8 mph	10.4 mph	29.71 in	0 in	0 in
10:44 PM	82.8 °F	70.7 °F	67 %	SSE	2.3 mph	4 mph	29.72 in	0 in	0 in
10:49 PM	82.6 °F	70.5 °F	67 %	SSE	3.2 mph	4.6 mph	29.72 in	0 in	0 in
10:54 PM	82.4 °F	70.3 °F	67 %	SSE	1.4 mph	3.5 mph	29.72 in	0 in	0 in
10:59 PM	82.3 °F	70.2 °F	67 %	SSE	3.1 mph	3.5 mph	29.72 in	0 in	0 in
11:01 PM	82.1 °F	70.1 °F	67 %	SSE	1.8 mph	4.6 mph	29.72 in	0 in	0 in
11:02 PM	82.1 °F	70.1 °F	67 %	SSE	0.9 mph	3.5 mph	29.72 in	0 in	0 in
11:07 PM	82 °F	70 °F	67 %	SSE	0.9 mph	2.3 mph	29.73 in	0 in	0 in
11:12 PM	81.8 °F	70.2 °F	68 %	SSE	1.2 mph	3.5 mph	29.73 in	0 in	0 in
11:17 PM	81.7 °F	70.1 °F	68 %	SSE	1 mph	3.5 mph	29.74 in	0 in	0 in
11:22 PM	81.5 °F	69.9 °F	68 %	SSE	4.1 mph	9.2 mph	29.73 in	0 in	0 in
11:27 PM	81.4 °F	69.8 °F	68 %	SSE	1.3 mph	3.5 mph	29.74 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:32 PM	81.4 °F	69.8 °F	68 %	SE	2.1 mph	9 mph	29.74 in	0 in	0 in
11:37 PM	81.4 °F	69.8 °F	68 %	SSE	1.9 mph	2.3 mph	29.74 in	0 in	0 in
11:42 PM	81.5 °F	69.9 °F	68 %	SSE	2.6 mph	6.9 mph	29.74 in	0 in	0 in
11:47 PM	81.6 °F	70 °F	68 %	SSE	2.8 mph	3.5 mph	29.75 in	0 in	0 in
11:52 PM	81.5 °F	70.3 °F	69 %	South	1.3 mph	3.5 mph	29.75 in	0 in	0 in
11:57 PM	81.5 °F	69.9 °F	68 %	SE	2.1 mph	3.5 mph	29.75 in	0 in	0 in

Weather History for KOKCAT002

Weather History Table, July 1, 2014

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:02 AM	81.4 °F	70.2 °F	69 %	SSE	3.8 mph	10.4 mph	29.75 in	0 in	0 in
12:07 AM	81.3 °F	70.2 °F	69 %	SSE	1.7 mph	3.5 mph	29.75 in	0 in	0 in
12:12 AM	81.1 °F	70 °F	69 %	SE	3.8 mph	6.9 mph	29.75 in	0 in	0 in
12:17 AM	81.1 °F	70.4 °F	70 %	SSE	2.1 mph	4.6 mph	29.75 in	0 in	0 in
12:22 AM	81 °F	70.3 °F	70 %	SE	2.7 mph	5.8 mph	29.74 in	0 in	0 in
12:27 AM	80.8 °F	70.1 °F	70 %	SSE	3.4 mph	6.9 mph	29.74 in	0 in	0 in
12:32 AM	80.8 °F	70.1 °F	70 %	SSE	3.5 mph	8.1 mph	29.74 in	0 in	0 in
12:37 AM	80.7 °F	70 °F	70 %	SSE	1.7 mph	3.5 mph	29.74 in	0 in	0 in
12:42 AM	80.7 °F	70 °F	70 %	SSE	3.1 mph	5.8 mph	29.74 in	0 in	0 in
12:47 AM	80.6 °F	69.9 °F	70 %	SSE	2.5 mph	3.5 mph	29.74 in	0 in	0 in
12:52 AM	80.6 °F	70.3 °F	71 %	SSE	1.2 mph	3.5 mph	29.74 in	0 in	0 in
12:57 AM	80.5 °F	69.8 °F	70 %	SSE	2.9 mph	4.6 mph	29.75 in	0 in	0 in
1:02 AM	80.6 °F	69.9 °F	70 %	SSE	2 mph	4.6 mph	29.75 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:07 AM	80.5 °F	70.2 °F	71 %	SSE	2.3 mph	3.5 mph	29.76 in	0 in	0 in
1:12 AM	80.5 °F	69.8 °F	70 %	SSE	1 mph	3.5 mph	29.77 in	0 in	0 in
1:17 AM	80.5 °F	69.8 °F	70 %	SSE	0.9 mph	2.3 mph	29.78 in	0 in	0 in
1:22 AM	80.5 °F	70.2 °F	71 %	SE	0.3 mph	1.2 mph	29.78 in	0 in	0 in
1:27 AM	80.5 °F	69.8 °F	70 %	South	1.6 mph	3.5 mph	29.78 in	0 in	0 in
1:32 AM	80.6 °F	70.3 °F	71 %	SE	1.9 mph	3.5 mph	29.78 in	0 in	0 in
1:37 AM	80.6 °F	69.9 °F	70 %	South	0 mph	0 mph	29.79 in	0 in	0 in
1:42 AM	80.7 °F	70 °F	70 %	SSW	1.1 mph	2.3 mph	29.79 in	0 in	0 in
1:47 AM	80.6 °F	69.9 °F	70 %	SE	1.5 mph	3.5 mph	29.8 in	0 in	0 in
1:52 AM	80.5 °F	70.2 °F	71 %	SSE	0.9 mph	3.5 mph	29.79 in	0 in	0 in
1:57 AM	80.5 °F	70.2 °F	71 %	SSE	2.3 mph	3.5 mph	29.79 in	0 in	0 in
2:02 AM	80.5 °F	70.2 °F	71 %	SE	1.4 mph	3.5 mph	29.8 in	0 in	0 in
2:07 AM	80.4 °F	70.1 °F	71 %	SE	1 mph	2.3 mph	29.8 in	0 in	0 in
2:12 AM	80.4 °F	70.1 °F	71 %	SE	0.3 mph	1.2 mph	29.8 in	0 in	0 in
2:17 AM	80.3 °F	70.4 °F	72 %	SSE	0.3 mph	1.2 mph	29.8 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:22 AM	80.2 °F	69.9 °F	71 %	South	0.9 mph	2.3 mph	29.8 in	0 in	0 in
2:27 AM	80.2 °F	70.4 °F	72 %	SE	1.2 mph	3.5 mph	29.8 in	0 in	0 in
2:32 AM	80.2 °F	70.4 °F	72 %	SSE	3.7 mph	6.9 mph	29.8 in	0 in	0 in
2:37 AM	80.1 °F	70.3 °F	72 %	South	1.6 mph	3.5 mph	29.8 in	0 in	0 in
2:42 AM	80.1 °F	70.3 °F	72 %	South	1.1 mph	5 mph	29.8 in	0 in	0 in
2:47 AM	80 °F	70.2 °F	72 %	South	1.6 mph	3.5 mph	29.8 in	0 in	0 in
2:52 AM	79.9 °F	70.5 °F	73 %	SSE	1.4 mph	3.5 mph	29.81 in	0 in	0 in
2:57 AM	79.9 °F	70.5 °F	73 %	WSW	0 mph	1.2 mph	29.81 in	0 in	0 in
3:02 AM	79.8 °F	70.4 °F	73 %	SE	1.7 mph	3.5 mph	29.81 in	0 in	0 in
3:07 AM	79.7 °F	70.7 °F	74 %	SE	0.7 mph	2.3 mph	29.81 in	0 in	0 in
3:12 AM	79.6 °F	70.6 °F	74 %	SE	0.9 mph	3.5 mph	29.81 in	0 in	0 in
3:17 AM	79.5 °F	70.5 °F	74 %	SSE	0.8 mph	1.2 mph	29.81 in	0 in	0 in
3:22 AM	79.4 °F	70.4 °F	74 %	South	1.1 mph	2.3 mph	29.81 in	0 in	0 in
3:27 AM	79.4 °F	70.4 °F	74 %	SW	1.1 mph	2.3 mph	29.81 in	0 in	0 in
3:32 AM	79.4 °F	70.8 °F	75 %	SE	1 mph	2.3 mph	29.81 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:37 AM	79.2 °F	70.6 °F	75 %	SE	1.4 mph	3.5 mph	29.81 in	0 in	0 in
3:42 AM	79.2 °F	70.6 °F	75 %	South	1.5 mph	2.3 mph	29.81 in	0 in	0 in
3:47 AM	79.2 °F	70.6 °F	75 %	SSE	1.4 mph	2.3 mph	29.81 in	0 in	0 in
3:52 AM	79.1 °F	70.9 °F	76 %	SSE	1 mph	2.3 mph	29.81 in	0 in	0 in
3:57 AM	79 °F	70.8 °F	76 %	SSE	1.7 mph	3.5 mph	29.81 in	0 in	0 in
4:02 AM	78.8 °F	70.6 °F	76 %	West	3.2 mph	6.9 mph	29.82 in	0 in	0 in
4:07 AM	78.8 °F	70.6 °F	76 %	West	2.6 mph	3.5 mph	29.83 in	0 in	0 in
4:12 AM	78.7 °F	70.5 °F	76 %	WSW	5.6 mph	9.2 mph	29.83 in	0 in	0 in
4:17 AM	78.7 °F	70.5 °F	76 %	West	1.2 mph	2.3 mph	29.83 in	0 in	0 in
4:22 AM	78.6 °F	70.4 °F	76 %	West	1.3 mph	3.5 mph	29.83 in	0 in	0 in
4:27 AM	78.5 °F	70.7 °F	77 %	WSW	3.1 mph	4.6 mph	29.84 in	0 in	0 in
4:32 AM	78.4 °F	70.6 °F	77 %	WSW	1.5 mph	2.3 mph	29.84 in	0 in	0 in
4:37 AM	78.3 °F	70.5 °F	77 %	WSW	2.5 mph	4.6 mph	29.84 in	0 in	0 in
4:42 AM	78.2 °F	70.8 °F	78 %	West	1.5 mph	2.3 mph	29.84 in	0 in	0 in
4:47 AM	78.2 °F	70.8 °F	78 %	West	0.3 mph	1.2 mph	29.85 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:52 AM	78.1 °F	70.7 °F	78 %	West	0.7 mph	2.3 mph	29.84 in	0 in	0 in
4:57 AM	78 °F	71 °F	79 %	West	1 mph	2.3 mph	29.84 in	0 in	0 in
5:02 AM	77.8 °F	70.8 °F	79 %	West	0 mph	1.2 mph	29.84 in	0 in	0 in
5:07 AM	77.7 °F	71 °F	80 %	West	0 mph	0 mph	29.84 in	0 in	0 in
5:12 AM	77.4 °F	70.7 °F	80 %	West	0.4 mph	1.2 mph	29.84 in	0 in	0 in
5:17 AM	77.1 °F	70.5 °F	80 %	West	0 mph	0 mph	29.84 in	0 in	0 in
5:22 AM	76.9 °F	70.6 °F	81 %	West	0.2 mph	1.2 mph	29.84 in	0 in	0 in
5:27 AM	76.7 °F	70.8 °F	82 %	West	0 mph	0 mph	29.84 in	0 in	0 in
5:32 AM	76.5 °F	70.9 °F	83 %	West	0 mph	0 mph	29.84 in	0 in	0 in
5:37 AM	76.2 °F	70.7 °F	83 %	West	0.7 mph	1.2 mph	29.84 in	0 in	0 in
5:42 AM	76 °F	70.5 °F	83 %	West	0 mph	0 mph	29.84 in	0 in	0 in
5:47 AM	75.9 °F	70.7 °F	84 %	West	1.1 mph	2.3 mph	29.84 in	0 in	0 in
5:52 AM	75.7 °F	70.9 °F	85 %	West	0 mph	1.2 mph	29.83 in	0 in	0 in
5:57 AM	75.6 °F	70.8 °F	85 %	West	0 mph	1.2 mph	29.84 in	0 in	0 in
6:02 AM	75.5 °F	70.7 °F	85 %	West	0.3 mph	1.2 mph	29.83 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:07 AM	75.3 °F	70.8 °F	86 %	West	0.2 mph	1.2 mph	29.84 in	0 in	0 in
6:12 AM	75.2 °F	70.7 °F	86 %	West	0 mph	0 mph	29.84 in	0 in	0 in
6:17 AM	75 °F	70.5 °F	86 %	West	0.4 mph	1.2 mph	29.84 in	0 in	0 in
6:22 AM	74.8 °F	70.7 °F	87 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:27 AM	74.7 °F	70.6 °F	87 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:32 AM	74.6 °F	70.5 °F	87 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:37 AM	74.5 °F	70.7 °F	88 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:42 AM	74.5 °F	70.7 °F	88 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:47 AM	74.4 °F	70.6 °F	88 %	West	0 mph	0 mph	29.84 in	0 in	0 in
6:52 AM	74.5 °F	71 °F	89 %	West	0 mph	0 mph	29.83 in	0 in	0 in
6:57 AM	74.5 °F	70.7 °F	88 %	West	0 mph	0 mph	29.83 in	0 in	0 in
7:02 AM	74.6 °F	71.1 °F	89 %	West	0 mph	0 mph	29.84 in	0 in	0 in
7:07 AM	74.7 °F	71.2 °F	89 %	West	1.3 mph	2.3 mph	29.84 in	0 in	0 in
7:12 AM	74.8 °F	71.3 °F	89 %	NNE	1.9 mph	3.5 mph	29.84 in	0 in	0 in
7:17 AM	75.1 °F	71.6 °F	89 %	NNE	0.6 mph	1.2 mph	29.83 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:22 AM	75.3 °F	71.5 °F	88 %	NNE	1.4 mph	2.3 mph	29.83 in	0 in	0 in
7:27 AM	75.5 °F	71.4 °F	87 %	NNE	0 mph	0 mph	29.83 in	0 in	0 in
7:32 AM	75.7 °F	71.6 °F	87 %	NE	0.1 mph	1 mph	29.83 in	0 in	0 in
7:37 AM	76 °F	71.8 °F	87 %	ENE	0.7 mph	2.3 mph	29.82 in	0 in	0 in
7:42 AM	76.4 °F	71.6 °F	85 %	ENE	0 mph	0 mph	29.83 in	0 in	0 in
7:47 AM	77 °F	72.1 °F	85 %	ESE	1.7 mph	3.5 mph	29.82 in	0 in	0 in
7:52 AM	77.4 °F	71.8 °F	83 %	SSE	3.6 mph	5.8 mph	29.82 in	0 in	0 in
7:57 AM	77.7 °F	72.5 °F	84 %	East	3.9 mph	5.8 mph	29.81 in	0 in	0 in
8:02 AM	77.9 °F	72.7 °F	84 %	SE	2.6 mph	3.5 mph	29.81 in	0 in	0 in
8:07 AM	78.4 °F	72.8 °F	83 %	ESE	2.6 mph	3.5 mph	29.81 in	0 in	0 in
8:12 AM	78.8 °F	72.8 °F	82 %	SSE	2.1 mph	5 mph	29.81 in	0 in	0 in
8:17 AM	78.8 °F	72.8 °F	82 %	SSE	3.3 mph	7 mph	29.8 in	0 in	0 in
8:22 AM	78.7 °F	72.4 °F	81 %	SE	2.7 mph	5.8 mph	29.81 in	0 in	0 in
8:27 AM	78.7 °F	72.4 °F	81 %	SSE	2.6 mph	4.6 mph	29.81 in	0 in	0 in
8:32 AM	78.9 °F	72.9 °F	82 %	South	1.1 mph	4 mph	29.82 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:37 AM	79.3 °F	73 °F	81 %	SSE	1.7 mph	3.5 mph	29.82 in	0 in	0 in
8:42 AM	79.8 °F	73.1 °F	80 %	SSE	0.5 mph	2.3 mph	29.83 in	0 in	0 in
8:47 AM	80.5 °F	73 °F	78 %	SSE	2 mph	3.5 mph	29.84 in	0 in	0 in
8:52 AM	81.2 °F	73.7 °F	78 %	SW	0.9 mph	2.3 mph	29.85 in	0 in	0 in
8:57 AM	81.6 °F	73.3 °F	76 %	WSW	1.1 mph	5 mph	29.85 in	0 in	0 in
9:02 AM	82.1 °F	73 °F	74 %	SSE	1.8 mph	3.5 mph	29.85 in	0 in	0 in
9:07 AM	82.5 °F	73 °F	73 %	SSE	1.3 mph	2.3 mph	29.84 in	0 in	0 in
9:12 AM	83.2 °F	73.2 °F	72 %	SE	2.7 mph	9.2 mph	29.84 in	0 in	0 in
9:17 AM	83.4 °F	73.4 °F	72 %	South	0.4 mph	2.3 mph	29.84 in	0 in	0 in
9:22 AM	83.3 °F	73.3 °F	72 %	SSE	1.8 mph	3.5 mph	29.85 in	0 in	0 in
9:27 AM	83.3 °F	72.5 °F	70 %	SSE	1.6 mph	3.5 mph	29.85 in	0 in	0 in
9:32 AM	83.1 °F	72.7 °F	71 %	SW	2 mph	4.6 mph	29.85 in	0 in	0 in
9:37 AM	82.9 °F	72.9 °F	72 %	West	1.2 mph	2.3 mph	29.85 in	0 in	0 in
9:42 AM	83.2 °F	73.2 °F	72 %	West	4 mph	9.2 mph	29.85 in	0 in	0 in
9:47 AM	83.5 °F	73.1 °F	71 %	West	5.1 mph	9.2 mph	29.86 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:52 AM	83.5 °F	73.1 °F	71 %	WNW	4.9 mph	8.1 mph	29.87 in	0 in	0 in
9:57 AM	83.5 °F	72.7 °F	70 %	WSW	4.6 mph	7 mph	29.87 in	0 in	0 in
10:02 AM	83.6 °F	72.8 °F	70 %	WNW	4.7 mph	8.1 mph	29.88 in	0 in	0 in
10:07 AM	83.8 °F	73.8 °F	72 %	WNW	4 mph	6.9 mph	29.88 in	0 in	0 in
10:12 AM	84.4 °F	73.1 °F	69 %	West	5.9 mph	10.4 mph	29.88 in	0 in	0 in
10:17 AM	84.8 °F	73.9 °F	70 %	WNW	2.9 mph	3.5 mph	29.88 in	0 in	0 in
10:22 AM	85.1 °F	74.2 °F	70 %	WNW	1.9 mph	5.8 mph	29.88 in	0 in	0 in
10:27 AM	84.8 °F	74.8 °F	72 %	NW	2.8 mph	6 mph	29.89 in	0 in	0 in
10:32 AM	84.9 °F	74 °F	70 %	WSW	2.5 mph	3.5 mph	29.89 in	0 in	0 in
10:37 AM	84.7 °F	73.8 °F	70 %	North	2.9 mph	8.1 mph	29.89 in	0 in	0 in
10:42 AM	84.8 °F	74.3 °F	71 %	NNW	2.9 mph	3.5 mph	29.89 in	0 in	0 in
10:47 AM	84.5 °F	73.2 °F	69 %	WNW	4.8 mph	9.2 mph	29.9 in	0 in	0 in
10:52 AM	83.7 °F	73.3 °F	71 %	WNW	3.2 mph	6.9 mph	29.9 in	0 in	0 in
10:57 AM	82.9 °F	72.9 °F	72 %	NNW	6.2 mph	11.5 mph	29.9 in	0 in	0 in
11:02 AM	82.1 °F	71.8 °F	71 %	NNE	4.7 mph	11.5 mph	29.91 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:07 AM	81.7 °F	72.6 °F	74 %	WNW	2.6 mph	3.5 mph	29.92 in	0 in	0 in
11:12 AM	81.3 °F	71.4 °F	72 %	WNW	3.8 mph	8.1 mph	29.92 in	0 in	0 in
11:17 AM	80.6 °F	70.7 °F	72 %	NW	3.9 mph	9.2 mph	29.92 in	0 in	0 in
