ENVIRONMENTAL OVERVIEW DATA

for

LYON and CALDWELL COUNTIES US 641 CORRIDOR FROM EDDYVILLE TO FREDONIA ITEM NUMBER: NOT ASSIGNED

Prepared For

KENTUCKY TRANSPORTATION CABINET DIVISION OF PLANNING

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Environmental Overview Data

for

Lyon and Caldwell Counties: US 641 Corridor: From Eddyville to Fredonia

INTRODUCTION

This report presents a general overview of the environmental framework of the study corridor project area for the improvement/reconstruction of US 641 from the Eddyville vicinity in Lyon County extending north to the Fredonia vicinity in Caldwell County (see Exhibit 1). It provides preliminary information on key environmental issues, which may represent constraints upon project location within the study corridor, including potential Section 106, Section 4(f), and ecological elements. The information presented is based on readily available public records and archival research supplemented with limited field reconnaissance and windshield surveys conducted by subject matter environmental experts.

GENERAL CHARACTERISTICS OF THE PROJECT AND PROJECT AREA

Project Description and Purpose:

Initial Screening of Corridor Alternates:

At an early stage in the study process, the Kentucky Transportation Cabinet (KYTC) project team, local officials, stakeholders, interest groups, and the public were asked to provide input on potential alternative corridor locations. Based on this input and a preliminary environmental footprint of the study area, and after further analysis, 12 corridor alternates were developed by the prime consultant, Wilbur Smith Associates (WSA).

At the request of the Kentucky Transportation Cabinet, an initial screening was conducted by WSA to determine which, if any, of the 12 alternates should be removed from future consideration in the study. Screening criteria were developed, giving consideration to the project purpose and need (based on preliminary project goals and objectives), potential environmental and community impacts, planning level cost estimates, public input, and transportation and traffic issues.

The results of the initial screening were then presented to the project team. Through a series of discussions, two (2) additional alternate corridors were added, for a total of 14 alternates. With additional alternates, the initial screening was re-evaluated. A rating of low, low-medium, medium, medium-high, or high was assigned to each proposed corridor based on how well it met the established screening criteria.

Based on the initial screening results, the project team agreed to carry forward eight (8) corridors with the highest overall rating to the next level of analysis. Environmental issues related to these eight corridor alternates are addressed further in this report.

The existing US 641 corridor, between the study area southern terminus at US 62 in Eddyville and the northern terminus on US 641 near the Caldwell County - Crittenden County line north of Fredonia, is a narrow, two lane roadway through rolling, rural terrain. The distance is approximately 10 miles. Due to less than optimal roadway geometry and frequent access points, driving speeds generally range from 45 to 55 mph. The route section is posted for 55 mph. The proposed project would involve the reconstruction and/or construction on new location of this section of US 641.

The proposed project would begin at one of four initial study locations in the vicinity of Eddyville (see Exhibit 2). The easternmost of these locations would begin with a new interchange at the Western Kentucky Parkway. The westernmost location would begin with a new interchange at I-24. The two central locations would begin with intersections at US 62. From the beginning points northward to the Caldwell-Crittenden County line, several combinations of study corridors were developed for examination. The US 641 study corridors between the terminal points are approximately 1,000 feet on either side of the preliminary projected centerline or existing road throughout the corridor length (see Exhibit 2). The study corridors vary in length from approximately 7 miles to approximately 11 miles. The study corridors are described as follows (see Exhibit 2):

Alternative 1: The southern terminus would be a new interchange proposed along the Wendell H. Ford Parkway at the Caldwell/Lyon County Line. The corridor would follow the county line to an intersection with existing US 641. The corridor would then turn due north. At KY 70 the corridor would curve to the northwest around Fredonia to an intersection with the proposed US 641 north of the existing US 641.

Alternative 1A: The southern terminus would be a new interchange proposed along the Wendell H. Ford Parkway at the Caldwell/Lyon County Line. The corridor would follow the county line to the Fredonia Quarry and then proceed northwest through the northeast corner of Lyon County and into Caldwell County. The corridor would continue north on the western side of Fredonia to a terminus with US 641 northwest of Fredonia.

Alternative 2: Starting at the existing US 641 and US 62 intersection and proceeding north along existing US 641, Alternative 2 would follow US 641 to just north of the entrance for the West Kentucky State Penitentiary Farm. The corridor would continue northwest to a point just south of the Caldwell/Lyon County Line. The corridor would proceed north crossing the Caldwell/Lyon County Line and continue north on the western side of Fredonia to a terminus with US 641 northwest of Fredonia.

Alternative 2A: Starting at the existing US 641 and US 62 intersection and proceeding north along existing US 641, Alternative 2A would follow US 641 to the Fredonia Quarry. The corridor would then turn due north. At KY 70 the corridor would curve to the northwest around Fredonia to an intersection with the proposed US 641 north of the existing US 641.

Alternative 3: Alternative 3 would have a southern terminus along I-24 between the Paducah and Louisville railroad crossing and KY 810. The corridor would continue northeast intersecting KY 93, KY 819, KY 295 and KY 373. The corridor would continue northeast west of existing US 641. The corridor will cross KY 1943 turning due north and intersecting Alternative 2 just south of the Caldwell/Lyon County Line. Similar to Alternative 2, the corridor would proceed north crossing the Caldwell/Lyon County Line and continue north on the western side of Fredonia to a terminus with US 641 northwest of Fredonia.

Alternative 3A: Alternative 3 would have a southern terminus along I-24 between the Paducah and Louisville Railroad crossing and KY 810. The corridor would continue northeast intersecting KY 93, KY 819, KY 295 and KY 373. The corridor then turns more to the east and intersects existing US 641 just south of KY 1943. The corridor then follows the same path as Alternative 2A. The corridor would follow US 641 to the Fredonia Quarry. The corridor would then turn due north. At KY 70 the corridor would curve to the northwest around Fredonia to an intersection with the proposed US 641 north of the existing US 641.

Alternative 4: Alternative 4 would have a southern terminus at the US 62 and Wendell H. Ford Parkway interchange. US 62 and/or the interchange would be reconfigured to make US 641 the primary direction. The corridor would follow along the western edge of the West Kentucky State Penitentiary Farm. The corridor would cross existing US 641 at the West Kentucky State Penitentiary Farm entrance. The corridor would continue northwest to a point just south of the Caldwell/Lyon County Line. The corridor would proceed north crossing the Caldwell/Lyon County Line and continue north on the western side of Fredonia to a terminus with US 641 northwest of Fredonia.