11:22 AM	80.6 °F	71.1 °F	73 %	WNW	2.9 mph	7 mph	29.91 in	0 in	0 in
11:27 AM	81.2 °F	71.3 °F	72 %	West	4.1 mph	9.2 mph	29.91 in	0 in	0 in
11:32 AM	81.6 °F	72.1 °F	73 %	WNW	2.2 mph	3.5 mph	29.91 in	0 in	0 in
11:37 AM	82.2 °F	72.3 °F	72 %	West	1.9 mph	3.5 mph	29.9 in	0 in	0 in
11:42 AM	82.8 °F	72 °F	70 %	West	3.7 mph	6.9 mph	29.9 in	0 in	0 in
11:47 AM	83 °F	72.2 °F	70 %	West	1.6 mph	3.5 mph	29.9 in	0 in	0 in
11:52 AM	83.4 °F	73.4 °F	72 %	NW	1.9 mph	3.5 mph	29.9 in	0 in	0 in
11:57 AM	84.2 °F	72 °F	67 %	NNW	2.5 mph	3.5 mph	29.89 in	0 in	0 in
12:02 PM	84.4 °F	72.7 °F	68 %	NNW	1.8 mph	3.5 mph	29.89 in	0 in	0 in
12:07 PM	84.5 °F	72.3 °F	67 %	NW	2.9 mph	4 mph	29.89 in	0 in	0 in
12:12 PM	84.9 °F	73.2 °F	68 %	NNW	1.1 mph	3.5 mph	29.89 in	0 in	0 in
12:17 PM	86.1 °F	73.4 °F	66 %	NNE	3.4 mph	8.1 mph	29.89 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:22 PM	87.4 °F	70.8 °F	58 %	North	3.1 mph	8.1 mph	29.89 in	0 in	0 in
12:27 PM	88 °F	70.3 °F	56 %	WNW	2.1 mph	3.5 mph	29.89 in	0 in	0 in
12:32 PM	87.7 °F	69.5 °F	55 %	NW	2.9 mph	5 mph	29.89 in	0 in	0 in
12:37 PM	87.9 °F	69.7 °F	55 %	WNW	3.8 mph	4.6 mph	29.89 in	0 in	0 in
12:42 PM	88.2 °F	71 °F	57 %	NNE	2.2 mph	3.5 mph	29.88 in	0 in	0 in
12:47 PM	88.7 °F	69.4 °F	53 %	NE	5.3 mph	9.2 mph	29.88 in	0 in	0 in
12:52 PM	88.9 °F	67.9 °F	50 %	NW	2.3 mph	5.8 mph	29.88 in	0 in	0 in
12:57 PM	89 °F	67.9 °F	50 %	North	4 mph	6.9 mph	29.88 in	0 in	0 in
1:02 PM	89.6 °F	69.1 °F	51 %	WNW	3 mph	4.6 mph	29.88 in	0 in	0 in
1:07 PM	89.7 °F	69.7 °F	52 %	North	3.3 mph	5.8 mph	29.88 in	0 in	0 in
1:12 PM	89.5 °F	67.2 °F	48 %	West	3.7 mph	8.1 mph	29.88 in	0 in	0 in
1:17 PM	89.6 °F	69.1 °F	51 %	NNW	3.9 mph	6.9 mph	29.88 in	0 in	0 in
1:22 PM	89.4 °F	70.6 °F	54 %	NNW	3.3 mph	3.5 mph	29.88 in	0 in	0 in
1:27 PM	89.3 °F	69.9 °F	53 %	NNW	3.4 mph	4.6 mph	29.88 in	0 in	0 in
1:32 PM	89.6 °F	68.5 °F	50 %	North	3.8 mph	8 mph	29.88 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:37 PM	89.5 °F	67.2 °F	48 %	NE	4.6 mph	9.2 mph	29.88 in	0 in	0 in
1:42 PM	89.5 °F	67.8 °F	49 %	NNE	4.3 mph	8.1 mph	29.88 in	0 in	0 in
1:47 PM	89.6 °F	68.5 °F	50 %	NNW	4.9 mph	10.4 mph	29.88 in	0 in	0 in
1:52 PM	89.6 °F	70.2 °F	53 %	ENE	2.5 mph	6 mph	29.88 in	0 in	0 in
1:57 PM	89.9 °F	67 °F	47 %	NW	5.7 mph	9.2 mph	29.88 in	0 in	0 in
2:02 PM	89.7 °F	65.5 °F	45 %	North	4.1 mph	5.8 mph	29.88 in	0 in	0 in
2:07 PM	89.8 °F	68.1 °F	49 %	NE	1.7 mph	3.5 mph	29.88 in	0 in	0 in
2:12 PM	89.9 °F	69.9 °F	52 %	ENE	1.1 mph	2.3 mph	29.88 in	0 in	0 in
2:17 PM	90.1 °F	70.1 °F	52 %	NE	4.4 mph	6 mph	29.87 in	0 in	0 in
2:22 PM	90.2 °F	66.6 °F	46 %	WNW	4.3 mph	9.2 mph	29.88 in	0 in	0 in
2:27 PM	89.8 °F	64.3 °F	43 %	West	2.9 mph	4.6 mph	29.88 in	0 in	0 in
2:32 PM	90 °F	66.4 °F	46 %	NNE	3.8 mph	9.2 mph	29.88 in	0 in	0 in
2:37 PM	90.1 °F	69 °F	50 %	WNW	3.4 mph	7 mph	29.88 in	0 in	0 in
2:42 PM	89.6 °F	68.5 °F	50 %	NNW	3.4 mph	8.1 mph	29.88 in	0 in	0 in
2:47 PM	89.7 °F	67.4 °F	48 %	WNW	3.2 mph	6.9 mph	29.88 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:52 PM	89.8 °F	67.5 °F	48 %	NNW	2.7 mph	8.1 mph	29.88 in	0 in	0 in
2:57 PM	90.1 °F	69 °F	50 %	North	2.9 mph	4.6 mph	29.88 in	0 in	0 in
3:02 PM	90.1 °F	67.2 °F	47 %	NW	1.6 mph	4.6 mph	29.88 in	0 in	0 in
3:07 PM	90.1 °F	69 °F	50 %	NNE	2.1 mph	6 mph	29.88 in	0 in	0 in
3:12 PM	90.2 °F	67.2 °F	47 %	WNW	4.1 mph	8.1 mph	29.87 in	0 in	0 in
3:17 PM	90 °F	67.7 °F	48 %	North	4.3 mph	8.1 mph	29.87 in	0 in	0 in
3:22 PM	90.3 °F	69.7 °F	51 %	ENE	4.4 mph	9.2 mph	29.87 in	0 in	0 in
3:27 PM	90.4 °F	68 °F	48 %	NE	3.4 mph	6.9 mph	29.87 in	0 in	0 in
3:32 PM	90.3 °F	69.1 °F	50 %	North	2.5 mph	5 mph	29.87 in	0 in	0 in
3:37 PM	90.4 °F	68.6 °F	49 %	North	3 mph	6 mph	29.87 in	0 in	0 in
3:42 PM	90.3 °F	66.1 °F	45 %	NE	4.7 mph	9.2 mph	29.87 in	0 in	0 in
3:47 PM	90.1 °F	66.5 °F	46 %	NNE	2.5 mph	4 mph	29.87 in	0 in	0 in
3:52 PM	90.2 °F	67.9 °F	48 %	North	4.4 mph	8.1 mph	29.86 in	0 in	0 in
3:57 PM	90.1 °F	67.2 °F	47 %	NE	2.2 mph	4.6 mph	29.86 in	0 in	0 in
4:02 PM	90.2 °F	68.5 °F	49 %	NNE	1.7 mph	3.5 mph	29.86 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:07 PM	90.4 °F	68.6 °F	49 %	ENE	2.4 mph	3.5 mph	29.86 in	0 in	0 in
4:12 PM	90.4 °F	68.6 °F	49 %	North	2.2 mph	4.6 mph	29.86 in	0 in	0 in
4:17 PM	90.3 °F	67.3 °F	47 %	North	3.3 mph	4.6 mph	29.87 in	0 in	0 in
4:22 PM	90 °F	68.3 °F	49 %	NE	2.2 mph	4 mph	29.87 in	0 in	0 in
4:27 PM	89.3 °F	67 °F	48 %	NNW	1.7 mph	3.5 mph	29.87 in	0 in	0 in
4:32 PM	88.6 °F	67 °F	49 %	WNW	2.1 mph	3.5 mph	29.87 in	0 in	0 in
4:37 PM	88.1 °F	67.7 °F	51 %	North	2.1 mph	3.5 mph	29.88 in	0 in	0 in
4:42 PM	87.9 °F	67.5 °F	51 %	NW	1 mph	2.3 mph	29.87 in	0 in	0 in
4:47 PM	88.1 °F	67.7 °F	51 %	NNE	3 mph	3.5 mph	29.87 in	0 in	0 in
4:52 PM	88.4 °F	68 °F	51 %	NNW	3.1 mph	4.6 mph	29.87 in	0 in	0 in
4:57 PM	88.6 °F	67 °F	49 %	WNW	1.9 mph	3.5 mph	29.88 in	0 in	0 in
5:02 PM	88.6 °F	68.2 °F	51 %	NW	3.3 mph	4.6 mph	29.88 in	0 in	0 in
5:07 PM	88.4 °F	68 °F	51 %	NW	3.1 mph	5.8 mph	29.88 in	0 in	0 in
5:12 PM	88 °F	68.2 °F	52 %	North	2.1 mph	3.5 mph	29.88 in	0 in	0 in
5:17 PM	87.5 °F	67.1 °F	51 %	North	2.6 mph	3.5 mph	29.88 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:22 PM	86.9 °F	67.2 °F	52 %	NNW	1.2 mph	2.3 mph	29.88 in	0 in	0 in
5:27 PM	86.4 °F	67.2 °F	53 %	NW	1.4 mph	2.3 mph	29.87 in	0 in	0 in
5:32 PM	86.2 °F	67.6 °F	54 %	NNE	1.7 mph	3.5 mph	29.87 in	0 in	0 in
5:37 PM	86.1 °F	67.5 °F	54 %	NNE	1.8 mph	2.3 mph	29.87 in	0 in	0 in
5:42 PM	86.2 °F	68.1 °F	55 %	North	3.4 mph	5.8 mph	29.87 in	0 in	0 in
5:47 PM	86.2 °F	68.7 °F	56 %	North	2.1 mph	3.5 mph	29.88 in	0 in	0 in
5:52 PM	86 °F	69 °F	57 %	North	3.2 mph	5.8 mph	29.88 in	0 in	0 in
5:57 PM	85.7 °F	68.7 °F	57 %	NNW	2.4 mph	3.5 mph	29.87 in	0 in	0 in
6:02 PM	85.2 °F	69.3 °F	59 %	WNW	2.5 mph	5.8 mph	29.87 in	0 in	0 in
6:07 PM	84.7 °F	69.3 °F	60 %	NW	1.7 mph	3.5 mph	29.87 in	0 in	0 in
6:12 PM	84.1 °F	68.2 °F	59 %	NNE	3.6 mph	5 mph	29.87 in	0 in	0 in
6:17 PM	83.5 °F	68.2 °F	60 %	NNW	2.2 mph	3.5 mph	29.87 in	0 in	0 in
6:22 PM	83 °F	68.2 °F	61 %	West	1.3 mph	2.3 mph	29.87 in	0 in	0 in
6:27 PM	82.7 °F	67.9 °F	61 %	NW	2 mph	3.5 mph	29.88 in	0 in	0 in
6:32 PM	82.5 °F	68.2 °F	62 %	NNW	1 mph	2.3 mph	29.87 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:37 PM	82.4 °F	68.1 °F	62 %	North	2.7 mph	3.5 mph	29.87 in	0 in	0 in
6:42 PM	82.3 °F	68.4 °F	63 %	North	2.8 mph	3.5 mph	29.87 in	0 in	0 in
6:47 PM	82.3 °F	68.4 °F	63 %	North	1.7 mph	3.5 mph	29.87 in	0 in	0 in
6:52 PM	82.1 °F	67.8 °F	62 %	North	1.8 mph	3.5 mph	29.87 in	0 in	0 in
6:57 PM	82.3 °F	68.4 °F	63 %	NNW	1.5 mph	3.5 mph	29.86 in	0 in	0 in
7:02 PM	82.4 °F	68.5 °F	63 %	NW	1.1 mph	3.5 mph	29.86 in	0 in	0 in
7:07 PM	82.5 °F	68.2 °F	62 %	North	1.4 mph	2.3 mph	29.86 in	0 in	0 in
7:12 PM	82.7 °F	67.9 °F	61 %	NW	2.4 mph	3.5 mph	29.86 in	0 in	0 in
7:17 PM	82.6 °F	67.8 °F	61 %	NW	1.3 mph	2.3 mph	29.86 in	0 in	0 in
7:22 PM	82.5 °F	68.2 °F	62 %	WNW	0.3 mph	2.3 mph	29.86 in	0 in	0 in
7:27 PM	82.5 °F	68.6 °F	63 %	WNW	0.1 mph	1.2 mph	29.86 in	0 in	0 in
7:32 PM	82.3 °F	67.5 °F	61 %	WNW	1.2 mph	2.3 mph	29.85 in	0 in	0 in
7:37 PM	82.1 °F	67.8 °F	62 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
7:42 PM	81.8 °F	68.4 °F	64 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
7:47 PM	81.3 °F	68.4 °F	65 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:52 PM	80.9 °F	68.9 °F	67 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
7:57 PM	80.5 °F	68.1 °F	66 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
8:02 PM	80.3 °F	68.3 °F	67 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
8:07 PM	80.1 °F	68.6 °F	68 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
8:12 PM	79.8 °F	68.7 °F	69 %	WNW	0 mph	0 mph	29.86 in	0 in	0 in
8:17 PM	79.6 °F	69.4 °F	71 %	WNW	0 mph	0 mph	29.87 in	0 in	0 in
8:22 PM	79.5 °F	69.3 °F	71 %	WNW	0 mph	0 mph	29.87 in	0 in	0 in
8:27 PM	79.3 °F	69.1 °F	71 %	WNW	0 mph	0 mph	29.88 in	0 in	0 in
8:32 PM	79 °F	69.2 °F	72 %	WNW	0 mph	0 mph	29.89 in	0 in	0 in
8:37 PM	78.9 °F	69.5 °F	73 %	WNW	0 mph	0 mph	29.89 in	0 in	0 in
8:42 PM	78.6 °F	69.2 °F	73 %	WNW	0 mph	0 mph	29.89 in	0 in	0 in
8:47 PM	78.3 °F	68.5 °F	72 %	WNW	0 mph	0 mph	29.9 in	0 in	0 in
8:52 PM	78.1 °F	68.7 °F	73 %	WNW	0 mph	0 mph	29.9 in	0 in	0 in
8:57 PM	77.8 °F	69.2 °F	75 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in
9:02 PM	77.5 °F	69.3 °F	76 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:07 PM	77.4 °F	69.2 °F	76 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in
9:12 PM	77.1 °F	68.9 °F	76 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in
9:17 PM	76.7 °F	68.6 °F	76 %	WNW	1.3 mph	2.3 mph	29.91 in	0 in	0 in
9:22 PM	76.6 °F	68.5 °F	76 %	WNW	0.1 mph	1.2 mph	29.91 in	0 in	0 in
9:27 PM	76.5 °F	68.4 °F	76 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in
9:32 PM	76.4 °F	68.3 °F	76 %	WNW	0 mph	0 mph	29.91 in	0 in	0 in
9:37 PM	76.3 °F	68.2 °F	76 %	WNW	0 mph	0 mph	29.92 in	0 in	0 in
9:42 PM	76.1 °F	68 °F	76 %	WNW	0 mph	0 mph	29.92 in	0 in	0 in
9:47 PM	75.9 °F	68.2 °F	77 %	WNW	0 mph	0 mph	29.92 in	0 in	0 in
9:52 PM	75.8 °F	68.4 °F	78 %	WNW	1 mph	2.3 mph	29.92 in	0 in	0 in
9:57 PM	75.7 °F	68.7 °F	79 %	WNW	0.1 mph	1.2 mph	29.92 in	0 in	0 in
10:02 PM	75.5 °F	68.2 °F	78 %	WNW	0 mph	0 mph	29.92 in	0 in	0 in
10:07 PM	75.3 °F	68.3 °F	79 %	WNW	0 mph	1.2 mph	29.93 in	0 in	0 in
10:12 PM	75.1 °F	68.1 °F	79 %	WNW	0.1 mph	1.2 mph	29.94 in	0 in	0 in
10:17 PM	74.9 °F	67.6 °F	78 %	WNW	0.2 mph	1.2 mph	29.94 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:22 PM	74.8 °F	68.2 °F	80 %	WNW	0.4 mph	1.2 mph	29.95 in	0 in	0 in
10:27 PM	74.8 °F	68.2 °F	80 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
10:32 PM	74.6 °F	68 °F	80 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
10:37 PM	74.4 °F	67.8 °F	80 %	WNW	0.8 mph	2.3 mph	29.95 in	0 in	0 in
10:42 PM	74.3 °F	68.1 °F	81 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
10:47 PM	74.1 °F	67.9 °F	81 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
10:52 PM	73.9 °F	67.7 °F	81 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
10:57 PM	73.8 °F	68 °F	82 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:01 PM	73.6 °F	67.8 °F	82 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:06 PM	73.4 °F	67.9 °F	83 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:11 PM	73.1 °F	67.3 °F	82 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:16 PM	72.9 °F	67.4 °F	83 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:21 PM	72.8 °F	67.3 °F	83 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:26 PM	72.6 °F	67.1 °F	83 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
11:31 PM	72.4 °F	66.9 °F	83 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:36 PM	72.2 °F	67.1 °F	84 %	WNW	0 mph	0 mph	29.95 in	0 in	0 in
11:41 PM	72 °F	66.6 °F	83 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
11:46 PM	71.9 °F	66.8 °F	84 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
11:51 PM	71.7 °F	66.9 °F	85 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
11:56 PM	71.4 °F	66.7 °F	85 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in

Weather History for KOKCAT002

Weather History Table, July 2, 2014

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:01 AM	71.3 °F	66.9 °F	86 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
12:06 AM	71.1 °F	66.7 °F	86 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
12:11 AM	71.1 °F	67 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
12:16 AM	71.1 °F	67 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
12:21 AM	71.1 °F	67.4 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
12:26 AM	71.2 °F	67.5 °F	88 %	WNW	1.8 mph	3.5 mph	29.97 in	0 in	0 in
12:31 AM	71.3 °F	67.6 °F	88 %	WNW	0.8 mph	1.2 mph	29.97 in	0 in	0 in
12:36 AM	71.4 °F	67.3 °F	87 %	WNW	0.7 mph	1.2 mph	29.97 in	0 in	0 in
12:41 AM	71.5 °F	67.4 °F	87 %	WNW	0 mph	1.2 mph	29.97 in	0 in	0 in
12:46 AM	71.6 °F	67.9 °F	88 %	WNW	0.1 mph	1.2 mph	29.97 in	0 in	0 in
12:51 AM	71.6 °F	67.5 °F	87 %	WNW	0.8 mph	2 mph	29.97 in	0 in	0 in
12:56 AM	71.7 °F	67.3 °F	86 %	WNW	0.6 mph	1.2 mph	29.97 in	0 in	0 in
1:01 AM	71.6 °F	67.5 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:06 AM	71.6 °F	67.5 °F	87 %	WNW	0.5 mph	1.2 mph	29.97 in	0 in	0 in
1:11 AM	71.5 °F	67.4 °F	87 %	WNW	0.8 mph	1.2 mph	29.97 in	0 in	0 in
1:16 AM	71.5 °F	67.4 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:21 AM	71.6 °F	67.5 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:26 AM	71.5 °F	67.4 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:31 AM	71.5 °F	67.8 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:36 AM	71.5 °F	67.4 °F	87 %	WNW	0.1 mph	1.2 mph	29.97 in	0 in	0 in
1:41 AM	71.5 °F	67.8 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:46 AM	71.6 °F	67.9 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:51 AM	71.5 °F	67.4 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
1:56 AM	71.6 °F	67.9 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
2:01 AM	71.6 °F	67.5 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
2:06 AM	71.6 °F	67.9 °F	88 %	WNW	0.2 mph	1.2 mph	29.97 in	0 in	0 in
2:11 AM	71.6 °F	67.5 °F	87 %	WNW	0.2 mph	1.2 mph	29.97 in	0 in	0 in
2:16 AM	71.5 °F	67.4 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:21 AM	71.6 °F	67.5 °F	87 %	WNW	0.2 mph	1.2 mph	29.97 in	0 in	0 in
2:26 AM	71.7 °F	68 °F	88 %	WNW	0.9 mph	2.3 mph	29.97 in	0 in	0 in
2:31 AM	71.8 °F	68.1 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
2:36 AM	71.8 °F	68.1 °F	88 %	WNW	0.4 mph	1.2 mph	29.97 in	0 in	0 in
2:41 AM	71.8 °F	67.7 °F	87 %	WNW	1 mph	2.3 mph	29.96 in	0 in	0 in
2:46 AM	71.7 °F	68 °F	88 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
2:51 AM	71.7 °F	68 °F	88 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
2:56 AM	71.8 °F	68.1 °F	88 %	WNW	0 mph	0 mph	29.96 in	0 in	0 in
3:01 AM	71.8 °F	68.1 °F	88 %	WNW	0.8 mph	2.3 mph	29.97 in	0 in	0 in
3:06 AM	71.7 °F	68 °F	88 %	WNW	1.5 mph	3.5 mph	29.97 in	0 in	0 in
3:11 AM	71.7 °F	67.6 °F	87 %	WNW	0.1 mph	1.2 mph	29.97 in	0 in	0 in
3:16 AM	71.7 °F	67.6 °F	87 %	WNW	1.1 mph	2.3 mph	29.97 in	0 in	0 in
3:21 AM	71.8 °F	67.7 °F	87 %	WNW	0.4 mph	1.2 mph	29.97 in	0 in	0 in
3:26 AM	71.9 °F	68.2 °F	88 %	WNW	0.1 mph	1.2 mph	29.96 in	0 in	0 in
3:31 AM	71.9 °F	67.8 °F	87 %	WNW	1.1 mph	2.3 mph	29.97 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:36 AM	71.9 °F	68.2 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
3:41 AM	71.8 °F	67.7 °F	87 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
3:46 AM	71.8 °F	68.1 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
3:51 AM	71.7 °F	68 °F	88 %	WNW	0 mph	0 mph	29.97 in	0 in	0 in
3:56 AM	71.7 °F	68 °F	88 %	WNW	1.3 mph	3.5 mph	29.97 in	0 in	0 in
4:01 AM	71.7 °F	68 °F	88 %	WNW	1.1 mph	2.3 mph	29.97 in	0 in	0 in
4:06 AM	71.8 °F	68.1 °F	88 %	WNW	0 mph	1.2 mph	29.97 in	0 in	0 in
4:11 AM	71.8 °F	68.1 °F	88 %	WNW	0.3 mph	2 mph	29.97 in	0 in	0 in
4:16 AM	71.8 °F	68.1 °F	88 %	WNW	1 mph	2.3 mph	29.97 in	0 in	0 in
4:21 AM	71.8 °F	68.1 °F	88 %	WNW	0.4 mph	2 mph	29.97 in	0 in	0 in
4:26 AM	71.8 °F	67.7 °F	87 %	WNW	1.3 mph	3.5 mph	29.97 in	0 in	0 in
4:31 AM	71.9 °F	67.8 °F	87 %	NNE	1.4 mph	2.3 mph	29.97 in	0 in	0 in
4:36 AM	72 °F	67.6 °F	86 %	NNE	1.9 mph	2.3 mph	29.97 in	0 in	0 in
4:41 AM	72.2 °F	67.4 °F	85 %	NW	2.4 mph	3.5 mph	29.97 in	0 in	0 in
4:46 AM	72.4 °F	67.6 °F	85 %	NNW	2.3 mph	3.5 mph	29.98 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:51 AM	72.5 °F	67.4 °F	84 %	NNW	2.2 mph	3.5 mph	29.98 in	0 in	0 in
4:56 AM	72.6 °F	67.5 °F	84 %	NNE	1.3 mph	2.3 mph	29.98 in	0 in	0 in
5:01 AM	72.5 °F	67.4 °F	84 %	North	1.9 mph	3.5 mph	29.98 in	0 in	0 in
5:06 AM	72.5 °F	67.4 °F	84 %	North	2.3 mph	3.5 mph	29.98 in	0 in	0 in
5:11 AM	72.4 °F	67.3 °F	84 %	NNE	2.6 mph	3.5 mph	29.99 in	0 in	0 in
5:16 AM	72.3 °F	67.5 °F	85 %	NNW	2.6 mph	4.6 mph	29.99 in	0 in	0 in
5:21 AM	72.2 °F	67.4 °F	85 %	NNW	2.1 mph	4.6 mph	29.99 in	0 in	0 in
5:26 AM	72.1 °F	67.3 °F	85 %	NNW	2.7 mph	3.5 mph	29.99 in	0 in	0 in
5:31 AM	72.1 °F	67.3 °F	85 %	North	3.7 mph	8.1 mph	30 in	0 in	0 in
5:36 AM	72.1 °F	67.3 °F	85 %	North	3.4 mph	4 mph	30 in	0 in	0 in
5:41 AM	72 °F	66.9 °F	84 %	North	2.9 mph	4.6 mph	30 in	0 in	0 in
5:46 AM	71.9 °F	66.8 °F	84 %	NNW	2.5 mph	3.5 mph	30 in	0 in	0 in
5:51 AM	71.8 °F	66.7 °F	84 %	NNE	2.6 mph	4.6 mph	30 in	0 in	0 in
5:56 AM	71.7 °F	66.6 °F	84 %	NNE	2.6 mph	3.5 mph	30 in	0 in	0 in
6:01 AM	71.6 °F	66.5 °F	84 %	NNE	3.5 mph	4.6 mph	30 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:06 AM	71.5 °F	66.1 °F	83 %	NNE	2.7 mph	6.9 mph	30 in	0 in	0 in
6:11 AM	71.4 °F	66 °F	83 %	NE	2.4 mph	5 mph	30 in	0 in	0 in
6:16 AM	71.3 °F	65.5 °F	82 %	NE	4.6 mph	11.5 mph	29.99 in	0 in	0 in
6:21 AM	71.2 °F	65.4 °F	82 %	NNE	3.1 mph	4 mph	30 in	0 in	0 in
6:26 AM	71.1 °F	65 °F	81 %	North	3.8 mph	6.9 mph	30 in	0 in	0 in
6:31 AM	71 °F	64.2 °F	79 %	NNE	3.1 mph	4.6 mph	30 in	0 in	0 in
6:36 AM	70.8 °F	64 °F	79 %	NNE	2.1 mph	3.5 mph	30 in	0 in	0 in
6:41 AM	70.7 °F	63.9 °F	79 %	North	4.3 mph	9.2 mph	30 in	0 in	0 in
6:46 AM	70.6 °F	63.8 °F	79 %	North	4.7 mph	9.2 mph	30 in	0 in	0 in
6:51 AM	70.5 °F	63.7 °F	79 %	NNE	2.3 mph	5 mph	30 in	0 in	0 in
6:56 AM	70.4 °F	63.2 °F	78 %	NE	3.3 mph	4.6 mph	30 in	0 in	0 in
7:01 AM	70.4 °F	63.2 °F	78 %	NE	3.8 mph	9.2 mph	30 in	0 in	0 in
7:06 AM	70.4 °F	63.2 °F	78 %	NNE	2.8 mph	4.6 mph	30.01 in	0 in	0 in
7:11 AM	70.5 °F	63.3 °F	78 %	NNE	2.5 mph	3.5 mph	30.01 in	0 in	0 in
7:16 AM	70.6 °F	63.4 °F	78 %	NNE	3.7 mph	4.6 mph	30.01 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:21 AM	70.8 °F	63.2 °F	77 %	NNE	4 mph	6.9 mph	30.01 in	0 in	0 in
7:26 AM	71.1 °F	63.5 °F	77 %	NNE	1.3 mph	2.3 mph	30.01 in	0 in	0 in
7:31 AM	71.4 °F	63.4 °F	76 %	NNE	1.9 mph	3.5 mph	30.01 in	0 in	0 in
7:36 AM	71.9 °F	63.2 °F	74 %	NNE	2.4 mph	4.6 mph	30.01 in	0 in	0 in
7:41 AM	72.4 °F	63.3 °F	73 %	NNE	2.7 mph	4.6 mph	30.01 in	0 in	0 in
7:46 AM	72.9 °F	63.3 °F	72 %	NNE	4.4 mph	6.9 mph	30.02 in	0 in	0 in
7:51 AM	73.3 °F	62.5 °F	69 %	NNE	4.7 mph	7 mph	30.02 in	0 in	0 in
7:56 AM	73.7 °F	62.9 °F	69 %	North	4.1 mph	4.6 mph	30.02 in	0 in	0 in
8:01 AM	74 °F	63.2 °F	69 %	NE	2.2 mph	4.6 mph	30.02 in	0 in	0 in
8:06 AM	74.2 °F	62.5 °F	67 %	NE	3.8 mph	4.6 mph	30.03 in	0 in	0 in
8:11 AM	74.3 °F	62.6 °F	67 %	NE	2.9 mph	3.5 mph	30.03 in	0 in	0 in
8:16 AM	74.6 °F	62.1 °F	65 %	NE	2.5 mph	8.1 mph	30.03 in	0 in	0 in
8:21 AM	74.9 °F	61.9 °F	64 %	NE	1.3 mph	3.5 mph	30.03 in	0 in	0 in
8:26 AM	75.2 °F	62.2 °F	64 %	NNE	2 mph	3.5 mph	30.04 in	0 in	0 in
8:31 AM	75.5 °F	62 °F	63 %	North	2.8 mph	4.6 mph	30.04 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:36 AM	75.9 °F	61.9 °F	62 %	NNE	0.7 mph	2 mph	30.04 in	0 in	0 in
8:41 AM	76.2 °F	61.8 °F	61 %	NE	3.3 mph	3.5 mph	30.04 in	0 in	0 in
8:46 AM	76.4 °F	62 °F	61 %	NNW	2.3 mph	3.5 mph	30.04 in	0 in	0 in
8:51 AM	76.6 °F	62.6 °F	62 %	NE	2.2 mph	3.5 mph	30.04 in	0 in	0 in
8:56 AM	76.8 °F	61.9 °F	60 %	NE	3 mph	4 mph	30.04 in	0 in	0 in
9:01 AM	76.9 °F	61.5 °F	59 %	East	2.9 mph	4 mph	30.04 in	0 in	0 in
9:06 AM	76.8 °F	60.9 °F	58 %	NNE	2.1 mph	3.5 mph	30.05 in	0 in	0 in
9:11 AM	77.1 °F	62.1 °F	60 %	NE	3.5 mph	4 mph	30.06 in	0 in	0 in
9:16 AM	77.5 °F	61.1 °F	57 %	North	5 mph	8.1 mph	30.06 in	0 in	0 in
9:21 AM	77.7 °F	61.7 °F	58 %	NNW	2.8 mph	3.5 mph	30.07 in	0 in	0 in
9:26 AM	77.9 °F	60.9 °F	56 %	WNW	2 mph	4.6 mph	30.07 in	0 in	0 in
9:31 AM	77.7 °F	61.7 °F	58 %	North	3.2 mph	4.6 mph	30.07 in	0 in	0 in
9:36 AM	78 °F	61 °F	56 %	North	3.1 mph	5.8 mph	30.07 in	0 in	0 in
9:41 AM	78.3 °F	62.3 °F	58 %	NNE	1.5 mph	3.5 mph	30.08 in	0 in	0 in
9:46 AM	78.4 °F	60.9 °F	55 %	North	3.4 mph	8 mph	30.07 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:51 AM	78.3 °F	60.3 °F	54 %	NNE	3.5 mph	9.2 mph	30.07 in	0 in	0 in
9:56 AM	78.8 °F	61.8 °F	56 %	NE	4.1 mph	8.1 mph	30.07 in	0 in	0 in
10:01 AM	79.1 °F	61.5 °F	55 %	North	0.9 mph	2.3 mph	30.07 in	0 in	0 in
10:06 AM	79.4 °F	58.6 °F	49 %	North	5.7 mph	11.5 mph	30.08 in	0 in	0 in
10:11 AM	79.4 °F	60.8 °F	53 %	North	1.9 mph	3.5 mph	30.08 in	0 in	0 in
10:16 AM	79.4 °F	60.8 °F	53 %	NW	2.7 mph	3.5 mph	30.08 in	0 in	0 in
10:21 AM	79.8 °F	61.7 °F	54 %	NE	2.6 mph	4.6 mph	30.07 in	0 in	0 in
10:26 AM	80 °F	60.8 °F	52 %	NNE	2.3 mph	4.6 mph	30.08 in	0 in	0 in
10:31 AM	80.4 °F	58.9 °F	48 %	NNE	4.5 mph	6 mph	30.09 in	0 in	0 in
10:36 AM	80.8 °F	61 °F	51 %	NE	4.1 mph	6 mph	30.08 in	0 in	0 in
10:41 AM	81.2 °F	60.2 °F	49 %	NE	1.7 mph	3.5 mph	30.08 in	0 in	0 in
10:46 AM	81.4 °F	61 °F	50 %	NNW	5.5 mph	8.1 mph	30.09 in	0 in	0 in
10:51 AM	81.6 °F	60 °F	48 %	ENE	2.2 mph	4.6 mph	30.09 in	0 in	0 in
10:56 AM	81.6 °F	61.2 °F	50 %	East	3.5 mph	3.5 mph	30.09 in	0 in	0 in
11:01 AM	81.9 °F	60.3 °F	48 %	NE	4.8 mph	10.4 mph	30.09 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:06 AM	82.4 °F	58.3 °F	44 %	NE	5.1 mph	9.2 mph	30.09 in	0 in	0 in
11:11 AM	82.6 °F	61.5 °F	49 %	NNE	2.7 mph	3.5 mph	30.1 in	0 in	0 in
11:16 AM	82.8 °F	59.3 °F	45 %	North	8 mph	11.5 mph	30.1 in	0 in	0 in
11:21 AM	82.7 °F	59.2 °F	45 %	WNW	4.4 mph	8.1 mph	30.1 in	0 in	0 in
11:26 AM	82.5 °F	58.4 °F	44 %	NE	5.3 mph	10.4 mph	30.1 in	0 in	0 in
11:31 AM	82.9 °F	57.5 °F	42 %	NE	6.9 mph	11.5 mph	30.1 in	0 in	0 in
11:36 AM	82.9 °F	58.7 °F	44 %	NE	4.8 mph	10.4 mph	30.1 in	0 in	0 in
11:41 AM	83.2 °F	59 °F	44 %	NE	4 mph	11.5 mph	30.1 in	0 in	0 in
11:46 AM	83.6 °F	59.4 °F	44 %	NNE	4.9 mph	9.2 mph	30.1 in	0 in	0 in
11:51 AM	83.9 °F	57.7 °F	41 %	NE	4.2 mph	4.6 mph	30.1 in	0 in	0 in
11:56 AM	83.9 °F	60.3 °F	45 %	NE	3.8 mph	5.8 mph	30.1 in	0 in	0 in
12:01 PM	84.2 °F	61.2 °F	46 %	NW	3.1 mph	4.6 mph	30.1 in	0 in	0 in
12:06 PM	84.2 °F	59.3 °F	43 %	NNE	3.7 mph	11.5 mph	30.1 in	0 in	0 in
12:11 PM	84.3 °F	60.6 °F	45 %	North	2.3 mph	5.8 mph	30.1 in	0 in	0 in
12:16 PM	84.4 °F	60.1 °F	44 %	North	2.7 mph	5 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:21 PM	84.3 °F	58 °F	41 %	NNE	3.5 mph	4.6 mph	30.1 in	0 in	0 in
12:26 PM	84.1 °F	57.9 °F	41 %	NNW	4.1 mph	6.9 mph	30.1 in	0 in	0 in
12:31 PM	83.8 °F	60.8 °F	46 %	NNE	5.4 mph	9.2 mph	30.1 in	0 in	0 in
12:36 PM	83.8 °F	58.9 °F	43 %	North	4.2 mph	8.1 mph	30.1 in	0 in	0 in
12:41 PM	83.8 °F	62.6 °F	49 %	NNE	3.6 mph	4 mph	30.1 in	0 in	0 in
12:46 PM	83.6 °F	58.7 °F	43 %	NW	4 mph	5.8 mph	30.09 in	0 in	0 in
12:51 PM	82.8 °F	58.7 °F	44 %	NW	3 mph	8.1 mph	30.09 in	0 in	0 in
12:56 PM	82.8 °F	60.5 °F	47 %	NNE	2.5 mph	9.2 mph	30.09 in	0 in	0 in
1:01 PM	83.3 °F	61.6 °F	48 %	ENE	4.6 mph	9.2 mph	30.09 in	0 in	0 in
1:06 PM	83 °F	58.8 °F	44 %	NNW	4 mph	6 mph	30.09 in	0 in	0 in
1:11 PM	83.1 °F	60.2 °F	46 %	ENE	4 mph	9.2 mph	30.09 in	0 in	0 in
1:16 PM	83.4 °F	59.2 °F	44 %	NNE	4.8 mph	9.2 mph	30.09 in	0 in	0 in
1:21 PM	83.5 °F	58.6 °F	43 %	North	1.3 mph	3.5 mph	30.09 in	0 in	0 in
1:26 PM	83.6 °F	58.7 °F	43 %	North	3.1 mph	5.8 mph	30.09 in	0 in	0 in
1:31 PM	83.3 °F	57.8 °F	42 %	NNW	3.3 mph	5.8 mph	30.09 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:36 PM	83.3 °F	59.7 °F	45 %	NNE	6.8 mph	10.4 mph	30.09 in	0 in	0 in
1:41 PM	83.7 °F	60.7 °F	46 %	North	4.6 mph	8.1 mph	30.08 in	0 in	0 in
1:46 PM	83.9 °F	60.3 °F	45 %	ENE	6.5 mph	6.5 mph	30.08 in	0 in	0 in
1:51 PM	84 °F	59.7 °F	44 %	ENE	6.2 mph	10.4 mph	30.08 in	0 in	0 in
1:56 PM	83.9 °F	58.3 °F	42 %	NNE	5 mph	9.2 mph	30.08 in	0 in	0 in
2:01 PM	84 °F	60.4 °F	45 %	NNE	7 mph	11.5 mph	30.08 in	0 in	0 in
2:06 PM	84.1 °F	59.8 °F	44 %	WNW	5.6 mph	10.4 mph	30.08 in	0 in	0 in
2:11 PM	84 °F	61.6 °F	47 %	NE	3.8 mph	10 mph	30.08 in	0 in	0 in
2:16 PM	83.9 °F	59 °F	43 %	WNW	4.8 mph	10 mph	30.08 in	0 in	0 in
2:21 PM	83.8 °F	60.2 °F	45 %	NNE	8 mph	13.8 mph	30.08 in	0 in	0 in
2:26 PM	83.7 °F	60.7 °F	46 %	North	5.7 mph	8.1 mph	30.08 in	0 in	0 in
2:31 PM	83.8 °F	61.4 °F	47 %	NNW	3.1 mph	5 mph	30.08 in	0 in	0 in
2:36 PM	84 °F	61.6 °F	47 %	NE	2 mph	5.8 mph	30.08 in	0 in	0 in
2:41 PM	84.2 °F	62.4 °F	48 %	WNW	3.4 mph	4.6 mph	30.08 in	0 in	0 in
2:46 PM	84.1 °F	61.1 °F	46 %	NW	3.4 mph	4.6 mph	30.08 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:51 PM	84.1 °F	59.8 °F	44 %	NNW	3 mph	5.8 mph	30.08 in	0 in	0 in
2:56 PM	84 °F	61 °F	46 %	NNW	3.6 mph	8.1 mph	30.08 in	0 in	0 in
3:01 PM	83.8 °F	61.4 °F	47 %	NE	3 mph	7 mph	30.08 in	0 in	0 in
3:06 PM	84.2 °F	61.2 °F	46 %	North	5.1 mph	8.1 mph	30.08 in	0 in	0 in
3:11 PM	84.5 °F	62.1 °F	47 %	NNE	2.3 mph	6 mph	30.07 in	0 in	0 in
3:16 PM	84.7 °F	62.2 °F	47 %	NNW	4.3 mph	6 mph	30.07 in	0 in	0 in
3:21 PM	84.3 °F	60 °F	44 %	NE	4.6 mph	8.1 mph	30.07 in	0 in	0 in
3:26 PM	83.9 °F	60.3 °F	45 %	NNW	5.3 mph	6.9 mph	30.07 in	0 in	0 in
3:31 PM	83.8 °F	62 °F	48 %	NE	6.5 mph	8.1 mph	30.07 in	0 in	0 in
3:36 PM	83.9 °F	62.7 °F	49 %	NE	4.7 mph	6 mph	30.07 in	0 in	0 in
3:41 PM	83.8 °F	60.8 °F	46 %	WNW	3.3 mph	4.6 mph	30.07 in	0 in	0 in
3:46 PM	83.1 °F	58.3 °F	43 %	NW	5.6 mph	11.5 mph	30.07 in	0 in	0 in
3:51 PM	82.2 °F	58.7 °F	45 %	NNE	5.3 mph	10.4 mph	30.08 in	0 in	0 in
3:56 PM	81.6 °F	59.4 °F	47 %	NNE	1.7 mph	3.5 mph	30.08 in	0 in	0 in
4:01 PM	81.5 °F	59.9 °F	48 %	North	5.2 mph	9.2 mph	30.07 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:06 PM	81.8 °F	60.2 °F	48 %	NNE	3.4 mph	4.6 mph	30.07 in	0 in	0 in
4:11 PM	81.7 °F	60.1 °F	48 %	NW	1.6 mph	3.5 mph	30.07 in	0 in	0 in
4:16 PM	80.9 °F	59.9 °F	49 %	NNW	3.3 mph	5.8 mph	30.07 in	0 in	0 in
4:21 PM	80.3 °F	60 °F	50 %	WNW	3.2 mph	6.9 mph	30.08 in	0 in	0 in
4:26 PM	79.8 °F	59.5 °F	50 %	WNW	2.9 mph	5.8 mph	30.08 in	0 in	0 in
4:31 PM	79.6 °F	61.5 °F	54 %	NE	2.6 mph	2.6 mph	30.07 in	0 in	0 in
4:36 PM	79.7 °F	60 °F	51 %	WNW	3.5 mph	8.1 mph	30.07 in	0 in	0 in
4:41 PM	79.7 °F	61.6 °F	54 %	NNW	1.2 mph	3.5 mph	30.07 in	0 in	0 in
4:46 PM	79.9 °F	61.2 °F	53 %	NW	1.9 mph	3.5 mph	30.08 in	0 in	0 in
4:51 PM	80.1 °F	62 °F	54 %	NNW	0.9 mph	2.3 mph	30.08 in	0 in	0 in
4:56 PM	80.2 °F	61.5 °F	53 %	North	1.9 mph	4.6 mph	30.08 in	0 in	0 in
5:01 PM	80.7 °F	62.5 °F	54 %	NNE	1.2 mph	2.3 mph	30.07 in	0 in	0 in
5:06 PM	81.4 °F	61 °F	50 %	NNE	3.2 mph	7 mph	30.07 in	0 in	0 in
5:11 PM	81.6 °F	61.7 °F	51 %	NE	2 mph	3.5 mph	30.07 in	0 in	0 in
5:16 PM	82.2 °F	61.1 °F	49 %	WNW	3.6 mph	6.9 mph	30.08 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:21 PM	82.3 °F	60.1 °F	47 %	NNE	5.3 mph	9.2 mph	30.07 in	0 in	0 in
5:26 PM	82.2 °F	61.1 °F	49 %	NW	3.7 mph	6.9 mph	30.07 in	0 in	0 in
5:31 PM	82.4 °F	62.5 °F	51 %	NNW	1.7 mph	3.5 mph	30.06 in	0 in	0 in
5:36 PM	82.5 °F	62.5 °F	51 %	NNE	2.7 mph	3.5 mph	30.06 in	0 in	0 in
5:41 PM	82 °F	61 °F	49 %	ENE	4.3 mph	5 mph	30.06 in	0 in	0 in
5:46 PM	81.4 °F	61.5 °F	51 %	ENE	0.9 mph	1.2 mph	30.07 in	0 in	0 in
5:51 PM	81.2 °F	61.4 °F	51 %	NNW	2.2 mph	3.5 mph	30.07 in	0 in	0 in
5:56 PM	81.1 °F	60.7 °F	50 %	NNE	4.3 mph	8.1 mph	30.06 in	0 in	0 in
6:01 PM	80.9 °F	61.1 °F	51 %	NW	2.1 mph	3.5 mph	30.06 in	0 in	0 in
6:06 PM	80.9 °F	59.9 °F	49 %	North	2.2 mph	4 mph	30.06 in	0 in	0 in
6:11 PM	80.7 °F	60.9 °F	51 %	North	1.4 mph	3.5 mph	30.06 in	0 in	0 in
6:16 PM	80.6 °F	59.7 °F	49 %	NE	3 mph	6.9 mph	30.06 in	0 in	0 in
6:21 PM	80.3 °F	59.4 °F	49 %	North	3 mph	4.6 mph	30.06 in	0 in	0 in
6:26 PM	80.2 °F	59.3 °F	49 %	NE	3.7 mph	4.6 mph	30.05 in	0 in	0 in
6:31 PM	80 °F	58 °F	47 %	NW	2.7 mph	5.8 mph	30.05 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:36 PM	79.8 °F	57.8 °F	47 %	North	2.6 mph	3.5 mph	30.05 in	0 in	0 in
6:41 PM	79.6 °F	58.8 °F	49 %	NNW	1.5 mph	3.5 mph	30.05 in	0 in	0 in
6:46 PM	79.4 °F	59.1 °F	50 %	North	1.8 mph	2.3 mph	30.05 in	0 in	0 in
6:51 PM	79.3 °F	59.6 °F	51 %	NNW	1.5 mph	3.5 mph	30.05 in	0 in	0 in
6:56 PM	79.2 °F	59.5 °F	51 %	NNW	2.5 mph	4.6 mph	30.06 in	0 in	0 in
7:01 PM	79.3 °F	60.7 °F	53 %	North	1.7 mph	3.5 mph	30.05 in	0 in	0 in
7:06 PM	79.3 °F	60.1 °F	52 %	NW	1.9 mph	4.6 mph	30.05 in	0 in	0 in
7:11 PM	79.3 °F	60.1 °F	52 %	NNE	2.5 mph	3.5 mph	30.05 in	0 in	0 in
7:16 PM	79 °F	60.4 °F	53 %	NNW	2.7 mph	4 mph	30.05 in	0 in	0 in
7:21 PM	78.7 °F	60.1 °F	53 %	NNW	2.5 mph	4.6 mph	30.05 in	0 in	0 in
7:26 PM	78.4 °F	60.4 °F	54 %	North	1.6 mph	3.5 mph	30.05 in	0 in	0 in
7:31 PM	78.2 °F	60.2 °F	54 %	North	1 mph	2.3 mph	30.05 in	0 in	0 in
7:36 PM	78 °F	61 °F	56 %	NW	1.1 mph	2.3 mph	30.06 in	0 in	0 in
7:41 PM	77.7 °F	60.8 °F	56 %	NNW	1.2 mph	3.5 mph	30.06 in	0 in	0 in
7:46 PM	77.4 °F	61 °F	57 %	North	1.4 mph	3.5 mph	30.06 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:51 PM	77.1 °F	60.7 °F	57 %	NNW	1.9 mph	3.5 mph	30.06 in	0 in	0 in
7:56 PM	76.9 °F	61 °F	58 %	North	1.5 mph	2.3 mph	30.06 in	0 in	0 in
8:01 PM	76.6 °F	60.7 °F	58 %	NNW	2.3 mph	3.5 mph	30.06 in	0 in	0 in
8:06 PM	76.3 °F	60.9 °F	59 %	NNE	1.2 mph	3 mph	30.06 in	0 in	0 in
8:11 PM	76 °F	60.2 °F	58 %	North	2.3 mph	4 mph	30.06 in	0 in	0 in
8:16 PM	75.7 °F	59.9 °F	58 %	North	0.5 mph	2.3 mph	30.06 in	0 in	0 in
8:21 PM	75.4 °F	59.1 °F	57 %	North	1.6 mph	2.3 mph	30.06 in	0 in	0 in
8:26 PM	75.2 °F	58.9 °F	57 %	North	0.6 mph	1.2 mph	30.06 in	0 in	0 in
8:31 PM	74.9 °F	59.6 °F	59 %	North	0.8 mph	1.2 mph	30.06 in	0 in	0 in
8:36 PM	74.3 °F	58.6 °F	58 %	North	0.3 mph	1.2 mph	30.06 in	0 in	0 in
8:41 PM	73.9 °F	59.1 °F	60 %	North	0 mph	0 mph	30.06 in	0 in	0 in
8:46 PM	73.6 °F	59.3 °F	61 %	North	0 mph	1 mph	30.06 in	0 in	0 in
8:51 PM	73.2 °F	59.8 °F	63 %	North	0.1 mph	1.2 mph	30.07 in	0 in	0 in
8:56 PM	72.8 °F	59.5 °F	63 %	North	0 mph	0 mph	30.07 in	0 in	0 in
9:01 PM	72.5 °F	60.1 °F	65 %	North	0.3 mph	1.2 mph	30.07 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:06 PM	72.1 °F	60.1 °F	66 %	North	0.1 mph	0 mph	30.06 in	0 in	0 in
9:11 PM	71.7 °F	60.2 °F	67 %	North	1.2 mph	3.5 mph	30.07 in	0 in	0 in
9:16 PM	71.3 °F	60.6 °F	69 %	North	0.5 mph	1.2 mph	30.07 in	0 in	0 in
9:21 PM	71 °F	60.7 °F	70 %	North	0 mph	1.2 mph	30.07 in	0 in	0 in
9:26 PM	70.8 °F	60.9 °F	71 %	North	0.8 mph	1.2 mph	30.06 in	0 in	0 in
9:31 PM	70.5 °F	60.6 °F	71 %	North	0.8 mph	2.3 mph	30.06 in	0 in	0 in
9:36 PM	70.3 °F	60.4 °F	71 %	North	1.6 mph	2.3 mph	30.06 in	0 in	0 in
9:42 PM	70.1 °F	59.9 °F	70 %	NNW	1.1 mph	2.3 mph	30.07 in	0 in	0 in
9:47 PM	70 °F	60.9 °F	73 %	NNW	0.7 mph	2.3 mph	30.07 in	0 in	0 in
9:52 PM	69.7 °F	60.7 °F	73 %	NNW	0 mph	0 mph	30.07 in	0 in	0 in
9:57 PM	69.5 °F	60.5 °F	73 %	NNW	0 mph	0 mph	30.08 in	0 in	0 in
10:02 PM	69.3 °F	60.7 °F	74 %	NNW	0 mph	0 mph	30.08 in	0 in	0 in
10:07 PM	69 °F	60.4 °F	74 %	NNW	0.4 mph	1.2 mph	30.08 in	0 in	0 in
10:12 PM	68.8 °F	60.6 °F	75 %	NNW	0 mph	1.2 mph	30.08 in	0 in	0 in
10:17 PM	68.6 °F	60.4 °F	75 %	NNW	0.2 mph	0 mph	30.08 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:22 PM	68.3 °F	60.4 °F	76 %	NNW	0 mph	0 mph	30.09 in	0 in	0 in
10:27 PM	68 °F	60.5 °F	77 %	NNW	0 mph	0 mph	30.09 in	0 in	0 in
10:32 PM	67.8 °F	60.3 °F	77 %	NNW	0.5 mph	1.2 mph	30.09 in	0 in	0 in
10:37 PM	67.6 °F	60.1 °F	77 %	NNW	0.4 mph	1.2 mph	30.09 in	0 in	0 in
10:42 PM	67.5 °F	60 °F	77 %	NNW	0.4 mph	1.2 mph	30.09 in	0 in	0 in
10:47 PM	67.2 °F	59.4 °F	76 %	NNW	0.4 mph	1.2 mph	30.1 in	0 in	0 in
10:52 PM	67 °F	59.5 °F	77 %	NNW	0 mph	0 mph	30.1 in	0 in	0 in
10:57 PM	66.8 °F	59.4 °F	77 %	NNW	0 mph	0 mph	30.1 in	0 in	0 in
11:01 PM	66.6 °F	59.5 °F	78 %	NNW	0 mph	0 mph	30.1 in	0 in	0 in
11:02 PM	66.6 °F	59.5 °F	78 %	NNW	0 mph	0 mph	30.1 in	0 in	0 in
11:07 PM	66.3 °F	59.6 °F	79 %	NNW	0.3 mph	1.2 mph	30.11 in	0 in	0 in
11:12 PM	66.1 °F	59.4 °F	79 %	NNW	0 mph	0 mph	30.11 in	0 in	0 in
11:17 PM	65.9 °F	59.2 °F	79 %	NNW	0 mph	1.2 mph	30.11 in	0 in	0 in
11:22 PM	65.7 °F	59.4 °F	80 %	NNW	0.1 mph	1.2 mph	30.11 in	0 in	0 in
11:27 PM	65.6 °F	59.3 °F	80 %	NNW	0 mph	0 mph	30.11 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:32 PM	65.4 °F	59.1 °F	80 %	NNW	0 mph	0 mph	30.12 in	0 in	0 in
11:37 PM	65.3 °F	59 °F	80 %	NNW	0 mph	0 mph	30.12 in	0 in	0 in
11:42 PM	65.2 °F	59.2 °F	81 %	NNW	0.5 mph	1.2 mph	30.13 in	0 in	0 in
11:47 PM	64.9 °F	59.3 °F	82 %	NNW	1.2 mph	2 mph	30.13 in	0 in	0 in
11:52 PM	64.7 °F	59.1 °F	82 %	NNW	1.1 mph	2.3 mph	30.14 in	0 in	0 in
11:57 PM	64.7 °F	59.8 °F	84 %	NNW	1 mph	2.3 mph	30.14 in	0 in	0 in