Alternative 4A: Alternative 4A would have a southern terminus at the US 62 and Wendell H. Ford Parkway interchange. US 62 and/or the interchange would be reconfigured to make US 641 the primary direction. The corridor would follow along the western edge of the West Kentucky State Penitentiary Farm. The corridor would merge into existing US 641 at the West Kentucky State Penitentiary Farm entrance. The corridor would then follow the same path as Alternatives 2A and 3A. The corridor would follow US 641 to the Fredonia Quarry. The corridor would then turn due north. At KY 70 the corridor would curve to the northwest around Fredonia to an intersection with the proposed US 641 north of the existing US 641.

There are several objectives which define the purpose for this project. Principally, the project would be expected to provide improved highway system connectivity and regional access, enhanced travel safety, and economic development potential along a reconstructed or new US 641 section. The project would yield safer, more efficient driving conditions on US 641 between the cities of Eddyville and Fredonia. The project would also be expected to improve and enhance access from Crittenden County and northwestern Caldwell County to jobs, medical centers, services, shopping, and recreational opportunities in Eddyville, Paducah, and the Kentucky Lake-Lake

Barkley areas. Local industries and commerce within the area and along the route would also be expected to benefit and route improvements would provide necessary conditions for opening up this area to greater economic development potential. Access to bodies of government, social services, and emergency response would also be enhanced by roadway improvements. The project could bring to the local communities in the project area the potential for changes that may be important to the future quality of life of area residents, through improvements in vehicular access, fewer accidents, reduced driving time, convenience, consistency of travel expectations, better emergency response time, and economic growth possibilities.

Project Area Physiological and Soil Characteristics:

The US 641 corridor is located in Caldwell and Lyon Counties. These counties fall within the western part of the Mississippian Plateau (Pennyroyal or Pennyrile) Phyisographic Region. This area can be characterized by a well-developed karst plain on which hundreds of sinkholes, sinking creeks, springs and other features associated with underground drainage in a limestone terrain are found. The project corridor also falls within the Lower Cumberland River Basin. Long, steep or moderately steep hillsides with narrow ridge-tops and branched bottoms characterize this area. Caldwell County includes the Dripping Springs escarpment, an upland area of sandstone-capped hills and broken ridges, which rises 150 to 200 feet above the karst plain. The vicinity of Fredonia is a particularly conspicuous example of the Dripping Springs Escarpment. In addition, part of Caldwell County is in the mineral region known as the Illinois-Kentucky fluorspar district, which is characterized by a large number of fractures (faults) in the rocks. The effects of faulting are reflected in the topography of the area as straight ridges and linear arrangement of sinkholes.

The Fredonia, Eddyville and Grand Rivers Geologic Quadrangles provided by the United States Geological Survey (USGS) show collectively six faults located in the US 641 project area, four of which are part of the Tabb Fault System just north of Fredonia. The Fredonia Valley Quarry is located just east of Alternate 1 in the Fredonia Limestone Member of the Ste. Genevieve Limestone formation. The quarry produces high calcium limestone, agricultural limestone, and crushed limestone aggregate. In addition the project corridor contains thirteen geologic formations. These formations are:

- St. Louis Limestone Formation. The St. Louis Limestone Formation consists of two members, an upper and a lower. The upper member is approximately 240-250 feet thick and is composed primarily of limestone. The lower member is approximately 250 feet thick and also is composed primarily of limestone. All the alternates cross this formation and it is one of the more common formations found in the project corridor study.
- Ste. Genevieve Limestone Formation. This formation can be 275 to 300 feet thick and is composed of three members. The Levias Limestone member is approximately 20 to 30 feet thick and composed mainly of limestone that is partly oolitic, with shale laminae in the lower part. The second member, Rosiclare Sandstone, is 5 to 10 feet thick, and is composed mainly of sandstone and shale. The third member is Fredonia Limestone; it is approximately 275 feet thick and composed mainly of limestone. All

- the alternates cross this formation and it is one of the most common formations found in the project corridor study.
- Alluvium Formation. The alluvium formation is the youngest formation. It is approximately 0 to 10 feet thick and is composed mainly of chert rubble, gravel, sand, silt and clay. It is found mainly in the floodplain areas of streams and river bottoms. This is one of the least common formations within the project corridor.
- Hardinsburg Sandstone Formation. The Hardinsburg Sandstone Formation is 130 to 150 feet thick and is composed mainly of sandstone with some shale. As much as 2 feet of coal can be found locally near the middle of the formation with thinner beds rare at other levels. This formation is found within the Tabb Fault System mainly at the northern most terminus of the project corridor.
- Tar Springs Sandstone Formation. The Tar Springs Sandstone Formation is approximately 90 to 120 feet thick. It is composed of sandstone, shale and siltstone. This formation is found near the northern most terminus of the project corridor at the Tabb Fault System.
- Menard Limestone Formation. The Menard Limestone Formation is 105 to 120 feet thick and is composed of mainly limestone and shale with abundant fossil fragments (brachiopods, gastropods). The project corridor crosses this formation near its northern terminus at the Tabb Fault System.
- Palestine Sandstone Formation. This formation is approximately 50 to 60 feet thick and is made up of sandstone and shale. It is crossed by the project corridor near its northern most terminus and is in the Tabb Fault System.
- Kinkaid Limestone Formation. The Kinkaid Limestone Formation consists of upper, middle, and lower members. The Upper member is approximately 20 to 25 feet thick and is composed primarily of limestone with sparse fossil debris and some sparse chert up to 6 inches thick. The Middle member is approximately 80 to 90 feet thick and consists of limestone, dolomitic limestone, dolomite, shale and sandstone. The Lower member is 35 to 40 feet thick and consists of limestone with sparse fossil fragment (brachiopods, gastropods). The project corridor crosses this formation near its northern most terminus at the Tabb Fault System.
- Degonia Sandstone Formation. The Degonia Formation is approximately 50 to 60 feet thick and is composed of sandstone and shale. The project corridor crosses this formation near its northern most terminus at the Tabb Fault System.
- Clore Limestone Formation. This formation can be as thick as 90 to 100 feet and consists of limestone and shale with sparse fossil fragments (brachiopods). The project corridor crosses this formation near its northern most terminus at the Tabb Fault System.
- Waltersburg Sandstone Formation. The Waltersburg Sandstone Formation is 20 to 40 feet thick and consists of sandstone, siltstone and shale. The project corridor crosses this formation near its northern most terminus at the Tabb Fault System.
- Vienna Limestone Formation. This formation is approximately 20 feet thick and is made up of limestone and shale containing sparse to common fossil fragments and chert nodules. The project corridor crosses this formation near its northern most terminus at the Tabb Fault System.
- Gravel Formation. This formation consists of chert pebbles in a quartz sand matrix. Most pebbles are less than 2 inches in length, but cobble as long as 4 inches are

common. Alternate 3 crosses this formation at its southern most terminus at the alternate's crossing with KY 93.