Weather History for KOKCAT002

Weather History Table, July 3, 2014

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:02 AM	64.8 °F	59.9 °F	84 %	NNE	1.7 mph	3.5 mph	30.14 in	0 in	0 in
12:07 AM	65 °F	59.7 °F	83 %	NNE	1.5 mph	2.3 mph	30.14 in	0 in	0 in
12:12 AM	65.2 °F	59.6 °F	82 %	NNE	2.2 mph	3.5 mph	30.14 in	0 in	0 in
12:17 AM	65.5 °F	59.5 °F	81 %	NNE	1.4 mph	2.3 mph	30.15 in	0 in	0 in
12:22 AM	65.6 °F	59.3 °F	80 %	NNE	2.7 mph	3.5 mph	30.15 in	0 in	0 in
12:27 AM	65.8 °F	59.1 °F	79 %	NNE	1.2 mph	2.3 mph	30.15 in	0 in	0 in
12:32 AM	65.9 °F	59.2 °F	79 %	NNE	2.8 mph	3.5 mph	30.15 in	0 in	0 in
12:37 AM	65.9 °F	58.8 °F	78 %	NNE	2.5 mph	3.5 mph	30.15 in	0 in	0 in
12:42 AM	66 °F	58.6 °F	77 %	NNE	1.9 mph	3.5 mph	30.15 in	0 in	0 in
12:47 AM	66 °F	58.2 °F	76 %	NNE	3.1 mph	8.1 mph	30.15 in	0 in	0 in
12:52 AM	66 °F	58.2 °F	76 %	NNE	2 mph	3.5 mph	30.15 in	0 in	0 in
12:57 AM	65.9 °F	57.7 °F	75 %	NE	1.5 mph	5.8 mph	30.16 in	0 in	0 in
1:02 AM	65.8 °F	57.3 °F	74 %	North	2 mph	3.5 mph	30.15 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:07 AM	65.7 °F	57.6 °F	75 %	NNE	2.4 mph	3.5 mph	30.16 in	0 in	0 in
1:12 AM	65.6 °F	57.5 °F	75 %	NNE	1.7 mph	3.5 mph	30.16 in	0 in	0 in
1:17 AM	65.4 °F	56.9 °F	74 %	NNE	1.7 mph	3 mph	30.16 in	0 in	0 in
1:22 AM	65.3 °F	56.8 °F	74 %	NNE	1.8 mph	3.5 mph	30.16 in	0 in	0 in
1:27 AM	65.2 °F	57.1 °F	75 %	NNE	0.9 mph	3.5 mph	30.15 in	0 in	0 in
1:32 AM	65 °F	56.9 °F	75 %	NNE	1.7 mph	3.5 mph	30.16 in	0 in	0 in
1:37 AM	64.9 °F	56.8 °F	75 %	NNE	1.9 mph	3.5 mph	30.15 in	0 in	0 in
1:42 AM	64.8 °F	56.7 °F	75 %	NNE	1.5 mph	2.3 mph	30.16 in	0 in	0 in
1:47 AM	64.7 °F	56.6 °F	75 %	NNE	1.9 mph	3 mph	30.16 in	0 in	0 in
1:52 AM	64.5 °F	56.4 °F	75 %	NNE	0.6 mph	2.3 mph	30.16 in	0 in	0 in
1:57 AM	64.4 °F	56.7 °F	76 %	NNE	1.5 mph	2.3 mph	30.15 in	0 in	0 in
2:02 AM	64.2 °F	56.5 °F	76 %	NNE	1.1 mph	2.3 mph	30.15 in	0 in	0 in
2:07 AM	64.1 °F	56.4 °F	76 %	NNE	1.5 mph	2.3 mph	30.16 in	0 in	0 in
2:12 AM	63.9 °F	56.2 °F	76 %	NNE	2.3 mph	3.5 mph	30.15 in	0 in	0 in
2:17 AM	63.7 °F	56.4 °F	77 %	NNE	2.5 mph	3.5 mph	30.16 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:22 AM	63.6 °F	56.3 °F	77 %	NNE	2.2 mph	3.5 mph	30.16 in	0 in	0 in
2:27 AM	63.4 °F	56.1 °F	77 %	NE	1.7 mph	3.5 mph	30.15 in	0 in	0 in
2:32 AM	63.3 °F	56 °F	77 %	NNE	1.8 mph	3.5 mph	30.15 in	0 in	0 in
2:37 AM	63.3 °F	56 °F	77 %	NE	2.5 mph	3.5 mph	30.15 in	0 in	0 in
2:42 AM	63.2 °F	55.9 °F	77 %	NNE	1.8 mph	3.5 mph	30.15 in	0 in	0 in
2:47 AM	63.1 °F	55.8 °F	77 %	NNE	2.6 mph	3.5 mph	30.15 in	0 in	0 in
2:52 AM	62.9 °F	55.6 °F	77 %	NNE	0.9 mph	2.3 mph	30.15 in	0 in	0 in
2:57 AM	62.9 °F	55.9 °F	78 %	NNE	1.1 mph	2.3 mph	30.15 in	0 in	0 in
3:02 AM	62.7 °F	55.4 °F	77 %	NNE	0 mph	0 mph	30.15 in	0 in	0 in
3:07 AM	62.6 °F	55.6 °F	78 %	NNE	0 mph	0 mph	30.16 in	0 in	0 in
3:12 AM	62.4 °F	55.8 °F	79 %	NNE	0.3 mph	2.3 mph	30.15 in	0 in	0 in
3:17 AM	62.2 °F	55.6 °F	79 %	NNE	0 mph	0 mph	30.15 in	0 in	0 in
3:22 AM	62.1 °F	55.5 °F	79 %	NNE	0.1 mph	1.2 mph	30.15 in	0 in	0 in
3:27 AM	61.9 °F	55.7 °F	80 %	NNE	0 mph	0 mph	30.15 in	0 in	0 in
3:32 AM	61.6 °F	55.4 °F	80 %	NNE	0.6 mph	2.3 mph	30.15 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:37 AM	61.5 °F	55.6 °F	81 %	NNE	0 mph	1.2 mph	30.15 in	0 in	0 in
3:42 AM	61.3 °F	55.4 °F	81 %	NNE	1.2 mph	2.3 mph	30.15 in	0 in	0 in
3:47 AM	61.2 °F	55.3 °F	81 %	NNE	1.2 mph	3.5 mph	30.15 in	0 in	0 in
3:52 AM	61.1 °F	55.2 °F	81 %	NNE	0.6 mph	2.3 mph	30.15 in	0 in	0 in
3:57 AM	61.1 °F	55.2 °F	81 %	NNE	0.2 mph	1.2 mph	30.15 in	0 in	0 in
4:02 AM	61 °F	55.1 °F	81 %	NNE	1.8 mph	3.5 mph	30.15 in	0 in	0 in
4:07 AM	60.9 °F	55 °F	81 %	NNE	2.5 mph	3.5 mph	30.15 in	0 in	0 in
4:12 AM	60.9 °F	55 °F	81 %	NNE	2 mph	3.5 mph	30.15 in	0 in	0 in
4:17 AM	60.9 °F	55 °F	81 %	NNE	1.3 mph	2.3 mph	30.15 in	0 in	0 in
4:22 AM	60.7 °F	55.2 °F	82 %	NNE	0 mph	0 mph	30.15 in	0 in	0 in
4:27 AM	60.6 °F	55.1 °F	82 %	NNE	0.2 mph	2.3 mph	30.15 in	0 in	0 in
4:32 AM	60.5 °F	55 °F	82 %	NNE	1.1 mph	2 mph	30.15 in	0 in	0 in
4:37 AM	60.4 °F	54.9 °F	82 %	NNE	1 mph	2 mph	30.15 in	0 in	0 in
4:42 AM	60.3 °F	54.8 °F	82 %	NNE	0.8 mph	2.3 mph	30.15 in	0 in	0 in
4:47 AM	60.2 °F	54.7 °F	82 %	NNE	0.7 mph	2.3 mph	30.16 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:52 AM	60.1 °F	54.9 °F	83 %	NNE	0.5 mph	1.2 mph	30.16 in	0 in	0 in
4:57 AM	60 °F	54.8 °F	83 %	NNE	2 mph	3.5 mph	30.16 in	0 in	0 in
5:02 AM	59.8 °F	54.6 °F	83 %	NNE	1.5 mph	2.3 mph	30.16 in	0 in	0 in
5:07 AM	59.7 °F	54.9 °F	84 %	NNE	2.7 mph	3.5 mph	30.16 in	0 in	0 in
5:12 AM	59.7 °F	54.5 °F	83 %	NNE	1.6 mph	3 mph	30.16 in	0 in	0 in
5:17 AM	59.6 °F	54.4 °F	83 %	NNE	1.8 mph	3 mph	30.16 in	0 in	0 in
5:22 AM	59.7 °F	54.5 °F	83 %	NE	2.7 mph	4.6 mph	30.16 in	0 in	0 in
5:27 AM	59.7 °F	54.5 °F	83 %	NE	2 mph	3.5 mph	30.16 in	0 in	0 in
5:32 AM	59.7 °F	54.5 °F	83 %	NNE	1.6 mph	3.5 mph	30.16 in	0 in	0 in
5:37 AM	59.7 °F	54.5 °F	83 %	NNE	1.8 mph	3.5 mph	30.16 in	0 in	0 in
5:42 AM	59.7 °F	54.5 °F	83 %	NNE	1.7 mph	3.5 mph	30.16 in	0 in	0 in
5:47 AM	59.7 °F	54.5 °F	83 %	NNE	0.8 mph	1.2 mph	30.16 in	0 in	0 in
5:52 AM	59.6 °F	54.4 °F	83 %	North	1.3 mph	3.5 mph	30.16 in	0 in	0 in
5:57 AM	59.6 °F	54.4 °F	83 %	North	1.7 mph	3.5 mph	30.16 in	0 in	0 in
6:02 AM	59.5 °F	54.3 °F	83 %	North	1.2 mph	3.5 mph	30.16 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:07 AM	59.4 °F	54.2 °F	83 %	North	0.8 mph	3.5 mph	30.16 in	0 in	0 in
6:12 AM	59.4 °F	54.2 °F	83 %	North	1.5 mph	2.3 mph	30.17 in	0 in	0 in
6:17 AM	59.2 °F	54.4 °F	84 %	North	1.6 mph	2.3 mph	30.17 in	0 in	0 in
6:22 AM	59.1 °F	54.3 °F	84 %	North	0.8 mph	3.5 mph	30.17 in	0 in	0 in
6:27 AM	59 °F	54.2 °F	84 %	North	1 mph	2.3 mph	30.17 in	0 in	0 in
6:32 AM	59 °F	54.2 °F	84 %	North	1.2 mph	3.5 mph	30.17 in	0 in	0 in
6:37 AM	59.1 °F	54.3 °F	84 %	North	1.7 mph	2.3 mph	30.18 in	0 in	0 in
6:42 AM	59.2 °F	54.4 °F	84 %	North	0.6 mph	2.3 mph	30.18 in	0 in	0 in
6:47 AM	59.3 °F	54.5 °F	84 %	North	0.2 mph	1.2 mph	30.18 in	0 in	0 in
6:52 AM	59.4 °F	54.6 °F	84 %	North	0 mph	1.2 mph	30.18 in	0 in	0 in
6:57 AM	59.5 °F	54.7 °F	84 %	NNE	1.8 mph	3 mph	30.18 in	0 in	0 in
7:02 AM	59.7 °F	54.9 °F	84 %	NNE	1 mph	1.2 mph	30.18 in	0 in	0 in
7:07 AM	60 °F	55.2 °F	84 %	NNE	0.5 mph	2.3 mph	30.18 in	0 in	0 in
7:12 AM	60.2 °F	55 °F	83 %	North	1.5 mph	2 mph	30.18 in	0 in	0 in
7:17 AM	60.5 °F	55 °F	82 %	North	0.8 mph	1.2 mph	30.18 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:22 AM	60.8 °F	55.3 °F	82 %	North	0.8 mph	2.3 mph	30.18 in	0 in	0 in
7:27 AM	61.4 °F	55.5 °F	81 %	North	0.7 mph	1.2 mph	30.18 in	0 in	0 in
7:32 AM	62.3 °F	56 °F	80 %	North	1.1 mph	2 mph	30.18 in	0 in	0 in
7:37 AM	63.1 °F	55.8 °F	77 %	NE	1.7 mph	3 mph	30.18 in	0 in	0 in
7:42 AM	63.9 °F	56.2 °F	76 %	NE	1.2 mph	3.5 mph	30.18 in	0 in	0 in
7:47 AM	64.7 °F	56.2 °F	74 %	NE	0.5 mph	3.5 mph	30.18 in	0 in	0 in
7:52 AM	65.4 °F	56.5 °F	73 %	NE	1.1 mph	2.3 mph	30.18 in	0 in	0 in
7:57 AM	66 °F	55.9 °F	70 %	NE	1 mph	3.5 mph	30.19 in	0 in	0 in
8:02 AM	66.6 °F	56.9 °F	71 %	NE	0 mph	1.2 mph	30.19 in	0 in	0 in
8:07 AM	67.1 °F	56.2 °F	68 %	NNE	0.6 mph	2.3 mph	30.19 in	0 in	0 in
8:12 AM	67.4 °F	56.1 °F	67 %	NE	2.7 mph	3.5 mph	30.19 in	0 in	0 in
8:17 AM	67.7 °F	56.8 °F	68 %	NE	2.5 mph	3.5 mph	30.19 in	0 in	0 in
8:22 AM	68.2 °F	57.2 °F	68 %	NNE	2.5 mph	4.6 mph	30.19 in	0 in	0 in
8:27 AM	68.6 °F	56.8 °F	66 %	NNE	2.6 mph	3.5 mph	30.19 in	0 in	0 in
8:32 AM	68.9 °F	57.9 °F	68 %	North	2.6 mph	3.5 mph	30.19 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:37 AM	69.4 °F	58 °F	67 %	NNE	2.5 mph	3.5 mph	30.19 in	0 in	0 in
8:42 AM	69.7 °F	57 °F	64 %	NE	1.3 mph	2.3 mph	30.2 in	0 in	0 in
8:47 AM	69.9 °F	56.7 °F	63 %	NNE	2.4 mph	3.5 mph	30.19 in	0 in	0 in
8:52 AM	70.2 °F	56.1 °F	61 %	NNE	2.9 mph	4.6 mph	30.2 in	0 in	0 in
8:57 AM	70.4 °F	57.2 °F	63 %	NE	1.5 mph	3.5 mph	30.2 in	0 in	0 in
9:02 AM	70.6 °F	56.9 °F	62 %	East	3.6 mph	4 mph	30.2 in	0 in	0 in
9:07 AM	70.4 °F	55.8 °F	60 %	ENE	2.8 mph	5.8 mph	30.2 in	0 in	0 in
9:12 AM	70.5 °F	55.9 °F	60 %	NNW	2.9 mph	9.2 mph	30.2 in	0 in	0 in
9:17 AM	70.8 °F	55.8 °F	59 %	NNE	4.1 mph	9 mph	30.2 in	0 in	0 in
9:22 AM	71.3 °F	56.2 °F	59 %	ENE	2.5 mph	4 mph	30.2 in	0 in	0 in
9:27 AM	71.7 °F	55.7 °F	57 %	NNE	5.3 mph	8.1 mph	30.2 in	0 in	0 in
9:32 AM	72.2 °F	57.1 °F	59 %	NNE	1.4 mph	3.5 mph	30.2 in	0 in	0 in
9:37 AM	72.2 °F	56.1 °F	57 %	ENE	2.6 mph	9.2 mph	30.2 in	0 in	0 in
9:42 AM	72.4 °F	56.8 °F	58 %	NE	5.5 mph	6.9 mph	30.2 in	0 in	0 in
9:47 AM	73 °F	57.3 °F	58 %	NE	3.1 mph	4.6 mph	30.2 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:52 AM	73.7 °F	57.5 °F	57 %	ENE	2.5 mph	4.6 mph	30.2 in	0 in	0 in
9:57 AM	73.9 °F	56.7 °F	55 %	NE	3.2 mph	8.1 mph	30.2 in	0 in	0 in
10:02 AM	74.1 °F	56.9 °F	55 %	ENE	1.4 mph	2.3 mph	30.2 in	0 in	0 in
10:07 AM	73.8 °F	56.1 °F	54 %	ENE	3.3 mph	3.5 mph	30.2 in	0 in	0 in
10:12 AM	73.7 °F	57.5 °F	57 %	NE	3.9 mph	4.6 mph	30.2 in	0 in	0 in
10:17 AM	74.2 °F	58 °F	57 %	NE	3.1 mph	4.6 mph	30.2 in	0 in	0 in
10:22 AM	74.5 °F	56.2 °F	53 %	ENE	4.4 mph	9.2 mph	30.2 in	0 in	0 in
10:27 AM	74.6 °F	57.9 °F	56 %	ENE	3.7 mph	4 mph	30.2 in	0 in	0 in
10:32 AM	74.4 °F	56.2 °F	53 %	ESE	5 mph	9.2 mph	30.2 in	0 in	0 in
10:37 AM	74.3 °F	55.5 °F	52 %	NW	2.3 mph	3.5 mph	30.2 in	0 in	0 in
10:42 AM	74.7 °F	58 °F	56 %	East	3.4 mph	8.1 mph	30.2 in	0 in	0 in
10:47 AM	75.3 °F	58.5 °F	56 %	North	2.7 mph	5 mph	30.2 in	0 in	0 in
10:52 AM	75.5 °F	56.1 °F	51 %	North	2 mph	4 mph	30.2 in	0 in	0 in
10:57 AM	75.2 °F	58.4 °F	56 %	ENE	3.8 mph	8.1 mph	30.2 in	0 in	0 in
11:02 AM	75.8 °F	58.5 °F	55 %	NNE	3.4 mph	4.6 mph	30.2 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:07 AM	76.5 °F	58.6 °F	54 %	East	2.6 mph	5.8 mph	30.2 in	0 in	0 in
11:12 AM	76.9 °F	58.5 °F	53 %	NE	3.4 mph	4 mph	30.2 in	0 in	0 in
11:17 AM	77.3 °F	58.3 °F	52 %	West	2.9 mph	4.6 mph	30.2 in	0 in	0 in
11:22 AM	76.8 °F	57.8 °F	52 %	NE	1.6 mph	3.5 mph	30.2 in	0 in	0 in
11:27 AM	77.1 °F	57.6 °F	51 %	NNE	4.2 mph	9.2 mph	30.19 in	0 in	0 in
11:32 AM	77.4 °F	57.9 °F	51 %	ESE	3.7 mph	3.7 mph	30.19 in	0 in	0 in
11:37 AM	77.2 °F	59.8 °F	55 %	NNW	2.6 mph	3.5 mph	30.19 in	0 in	0 in
11:42 AM	77.4 °F	57.3 °F	50 %	NNE	5.5 mph	8.1 mph	30.19 in	0 in	0 in
11:47 AM	77.5 °F	59 °F	53 %	NNE	2.7 mph	6.9 mph	30.2 in	0 in	0 in
11:52 AM	77.9 °F	58.3 °F	51 %	ENE	2.2 mph	6.9 mph	30.2 in	0 in	0 in