The general soil associations encountered by the proposed US 641 Corridors in Caldwell County are:

- Zanesville-Tilsit-Crider association: Gently rolling soils with fragipans, in thin loess over bedrock.
- Caneyville-Dekalb-Muskingum-Wellston association: Steep soils that are shallow to bedrock or commonly contain rock outcrops.
- Crider-Pembroke association: Gently rolling, deep, well-drained soils in loess and residuum over limestone.
- Crider-Russellville-Baxter association: Strongly rolling, deep, well-drained soils in loess and residuum over limestone.
- Crider-Russellville-Pembroke association: Irregularly rolling, deep well-drained soils in loess and residuum over limestone.

In Caldwell County the project corridor travels through pasture and agricultural soils (Hayes, 1966). These soils are used mainly for livestock and livestock products but also some crops such as tobacco, soybeans and corn are grown. Most of the upland soils are well drained or moderately well-drained. There are also highly erodible and hydric soils found within the project corridor in Caldwell County.

The general soil associations encountered by the proposed US 641 Corridors in Lyon County are:

- Baxter-Hammack association: Deep, steep to sloping, well-drained soils formed in cherty limestone residuum or in shallow loess and cherty limestone residuum; on uplands.
- Nicholson-Hammack association: Deep, gently sloping and sloping, moderately well-drained and well-drained soils formed in loess and cherty limestone residuum; on uplands.
- Crider-Pembroke association: Deep, gently sloping and sloping, well-drained soils formed in loess and limestone residuum; on karst uplands.
- Hammack-Baxter-Nicholson association: Deep, gently sloping to moderately steep, well-drained and moderately well drained soils formed in loess and cherty limestone residuum or in cherty limestone residuum; on karst uplands.

In Lyon County the project corridor travels through mainly agricultural soils (Humphrey 1981). The soils in this area are used for grains, burley tobacco, dark tobacco, alfalfa, soybeans, corn, wheat, pasture for cattle, hogs and other livestock. Most of the upland soils are well-drained or moderately well-drained. There are also hydric and highly erodible soils found within the project corridor in Lyon County.

Project Area Water Resources:

The topographical quadrangles provided by the USGS for the project corridor indicate that there are four blue-line streams encountered by the proposed US 641 corridor study. Skinframe Creek, Crab Creek, Brewster Creek and the headwaters of Spring Creek all lay within the project corridor study area. Alternates 2, 2A, 3, 3A, 4, and 4A encounter Skinframe Creek approximately 2.25 miles north of Eddyville in Lyon County. Alternates 3 and 3A cross Crab Creek just southwest of their intersection with KY 373. Alternates 1 and 1A cross Brewster Creek at the Lyon and Caldwell County line, 1.75 miles south of the Fredonia Quarry. Alternates 3 and 3A encounter the headwaters of Spring Creek near their southern most terminuses after their intersection with KY 819.

These creeks are all part of the Lower Cumberland River Basin and all occur in Lyon County, flowing in a west to northwesterly direction into Livingston Creek. Topographical quadrangle maps are not always accurate and may not always indicate all of the streams existing in the project area. Field surveys in future project phases are necessary to verify current stream locations and identify any streams not shown on the topographical quadrangle maps.

According to Kentucky Division of Water (KDOW), Groundwater Branch, there are numerous domestic water wells that exist in the project area, although very few are inventoried in state records. The KDOW indicated there are no Wellhead Protection Areas in the proposed project corridor.

Project Area Land Use:

The majority of the study corridor land use is agricultural. Development in the study corridors currently consists of single family residential and related outbuildings, and structures associated with farm operations. There are no trailer courts in the corridors and no apartment complexes or multi-family buildings in the study corridors. Most of the dwellings are fronting on US 641 or the county roads which provide their access. There are no large concentrations of houses such as residential subdivisions found in the study corridors. Local businesses are principally located in Fredonia and Eddyville. The Fredonia Quarry is located adjacent to study corridor Alternative 1, and an institutional land use, the West Kentucky State Penitentiary, is located between study corridors Alternative 1 and Alternative 4A (see Exhibit 2). Lyon and Caldwell Counties have no formal land use plans or zoning ordinances. No official existing or future land use plans incorporating the project study corridors are currently known to exist.

ENVIRONMENTAL OVERVIEW CONSIDERATIONS

Land Use:

Land use in the project area is not expected to change dramatically from current uses and trends. Due to the terrain in the study corridors and the dominant agricultural base of much of the adjacent area, the project is not expected to induce significant new housing or commercial

development nor result in unanticipated additional pressure on public services. Current land use applications and trends are expected to continue for the future. Additionally, the project would not be expected to interfere with any zoning or development plans which might be proposed in Lyon or Caldwell Counties, since local officials (County Judge-Executives, Chambers of Commerce) have indicated support for the improvement of US 641 and would accommodate infrastructure changes as may become needed.

Farmland is the most abundant resource in the project study area. The agricultural use is a mixture of pasture, cropland and subsistence gardens. Some individual garden plots, farm acreage, and farm support structures in the study corridors may be negatively effected, depending on the alternative selected. The farmland conversion required by any of the alternatives proposed would not represent a serious net loss of farmland along the project corridor or for the region as a whole, due to the large regional availability of arable land. However, efforts should be made in subsequent project phases to further define the effects of alternatives on individual agricultural complexes and reduce land conversion impacts by design modifications wherever practical. Coordination with the Natural Resources Conservation Service and development of Farmland Protection Policy Act (FPPA) farmland impact assessment evaluations will also be required in future project phases. The study corridors as currently configured, would not be expected to have any serious impacts on businesses or institutions as they are not present or are likely to be avoided.

Air Quality Considerations:

The U.S. Environmental Protection Agency (EPA) has established criteria for ambient levels of common transportation related air pollutants including ozone, carbon monoxide (CO), oxides of nitrogen (Nox) and total suspended particulates (TSP). The Kentucky Natural Resources and Environmental Protection Cabinet (KNREPC) has adopted these same air quality standards. These National Ambient Air Quality Standards (NAAQS) have been promulgated to represent the maximum allowable air pollutant levels and characterize conditions that pose no significant threat to human health and welfare.

Pursuant to the 1990 Clean Air Act Amendments, the project area has been designated an attainment area for all transportation-related pollutants (CO, HC, NOx, and TSP). This project is in an area that does not require transportation control measures. Therefore, the Amended Final Conformity Guidelines issued by the U.S. Environmental Protection Agency and the U.S. Department of Transportation will not apply for this project. With respect to the latest conforming State Transportation Improvement Program (STIP), the proposed project is not included in the latest issue of the STIP (Fiscal Years 2003-2008). The project is also not included in the current Six Year State Highway Plan. The project would need to be added to the STIP and to the Six Year Plan prior to advancement beyond the project planning phase. Mobile source air pollution is not a problem in the project area and the existing ambient air environment is well within National Ambient Air Quality Standards (NAAQS). Therefore, no problems would be anticipated in adding this project to the STIP.

Based on project corridor "windshield" surveys and inspections, no air quality sensitive land uses or susceptible sites were observed. With the location of the corridor being in an attainment area and traffic volumes predicted for the design year (2025) expected to be low (<20,000ADT), it is

anticipated that concentrations of carbon monoxide will remain below both the one-hour standard (35ppm) and the eight-hour standard (9ppm) regardless of the alternative alignment used. In accordance with KYTC/DEA Position Paper 006-2000, a microscale analysis following the guidance specified in *Air Quality Guidance for Project Level Analysis*, revised October 2000, will be required for this project. Project level emission inventories will need to be developed because the project does not originate from a conforming STIP.

Finally, construction period air quality impacts will need to be evaluated to expose the potential short-term effects of site preparation, demolition, open burning, materials storage and construction actions to determine if any appropriate mitigation commitments are to be incorporated into the project plans.

Highway Noise Considerations:

Highway noise levels, at this time, are not expected to be a major concern on this project. Most receptors are isolated single structures, and several of the potential receptors (residences) may be acquired for project construction. With no concentrations of impacted noise receptors throughout the project area, noise mitigation by sound barriers would not be practical. Due to the isolated nature of noise receptors, openings required for property access, and low cost-benefit considerations, as outlined within the context of KYTC's Noise Abatement Policy, noise abatement by structural barrier would not be likely. Given the rural nature of the project area, the vehicle mix, low traffic volumes, uncontrolled access, and the general absence of significant concentrations of sensitive receptors, highway noise impacts are not expected to influence project feasibility or location decisions. However, a project specific noise impact analysis will be required in upcoming project phases to verify noise impact conditions using the procedure for conducting field monitoring based on FHWA requirements and the KYTC Noise Abatement Policy.

Water Quality and Aquatic Ecosystem Factors:

The need for any channel changes will be determined by which alternate is chosen and its location relative to Skinframe Creek, Crab Creek, Brewster Creek and Spring Creek. The extent of construction activities involving aquatic resources will be revealed as the planning and design process progresses. The placement of bridge or culvert crossings could have adverse impacts. Not only will the natural riparian vegetation be lost where bridges are constructed, but also the increased sedimentation from accelerated erosion during construction could have adverse affects to the aquatic life. Prevention of excess sedimentation through the application of BMP's during daily construction activities will minimize water quality impacts.

KDOW recommends that because the project lies in a well-developed karst region where few detailed investigations have been conducted and due to the sensitivity of karst groundwater in project areas, best management practices (BMP's) should be employed and stormwater runoff from disturbed areas should be properly managed. KDOW also recommends that because this project will affect such a large uninvestigated karst recharge area, that all springs and sinking streams be systematically inventoried and monitored prior to and during any major highway

construction. Groundwater tracer studies should be conducted in order to understand the groundwater drainage systems that the construction activities will affect. Exceptionally sensitive sinking streams and karst windows should be protected from direct highway runoff with retention/infiltration basins.

KDOW also noted that the location and discharge data for springs is minimal for the proposed project corridor. One of the largest known springs is Mill Bluff Spring just one mile Southwest of Fredonia. It is labeled as "The Bluff" on the Fredonia topographic quadrangles. It has a low flow of 2.1 ft³/s, and probably drains the sinking stream to the east. It may also drain Sinking Fork of Livingston Creek to the Northeast. Proposed alternates 1A, 2, 3, and 4 lie between the spring and the sinking stream to the east.

Wild and Scenic Rivers and Monitored Habitats:

According to the Kentucky Division Of Water (KDOW), there are no wild or scenic rivers or Outstanding Water Resources within the project area. There are no exemplary natural communities, natural areas, recreational areas or wildlife and waterfowl refuges within the study corridors. Also, there are no outdoor recreational land and water areas or facilities established from grants-in-aid from the Land and Water Conservation Fund Act (LWCF).

Wetlands:

The National Wetlands Inventory (NWI) maps for the Grand Rivers, Fredonia and Eddyville Quadrangles were reviewed to determine the presence of wetlands within the study corridor and are indicated on Exhibit 3, Sheets 1 through 4.

Wetland impacts for this project could be more than the area threshold determined by the United States Army Corps of Engineers (USACE). If mitigation is necessary, coordination with the USACE will be required. The USACE may require a Nationwide Permit #14 under Section 404 of the Clean Water Act, which requires notifying the USACE and mitigation for any non-tidal waters impacts of 0.1 acres. Impacts greater than 0.1 acre will require an Individual Permit.

A 401 Water Quality Certification permit may be required from the Kentucky Division of Water (KDOW). KDOW recommends field delineation of wetlands prior to final site selection to avoid impact to wetland areas. If wetlands cannot be avoided, any wetland losses must be mitigated. Section 401 of the Clean Water Act does not require mitigation for the loss of ponds. Ponds serve as wildlife habitat as well as surface water retention and replacement should be considered for any losses. Field surveys will be necessary to determine if these ponds exist, and if they have associated wetland edges.

NWI maps are not always accurate and may not indicate all of the wetlands existing in the area. Field surveys will determine if these wetlands as well as others exist in the project area. For possible wetlands impacted by each alternate see the Table below.

Table 3. Possible Wetlands located within the US 641 Project Corridor Study Area.						
	Wetland Types					
Alternates	Forested	Emergent	Riverine	Pond		
Alternate 1	6	6		30		
Alternate 1A	14	12		60		
Alternate 2	10	21		61		
Alternate 2A	2	21		44		
Alternate 3	14	21		69		
Alternat3A	3	21	2	60		
Alternate 4	11	21		40		
Alternate 4A	2	20		30		

Floodplains:

Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Agency (FEMA), indicate that none of the alternates for the US 641 Corridor Study in Caldwell County encounter any floodplain areas.