11:57 AM	77.6 °F	57.5 °F	50 %	NE	1.3 mph	3.5 mph	30.2 in	0 in	0 in
12:02 PM	77.7 °F	60.8 °F	56 %	North	0.7 mph	2 mph	30.2 in	0 in	0 in
12:07 PM	78 °F	59.5 °F	53 %	ENE	3.9 mph	3.9 mph	30.19 in	0 in	0 in
12:12 PM	77.9 °F	59.9 °F	54 %	ENE	1.9 mph	3.5 mph	30.19 in	0 in	0 in
12:17 PM	77.8 °F	57.7 °F	50 %	ENE	1.7 mph	3.5 mph	30.19 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:22 PM	78 °F	58.9 °F	52 %	NNW	3.2 mph	4 mph	30.19 in	0 in	0 in
12:27 PM	78 °F	57.3 °F	49 %	East	2 mph	5.8 mph	30.19 in	0 in	0 in
12:32 PM	78.4 °F	59.3 °F	52 %	NNE	2.5 mph	5.8 mph	30.19 in	0 in	0 in
12:37 PM	79.1 °F	58.9 °F	50 %	NNW	3 mph	5.8 mph	30.19 in	0 in	0 in
12:42 PM	78.9 °F	55.8 °F	45 %	North	1.3 mph	3.5 mph	30.19 in	0 in	0 in
12:47 PM	78.2 °F	60.2 °F	54 %	North	2.6 mph	6.9 mph	30.19 in	0 in	0 in
12:52 PM	78.7 °F	57.4 °F	48 %	East	3.5 mph	6 mph	30.19 in	0 in	0 in
12:57 PM	78.6 °F	59 °F	51 %	ESE	1.9 mph	3.5 mph	30.19 in	0 in	0 in
1:02 PM	78.4 °F	58.2 °F	50 %	NE	0.6 mph	3.5 mph	30.19 in	0 in	0 in
1:07 PM	79 °F	58.8 °F	50 %	WNW	1.3 mph	3 mph	30.19 in	0 in	0 in
1:12 PM	78.5 °F	56.6 °F	47 %	West	0.5 mph	1.2 mph	30.19 in	0 in	0 in
1:17 PM	79.1 °F	57.7 °F	48 %	North	2.2 mph	3.5 mph	30.19 in	0 in	0 in
1:22 PM	79.8 °F	60.6 °F	52 %	NNE	3 mph	3.5 mph	30.19 in	0 in	0 in
1:27 PM	80.5 °F	57.2 °F	45 %	NNE	0.9 mph	4.6 mph	30.19 in	0 in	0 in
1:32 PM	80.2 °F	57.5 °F	46 %	East	2.4 mph	3.5 mph	30.19 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:37 PM	80.2 °F	58.1 °F	47 %	ENE	1.1 mph	4.6 mph	30.19 in	0 in	0 in
1:42 PM	80.1 °F	56.8 °F	45 %	WSW	1.4 mph	3.5 mph	30.18 in	0 in	0 in
1:47 PM	80.3 °F	59.4 °F	49 %	NNE	0.7 mph	2 mph	30.18 in	0 in	0 in
1:52 PM	80.8 °F	58.1 °F	46 %	NW	3.7 mph	4 mph	30.18 in	0 in	0 in
1:57 PM	80.5 °F	58.4 °F	47 %	NNE	1.4 mph	3.5 mph	30.18 in	0 in	0 in
2:02 PM	80.7 °F	56.8 °F	44 %	West	3.3 mph	3.5 mph	30.18 in	0 in	0 in
2:07 PM	80.6 °F	57.9 °F	46 %	NNE	3.1 mph	5.8 mph	30.18 in	0 in	0 in
2:12 PM	80.3 °F	57.6 °F	46 %	East	2.6 mph	4.6 mph	30.18 in	0 in	0 in
2:17 PM	80.2 °F	56.9 °F	45 %	ESE	0.5 mph	1.2 mph	30.18 in	0 in	0 in
2:22 PM	80.4 °F	57.7 °F	46 %	East	2.2 mph	3.5 mph	30.17 in	0 in	0 in
2:27 PM	80.6 °F	58.5 °F	47 %	ESE	4.2 mph	6.9 mph	30.17 in	0 in	0 in
2:32 PM	80.4 °F	57.1 °F	45 %	East	1.2 mph	3.5 mph	30.17 in	0 in	0 in
2:37 PM	80.3 °F	58.2 °F	47 %	ENE	2.8 mph	4 mph	30.17 in	0 in	0 in
2:42 PM	80.5 °F	59.6 °F	49 %	NE	1.1 mph	3.5 mph	30.17 in	0 in	0 in
2:47 PM	81 °F	61.2 °F	51 %	NE	1.4 mph	3 mph	30.17 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:52 PM	81.5 °F	62.7 °F	53 %	NE	0.6 mph	3.5 mph	30.16 in	0 in	0 in
2:57 PM	81.8 °F	59.6 °F	47 %	NE	3.5 mph	4.6 mph	30.16 in	0 in	0 in
3:02 PM	82.1 °F	58.7 °F	45 %	NE	1.9 mph	3 mph	30.16 in	0 in	0 in
3:07 PM	82.3 °F	57.6 °F	43 %	NE	2.2 mph	3.5 mph	30.16 in	0 in	0 in
3:12 PM	82.3 °F	57.6 °F	43 %	NNW	2.7 mph	3.5 mph	30.16 in	0 in	0 in
3:17 PM	82.5 °F	59.6 °F	46 %	NE	2.9 mph	3.5 mph	30.16 in	0 in	0 in
3:22 PM	82.4 °F	60.7 °F	48 %	NNE	1.8 mph	9.2 mph	30.15 in	0 in	0 in
3:27 PM	82.3 °F	58.2 °F	44 %	NE	1 mph	3.5 mph	30.15 in	0 in	0 in
3:32 PM	82.3 °F	58.2 °F	44 %	NE	4 mph	5.8 mph	30.15 in	0 in	0 in
3:37 PM	82 °F	60.4 °F	48 %	NNW	1.7 mph	3.5 mph	30.15 in	0 in	0 in
3:42 PM	82.4 °F	59.5 °F	46 %	West	2.6 mph	3.5 mph	30.14 in	0 in	0 in
3:47 PM	82.4 °F	58.9 °F	45 %	North	1.4 mph	3.5 mph	30.14 in	0 in	0 in
3:52 PM	82.4 °F	60.7 °F	48 %	ENE	2.2 mph	3.5 mph	30.14 in	0 in	0 in
3:57 PM	82.4 °F	59.5 °F	46 %	NNW	3.1 mph	3.5 mph	30.14 in	0 in	0 in
4:02 PM	82.3 °F	60.1 °F	47 %	East	1.7 mph	3.5 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:07 PM	82.2 °F	60 °F	47 %	East	1.6 mph	3.5 mph	30.14 in	0 in	0 in
4:12 PM	82 °F	59.2 °F	46 %	ESE	2.3 mph	5.8 mph	30.14 in	0 in	0 in
4:17 PM	81.9 °F	60.3 °F	48 %	ESE	3.3 mph	6 mph	30.14 in	0 in	0 in
4:22 PM	81.5 °F	59.9 °F	48 %	East	3.4 mph	4.6 mph	30.14 in	0 in	0 in
4:27 PM	81.3 °F	59.1 °F	47 %	SSE	0.6 mph	1.2 mph	30.14 in	0 in	0 in
4:32 PM	81.8 °F	60.2 °F	48 %	East	4.2 mph	9.2 mph	30.14 in	0 in	0 in
4:37 PM	82.4 °F	58.9 °F	45 %	NE	1.6 mph	3.5 mph	30.14 in	0 in	0 in
4:42 PM	82.7 °F	58.6 °F	44 %	NNE	4.3 mph	6.9 mph	30.14 in	0 in	0 in
4:47 PM	83.1 °F	59.6 °F	45 %	North	1.5 mph	4 mph	30.14 in	0 in	0 in
4:52 PM	83.2 °F	59 °F	44 %	NNE	1.5 mph	3 mph	30.13 in	0 in	0 in
4:57 PM	83.2 °F	60.3 °F	46 %	NNE	3.2 mph	4.6 mph	30.13 in	0 in	0 in
5:02 PM	83.3 °F	61 °F	47 %	East	1.9 mph	2.3 mph	30.13 in	0 in	0 in
5:07 PM	82.9 °F	61.2 °F	48 %	NE	0.9 mph	2 mph	30.13 in	0 in	0 in
5:12 PM	83 °F	61.9 °F	49 %	North	2.9 mph	3.5 mph	30.13 in	0 in	0 in
5:17 PM	83.2 °F	60.3 °F	46 %	North	2.3 mph	4 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:22 PM	83.5 °F	59.9 °F	45 %	NNE	1.7 mph	3.5 mph	30.12 in	0 in	0 in
5:27 PM	82.9 °F	62.4 °F	50 %	ENE	1 mph	3.5 mph	30.12 in	0 in	0 in
5:32 PM	82.5 °F	59.6 °F	46 %	NNE	0.8 mph	2.3 mph	30.12 in	0 in	0 in
5:37 PM	82.4 °F	60.1 °F	47 %	East	2.8 mph	3.5 mph	30.12 in	0 in	0 in
5:42 PM	82.2 °F	59.4 °F	46 %	ENE	1.8 mph	2.3 mph	30.12 in	0 in	0 in
5:47 PM	82.2 °F	60.6 °F	48 %	ENE	3.4 mph	4.6 mph	30.11 in	0 in	0 in
5:52 PM	82.3 °F	60.6 °F	48 %	NNE	1.1 mph	3.5 mph	30.11 in	0 in	0 in
5:57 PM	82.4 °F	60.7 °F	48 %	NNE	2.1 mph	3.5 mph	30.11 in	0 in	0 in
6:02 PM	82.6 °F	60.3 °F	47 %	ESE	2.9 mph	3.5 mph	30.11 in	0 in	0 in
6:07 PM	82.3 °F	61.2 °F	49 %	ENE	0.3 mph	2.3 mph	30.1 in	0 in	0 in
6:12 PM	82.1 °F	61 °F	49 %	NE	2.5 mph	4.6 mph	30.1 in	0 in	0 in
6:17 PM	81.8 °F	60.2 °F	48 %	East	3 mph	5.8 mph	30.1 in	0 in	0 in
6:22 PM	81.2 °F	61.9 °F	52 %	East	2.6 mph	4 mph	30.1 in	0 in	0 in
6:27 PM	80.7 °F	60.3 °F	50 %	East	3.9 mph	6.9 mph	30.1 in	0 in	0 in
6:32 PM	80.4 °F	60.1 °F	50 %	ESE	2.5 mph	3.5 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:37 PM	80.1 °F	60.9 °F	52 %	ENE	1.6 mph	3 mph	30.1 in	0 in	0 in
6:42 PM	80 °F	59.7 °F	50 %	East	2.8 mph	5 mph	30.1 in	0 in	0 in
6:47 PM	79.8 °F	60.1 °F	51 %	East	4.2 mph	6 mph	30.1 in	0 in	0 in
6:52 PM	79.7 °F	60.5 °F	52 %	East	2.2 mph	3.5 mph	30.1 in	0 in	0 in
6:57 PM	79.6 °F	59.3 °F	50 %	East	4.3 mph	5.8 mph	30.1 in	0 in	0 in
7:02 PM	79.5 °F	60.3 °F	52 %	ESE	3.5 mph	6 mph	30.1 in	0 in	0 in
7:07 PM	79.3 °F	60.7 °F	53 %	ENE	4.7 mph	8.1 mph	30.1 in	0 in	0 in
7:12 PM	79.1 °F	60.5 °F	53 %	ESE	2.7 mph	3.5 mph	30.1 in	0 in	0 in
7:17 PM	78.9 °F	60.3 °F	53 %	East	3.4 mph	6.9 mph	30.1 in	0 in	0 in
7:22 PM	78.8 °F	60.2 °F	53 %	ESE	2.2 mph	3.5 mph	30.1 in	0 in	0 in
7:27 PM	78.7 °F	59.6 °F	52 %	East	2.6 mph	5.8 mph	30.1 in	0 in	0 in
7:32 PM	78.5 °F	59.9 °F	53 %	ENE	2.4 mph	3.5 mph	30.09 in	0 in	0 in
7:37 PM	78.4 °F	59.9 °F	53 %	East	3.5 mph	5.8 mph	30.1 in	0 in	0 in
7:42 PM	78.3 °F	60.3 °F	54 %	East	2.8 mph	4.6 mph	30.1 in	0 in	0 in
7:47 PM	78.1 °F	60.6 °F	55 %	East	1.6 mph	3.5 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:52 PM	77.9 °F	60.4 °F	55 %	East	2.7 mph	4 mph	30.1 in	0 in	0 in
7:57 PM	77.8 °F	60.8 °F	56 %	ENE	2.4 mph	3.5 mph	30.1 in	0 in	0 in
8:02 PM	77.6 °F	60.7 °F	56 %	East	1.5 mph	3.5 mph	30.1 in	0 in	0 in
8:07 PM	77.4 °F	61 °F	57 %	East	2.2 mph	3.5 mph	30.09 in	0 in	0 in
8:12 PM	77.1 °F	60.7 °F	57 %	East	2 mph	3.5 mph	30.1 in	0 in	0 in
8:17 PM	76.9 °F	61 °F	58 %	East	1.3 mph	2.3 mph	30.09 in	0 in	0 in
8:22 PM	76.7 °F	60.8 °F	58 %	East	1.6 mph	3.5 mph	30.1 in	0 in	0 in
8:27 PM	76.5 °F	61.1 °F	59 %	East	1.8 mph	3.5 mph	30.09 in	0 in	0 in
8:32 PM	76.2 °F	61.3 °F	60 %	East	0 mph	0 mph	30.1 in	0 in	0 in
8:37 PM	76 °F	62.5 °F	63 %	East	0 mph	0 mph	30.1 in	0 in	0 in
8:42 PM	75.5 °F	62 °F	63 %	East	0 mph	0 mph	30.1 in	0 in	0 in
8:47 PM	75.2 °F	62.2 °F	64 %	East	0.4 mph	1.2 mph	30.1 in	0 in	0 in
8:52 PM	74.8 °F	62.2 °F	65 %	East	0 mph	0 mph	30.1 in	0 in	0 in
8:57 PM	74.5 °F	62 °F	65 %	East	0 mph	0 mph	30.1 in	0 in	0 in
9:02 PM	74 °F	61.9 °F	66 %	East	0.3 mph	1.2 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:07 PM	73.4 °F	61.8 °F	67 %	East	0.1 mph	1.2 mph	30.1 in	0 in	0 in
9:12 PM	73 °F	62.2 °F	69 %	East	0 mph	0 mph	30.1 in	0 in	0 in
9:17 PM	72.6 °F	61.8 °F	69 %	East	0 mph	0 mph	30.1 in	0 in	0 in
9:22 PM	72.2 °F	61.9 °F	70 %	East	0 mph	0 mph	30.1 in	0 in	0 in
9:27 PM	71.9 °F	62 °F	71 %	East	0 mph	0 mph	30.1 in	0 in	0 in
9:32 PM	71.3 °F	61.8 °F	72 %	East	0 mph	0 mph	30.11 in	0 in	0 in
9:37 PM	70.9 °F	61.8 °F	73 %	East	0 mph	0 mph	30.11 in	0 in	0 in
9:42 PM	70.6 °F	61.9 °F	74 %	East	0 mph	0 mph	30.11 in	0 in	0 in
9:47 PM	70.2 °F	61.5 °F	74 %	East	0 mph	0 mph	30.11 in	0 in	0 in
9:52 PM	69.7 °F	61.4 °F	75 %	East	0.5 mph	1.2 mph	30.12 in	0 in	0 in
9:57 PM	69.2 °F	61.7 °F	77 %	East	0.5 mph	1.2 mph	30.12 in	0 in	0 in
10:02 PM	68.7 °F	61.6 °F	78 %	East	1.1 mph	2.3 mph	30.13 in	0 in	0 in
10:07 PM	68.4 °F	61.6 °F	79 %	East	0.6 mph	1.2 mph	30.13 in	0 in	0 in
10:12 PM	68.2 °F	61.4 °F	79 %	East	0.1 mph	1.2 mph	30.13 in	0 in	0 in
10:17 PM	67.9 °F	61.5 °F	80 %	East	0.7 mph	1.2 mph	30.13 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:22 PM	67.9 °F	61.5 °F	80 %	East	0 mph	1 mph	30.13 in	0 in	0 in
10:27 PM	67.8 °F	61.4 °F	80 %	East	0.3 mph	1.2 mph	30.14 in	0 in	0 in
10:32 PM	67.7 °F	61.3 °F	80 %	East	0 mph	0 mph	30.14 in	0 in	0 in
10:37 PM	67.6 °F	61.2 °F	80 %	East	0 mph	0 mph	30.14 in	0 in	0 in
10:42 PM	67.5 °F	61.1 °F	80 %	East	0 mph	0 mph	30.14 in	0 in	0 in
10:47 PM	67.3 °F	60.9 °F	80 %	East	0.3 mph	1.2 mph	30.14 in	0 in	0 in
10:52 PM	67.1 °F	61.1 °F	81 %	East	1 mph	2.3 mph	30.15 in	0 in	0 in
10:57 PM	66.9 °F	60.9 °F	81 %	East	1 mph	2.3 mph	30.15 in	0 in	0 in
11:01 PM	66.7 °F	61 °F	82 %	East	0.5 mph	1.2 mph	30.15 in	0 in	0 in
11:02 PM	66.7 °F	61 °F	82 %	East	0.6 mph	1.2 mph	30.15 in	0 in	0 in
11:07 PM	66.5 °F	61.2 °F	83 %	East	0.4 mph	1.2 mph	30.15 in	0 in	0 in
11:12 PM	66.4 °F	60.7 °F	82 %	East	0.3 mph	1.2 mph	30.16 in	0 in	0 in
11:17 PM	66.2 °F	60.5 °F	82 %	East	1.2 mph	2.3 mph	30.16 in	0 in	0 in
11:22 PM	66.1 °F	60.4 °F	82 %	East	0.2 mph	1.2 mph	30.16 in	0 in	0 in
11:27 PM	66 °F	60.3 °F	82 %	East	0.8 mph	1.2 mph	30.16 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:32 PM	65.8 °F	60.2 °F	82 %	East	0.4 mph	1.2 mph	30.16 in	0 in	0 in
11:37 PM	65.7 °F	60.4 °F	83 %	East	0 mph	0 mph	30.16 in	0 in	0 in
11:42 PM	65.6 °F	60.3 °F	83 %	East	0 mph	0 mph	30.16 in	0 in	0 in
11:47 PM	65.5 °F	60.2 °F	83 %	East	0.5 mph	1.2 mph	30.16 in	0 in	0 in
11:52 PM	65.3 °F	59.7 °F	82 %	East	0 mph	1.2 mph	30.17 in	0 in	0 in
11:57 PM	65.3 °F	60 °F	83 %	East	0 mph	0 mph	30.17 in	0 in	0 in