According to the Federal Emergency Management Agency (FEMA) Lyon County does not have a Flood Insurance Rate Map.

Flora and Fauna:

The land use within the US 641 Corridor Study area is predominately agricultural, with scattered residential, commercial, open and forested areas. The forested areas consist of Western Mesophytic Forest, which is dominated by deciduous species with some coniferous species throughout. The forest communities show a pronounced influence from the underlying rock formations, which cause them to form a mosaic of vegetation types including oak-hickory, mixed mesophytic and forested swamp. Also in the Mississippian Plateau section some areas were originally tall prairie grasses in open country. This region has extensive karst features such as sinkholes, sinking creeks, springs and caves.

There are a few expanses of forest areas in or near the project corridors that contain both mature and sapling trees with a dense understory in the form of shrub and herbaceous vegetation. These forested habitats support a complex community of wildlife species. Much of the plant and animal life will be common species adapted to the altered landscape. The vegetation would include tree species of Eastern red cedar (*Juniperus virginiana*), yellow-poplar (*Liriodendron tulipifera*), maples (*Aceraceae*), oaks (*Fagaceae*), hickories (Juglandaceae) and many other herbaceous species including grasses (Poeaceae) and sedges (Cyperaceae). Most of the existing forest occurs in a mosaic, broken by agriculture, roads, power lines, residential areas, and other forms of development.

This mixture of forested and open field habitats would attract mammals, such as white-tailed deer (*Odocoileus virginianus*), skunks (*Mustelidae*), cottontail rabbit (*Sylvilagus floridanus*), red fox (*Vulpes vulpes*), gray squirrel (*Sciurus carolinensis*), fox squirrel (*Sciurus niger*), woodchuck (*Marmota monax*), mink (*Mustela vison*) and raccoon (*Procyon lotor*). The diversity of habitats in this forest type may make this a prime stopover point for migrating Neotropical songbirds and waterfowl. Forest habitats in the project area could support some amphibian species undergoing statewide population decline including the barking treefrog (*Hyla gratiosa*) and bird-voiced treefrog (*Hyla avivoca*). There are also several reptile species that can occur in the project area, such as the eastern box turtle (*Terrapene Carolina*), midland water snake (*Nerodia sipedon pleuralis*), red-eared slider (*Trachemys scripta elegans*), and river cooter (*Pseudemys concinna*). Fallen trees, rocky areas and cliff lines adjacent to crops and pasture land would encourage numerous small mammals, such as squirrels and chipmunks (*Sciuridae*), mice and rats (*Muridae* and *Cricetidae*), as well as songbirds (*Passeriformes*), waterfowl (*Anseriformes*), and raptors (*Falconiformes*). Subterranean habitats will support species of shrew (*Soricidae*) and moles (*Talpidae*).

The corridor study areas also provide some intermittent and perennial streams that are capable of supporting fish and aquatic macroinvertebrate communities. The corridor study areas have habitat types including agricultural fields, pastures, wooded areas, and those closely related to settlements. Places where different habitat types meet, like fencerows and grassy road right-of-ways, are common in the project area, and would encourage species that utilize this edge habitat. Standing snags are an important habitat type and serve as nest sites for birds and waterfowl, dens for mammals, and possibly, hibernacula for bats.

Construction of the proposed US 641 will initially eliminate all flora and fauna in the project's path. Fragmentation of forest tracts can result in a decrease in wildlife populations that depend on forested habitat. Forests conduct numerous natural functions, such as filtering water, absorbing carbon and releasing oxygen, moderating climates, stabilizing slopes, providing wildlife habitat, and supporting biodiversity. Mature forested areas should be avoided since they contain the greatest amount of biodiversity and biomass. Abandoned fields also contain large amounts of diversity due to the transitional nature of these habitats.

The predominant wildlife species that would be expected in the study corridors are species capable of co-existing with humans. Many wildlife habitats have been modified or destroyed as a result of the farming and development activities in the region. There are no areas within the corridors that are pristine or considered critical habitats for threatened or endangered species. It is highly unlikely the project would have sensitive species. Additional fieldwork in subsequent project phases will be necessary to identify the wildlife species present in the corridor, determine if they are threatened or endangered, and assess and quantify the quality of the habitats that exist.

The Kentucky Division of Forestry lists one big tree in Caldwell County, a Carolina Buckthorn (*Rhamnus caroliniana*). It is located approximately 1.75 miles southeast of the southern most terminuses of Alternatives 1 and 1A.

Threatened and Endangered Species

According to U.S. Fish and Wildlife Service (USFWS) records, summer roost habitat and/or winter hibernacula for the federally endangered Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*) may exist within the proposed project area. The USFWS believes that: (1) forested areas in the vicinity of and on the project area may provide potentially suitable summer roosting and foraging habitat for the Indiana bat and potentially suitable foraging habitat for the gray bat and (2) caves, rockshelters, and abandoned underground mines in the vicinity of and on the project area may provide potentially suitable winter hibernacula habitat for the Indiana bat and/or potentially suitable summer roosting and winter hibernacula habitat for the gray bat

The Kentucky Department of Fish and Wildlife Resources (KDFWR) information System indicates that four (4) federally threatened and endangered species are known to occur in the Fredonia and Eddyville 7.5 minute USGS quadrangle. KDFWR Information System indicates that the Indiana bat and gray bat are known to occur in the Fredonia 7.5 minute USGS quadrangle and the Bald Eagle and pink mucket are known to occur in the Eddyville quadrangle. KDFWR recommends that in quadrangles in which gray bats are known to occur, any cave entrances that exit within the project area should be surveyed for potential use by gray bats. KDFWR states that because gray bats are cave residents year-round and maternity colonies are generally found in close proximity to rivers, streams and lakes, any caves within the project area could offer potentially valuable habitat to resident gray bats. KDFWR recommends that in quadrangles in which Indiana bats are known to occur, any wooded areas that may be impacted by the proposed project should be examined for potential Indiana bat habitat. Indiana bats are known to form maternity colonies and roost under the bark of trees in both riparian and upland areas. Therefore, any disturbances of trees with exfoliating bark, dead limbs or cavities should be avoided when bat activity may occur.

The Kentucky State Nature Preserves Commission (KSNPC), determined that fifty-five (55) occurrences of plants or animals and no occurrences of monitored exemplary natural communities are reported located within five miles of the project area. Refer to the Table below for the KSNPC species list.

Cultural Historic Resources Evaluation:

1. Historic Sites and Districts:

Historic site data were acquired from the Kentucky Heritage Council Historic Resource Inventory Records. Research and archival documentation was conducted at the Kentucky Historical Society and at the Kentucky Department for Library and Archives. These data were supplemented by a windshield survey of each of the 2000 foot-wide study corridors. Based on initial research, the following historic context for the project area was developed.

Historically settled during the latter part of the 18th century, the project area falls within an area established as Caldwell County in 1809 after it was segregated from Livingston County. At that time Caldwell was one of two western counties claiming lands within federally recognized Chickasaw tribal property. The Jackson Purchase in 1818 established Caldwell County and the county seat of Princeton as a center for settlement of the newly created region [Kleber 1992:151].

The community of Fredonia is located approximately 10 miles north of new Eddyville at the juncture of US 641, and KY 70 and 91. Established in 1836 Fredonia was bypassed by the Ohio Valley Railroad in 1887 when the line passed through Caldwell County. The station stop on the line just ½ mile away was known as Kelsey and for many years both communities had post offices. Finally in 1906 the US Postal Service closed the Fredonia Post Office and applied that name to Kelsey's location [Rennick 1984:232].

Lyon County was taken from the southwest section of Caldwell in 1854 with the community of Eddyville located on the Cumberland River established as the seat of local government. Large deposits of iron ore and other minerals and Eddyville's port on the Cumberland River dictated that the early 19th century growth of Lyon County was based on production of iron and later steel processing.

Both Lyon and Caldwell Counties also have economies based heavily on agriculture and this area was part of Kentucky's dark fired tobacco region. Caldwell and Lyon County took advantage of their location and shipped large quantities of West Kentucky tobacco to New Orleans through their Cumberland River ports at Eddyville and also Dycusburg. In 1860 Caldwell County was 6th in the state in tobacco production.

Locally known as the "Black Patch", during the latter part of the 19th and early part of the 20th century the regional production of this dark leafed tobacco brought great wealth to this area. The Fredonia Valley was an area settled by transplanted farmers from Virginia and North Carolina. Their dark tobacco grew well in the rich west Kentucky soil and by 1900 the Black Patch area had the highest tobacco production in the world [Jarratt 1998]. The later rise in the popularity of the lighter Burley tobacco for cigarette production and the growth of the railroad threatened this monopoly.

In an attempt to exert some control over the production and raise the prices the Dark Tobacco District Planters Protective Association of Kentucky and Tennessee was formed in 1904.

While this association was non-violent, pressures on local farmers led to the establishment of a radical arm of the group known as the "Night Riders". Led by Dr. David Moss, a local physician with military training, the Night Riders threatened any non-association planter, processor or manufacturer. For two years the Night Riders and their violent tactics figured heavily in the successes of the "Association". However, as the vigilantism grew more violent, support from the local populace dwindled and the burning of major tobacco warehouses in Fredonia and Princeton heralded the beginning of the end of the Black Patch War [Jaratt: 1998].

During the first quarter of the 20th century the "Association" disbanded and reorganized several times as tobacco prices fluctuated. The agricultural programs established in the 1930's under Franklin Roosevelt's New Deal ended this era and succeeded in stabilizing the tobacco market

Beginning in the 1930's Congress began investigating the potential for a deeper channel on the Cumberland that would guarantee a shipping channel between Nashville and the Ohio and Mississippi Rivers. In 1956 the money was finally appropriated and The Army Corps of Engineers began negotiations with the communities of Eddyville and Kuttawa for either the purchase or relocation of the communities [Powell 1996:III-2]. There were several options available including incorporating the two towns into one, or the relocation of the entire town of Eddyville. Although smaller by comparison Kuttawa was sited higher above the river than Eddyville, and did not suffer that same problems with flooding along the Cumberland. After several years of indecision, Eddyville accepted an offer of free land from an attorney who owned a large tract near the rural community of Fairview four miles to the north. The economy of both counties is now based heavily on tourism [Powell 1996: III-4].

The Kentucky Heritage Council files listed records for eight properties identified within the study corridors. A field review, conducted in May 2004, revealed that two of these sites were no longer extant. Another of these eight sites was found to be in ruinous condition and could not be evaluated under National Register of Historic Places Criteria as a standing structure. This site, the William J. Stone House, is located between the New Bethel Church and US 641 and is the ruin of one of the most historically important properties in Lyon County. The house was locally known as Stonehurst and constructed during the first part of the 19th century by Caleb Stone, patriarch of the family who emigrated from South Carolina. This property was later owned by his grandson, William J. Stone.

William J. Stone was born in this house in 1841 and he served in the Confederate Army and participated in the Battles of Shiloh, Chickamauga, and Missionary Ridge. He served with General John Hunt Morgan and was promoted to Captain. He was wounded and lost his leg in a skirmish near Cynthiana, Kentucky. After the war he was elected to the Kentucky State Legislature in 1867. He served his district for three separate terms and served as Speaker of the House for two of those terms. He served as chairman on state prisons and brought about many penal reforms. In 1884 he used his influence to establish a penitentiary at Eddyville. That same year he was elected a member of the US Congress from the First Kentucky District where he served five terms [Haman 1961:43]. In 1899 he made a bid for the Democratic nomination for Governor of Kentucky.

During the first part of the 20th century the Kentucky Confederate Pensions Department was established and William J. Stone was appointed Commissioner in Charge. In 1913 the constitutionality of the pension law was challenged and William J. Stone argued the case before the Kentucky Court of Appeals. A small booklet on file at the Kentucky Heritage Council entitled "Capt. W. J. Stone Examiner of Confederate Pensions before the Court of Appeals was published in Frankfort in 1919. He was the first person not a lawyer or party to a suit ever permitted to address the court on any question. This great honor was conferred on Captain Stone by a unanimous vote of the seven Judges of the Court and Consented to by the Attorney General and his assistants, who were opposing counsel in the case." [Kentucky Heritage Council Survey files].

Because of the ruinous condition of this structure, it cannot be evaluated under National Register Criterion A, B, or C. However given the significance of the owner of this property it should be evaluated under Criterion D for its historic archaeological potential.