## Weather History for KOKCAT002

Weather History Table, July 4, 2014

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:02 AM	65.2 °F	59.9 °F	83 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:07 AM	65 °F	59.7 °F	83 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:12 AM	64.8 °F	59.9 °F	84 %	East	0.1 mph	0 mph	30.17 in	0 in	0 in
12:17 AM	64.7 °F	59.8 °F	84 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:22 AM	64.6 °F	59.7 °F	84 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:27 AM	64.4 °F	59.8 °F	85 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:32 AM	64.3 °F	59.7 °F	85 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:37 AM	64.1 °F	59.5 °F	85 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:42 AM	63.9 °F	59.3 °F	85 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:47 AM	63.8 °F	59.2 °F	85 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:52 AM	63.7 °F	59.4 °F	86 %	East	0 mph	0 mph	30.17 in	0 in	0 in
12:57 AM	63.7 °F	59.4 °F	86 %	East	0 mph	0 mph	30.17 in	0 in	0 in
1:02 AM	63.6 °F	59.3 °F	86 %	East	0 mph	0 mph	30.17 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:07 AM	63.5 °F	59.2 °F	86 %	East	0 mph	0 mph	30.17 in	0 in	0 in
1:12 AM	63.5 °F	59.6 °F	87 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:17 AM	63.4 °F	59.5 °F	87 %	East	0 mph	0 mph	30.17 in	0 in	0 in
1:22 AM	63.3 °F	59 °F	86 %	East	0 mph	0 mph	30.17 in	0 in	0 in
1:27 AM	63.2 °F	59.3 °F	87 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:32 AM	63 °F	59.1 °F	87 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:37 AM	63 °F	59.4 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:42 AM	62.9 °F	59.3 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:47 AM	62.8 °F	59.2 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:52 AM	62.7 °F	59.1 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
1:57 AM	62.7 °F	59.4 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:02 AM	62.7 °F	59.1 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:07 AM	62.6 °F	59 °F	88 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:12 AM	62.6 °F	59.3 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:17 AM	62.5 °F	59.2 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:22 AM	62.5 °F	59.2 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:27 AM	62.4 °F	59.1 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:32 AM	62.3 °F	59 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:37 AM	62.3 °F	59.3 °F	90 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:42 AM	62.3 °F	59 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:47 AM	62.2 °F	58.9 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:52 AM	62.1 °F	58.8 °F	89 %	East	0 mph	0 mph	30.18 in	0 in	0 in
2:57 AM	62.1 °F	59.1 °F	90 %	East	0 mph	0 mph	30.18 in	0 in	0 in
3:02 AM	62 °F	59 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:07 AM	61.9 °F	58.9 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:12 AM	61.9 °F	58.9 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:17 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:22 AM	61.8 °F	58.8 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:27 AM	61.7 °F	59 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:32 AM	61.7 °F	58.7 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:37 AM	61.7 °F	58.7 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:42 AM	61.8 °F	58.8 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:47 AM	61.8 °F	58.8 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:52 AM	61.8 °F	58.8 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
3:57 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:02 AM	61.9 °F	59.2 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:07 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:12 AM	61.8 °F	58.8 °F	90 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:17 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:22 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:27 AM	61.8 °F	59.1 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:32 AM	61.7 °F	59 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:37 AM	61.7 °F	59 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:42 AM	61.6 °F	58.9 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:47 AM	61.6 °F	58.9 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:52 AM	61.5 °F	58.8 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
4:57 AM	61.4 °F	58.7 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:02 AM	61.3 °F	58.7 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:07 AM	61.3 °F	58.7 °F	91 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:12 AM	61.2 °F	58.9 °F	92 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:17 AM	61.2 °F	58.9 °F	92 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:22 AM	61.1 °F	58.8 °F	92 %	East	0 mph	0 mph	30.17 in	0 in	0 in
5:27 AM	61 °F	58.7 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:32 AM	60.9 °F	58.6 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:37 AM	60.9 °F	58.6 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:42 AM	60.8 °F	58.5 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:47 AM	60.8 °F	58.5 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:52 AM	60.7 °F	58.4 °F	92 %	East	0 mph	0 mph	30.18 in	0 in	0 in
5:57 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.18 in	0 in	0 in
6:02 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:07 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.18 in	0 in	0 in
6:12 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.18 in	0 in	0 in
6:17 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.18 in	0 in	0 in
6:22 AM	60.6 °F	58.6 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:27 AM	60.6 °F	58.6 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:32 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:37 AM	60.7 °F	58.7 °F	93 %	East	0 mph	0 mph	30.18 in	0 in	0 in
6:42 AM	60.8 °F	58.8 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:47 AM	60.8 °F	58.8 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:52 AM	60.9 °F	59.2 °F	94 %	East	0 mph	0 mph	30.19 in	0 in	0 in
6:57 AM	61.1 °F	59.4 °F	94 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:02 AM	61.3 °F	59.6 °F	94 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:07 AM	61.6 °F	59.9 °F	94 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:12 AM	62 °F	60.3 °F	94 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:17 AM	62.5 °F	60.4 °F	93 %	East	0 mph	0 mph	30.19 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:22 AM	63 °F	60.6 °F	92 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:27 AM	63.5 °F	60.8 °F	91 %	East	0 mph	0 mph	30.19 in	0 in	0 in
7:32 AM	64 °F	61 °F	90 %	East	0.1 mph	1.2 mph	30.2 in	0 in	0 in
7:37 AM	64.5 °F	61.2 °F	89 %	East	0.5 mph	1.2 mph	30.2 in	0 in	0 in
7:42 AM	65.3 °F	61.3 °F	87 %	East	1 mph	1.2 mph	30.2 in	0 in	0 in
7:47 AM	66.2 °F	61.9 °F	86 %	East	0.7 mph	1.2 mph	30.2 in	0 in	0 in
7:52 AM	66.8 °F	61.8 °F	84 %	East	0.5 mph	1.2 mph	30.2 in	0 in	0 in
7:57 AM	67.3 °F	62 °F	83 %	ESE	1.2 mph	2.3 mph	30.2 in	0 in	0 in
8:02 AM	67.8 °F	62.4 °F	83 %	ESE	0.7 mph	2.3 mph	30.2 in	0 in	0 in
8:07 AM	68.4 °F	63 °F	83 %	ESE	2.3 mph	2.3 mph	30.2 in	0 in	0 in
8:12 AM	69 °F	63.3 °F	82 %	ESE	1.1 mph	2.3 mph	30.2 in	0 in	0 in
8:17 AM	69.5 °F	63.4 °F	81 %	ESE	0.5 mph	1.2 mph	30.2 in	0 in	0 in
8:22 AM	69.9 °F	63.4 °F	80 %	SE	1.7 mph	3.5 mph	30.21 in	0 in	0 in
8:27 AM	70.1 °F	64 °F	81 %	SSE	3 mph	3.5 mph	30.21 in	0 in	0 in
8:32 AM	70.5 °F	63.7 °F	79 %	SSE	2.5 mph	4.6 mph	30.21 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:37 AM	71.2 °F	64 °F	78 %	SE	1.2 mph	6.9 mph	30.21 in	0 in	0 in
8:42 AM	71.9 °F	64.3 °F	77 %	SE	5.4 mph	8.1 mph	30.2 in	0 in	0 in
8:47 AM	72.2 °F	64.2 °F	76 %	SSE	3 mph	8.1 mph	30.2 in	0 in	0 in
8:52 AM	72.4 °F	64 °F	75 %	SSE	5.6 mph	5.8 mph	30.2 in	0 in	0 in
8:57 AM	72.6 °F	64.6 °F	76 %	SSE	3.2 mph	9.2 mph	30.21 in	0 in	0 in
9:02 AM	73 °F	65 °F	76 %	SE	1.6 mph	3.5 mph	30.21 in	0 in	0 in
9:07 AM	73.5 °F	65.5 °F	76 %	SSE	4.6 mph	7 mph	30.21 in	0 in	0 in
9:12 AM	73.9 °F	65.1 °F	74 %	South	1.3 mph	6.9 mph	30.21 in	0 in	0 in
9:17 AM	74.2 °F	65 °F	73 %	South	4.9 mph	9.2 mph	30.21 in	0 in	0 in
9:22 AM	74.7 °F	65.5 °F	73 %	SE	4 mph	8.1 mph	30.21 in	0 in	0 in
9:27 AM	75.2 °F	65.1 °F	71 %	SSE	4.6 mph	8.1 mph	30.22 in	0 in	0 in
9:32 AM	75.9 °F	65.8 °F	71 %	SSE	4.8 mph	6 mph	30.22 in	0 in	0 in
9:37 AM	76.2 °F	66.1 °F	71 %	SSE	1.6 mph	3.5 mph	30.22 in	0 in	0 in
9:42 AM	76.6 °F	66.5 °F	71 %	SSE	1.7 mph	5.8 mph	30.21 in	0 in	0 in
9:47 AM	77.3 °F	65.9 °F	68 %	SE	4.6 mph	7 mph	30.21 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:52 AM	77.6 °F	66.6 °F	69 %	ESE	1.5 mph	3.5 mph	30.21 in	0 in	0 in
9:57 AM	78.1 °F	67.1 °F	69 %	SSE	0.9 mph	4.6 mph	30.21 in	0 in	0 in
10:02 AM	78.9 °F	67 °F	67 %	ESE	1.2 mph	4.6 mph	30.21 in	0 in	0 in
10:07 AM	79.3 °F	65.6 °F	63 %	SSE	5 mph	8.1 mph	30.21 in	0 in	0 in
10:12 AM	79.3 °F	66.5 °F	65 %	SSE	3.7 mph	6 mph	30.21 in	0 in	0 in
10:17 AM	79.5 °F	66.7 °F	65 %	East	3.6 mph	5 mph	30.21 in	0 in	0 in
10:22 AM	79.4 °F	66.2 °F	64 %	SSE	2.3 mph	4.6 mph	30.2 in	0 in	0 in
10:27 AM	79.6 °F	66.8 °F	65 %	ESE	4.7 mph	8.1 mph	30.2 in	0 in	0 in
10:32 AM	79.8 °F	67.4 °F	66 %	SE	0.7 mph	5.8 mph	30.21 in	0 in	0 in
10:37 AM	80.2 °F	66.9 °F	64 %	SSE	2.3 mph	6 mph	30.21 in	0 in	0 in
10:42 AM	80.7 °F	66.5 °F	62 %	East	3.6 mph	8.1 mph	30.21 in	0 in	0 in
10:47 AM	80.6 °F	66.8 °F	63 %	ESE	3.4 mph	5.8 mph	30.21 in	0 in	0 in
10:52 AM	81 °F	68.1 °F	65 %	ESE	4.2 mph	4.2 mph	30.21 in	0 in	0 in
10:57 AM	81.1 °F	66.8 °F	62 %	East	2.9 mph	6.9 mph	30.2 in	0 in	0 in
11:02 AM	81.3 °F	66.6 °F	61 %	SSE	2.7 mph	3.5 mph	30.2 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:07 AM	81.5 °F	67.2 °F	62 %	SE	3.4 mph	5.8 mph	30.21 in	0 in	0 in
11:12 AM	81.9 °F	66.6 °F	60 %	East	2.6 mph	10.4 mph	30.2 in	0 in	0 in
11:17 AM	82.1 °F	66.8 °F	60 %	SSE	1 mph	3.5 mph	30.2 in	0 in	0 in
11:22 AM	82.4 °F	67.6 °F	61 %	SE	3.3 mph	5 mph	30.2 in	0 in	0 in
11:27 AM	82.9 °F	67.1 °F	59 %	SE	1.3 mph	3 mph	30.2 in	0 in	0 in
11:32 AM	83.5 °F	68.6 °F	61 %	SSE	1.9 mph	9.2 mph	30.2 in	0 in	0 in
11:37 AM	83.6 °F	66.2 °F	56 %	South	4 mph	8.1 mph	30.2 in	0 in	0 in
11:42 AM	83.4 °F	67.6 °F	59 %	SSE	4.9 mph	9.2 mph	30.2 in	0 in	0 in
11:47 AM	83.4 °F	67.1 °F	58 %	SE	4.4 mph	6.9 mph	30.2 in	0 in	0 in
11:52 AM	83.6 °F	66.8 °F	57 %	South	1.9 mph	3.5 mph	30.2 in	0 in	0 in
11:57 AM	83.9 °F	68 °F	59 %	South	2.8 mph	6.9 mph	30.2 in	0 in	0 in
12:02 PM	84.2 °F	67.8 °F	58 %	SSE	4.9 mph	6.9 mph	30.2 in	0 in	0 in
12:07 PM	84.2 °F	66.3 °F	55 %	SSE	4.3 mph	9.2 mph	30.2 in	0 in	0 in
12:12 PM	84.1 °F	67.7 °F	58 %	SSE	5 mph	6.9 mph	30.2 in	0 in	0 in
12:17 PM	84.1 °F	67.7 °F	58 %	ESE	1.6 mph	3.5 mph	30.2 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:22 PM	84.5 °F	67.6 °F	57 %	SSE	6 mph	8 mph	30.19 in	0 in	0 in
12:27 PM	84.6 °F	68.2 °F	58 %	East	5.3 mph	10.4 mph	30.19 in	0 in	0 in
12:32 PM	84.5 °F	67.6 °F	57 %	SE	3.9 mph	6.9 mph	30.19 in	0 in	0 in
12:37 PM	84.7 °F	66.7 °F	55 %	SSE	1.4 mph	3.5 mph	30.19 in	0 in	0 in
12:42 PM	85.2 °F	67.7 °F	56 %	SSE	3.8 mph	5.8 mph	30.19 in	0 in	0 in
12:47 PM	85.7 °F	68.7 °F	57 %	SSE	1.1 mph	2.3 mph	30.19 in	0 in	0 in
12:52 PM	85.8 °F	68.3 °F	56 %	East	2.7 mph	5.8 mph	30.18 in	0 in	0 in
12:57 PM	85.8 °F	68.8 °F	57 %	SSE	4.2 mph	6.9 mph	30.18 in	0 in	0 in
1:02 PM	86 °F	66.3 °F	52 %	SSE	3.9 mph	6.9 mph	30.18 in	0 in	0 in
1:07 PM	86 °F	68 °F	55 %	SSE	6 mph	9.2 mph	30.18 in	0 in	0 in
1:12 PM	86.1 °F	67 °F	53 %	SE	5.8 mph	9.2 mph	30.18 in	0 in	0 in
1:17 PM	86.3 °F	66 °F	51 %	SSE	6.5 mph	8.1 mph	30.18 in	0 in	0 in
1:22 PM	86.4 °F	66.7 °F	52 %	ESE	2.9 mph	6.9 mph	30.18 in	0 in	0 in
1:27 PM	86.4 °F	68.3 °F	55 %	SSE	1.2 mph	4.6 mph	30.18 in	0 in	0 in
1:32 PM	86.7 °F	67.5 °F	53 %	SSE	4.5 mph	6.9 mph	30.18 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:37 PM	86.7 °F	67 °F	52 %	SSE	4.7 mph	8 mph	30.18 in	0 in	0 in
1:42 PM	86.7 °F	66.4 °F	51 %	South	2.2 mph	5.8 mph	30.17 in	0 in	0 in
1:47 PM	86.8 °F	65.9 °F	50 %	SE	1.8 mph	4.6 mph	30.17 in	0 in	0 in
1:52 PM	87 °F	66.7 °F	51 %	SE	2.8 mph	6.9 mph	30.17 in	0 in	0 in
1:57 PM	87 °F	66.1 °F	50 %	West	2.9 mph	3.5 mph	30.17 in	0 in	0 in
2:02 PM	87.2 °F	68 °F	53 %	ESE	3.2 mph	5.8 mph	30.16 in	0 in	0 in
2:07 PM	87.6 °F	68.9 °F	54 %	South	0.6 mph	2.3 mph	30.16 in	0 in	0 in
2:12 PM	88 °F	68.7 °F	53 %	South	1.1 mph	2 mph	30.16 in	0 in	0 in
2:17 PM	88.2 °F	67.8 °F	51 %	SSE	5.3 mph	8.1 mph	30.16 in	0 in	0 in
2:22 PM	87.9 °F	68.6 °F	53 %	SSE	2.6 mph	6.9 mph	30.16 in	0 in	0 in
2:27 PM	87.6 °F	67.2 °F	51 %	SE	3.4 mph	5.8 mph	30.16 in	0 in	0 in
2:32 PM	87.4 °F	69.8 °F	56 %	SE	2.9 mph	6.9 mph	30.15 in	0 in	0 in
2:37 PM	88 °F	69.3 °F	54 %	SE	1.2 mph	2.3 mph	30.15 in	0 in	0 in
2:42 PM	88 °F	68.2 °F	52 %	East	3.8 mph	6.9 mph	30.15 in	0 in	0 in
2:47 PM	87.1 °F	68.4 °F	54 %	SE	2.5 mph	5.8 mph	30.15 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:52 PM	87.4 °F	67.6 °F	52 %	SE	0.7 mph	4.6 mph	30.15 in	0 in	0 in
2:57 PM	87.9 °F	68.6 °F	53 %	SSE	2.7 mph	4.6 mph	30.15 in	0 in	0 in
3:02 PM	88.3 °F	69 °F	53 %	SSE	2.5 mph	4.6 mph	30.15 in	0 in	0 in
3:07 PM	88 °F	68.2 °F	52 %	WSW	2.1 mph	4.6 mph	30.15 in	0 in	0 in
3:12 PM	88.2 °F	69.5 °F	54 %	SE	2.2 mph	4.6 mph	30.15 in	0 in	0 in
3:17 PM	88.4 °F	68 °F	51 %	SSE	0.7 mph	3.5 mph	30.15 in	0 in	0 in
3:22 PM	88.6 °F	69.8 °F	54 %	South	3.3 mph	5.8 mph	30.15 in	0 in	0 in
3:27 PM	89 °F	71.8 °F	57 %	SE	0.9 mph	3.5 mph	30.15 in	0 in	0 in
3:32 PM	89.1 °F	68.6 °F	51 %	SSE	5.2 mph	8.1 mph	30.14 in	0 in	0 in
3:37 PM	88.5 °F	69.2 °F	53 %	SE	2.4 mph	7 mph	30.14 in	0 in	0 in
3:42 PM	87.7 °F	67.9 °F	52 %	ESE	2.3 mph	8.1 mph	30.14 in	0 in	0 in
3:47 PM	87.3 °F	68.1 °F	53 %	ESE	1.2 mph	6 mph	30.14 in	0 in	0 in
3:52 PM	87.3 °F	68.1 °F	53 %	South	5.3 mph	6.9 mph	30.14 in	0 in	0 in
3:57 PM	87.3 °F	68.6 °F	54 %	SSE	4.3 mph	9.2 mph	30.14 in	0 in	0 in
4:02 PM	87.5 °F	69.9 °F	56 %	East	3.6 mph	6 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:07 PM	87.6 °F	68.4 °F	53 %	SE	5 mph	6.9 mph	30.14 in	0 in	0 in
4:12 PM	87 °F	68.3 °F	54 %	SE	3.7 mph	8.1 mph	30.13 in	0 in	0 in
4:17 PM	86.9 °F	69.3 °F	56 %	SE	7.8 mph	11.5 mph	30.13 in	0 in	0 in
4:22 PM	87.1 °F	68.4 °F	54 %	SSE	4.1 mph	6.9 mph	30.13 in	0 in	0 in
4:27 PM	87.1 °F	69 °F	55 %	SE	3.9 mph	6.9 mph	30.13 in	0 in	0 in
4:32 PM	87.4 °F	68.7 °F	54 %	SE	2.8 mph	6.9 mph	30.13 in	0 in	0 in
4:37 PM	87.7 °F	69.5 °F	55 %	SSE	4.5 mph	5.8 mph	30.13 in	0 in	0 in
4:42 PM	87.5 °F	69.3 °F	55 %	SSE	4.1 mph	5.8 mph	30.13 in	0 in	0 in
4:47 PM	87.3 °F	69.2 °F	55 %	South	6 mph	9 mph	30.13 in	0 in	0 in
4:52 PM	87.2 °F	69.6 °F	56 %	East	2.9 mph	6.9 mph	30.12 in	0 in	0 in
4:57 PM	87.1 °F	69 °F	55 %	SSE	1.6 mph	8.1 mph	30.13 in	0 in	0 in
5:02 PM	87.1 °F	69.5 °F	56 %	SE	5.4 mph	9.2 mph	30.13 in	0 in	0 in
5:07 PM	87 °F	69.9 °F	57 %	ESE	4 mph	13.8 mph	30.12 in	0 in	0 in
5:12 PM	86.9 °F	69.3 °F	56 %	SE	2.9 mph	6.9 mph	30.12 in	0 in	0 in
5:17 PM	87 °F	68.9 °F	55 %	SSE	2.1 mph	3.5 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:22 PM	87.1 °F	69.5 °F	56 %	SSE	1.7 mph	2.3 mph	30.12 in	0 in	0 in
5:27 PM	87.4 °F	70.3 °F	57 %	SSE	2.6 mph	3.5 mph	30.12 in	0 in	0 in
5:32 PM	87.6 °F	69.4 °F	55 %	SSE	3.3 mph	4.6 mph	30.12 in	0 in	0 in
5:37 PM	87.6 °F	68.4 °F	53 %	South	3.8 mph	5.8 mph	30.11 in	0 in	0 in
5:42 PM	87.6 °F	67.8 °F	52 %	SE	4 mph	6.9 mph	30.11 in	0 in	0 in
5:47 PM	87.8 °F	69.1 °F	54 %	SE	5.6 mph	10.4 mph	30.11 in	0 in	0 in
5:52 PM	87.9 °F	69.2 °F	54 %	SSE	3.2 mph	5 mph	30.11 in	0 in	0 in
5:57 PM	87.7 °F	68.4 °F	53 %	ESE	5.7 mph	10.4 mph	30.11 in	0 in	0 in
6:02 PM	87.6 °F	68.9 °F	54 %	SE	1.5 mph	3.5 mph	30.11 in	0 in	0 in
6:07 PM	87.7 °F	68.4 °F	53 %	ESE	4.1 mph	6.9 mph	30.11 in	0 in	0 in
6:12 PM	87.6 °F	68.4 °F	53 %	SE	0.9 mph	4.6 mph	30.11 in	0 in	0 in
6:17 PM	87.6 °F	67.8 °F	52 %	SSE	4.1 mph	5.8 mph	30.11 in	0 in	0 in
6:22 PM	87.4 °F	68.2 °F	53 %	SE	2.5 mph	6.9 mph	30.1 in	0 in	0 in
6:27 PM	87.2 °F	67.4 °F	52 %	SE	2.8 mph	9.2 mph	30.11 in	0 in	0 in
6:32 PM	86.9 °F	67.7 °F	53 %	SSE	4.8 mph	10.4 mph	30.11 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:37 PM	86.7 °F	67.5 °F	53 %	SSE	3.1 mph	8.1 mph	30.11 in	0 in	0 in
6:42 PM	86.5 °F	67.9 °F	54 %	SSE	2.6 mph	3.5 mph	30.11 in	0 in	0 in
6:47 PM	86.3 °F	67.7 °F	54 %	SSE	6.7 mph	11.5 mph	30.11 in	0 in	0 in
6:52 PM	86 °F	68 °F	55 %	SSE	1.9 mph	3.5 mph	30.11 in	0 in	0 in
6:57 PM	85.6 °F	67.6 °F	55 %	SE	2.4 mph	3.5 mph	30.11 in	0 in	0 in
7:02 PM	85.5 °F	68 °F	56 %	SSE	6.1 mph	9 mph	30.11 in	0 in	0 in
7:07 PM	85.2 °F	68.2 °F	57 %	SSE	4.7 mph	5.8 mph	30.11 in	0 in	0 in
7:12 PM	85.1 °F	68.7 °F	58 %	SSE	2.7 mph	3.5 mph	30.11 in	0 in	0 in
7:18 PM	85.1 °F	68.7 °F	58 %	SE	2.7 mph	4.6 mph	30.11 in	0 in	0 in
7:23 PM	85 °F	68.1 °F	57 %	SSE	4.7 mph	6.9 mph	30.1 in	0 in	0 in
7:28 PM	84.8 °F	68.4 °F	58 %	South	2.8 mph	4.6 mph	30.1 in	0 in	0 in
7:33 PM	84.7 °F	68.3 °F	58 %	SE	3.9 mph	6.9 mph	30.1 in	0 in	0 in
7:38 PM	84.5 °F	68.6 °F	59 %	SE	3.3 mph	4.6 mph	30.1 in	0 in	0 in
7:43 PM	84.4 °F	68.5 °F	59 %	South	3.4 mph	6 mph	30.1 in	0 in	0 in
7:48 PM	84.2 °F	68.8 °F	60 %	SE	4.1 mph	4.6 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:53 PM	84 °F	68.6 °F	60 %	SSE	6.6 mph	10.4 mph	30.1 in	0 in	0 in
7:58 PM	83.8 °F	68.9 °F	61 %	SSE	3.4 mph	5.8 mph	30.1 in	0 in	0 in
8:03 PM	83.6 °F	68.7 °F	61 %	SSE	2.6 mph	3.5 mph	30.1 in	0 in	0 in
8:08 PM	83.3 °F	68.9 °F	62 %	SSE	4.5 mph	5.8 mph	30.1 in	0 in	0 in
8:13 PM	83.1 °F	68.7 °F	62 %	SSE	2.2 mph	3.5 mph	30.11 in	0 in	0 in
8:18 PM	82.9 °F	69 °F	63 %	SSE	2.8 mph	4.6 mph	30.11 in	0 in	0 in
8:23 PM	82.6 °F	68.7 °F	63 %	SSE	2 mph	3.5 mph	30.11 in	0 in	0 in
8:28 PM	82.4 °F	69 °F	64 %	SSE	1.2 mph	2.3 mph	30.1 in	0 in	0 in
8:33 PM	82.1 °F	69.2 °F	65 %	SSE	3.2 mph	5.8 mph	30.1 in	0 in	0 in
8:38 PM	81.8 °F	68.9 °F	65 %	SE	2 mph	3.5 mph	30.1 in	0 in	0 in
8:43 PM	81.5 °F	69 °F	66 %	East	2.9 mph	5.8 mph	30.1 in	0 in	0 in
8:48 PM	81.2 °F	69.2 °F	67 %	SE	1.2 mph	2.3 mph	30.1 in	0 in	0 in
8:53 PM	80.9 °F	69.3 °F	68 %	SE	2.3 mph	3.5 mph	30.1 in	0 in	0 in
8:58 PM	80.5 °F	69 °F	68 %	SSE	2.2 mph	5.8 mph	30.1 in	0 in	0 in
9:03 PM	80.3 °F	69.2 °F	69 %	SSE	3.5 mph	5 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:08 PM	80.2 °F	69.1 °F	69 %	South	2.9 mph	5.8 mph	30.1 in	0 in	0 in
9:13 PM	80 °F	69.3 °F	70 %	SSE	3.3 mph	4.6 mph	30.1 in	0 in	0 in
9:18 PM	79.8 °F	69.1 °F	70 %	SSE	4.7 mph	7 mph	30.1 in	0 in	0 in
9:23 PM	79.6 °F	69 °F	70 %	SE	4.5 mph	9.2 mph	30.1 in	0 in	0 in
9:28 PM	79.5 °F	68.9 °F	70 %	SSE	2 mph	3.5 mph	30.1 in	0 in	0 in
9:33 PM	79.3 °F	69.1 °F	71 %	SE	2.7 mph	3.5 mph	30.1 in	0 in	0 in
9:38 PM	79.1 °F	68.9 °F	71 %	SSE	0.4 mph	2.3 mph	30.1 in	0 in	0 in
9:43 PM	78.9 °F	69.1 °F	72 %	SE	2.3 mph	3.5 mph	30.1 in	0 in	0 in
9:48 PM	78.7 °F	68.9 °F	72 %	SE	0.5 mph	3.5 mph	30.11 in	0 in	0 in
9:53 PM	78.4 °F	68.6 °F	72 %	SSE	2 mph	3.5 mph	30.11 in	0 in	0 in
9:58 PM	78.2 °F	68.8 °F	73 %	SSE	0.2 mph	1.2 mph	30.11 in	0 in	0 in
10:03 PM	78 °F	68.6 °F	73 %	SSE	0.4 mph	1.2 mph	30.11 in	0 in	0 in
10:08 PM	77.8 °F	68.8 °F	74 %	SSE	1.1 mph	2.3 mph	30.11 in	0 in	0 in
10:13 PM	77.6 °F	68.7 °F	74 %	SSE	0.1 mph	1.2 mph	30.12 in	0 in	0 in
10:18 PM	77.4 °F	68.9 °F	75 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:23 PM	77.2 °F	68.7 °F	75 %	SSE	0.2 mph	1.2 mph	30.12 in	0 in	0 in
10:28 PM	77 °F	68.5 °F	75 %	SSE	0.4 mph	2.3 mph	30.12 in	0 in	0 in
10:33 PM	76.7 °F	68.6 °F	76 %	SSE	0.4 mph	1.2 mph	30.12 in	0 in	0 in
10:38 PM	76.6 °F	68.8 °F	77 %	SSE	0.3 mph	1.2 mph	30.12 in	0 in	0 in
10:43 PM	76.4 °F	68.7 °F	77 %	SSE	0.6 mph	1.2 mph	30.12 in	0 in	0 in
10:48 PM	76.2 °F	68.5 °F	77 %	SSE	1.5 mph	3.5 mph	30.12 in	0 in	0 in
10:53 PM	76 °F	68.3 °F	77 %	SSE	0.2 mph	2.3 mph	30.12 in	0 in	0 in
10:58 PM	75.9 °F	68.2 °F	77 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
11:01 PM	75.9 °F	68.2 °F	77 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
11:06 PM	75.8 °F	68.1 °F	77 %	SSE	0.1 mph	1.2 mph	30.12 in	0 in	0 in
11:11 PM	75.8 °F	68.1 °F	77 %	SE	0.4 mph	2.3 mph	30.12 in	0 in	0 in
11:16 PM	75.7 °F	68 °F	77 %	SE	2.9 mph	4.6 mph	30.12 in	0 in	0 in
11:21 PM	75.7 °F	68 °F	77 %	SE	1.1 mph	3 mph	30.12 in	0 in	0 in
11:25 PM	75.6 °F	67.5 °F	76 %	SSE	1.5 mph	3.5 mph	30.12 in	0 in	0 in
11:30 PM	75.6 °F	67.5 °F	76 %	SSE	3.8 mph	5.8 mph	30.13 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:35 PM	75.7 °F	67.6 °F	76 %	SSE	0.5 mph	3.5 mph	30.13 in	0 in	0 in
11:40 PM	75.7 °F	67.6 °F	76 %	SSE	3.4 mph	9.2 mph	30.13 in	0 in	0 in
11:45 PM	75.7 °F	67.6 °F	76 %	SSE	1.7 mph	6.9 mph	30.13 in	0 in	0 in
11:50 PM	75.7 °F	67.6 °F	76 %	SSE	1.6 mph	3.5 mph	30.13 in	0 in	0 in
11:55 PM	75.7 °F	67.6 °F	76 %	SSE	1.8 mph	3 mph	30.13 in	0 in	0 in