In addition to the five previously listed historic standing structures (KHC Records) which were confirmed during field review, an additional six historic properties within the study corridors were identified. Therefore, a total of eleven potentially significant historic sites were identified. Preliminary evaluations of these eleven sites were conducted. These sites are described as follows (see Exhibit 4):

Site 1 Ca-34/Bungalow Intersection of Ky 91 and Ky 70 southeast of Fredonia in Caldwell County Alternatives 1, 2A, 3A, & 4A

Description: This one story, frame, asymmetrical bungalow sits in the Y formed by the intersection of two main roads ³/₄ mile east of Fredonia. The house faces south and the lot contains no domestic outbuildings. Constructed circa 1920, the dwelling is a massed plan with a hipped roof on a poured concrete foundation. Separate front and side entrances are located on the south and west elevations. The main entrance on the south façade is given emphasis with double, gable-roofed porches supported by paired wood piers. The entire structure is sheathed in cedar shingles. Window openings appear to be original and are composed of multi-light, double hung, sashes with simple wood surrounds.

There are also associated agricultural buildings including several large dairy barns located east of the main house and these would be included within the historic boundaries.

This Craftsman style bungalow is an unusually well detailed example of this vernacular type. It would meet National Register Criterion C as a type of construction displaying a high degree of historic integrity.

Site 2 Ca-53 Not Extant

Site 3

Tenant house

North side of old Fredonia Princeton Road, north of Fredonia in Caldwell County Alternatives 1A, 2, 3, & 4

Description: This structure is a one story, frame tenant house that has been covered in stucco. It has a central chimney and a small shed type porch shelters the entrance. The dwelling sits close to the roadway and the site retains no outbuildings or agricultural structures.

This dwelling was probably originally a feature of a larger agricultural complex that was subdivided. As such it is a remnant and is not significant as an individual property. It would

not be eligible for the National Register under Criterion A, B, or C.

Fredonia Valley Quarry Road

The following two dwellings are located on property presently owned by the Fredonia Valley Quarry a large industry located east of US 641. During the 1992 survey of Caldwell County four historic sites (Ca-45, 47, 48, & 49) were recorded on this road but only two remain, Ca-47 and 49.

Site 4 Ca-47/Orlando Ross Baker House Fredonia Valley Quarry Road, east of US 641 in Caldwell County Alternatives 1, 2A, 3A, & 4A

Description: This property is located on the north side of the Fredonia Valley Quarry Road about .03 miles east of US 641. It is a one story, frame, three bay, single-pile, dwelling on a brick pier foundation. A later kitchen ell with an enclosed porch is located behind the main block. An interior brick chimney is centrally located along the ridge of the gable roof. The window openings are 1/1, double hung sash type and a one-story porch supported by turned wood posts shelters the façade.

The KHRI form documents the interior plan as similar to a saddlebag, or hall/parlor plan. This was documented as the Orlando Ross Baker house built by him around 1910. The Baker family owned quite a large tract of 400 acres of property in the Fredonia Valley in the middle of the 19th century and Baker's station that was established when the Illinois-Central rail line passed through the area during the latter part of the 19th century, was named for them.

In recent years the quarry pit has expanded and is now directly behind this dwelling which is uninhabited and rapidly falling into disrepair.

Although Site 4 may have originally been considered eligible for the National Register under Criterion A for association with a prominent local family, the loss of historic integrity of setting, feeling, and association would preclude the eligibility. Therefore, Ca-47 does not meet Criterion A, B, or C.

Site 5

Ca-49/Silas Dodd House Fredonia Valley Quarry Road, east of US 641 in Caldwell County

Alternatives 1, 2A, 3A, & 4A

Description: This two-story saddlebag dwelling sits on the south side of the Fredonia Valley Quarry Road just opposite Ca-47. The 1992 KHRI form documented this structure as constructed circa 1918 and later owned by Silas Dodd. The building has a gable roof, sits on a fieldstone foundation and is sheathed in asphalt siding. A kitchen ell with a shed addition were added in the 1940s. A one-story porch with exposed rafter tails and square, wood support posts shelters the main entrance.

Used in recent years as an office and storage facility for the quarry the structure is in abandoned, poor condition. With the loss of much of the historic integrity of setting, design, materials, workmanship and feeling this structure does not meet National Register Criterion A, B, or C.

Site 6 Ca-48 Not Extant

Site 7

Ca-40/William Clayborne Rice House Gravel lane east of US 641, one mile south of Caldwell County line in Lyon County Alternatives 2A, 3A, & 4A

Description: Although this house is physically located in Lyon County due to its historic connections to an important Caldwell County family, it was recorded as part of the Caldwell County survey. This dwelling belonged to William Clayborne Rice born in Todd County, Kentucky in 1843. He served in the Confederate Army during the Civil War and after he returned to West Kentucky he amassed over 1400 acres of land in Lyon and Caldwell Counties. In later years he was owner and partner in W.C. Rice and Co., Tobacco Stemmery Company one of the largest in the region with stemmeries in Fredonia, Kelsey, Butler's Farm, and Craneville. It was reported that a stemmerie was part of this farm (Ca-40). William Clayborne also owned other businesses including dealing in groceries, salt, lime, and cement as well as tobacco the cigars. William Clayborne Rice

died in 1902. Four years later his tobacco factory and stemmery in Fredonia was burned by the "Night Riders" during the "Black Patch War".

This property contains the oldest dwelling within the project area. The W.C. Rice house is a two story, five bay, brick I-house that dates to the first half of the 19th century. The KHRI form estimated the construction of the main block at 1835 but this could not be confirmed. The structure displays Greek Revival details in the main entrance element consisting of large transom and sidelights with pilasters. With the exception of the lintel over the opening, the windows have been reconfigured with 1/1, double hung sashes. The original brick masonry, (noted on 1992 KHRI as common bond) has been covered in stucco. An oversized two story, gable roofed, portico with round wood columns is a 20th century addition. A late 19th century photo documents the

original portico as two stories, just one bay wide with gable roof supported by paired, square piers and a second level porch with baluster. A two-story frame addition with a hipped roof projects from the rear of the main block and a later, one story, frame ell is attached.

No other historic structures are part of this site and boundaries would include the main dwelling only.

The influence of the Rice Family on early Fredonia Valley history is well documented and this property is one of few extant resources associated with them. Although this structure is in poor condition it retains integrity of location, setting feeling and association and would be eligible under Criterion A for association with the Black Patch War and Criterion B for association with the Rice family in Caldwell County.