## Weather History for KOKCAT002

Weather History Table, July 5, 2014

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:00 AM	75.5 °F	67.4 °F	76 %	South	3.1 mph	4.6 mph	30.13 in	0 in	0 in
12:05 AM	75.5 °F	67.4 °F	76 %	SSE	1.2 mph	3.5 mph	30.13 in	0 in	0 in
12:10 AM	75.4 °F	67.3 °F	76 %	SE	0.2 mph	2 mph	30.14 in	0 in	0 in
12:15 AM	75.2 °F	67.5 °F	77 %	SE	0.1 mph	1.2 mph	30.14 in	0 in	0 in
12:20 AM	75.1 °F	67.4 °F	77 %	SE	0.1 mph	1.2 mph	30.14 in	0 in	0 in
12:25 AM	75 °F	67.3 °F	77 %	SE	2.2 mph	3.5 mph	30.14 in	0 in	0 in
12:30 AM	74.9 °F	67.2 °F	77 %	SE	0.6 mph	2.3 mph	30.14 in	0 in	0 in
12:35 AM	74.8 °F	67.1 °F	77 %	SE	1.4 mph	2.3 mph	30.14 in	0 in	0 in
12:40 AM	74.7 °F	67.4 °F	78 %	SE	0.9 mph	3.5 mph	30.14 in	0 in	0 in
12:45 AM	74.6 °F	67.3 °F	78 %	SE	0.3 mph	2.3 mph	30.14 in	0 in	0 in
12:50 AM	74.5 °F	67.2 °F	78 %	SSE	1.9 mph	4.6 mph	30.14 in	0 in	0 in
12:55 AM	74.4 °F	67.1 °F	78 %	SSE	0.1 mph	1.2 mph	30.14 in	0 in	0 in
1:00 AM	74.2 °F	66.9 °F	78 %	SSE	0.1 mph	1.2 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:05 AM	74.1 °F	67.2 °F	79 %	SSE	0.1 mph	1.2 mph	30.14 in	0 in	0 in
1:10 AM	74 °F	67.4 °F	80 %	SSE	0.1 mph	1 mph	30.14 in	0 in	0 in
1:15 AM	73.8 °F	67.2 °F	80 %	SSE	0.2 mph	1.2 mph	30.14 in	0 in	0 in
1:20 AM	73.6 °F	67 °F	80 %	SSE	1.3 mph	5.8 mph	30.14 in	0 in	0 in
1:25 AM	73.6 °F	67.4 °F	81 %	SE	0.4 mph	2.3 mph	30.14 in	0 in	0 in
1:30 AM	73.5 °F	67.3 °F	81 %	SSE	1.2 mph	3.5 mph	30.14 in	0 in	0 in
1:35 AM	73.5 °F	67.3 °F	81 %	SSE	1 mph	3.5 mph	30.14 in	0 in	0 in
1:40 AM	73.4 °F	67.2 °F	81 %	SSE	0.5 mph	2.3 mph	30.14 in	0 in	0 in
1:45 AM	73.3 °F	67.5 °F	82 %	SSE	0.7 mph	3.5 mph	30.14 in	0 in	0 in
1:50 AM	73.2 °F	67.4 °F	82 %	SSE	0 mph	0 mph	30.14 in	0 in	0 in
1:55 AM	73 °F	67.2 °F	82 %	SSE	0.1 mph	1.2 mph	30.14 in	0 in	0 in
2:00 AM	73 °F	67.5 °F	83 %	SSE	0.5 mph	2 mph	30.14 in	0 in	0 in
2:05 AM	72.9 °F	67.4 °F	83 %	SSE	0.4 mph	1.2 mph	30.14 in	0 in	0 in
2:10 AM	72.8 °F	67.3 °F	83 %	SSE	0 mph	1.2 mph	30.14 in	0 in	0 in
2:15 AM	72.6 °F	67.5 °F	84 %	SSE	0.3 mph	1 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:20 AM	72.5 °F	67.4 °F	84 %	SSE	0 mph	1.2 mph	30.14 in	0 in	0 in
2:25 AM	72.4 °F	67.3 °F	84 %	SSE	0 mph	1.2 mph	30.14 in	0 in	0 in
2:30 AM	72.2 °F	67.4 °F	85 %	SSE	0.1 mph	1.2 mph	30.13 in	0 in	0 in
2:35 AM	72.1 °F	67.3 °F	85 %	SSE	0.3 mph	1.2 mph	30.13 in	0 in	0 in
2:40 AM	71.9 °F	67.1 °F	85 %	SSE	0 mph	0 mph	30.13 in	0 in	0 in
2:45 AM	71.7 °F	66.9 °F	85 %	SSE	0 mph	0 mph	30.13 in	0 in	0 in
2:50 AM	71.5 °F	67.1 °F	86 %	SSE	0 mph	1.2 mph	30.13 in	0 in	0 in
2:55 AM	71.4 °F	67 °F	86 %	SSE	0 mph	0 mph	30.13 in	0 in	0 in
3:00 AM	71.3 °F	66.9 °F	86 %	SSE	0.1 mph	1.2 mph	30.13 in	0 in	0 in
3:05 AM	71.2 °F	67.1 °F	87 %	SSE	0 mph	1.2 mph	30.13 in	0 in	0 in
3:10 AM	71.1 °F	67 °F	87 %	SSE	0 mph	1.2 mph	30.13 in	0 in	0 in
3:15 AM	71 °F	66.9 °F	87 %	SSE	0 mph	0 mph	30.13 in	0 in	0 in
3:20 AM	70.9 °F	67.2 °F	88 %	SSE	0 mph	1.2 mph	30.13 in	0 in	0 in
3:25 AM	70.8 °F	67.1 °F	88 %	SSE	1.2 mph	2.3 mph	30.13 in	0 in	0 in
3:30 AM	70.8 °F	67.1 °F	88 %	SSE	1.4 mph	2 mph	30.13 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
3:35 AM	70.8 °F	67.1 °F	88 %	SSE	0.7 mph	3.5 mph	30.13 in	0 in	0 in
3:40 AM	70.8 °F	67.1 °F	88 %	SSE	0 mph	1.2 mph	30.12 in	0 in	0 in
3:45 AM	70.7 °F	67.3 °F	89 %	SSE	1 mph	2.3 mph	30.12 in	0 in	0 in
3:50 AM	70.7 °F	67.3 °F	89 %	SSE	1 mph	1.2 mph	30.13 in	0 in	0 in
3:55 AM	70.7 °F	67.3 °F	89 %	SSE	0.3 mph	1.2 mph	30.12 in	0 in	0 in
4:00 AM	70.6 °F	67.2 °F	89 %	SSE	0.1 mph	2.3 mph	30.13 in	0 in	0 in
4:05 AM	70.4 °F	67 °F	89 %	SSE	0.4 mph	2.3 mph	30.13 in	0 in	0 in
4:10 AM	70.3 °F	66.9 °F	89 %	SSE	0.1 mph	2.3 mph	30.13 in	0 in	0 in
4:15 AM	70.3 °F	66.9 °F	89 %	SSE	0.4 mph	1.2 mph	30.13 in	0 in	0 in
4:20 AM	70.1 °F	67 °F	90 %	SSE	1.8 mph	2.3 mph	30.13 in	0 in	0 in
4:25 AM	70 °F	66.9 °F	90 %	SSE	0.6 mph	1.2 mph	30.13 in	0 in	0 in
4:30 AM	69.9 °F	66.8 °F	90 %	SSE	0.9 mph	1.2 mph	30.13 in	0 in	0 in
4:35 AM	69.7 °F	66.6 °F	90 %	SSE	0.6 mph	2.3 mph	30.13 in	0 in	0 in
4:40 AM	69.6 °F	66.5 °F	90 %	SSE	1.8 mph	2.3 mph	30.13 in	0 in	0 in
4:45 AM	69.5 °F	66.8 °F	91 %	SSE	2.1 mph	3.5 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:50 AM	69.5 °F	66.8 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
4:55 AM	69.4 °F	66.7 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
5:00 AM	69.4 °F	66.7 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
5:05 AM	69.3 °F	66.6 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
5:10 AM	69.3 °F	66.6 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
5:15 AM	69.3 °F	66.6 °F	91 %	SSE	0 mph	0 mph	30.12 in	0 in	0 in
5:20 AM	69.4 °F	66.7 °F	91 %	SSE	1.4 mph	2.3 mph	30.12 in	0 in	0 in
5:25 AM	69.4 °F	66.7 °F	91 %	SSE	0.7 mph	4.6 mph	30.11 in	0 in	0 in
5:30 AM	69.5 °F	66.8 °F	91 %	SSE	1.5 mph	5 mph	30.11 in	0 in	0 in
5:35 AM	69.5 °F	66.8 °F	91 %	SSE	2.4 mph	3.5 mph	30.11 in	0 in	0 in
5:40 AM	69.5 °F	66.8 °F	91 %	SSE	1.3 mph	2.3 mph	30.11 in	0 in	0 in
5:45 AM	69.5 °F	66.8 °F	91 %	South	2.1 mph	3.5 mph	30.11 in	0 in	0 in
5:50 AM	69.4 °F	66.7 °F	91 %	SE	1.7 mph	3.5 mph	30.11 in	0 in	0 in
5:55 AM	69.5 °F	66.8 °F	91 %	SSE	1.3 mph	2.3 mph	30.11 in	0 in	0 in
6:00 AM	69.4 °F	66.7 °F	91 %	SSE	2.2 mph	3.5 mph	30.11 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:05 AM	69.4 °F	66.7 °F	91 %	SSE	1.5 mph	5.8 mph	30.11 in	0 in	0 in
6:10 AM	69.4 °F	66.7 °F	91 %	SSE	1 mph	1.2 mph	30.11 in	0 in	0 in
6:15 AM	69.4 °F	66.7 °F	91 %	SSE	1.2 mph	3.5 mph	30.11 in	0 in	0 in
6:20 AM	69.4 °F	66.7 °F	91 %	SSE	3.9 mph	4 mph	30.11 in	0 in	0 in
6:25 AM	69.4 °F	66.7 °F	91 %	SSE	1.4 mph	3.5 mph	30.11 in	0 in	0 in
6:30 AM	69.4 °F	66.7 °F	91 %	SE	1.8 mph	2.3 mph	30.1 in	0 in	0 in
6:35 AM	69.4 °F	66.7 °F	91 %	SSE	1.8 mph	3.5 mph	30.1 in	0 in	0 in
6:40 AM	69.4 °F	66.7 °F	91 %	SE	2.2 mph	4 mph	30.1 in	0 in	0 in
6:45 AM	69.5 °F	66.4 °F	90 %	SSE	4.8 mph	5.8 mph	30.1 in	0 in	0 in
6:50 AM	69.6 °F	66.5 °F	90 %	SSE	2.9 mph	3.5 mph	30.1 in	0 in	0 in
6:55 AM	69.7 °F	66.6 °F	90 %	SSE	3.2 mph	8.1 mph	30.11 in	0 in	0 in
7:00 AM	69.8 °F	66.7 °F	90 %	SSE	4 mph	6 mph	30.11 in	0 in	0 in
7:05 AM	69.9 °F	66.8 °F	90 %	SSE	1.7 mph	5.8 mph	30.11 in	0 in	0 in
7:10 AM	70.1 °F	67 °F	90 %	SSE	2.7 mph	3.5 mph	30.12 in	0 in	0 in
7:15 AM	70.1 °F	66.7 °F	89 %	SSE	1.5 mph	7 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:20 AM	70.3 °F	66.9 °F	89 %	SSE	2.8 mph	8 mph	30.12 in	0 in	0 in
7:25 AM	70.5 °F	67.1 °F	89 %	SSE	1.5 mph	9.2 mph	30.12 in	0 in	0 in
7:30 AM	70.8 °F	67.1 °F	88 %	SSE	2.8 mph	6 mph	30.13 in	0 in	0 in
7:35 AM	71.2 °F	67.5 °F	88 %	SSE	1.9 mph	3.5 mph	30.13 in	0 in	0 in
7:40 AM	71.5 °F	67.4 °F	87 %	SSE	2.7 mph	6 mph	30.14 in	0 in	0 in
7:45 AM	71.9 °F	67.5 °F	86 %	SSE	3.1 mph	5.8 mph	30.14 in	0 in	0 in
7:50 AM	72.4 °F	68 °F	86 %	SSE	2.9 mph	5 mph	30.14 in	0 in	0 in
7:55 AM	72.9 °F	67.8 °F	84 %	SE	2.4 mph	5.8 mph	30.14 in	0 in	0 in
8:00 AM	73.2 °F	68.1 °F	84 %	ESE	2.6 mph	4 mph	30.14 in	0 in	0 in
8:05 AM	73.7 °F	67.9 °F	82 %	SSE	3.2 mph	4.6 mph	30.15 in	0 in	0 in
8:10 AM	74.1 °F	68.3 °F	82 %	SSE	4.3 mph	6.9 mph	30.15 in	0 in	0 in
8:15 AM	74.4 °F	68.2 °F	81 %	SSE	3.8 mph	8 mph	30.15 in	0 in	0 in
8:20 AM	74.6 °F	68.4 °F	81 %	SSE	1.9 mph	4.6 mph	30.15 in	0 in	0 in
8:25 AM	74.9 °F	67.9 °F	79 %	South	5.7 mph	11.5 mph	30.15 in	0 in	0 in
8:30 AM	75.1 °F	67.8 °F	78 %	ESE	6.1 mph	9.2 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
8:35 AM	75.1 °F	67.8 °F	78 %	SE	2.4 mph	6.9 mph	30.14 in	0 in	0 in
8:40 AM	75.1 °F	67.8 °F	78 %	SSE	3.1 mph	6.9 mph	30.14 in	0 in	0 in
8:45 AM	75.5 °F	68.5 °F	79 %	SE	2.8 mph	5.8 mph	30.14 in	0 in	0 in
8:50 AM	75.7 °F	68.4 °F	78 %	South	4.6 mph	11.5 mph	30.14 in	0 in	0 in
8:55 AM	76.2 °F	68.1 °F	76 %	South	7.3 mph	11 mph	30.14 in	0 in	0 in
9:00 AM	76.4 °F	67.5 °F	74 %	SSE	6.2 mph	13.8 mph	30.15 in	0 in	0 in
9:06 AM	76.7 °F	68.2 °F	75 %	SE	7.4 mph	11.5 mph	30.14 in	0 in	0 in
9:11 AM	77.1 °F	68.2 °F	74 %	SE	7.7 mph	10.4 mph	30.14 in	0 in	0 in
9:16 AM	77.5 °F	68.2 °F	73 %	SSE	2.1 mph	6.9 mph	30.14 in	0 in	0 in
9:21 AM	77.6 °F	68.3 °F	73 %	SSE	2.6 mph	4.6 mph	30.15 in	0 in	0 in
9:26 AM	77.5 °F	67.8 °F	72 %	South	1.9 mph	6.9 mph	30.15 in	0 in	0 in
9:31 AM	77.4 °F	67.7 °F	72 %	South	3.8 mph	6.9 mph	30.15 in	0 in	0 in
9:36 AM	77.2 °F	67.5 °F	72 %	South	3.9 mph	9.2 mph	30.15 in	0 in	0 in
9:41 AM	77.3 °F	68 °F	73 %	SE	3.4 mph	8.1 mph	30.15 in	0 in	0 in
9:46 AM	77.5 °F	67.8 °F	72 %	SSE	3.8 mph	11.5 mph	30.14 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:51 AM	77.6 °F	68.3 °F	73 %	South	5.1 mph	10.4 mph	30.14 in	0 in	0 in
9:56 AM	77.8 °F	68.4 °F	73 %	SSE	3.4 mph	8.1 mph	30.14 in	0 in	0 in
10:01 AM	77.9 °F	67.7 °F	71 %	SSW	3.2 mph	10.4 mph	30.14 in	0 in	0 in
10:06 AM	78.1 °F	68.3 °F	72 %	SSE	6.7 mph	10 mph	30.14 in	0 in	0 in
10:11 AM	78.2 °F	68.4 °F	72 %	South	3.8 mph	4 mph	30.14 in	0 in	0 in
10:16 AM	78.3 °F	68.1 °F	71 %	SSE	2.3 mph	9.2 mph	30.14 in	0 in	0 in
10:21 AM	78.4 °F	68.2 °F	71 %	SSE	2.1 mph	9.2 mph	30.14 in	0 in	0 in
10:26 AM	78.5 °F	68.3 °F	71 %	SSE	3.3 mph	7 mph	30.13 in	0 in	0 in
10:31 AM	78.5 °F	68.3 °F	71 %	ESE	2.5 mph	8.1 mph	30.13 in	0 in	0 in
10:36 AM	78.7 °F	68.5 °F	71 %	SE	1.2 mph	2.3 mph	30.13 in	0 in	0 in
10:41 AM	79 °F	68.8 °F	71 %	South	5.6 mph	18.4 mph	30.13 in	0 in	0 in
10:46 AM	79.4 °F	69.2 °F	71 %	South	2.5 mph	4.6 mph	30.13 in	0 in	0 in
10:51 AM	80 °F	69.3 °F	70 %	SSE	4.4 mph	9.2 mph	30.13 in	0 in	0 in
10:56 AM	80.3 °F	69.6 °F	70 %	SSE	2.7 mph	4.6 mph	30.12 in	0 in	0 in
11:01 AM	80.6 °F	69.5 °F	69 %	SE	7.5 mph	16.1 mph	30.12 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:06 AM	81.2 °F	70.1 °F	69 %	South	2.5 mph	6.9 mph	30.12 in	0 in	0 in
11:11 AM	81.6 °F	70.4 °F	69 %	ESE	3.4 mph	8.1 mph	30.12 in	0 in	0 in
11:16 AM	82 °F	70 °F	67 %	SE	6.4 mph	15 mph	30.11 in	0 in	0 in
11:21 AM	82.4 °F	71.6 °F	70 %	West	2 mph	6.9 mph	30.11 in	0 in	0 in
11:26 AM	82.9 °F	70.4 °F	66 %	SSE	4.4 mph	6.9 mph	30.11 in	0 in	0 in
11:31 AM	82.8 °F	70.3 °F	66 %	SSE	3 mph	11 mph	30.11 in	0 in	0 in
11:36 AM	83.1 °F	71 °F	67 %	SSE	3 mph	6.9 mph	30.11 in	0 in	0 in
11:41 AM	83.5 °F	71.8 °F	68 %	SSW	1.6 mph	4.6 mph	30.11 in	0 in	0 in
11:46 AM	84.1 °F	72 °F	67 %	SE	5.2 mph	11.5 mph	30.11 in	0 in	0 in
11:51 AM	84.1 °F	71.5 °F	66 %	SSE	3.9 mph	8.1 mph	30.11 in	0 in	0 in
11:56 AM	84.2 °F	71.2 °F	65 %	SSE	4.3 mph	12.7 mph	30.1 in	0 in	0 in
12:01 PM	84.3 °F	71.2 °F	65 %	SSW	7.1 mph	11.5 mph	30.1 in	0 in	0 in
12:06 PM	84.3 °F	70.8 °F	64 %	South	3.2 mph	5.8 mph	30.1 in	0 in	0 in
12:11 PM	84.5 °F	71.4 °F	65 %	West	2.4 mph	8.1 mph	30.1 in	0 in	0 in
12:16 PM	84.5 °F	71.4 °F	65 %	SSE	2.6 mph	9.2 mph	30.1 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
12:21 PM	84.8 °F	71.3 °F	64 %	SSE	9 mph	9 mph	30.1 in	0 in	0 in
12:26 PM	84.9 °F	72.3 °F	66 %	SSE	3.2 mph	11.5 mph	30.1 in	0 in	0 in
12:31 PM	85.2 °F	71.2 °F	63 %	SSW	5.4 mph	5.4 mph	30.1 in	0 in	0 in
12:36 PM	85.4 °F	71.4 °F	63 %	SSE	5.8 mph	11.5 mph	30.09 in	0 in	0 in
12:41 PM	85.6 °F	72 °F	64 %	South	3.6 mph	11.5 mph	30.09 in	0 in	0 in
12:46 PM	85.7 °F	72.1 °F	64 %	SSE	6.4 mph	12.7 mph	30.09 in	0 in	0 in
12:51 PM	86 °F	71.9 °F	63 %	SE	5.6 mph	11.5 mph	30.09 in	0 in	0 in
12:56 PM	86.3 °F	71.7 °F	62 %	SSE	4.2 mph	9 mph	30.09 in	0 in	0 in
1:01 PM	86.2 °F	72.1 °F	63 %	SSE	3.4 mph	5.8 mph	30.09 in	0 in	0 in
1:06 PM	86.5 °F	71.9 °F	62 %	ESE	2.5 mph	5.8 mph	30.09 in	0 in	0 in
1:11 PM	86.6 °F	73 °F	64 %	ESE	3.3 mph	6.9 mph	30.09 in	0 in	0 in
1:16 PM	87 °F	72.4 °F	62 %	SE	9.2 mph	13.8 mph	30.08 in	0 in	0 in
1:21 PM	87.1 °F	72.5 °F	62 %	SSE	3.2 mph	8.1 mph	30.08 in	0 in	0 in
1:26 PM	87.1 °F	73 °F	63 %	SE	4.4 mph	11.5 mph	30.08 in	0 in	0 in
1:31 PM	87.3 °F	72.2 °F	61 %	SE	3.5 mph	6.9 mph	30.08 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
1:36 PM	87.3 °F	71.7 °F	60 %	SSE	3.2 mph	8.1 mph	30.08 in	0 in	0 in
1:41 PM	87.3 °F	71.7 °F	60 %	WSW	4.2 mph	8.1 mph	30.08 in	0 in	0 in
1:46 PM	87.6 °F	72 °F	60 %	South	4.9 mph	8.1 mph	30.07 in	0 in	0 in
1:51 PM	87.9 °F	71.8 °F	59 %	SSW	4.8 mph	11.5 mph	30.07 in	0 in	0 in
1:56 PM	87.6 °F	72 °F	60 %	SSE	6 mph	9.2 mph	30.07 in	0 in	0 in
2:01 PM	87.5 °F	71.9 °F	60 %	East	2.4 mph	5.8 mph	30.07 in	0 in	0 in
2:06 PM	87.6 °F	72 °F	60 %	SSE	3.3 mph	8.1 mph	30.07 in	0 in	0 in
2:11 PM	88 °F	73.3 °F	62 %	ESE	2.4 mph	9 mph	30.07 in	0 in	0 in
2:16 PM	88.1 °F	72.5 °F	60 %	SSE	4.4 mph	11.5 mph	30.07 in	0 in	0 in
2:21 PM	88.3 °F	71.6 °F	58 %	SE	8.2 mph	15 mph	30.06 in	0 in	0 in
2:26 PM	88.1 °F	72 °F	59 %	SSW	1.9 mph	3.5 mph	30.06 in	0 in	0 in
2:31 PM	88.1 °F	73.4 °F	62 %	South	6.8 mph	13.8 mph	30.06 in	0 in	0 in
2:36 PM	88.3 °F	72.7 °F	60 %	SSE	3.5 mph	5.8 mph	30.06 in	0 in	0 in
2:41 PM	88.6 °F	72.4 °F	59 %	South	5.3 mph	10.4 mph	30.06 in	0 in	0 in
2:46 PM	88.8 °F	72.1 °F	58 %	SE	2.7 mph	7 mph	30.05 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
2:51 PM	88.6 °F	72.9 °F	60 %	West	1.7 mph	3.5 mph	30.05 in	0 in	0 in
2:56 PM	89 °F	72.8 °F	59 %	South	6.6 mph	12.7 mph	30.05 in	0 in	0 in
3:01 PM	89.1 °F	73.4 °F	60 %	South	1.8 mph	3.5 mph	30.05 in	0 in	0 in
3:06 PM	89.3 °F	72.1 °F	57 %	SSE	4.2 mph	9.2 mph	30.05 in	0 in	0 in
3:11 PM	89.2 °F	72.5 °F	58 %	SW	3.2 mph	6.9 mph	30.05 in	0 in	0 in
3:16 PM	89.3 °F	72.6 °F	58 %	SE	4.9 mph	10.4 mph	30.04 in	0 in	0 in
3:21 PM	89.4 °F	72.7 °F	58 %	SSE	3.8 mph	7 mph	30.04 in	0 in	0 in
3:26 PM	89.4 °F	72.7 °F	58 %	West	2.2 mph	4.6 mph	30.04 in	0 in	0 in
3:31 PM	89.6 °F	72.3 °F	57 %	South	2.4 mph	4 mph	30.03 in	0 in	0 in
3:36 PM	89.8 °F	72.5 °F	57 %	SSE	3.2 mph	8 mph	30.03 in	0 in	0 in
3:41 PM	90 °F	72.7 °F	57 %	SSE	2.7 mph	6.9 mph	30.03 in	0 in	0 in
3:46 PM	89.8 °F	73.6 °F	59 %	SE	8.7 mph	17.3 mph	30.03 in	0 in	0 in
3:51 PM	89.9 °F	72.6 °F	57 %	SE	4.7 mph	13 mph	30.03 in	0 in	0 in
3:56 PM	90.1 °F	72.8 °F	57 %	SSE	3.5 mph	4.6 mph	30.03 in	0 in	0 in
4:01 PM	90.2 °F	72.4 °F	56 %	SE	8.9 mph	9.2 mph	30.03 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
4:06 PM	90 °F	72.2 °F	56 %	SE	5.2 mph	12.7 mph	30.03 in	0 in	0 in
4:11 PM	89.8 °F	72.5 °F	57 %	SSE	8.5 mph	13.8 mph	30.02 in	0 in	0 in
4:16 PM	89.6 °F	72.9 °F	58 %	SE	2 mph	5 mph	30.02 in	0 in	0 in
4:21 PM	89.5 °F	73.3 °F	59 %	WSW	2 mph	8.1 mph	30.02 in	0 in	0 in
4:26 PM	89.7 °F	72.4 °F	57 %	South	3.2 mph	3.5 mph	30.02 in	0 in	0 in
4:31 PM	89.2 °F	72.5 °F	58 %	SSE	2 mph	5.8 mph	30.02 in	0 in	0 in
4:36 PM	88.9 °F	72.7 °F	59 %	SE	1.5 mph	4 mph	30.02 in	0 in	0 in
4:41 PM	88.9 °F	72.7 °F	59 %	SSE	3.6 mph	6.9 mph	30.01 in	0 in	0 in
4:46 PM	89.1 °F	72.4 °F	58 %	SE	5.9 mph	11.5 mph	30.01 in	0 in	0 in
4:51 PM	89.3 °F	73.1 °F	59 %	SSE	4.9 mph	9.2 mph	30.01 in	0 in	0 in
4:56 PM	89.3 °F	72.6 °F	58 %	SE	2.8 mph	5.8 mph	30.01 in	0 in	0 in
5:01 PM	89.5 °F	73.3 °F	59 %	SW	1.8 mph	3.5 mph	30.01 in	0 in	0 in
5:06 PM	89.8 °F	73.6 °F	59 %	SSE	4.5 mph	6.9 mph	30.01 in	0 in	0 in
5:11 PM	89.7 °F	73 °F	58 %	SSE	7.8 mph	17.3 mph	30.01 in	0 in	0 in
5:16 PM	89.4 °F	72.7 °F	58 %	SSE	3.6 mph	10.4 mph	30 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
5:21 PM	89.2 °F	72.5 °F	58 %	SSE	2 mph	4.6 mph	30 in	0 in	0 in
5:26 PM	89.2 °F	72.5 °F	58 %	WSW	1.9 mph	3.5 mph	30 in	0 in	0 in
5:31 PM	89.2 °F	73 °F	59 %	SSE	4.2 mph	6.9 mph	30 in	0 in	0 in
5:36 PM	89.1 °F	73.4 °F	60 %	SSE	3 mph	5 mph	30 in	0 in	0 in
5:41 PM	89 °F	72.8 °F	59 %	SSE	4.3 mph	9.2 mph	29.99 in	0 in	0 in
5:46 PM	88.8 °F	72.6 °F	59 %	SE	7.6 mph	11.5 mph	29.99 in	0 in	0 in
5:51 PM	88.7 °F	72.5 °F	59 %	SSE	3.1 mph	6.9 mph	29.99 in	0 in	0 in
5:56 PM	88.5 °F	72.8 °F	60 %	SSE	3.7 mph	6 mph	29.98 in	0 in	0 in
6:01 PM	88.3 °F	72.7 °F	60 %	SE	6.5 mph	11.5 mph	29.99 in	0 in	0 in
6:06 PM	88.4 °F	72.7 °F	60 %	South	4.5 mph	9.2 mph	29.98 in	0 in	0 in
6:11 PM	88.2 °F	72.6 °F	60 %	SSE	2 mph	3.5 mph	29.98 in	0 in	0 in
6:16 PM	88 °F	72.4 °F	60 %	South	4.7 mph	10.4 mph	29.98 in	0 in	0 in
6:21 PM	88 °F	72.9 °F	61 %	ESE	1.6 mph	3.5 mph	29.98 in	0 in	0 in
6:26 PM	87.8 °F	72.7 °F	61 %	SSE	4.7 mph	10.4 mph	29.98 in	0 in	0 in
6:31 PM	87.5 °F	72.9 °F	62 %	SSE	3.9 mph	6.9 mph	29.97 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
6:36 PM	87.4 °F	72.8 °F	62 %	SE	3.1 mph	5 mph	29.97 in	0 in	0 in
6:41 PM	87.2 °F	72.6 °F	62 %	ESE	3.3 mph	5.8 mph	29.97 in	0 in	0 in
6:46 PM	87 °F	72.4 °F	62 %	SSE	9.5 mph	16.1 mph	29.97 in	0 in	0 in
6:51 PM	86.7 °F	72.6 °F	63 %	SSE	4.6 mph	12 mph	29.97 in	0 in	0 in
6:56 PM	86.6 °F	72.5 °F	63 %	SSE	3 mph	6.9 mph	29.97 in	0 in	0 in
7:01 PM	86.5 °F	72.4 °F	63 %	South	1.7 mph	3.5 mph	29.97 in	0 in	0 in
7:06 PM	86.4 °F	72.3 °F	63 %	SSE	5.5 mph	9.2 mph	29.97 in	0 in	0 in
7:11 PM	86.1 °F	72 °F	63 %	SSE	3.3 mph	8.1 mph	29.97 in	0 in	0 in
7:16 PM	85.9 °F	72.3 °F	64 %	ESE	1.4 mph	3 mph	29.97 in	0 in	0 in
7:21 PM	85.8 °F	72.2 °F	64 %	SSE	3 mph	4.6 mph	29.97 in	0 in	0 in
7:26 PM	85.6 °F	72.5 °F	65 %	SSE	3.7 mph	10.4 mph	29.97 in	0 in	0 in
7:31 PM	85.5 °F	72.4 °F	65 %	SSE	4.7 mph	6.9 mph	29.97 in	0 in	0 in
7:36 PM	85.4 °F	72.3 °F	65 %	SE	5.4 mph	11.5 mph	29.97 in	0 in	0 in
7:41 PM	85.2 °F	72.1 °F	65 %	SSE	3 mph	6.9 mph	29.97 in	0 in	0 in
7:46 PM	85 °F	71.9 °F	65 %	SSE	4.9 mph	11.5 mph	29.97 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
7:51 PM	84.8 °F	72.2 °F	66 %	SSW	5.3 mph	11.5 mph	29.97 in	0 in	0 in
7:56 PM	84.7 °F	72.1 °F	66 %	South	2.2 mph	4.6 mph	29.97 in	0 in	0 in
8:01 PM	84.6 °F	72.4 °F	67 %	SSE	2.5 mph	5.8 mph	29.97 in	0 in	0 in
8:06 PM	84.4 °F	72.7 °F	68 %	SSE	2.7 mph	8.1 mph	29.97 in	0 in	0 in
8:11 PM	84.1 °F	72.4 °F	68 %	SSE	1.7 mph	3.5 mph	29.97 in	0 in	0 in
8:16 PM	83.9 °F	72.2 °F	68 %	SE	2 mph	3.5 mph	29.97 in	0 in	0 in
8:21 PM	83.7 °F	72.4 °F	69 %	SSE	3.7 mph	6.9 mph	29.97 in	0 in	0 in
8:26 PM	83.6 °F	72.3 °F	69 %	SSE	3.6 mph	4.6 mph	29.98 in	0 in	0 in
8:31 PM	83.4 °F	72.2 °F	69 %	South	2.6 mph	3.5 mph	29.98 in	0 in	0 in
8:36 PM	83.3 °F	72.1 °F	69 %	SSE	3.8 mph	6.9 mph	29.98 in	0 in	0 in
8:41 PM	83.1 °F	72.3 °F	70 %	SSE	3.8 mph	10 mph	29.98 in	0 in	0 in
8:46 PM	82.9 °F	72.1 °F	70 %	SSE	2.1 mph	3.5 mph	29.98 in	0 in	0 in
8:51 PM	82.7 °F	71.9 °F	70 %	SSE	3.9 mph	6 mph	29.98 in	0 in	0 in
8:56 PM	82.6 °F	72.2 °F	71 %	South	5.8 mph	10.4 mph	29.98 in	0 in	0 in
9:01 PM	82.4 °F	72 °F	71 %	SSE	2.2 mph	3.5 mph	29.98 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
9:06 PM	82.2 °F	71.9 °F	71 %	SE	2.3 mph	4 mph	29.98 in	0 in	0 in
9:11 PM	82.1 °F	72.2 °F	72 %	SSE	1.7 mph	5 mph	29.98 in	0 in	0 in
9:16 PM	81.9 °F	72 °F	72 %	SSE	3 mph	5.8 mph	29.98 in	0 in	0 in
9:21 PM	81.8 °F	71.9 °F	72 %	SSE	2.5 mph	5.8 mph	29.98 in	0 in	0 in
9:26 PM	81.6 °F	71.7 °F	72 %	SSE	1.9 mph	4 mph	29.99 in	0 in	0 in
9:31 PM	81.4 °F	71.9 °F	73 %	SSE	2.6 mph	5 mph	29.99 in	0 in	0 in
9:36 PM	81.2 °F	71.7 °F	73 %	SSE	2.1 mph	4.6 mph	29.99 in	0 in	0 in
9:41 PM	81.1 °F	71.6 °F	73 %	SSE	1.7 mph	3.5 mph	29.99 in	0 in	0 in
9:46 PM	80.9 °F	71.8 °F	74 %	SSE	2.3 mph	5.8 mph	29.99 in	0 in	0 in
9:51 PM	80.7 °F	71.6 °F	74 %	SSE	2.4 mph	3.5 mph	29.99 in	0 in	0 in
9:56 PM	80.6 °F	71.9 °F	75 %	SSE	1.5 mph	3.5 mph	29.99 in	0 in	0 in
10:01 PM	80.4 °F	71.7 °F	75 %	SSE	2.3 mph	3.5 mph	29.99 in	0 in	0 in
10:06 PM	80.3 °F	71.6 °F	75 %	SSE	2.5 mph	4.6 mph	29.99 in	0 in	0 in
10:11 PM	80.1 °F	71.8 °F	76 %	SSE	1.9 mph	3.5 mph	30 in	0 in	0 in
10:16 PM	80 °F	71.8 °F	76 %	SSE	0.5 mph	2.3 mph	30 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
10:21 PM	79.8 °F	71.6 °F	76 %	SE	2.1 mph	3.5 mph	30 in	0 in	0 in
10:26 PM	79.7 °F	71.8 °F	77 %	SSE	1.5 mph	3.5 mph	30 in	0 in	0 in
10:31 PM	79.6 °F	71.8 °F	77 %	SSE	1.8 mph	3.5 mph	30 in	0 in	0 in
10:36 PM	79.6 °F	71.8 °F	77 %	SE	1.9 mph	4 mph	30 in	0 in	0 in
10:41 PM	79.5 °F	71.7 °F	77 %	SSE	2.3 mph	4.6 mph	30 in	0 in	0 in
10:46 PM	79.4 °F	71.6 °F	77 %	SSE	1.3 mph	3.5 mph	30 in	0 in	0 in
10:51 PM	79.4 °F	71.6 °F	77 %	SSE	1.2 mph	3.5 mph	30 in	0 in	0 in
10:56 PM	79.3 °F	71.5 °F	77 %	SSE	2.2 mph	6.9 mph	30 in	0 in	0 in
11:01 PM	79.3 °F	71.5 °F	77 %	SSE	1.4 mph	6.9 mph	30 in	0 in	0 in
11:06 PM	79.2 °F	71.4 °F	77 %	SSE	1.7 mph	3.5 mph	30 in	0 in	0 in
11:11 PM	79.1 °F	71.6 °F	78 %	SSE	2.3 mph	9.2 mph	30 in	0 in	0 in
11:16 PM	79 °F	71.6 °F	78 %	SSE	1.6 mph	3.5 mph	30 in	0 in	0 in
11:21 PM	78.9 °F	71.5 °F	78 %	SSE	2 mph	3.5 mph	30 in	0 in	0 in
11:26 PM	78.8 °F	71.4 °F	78 %	SSE	1.2 mph	3.5 mph	30 in	0 in	0 in
11:31 PM	78.7 °F	71.3 °F	78 %	SSE	0.8 mph	2.3 mph	30 in	0 in	0 in

Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.
11:36 PM	78.6 °F	71.2 °F	78 %	SSE	1.9 mph	4 mph	30 in	0 in	0 in
11:41 PM	78.5 °F	71.4 °F	79 %	South	1 mph	3.5 mph	29.99 in	0 in	0 in
11:46 PM	78.5 °F	71.4 °F	79 %	SSE	1.3 mph	4.6 mph	30 in	0 in	0 in
11:51 PM	78.5 °F	71.4 °F	79 %	SSE	1.1 mph	3.5 mph	30 in	0 in	0 in
11:56 PM	78.4 °F	71.3 °F	79 %	SSE	1.7 mph	3.5 mph	30 in	0 in	0 in

## **Appendix C**

### **Representative Photographs**



Trap 1, 36.2202, 95.7508



Trap 2, 36.2102, -95.7478



Trap 3, 36.2185, -95.7335

**APPENDIX H**  
**SEA MAILING LIST**

**Mailing List for Port of Catoosa Land Exchange Supplemental Environmental  
Assessment Coordination Revised 2/12/2016**

**Honorable Mary Fallin**

Governor of Oklahoma  
State Capitol Building  
2300 North Lincoln Boulevard, Room 212  
Oklahoma City, OK 73105-4801

**Honorable James M Inhofe**

U. S. Senator  
1900 NW Expressway, Suite 1210  
Oklahoma City, OK 73118-1821

**Honorable James Lankford**

U. S. Senator  
1015 North Broadway, Suite 310  
Oklahoma City, OK 73102-5849

**Honorable James F Bridenstine**

Representative in Congress, District 001  
216 Cannon House Office Building  
Washington, DC 20515

**Honorable Markwayne Mullin**

Representative in Congress, District 002  
1113 Longworth House Office Building  
Washington, DC 20515

**Senator Nathan Dahm**

State Senate, District 033  
2300 North Lincoln Blvd., Rm. 534  
Oklahoma City, OK 73105-4805

**Senator JJ Dossett**

State Senate, District 034  
2300 North Lincoln Blvd., Rm. 521A  
Oklahoma City, OK 73105-4818

**Senator Bill Brown**

State Senate, District 036  
2300 North Lincoln Blvd., Rm. 412  
Oklahoma City, OK 73105-4819

**Senator Marty Quinn**

State Senate, District 002  
2300 N. Lincoln Blvd., Rm. 528B  
Oklahoma City, OK 73105-4818

**Senator Brian Crain**

State Senate, District 039  
2300 North Lincoln Blvd., Rm. 417B  
Oklahoma City, OK 73105-4819

**Senator Kim David**

State Senate, District 018  
2300 North Lincoln Blvd., Room 417C  
Oklahoma City, OK 73105-4819

**Senator Kevin Matthews**

State Senate, District 011  
2300 North Lincoln Blvd., Rm. 518  
Oklahoma City, OK 73105-4805

**Senator Dan Newberry**

State Senate, District 037  
2300 North Lincoln Blvd., Rm. 234  
Oklahoma City, OK 73105-4801

**Senator Gary Stanislawski**

State Senate, District 035  
2300 North Lincoln Blvd., Room 427A  
Oklahoma City, OK 73105-4819

**Senator Earl Garrison**

State Senate, District 009  
2300 North Lincoln Blvd., Room 520  
Oklahoma City, OK 73105-4818

**Senator Mike Mazzei**

State Senate, District 025  
2300 North Lincoln Blvd., Room 424  
Oklahoma City, OK 73105-4819

**Senator Wayne Shaw**

State Senate, District 003  
2300 North Lincoln Blvd., Rm. 235  
Oklahoma City, OK 73105-4801

**Representative Earl Sears**

State Representative, District 011  
2300 North Lincoln Blvd., Rm. 432D  
Oklahoma City, OK 73105-4811

**Mailing List for Port of Catoosa Land Exchange Supplemental Environmental  
Assessment Coordination Revised 2/12/2016**

Representative Glen Mulready  
State Representative, District 068  
2300 North Lincoln Blvd., Rm. 338  
Oklahoma City, OK 73105-4801

Representative Wade Rousselot  
State Representative, District 012  
2300 North Lincoln Blvd., Rm. 507  
Oklahoma City, OK 73105-4813

Representative David Derby  
State Representative, District 074  
2300 North Lincoln Blvd., Rm. 408  
Oklahoma City, OK 73105-4811

Representative Jerry McPeak  
State Representative, District 013  
2300 North Lincoln Blvd., Rm. 503  
Oklahoma City, OK 73105-4813

Representative George Faught  
State Representative, District 014  
2300 North Lincoln Blvd., Rm. 301B  
Oklahoma City, OK 731054803

Representative James Leewright  
State Representative, District 029  
2300 North Lincoln Blvd., Rm. 204B  
Oklahoma City, OK 73105-4805

Representative Mark McCullough  
State Representative, District 030  
2300 North Lincoln Blvd., Rm. 435-A  
Oklahoma City, OK 73105-4811

Representative Sean Roberts  
State Representative, District 036  
2300 North Lincoln Blvd., Rm. 250  
Oklahoma City, OK 73105-4805

Representative Mark Lepak  
State Representative, District 009  
2300 North Lincoln Blvd., Rm. 328A  
Oklahoma City, OK 73105-4822

Representative Chuck Strohm  
State Representative, District 069  
2300 North Lincoln Blvd., Rm. 300C  
Oklahoma City, OK 73105-4803

Representative Dan Kirby  
State Representative, District 075  
2300 North Lincoln Blvd., Rm. 302A  
Oklahoma City, OK 73105-4803

Representative Jadine Nollan  
State Representative, District 066  
2300 North Lincoln Blvd., Rm. 333  
Oklahoma City, OK 73105-4803

Representative Jeannie McDaniel  
State Representative, District 078  
2300 North Lincoln Blvd., Rm. 508  
Oklahoma City, OK 73105-4813

Representative Ken Walker  
State Representative, District 070  
2300 North Lincoln Blvd., Rm. 204  
Oklahoma City, OK 73105-4829

Representative Pam Peterson  
State Representative, District 067  
2300 North Lincoln Blvd., Rm. 405  
Oklahoma City, OK 73105-4811

Representative Eric Proctor  
State Representative, District 077  
2300 North Lincoln Blvd., Rm. 540-A  
Oklahoma City, OK 731054830

Representative Mike Ritze  
State Representative, District 080  
2300 North Lincoln Blvd., Rm. 433B  
Oklahoma City, OK 73105-4811

Representative Seneca Scott  
State Representative, District 072  
2300 North Lincoln Blvd., Rm. 510  
Oklahoma City, OK 73105-4813

**Mailing List for Port of Catoosa Land Exchange Supplemental Environmental Assessment Coordination Revised 2/12/2016**

Representative Ben Sherrer  
State Representative, District 008  
2300 North Lincoln Blvd., Rm. 500  
Oklahoma City, OK 73105-4813

Representative Regina Goodwin  
State Representative, District 073  
2300 North Lincoln Blvd., Rm. 510  
Oklahoma City, OK 73105-4813

Representative Terry O'Donnell  
State Representative, District 023  
2300 North Lincoln Blvd., Rm. 242  
Oklahoma City, OK 73105-4829

Representative Michael Rogers  
State Representative, District 098  
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