Site 8
John Clift House
325 Clift Road, north of Oak Grove Road, west of US 641 in Lyon County
Alternatives 2, 3, & 4

Description: According to the owner of this small, early 20th century, cottage it was built by John Clift in 1907 out of lumber that he cut and milled from this farm. It is a one story, five bay, double pile cottage with a poured concrete foundation and hipped roof. An oversized gable roofed porch shelters the main façade and is supported by paired wood piers with cross bracing at the top. The plan of the dwelling is unusual with a recessed entrance bay with three entrances. The main, central entrance has sidelights with paneled aprons beneath. In addition, two secondary entrances on adjacent, angled elevations flank the main one. The interior is intact with the original oak details.

This small parcel was originally part of a larger, older farm complex that originally belonged to the Dykes family. The original main house, located east of this dwelling closer to US 641 burned in the 1960s. The present owner's father purchased this 250-acre parcel in 1945. Other structures extant on the farm at that time included several outbuildings and barns and a second smaller dwelling.

The Clift house is a well-preserved early 20th century dwelling with an unusual floor plan. It retains a high degree of historic integrity and would be eligible for inclusion in the National Register under Criterion C. The boundary would include the historic setting for the house only.

Site 9/Ly-16
Caleb Stone House
West side of Oak Grove Road, one mile north of Ky 1943 in Lyon County
Alternative 3

Description: This two story, five bay, center passage, dwelling was constructed by Caleb Stone during the middle part of the 19th century. The center bay is reportedly log construction with the remaining sections wood frame. This may be confirmed as the fenestration on the first floor central bay is unevenly spaced. The second floor has only two window openings with original 6/6 lights in the northern opening. The main entrance displays sidelights in a simple surround. Exterior step shouldered, brick end chimneys flank the main block. A one story kitchen ell and enclosed shed addition are circa 1950 additions.

The Stone family was one of the earliest groups of settlers in the Fredonia Valley, the eldest Caleb Stone immigrating to this area from South Carolina in the early 1800s. This farm encompassing over 500 acres reportedly belonged to one of the grandsons of the original settler also named Caleb. Caleb Stone built this house sometime after his marriage in 1851 and in later years he achieved prominence specializing in premium short horn cattle and Poland China hogs. One of his short horn bulls was exhibited at the New Orleans World's Fair in 1885[KHRI: 1986].

The Caleb Stone House is potentially eligible for listing in the National Register under Criterion B for association with the Stone family prominent in early Lyon County history.

Site 10/dwelling West side of US 641, one mile north of Ky 1943 in Lyon County Alternatives 2A, 3A, 4, & 4A

Description: This dwelling is an early 20^{th} century, one story, five bay frame structure on a rough-cut, stone block foundation. A projecting roofline gable is centered on the façade and the structure is sheathed in sawn weatherboard. The entrance element contains segmented sidelights with paneled aprons. A one story, flat roofed portico on a cut stone foundation with a trio of square wood piers shelters the entrance. A step shouldered, brick chimney is located on the north gable end of the main block.

This structure is the main dwelling in a small farm complex containing various agricultural related outbuildings.

This early 20th century farming complex is potentially eligible for listing in the National Register under Criterion C. It has retained historic integrity of location, setting, design, materials, workmanship feeling and association. Potential boundaries would include the main dwelling as well as associated agricultural structures on the property.

Site 11/Ly-3/William J. Stone House South side of New Bethel Church Road, east of US 641 in Lyon County Ruinous Condition Alternatives 2, 2A, 3A, 4 & 4A

Described earlier: Should be evaluated as an historic archaeological resource

Site 12/tenant house End of long lane east of Ky 393, 2 miles north of Ky 93 in Lyon County Alternatives 3 & 3A

Description: This dwelling is a one story, frame tenant house that is in poor abandoned condition. The window and door openings are deteriorated or missing, leaving the interior open to the weather. Much of the weatherboard has been removed and vines and shrubbery enclose the yard area. A barn that appears to be from the same construction period as the house is the only other structure on the site.

The present property owner related that the structure was built in the 1930s.

This dwelling is abandoned and in extremely poor condition having lost much integrity of design, materials and workmanship. It is not potentially eligible for listing in the National Register under Criterion A, B, or C.

Site 13/saddlebag dwelling North side of Ky 819, one mile north of Ky 93 in Lyon County Alternatives 3 & 3A

Description: This one story frame saddlebag dwelling has a four bay façade with double entrance doors. The gable roof is sheathed in standing seam metal and two brick chimneys are located along the ridgeline of the roof. A shed-roofed porch shelters the main façade and a small addition is attached to the west elevation. The foundation material is unknown as it has been covered in new brick. Given the commonality of this type of dwelling it is not potentially eligible under Criterion A, B, or C.

Site 14/dwelling North side of Ky 93, 1.5 miles north of US 62 in Lyon County Alternatives 3 & 3A

Description:

This one and one half story, frame cottage, sits on a poured concrete foundation and has a dormered, steeply pitched gable roof with flared eaves. A gable roof, entry bay with flared eaves appears to be original to the structure. A one-story addition on the rear may be a later construction phase.

This minimal traditional cottage appears to date from the 1930 or 1940s. It has retained much historic integrity and is potentially eligible for listing under Criterion C. Boundaries would include the main house and the domestic space only.

A search to identify previously recorded sites at the State Historic Preservation Office, Kentucky Heritage Council, identified eight properties within the specified 2000 foot corridor of project alternatives (Sites 1, 2, 4, 5, 6, 7, 9, and 11). The Principal Investigator was unable to locate sites 2 and 6 and it was assumed that these resources are no longer extant. One site, Site 11, was determined to be in ruinous condition and could not be evaluated as a standing structure. During preliminary field review, six additional historic properties (that met the 50 year age criterion) within the 2000-foot APE for each corridor were identified.

Of the 11 historic sites that were located and documented within the project corridors, six (sites 1, 7, 8, 9, 10, & 14) appear to be potentially eligible for inclusion in the National Register of Historic Places (NRHP). Sites 1, 8, 10, and 14 appear to be potentially eligible under National Register Criterion C as dwellings that embody the distinctive characteristics of a type of construction. Given the existing documentation on these sites, potential National Register boundaries would likely be limited to an area containing the main dwelling and any other associated ancillary structures that contribute to the historic setting. Sites 7 & 9 are potentially eligible under Criterion B for their association with persons or families significant in Caldwell and Lyon County history. The National Register boundaries for these sites would likely be potentially larger and contain acreage associated with the farm. These findings are preliminary however, and final determinations of eligibility and fully researched historic boundaries cannot be completed until a report that meets the *Specifications for Conduction of Fieldwork And Preparing Cultural Resource Assessment Reports, ed.2.4* issued by the Kentucky Heritage Council (SHPO), is completed and Section 106 consultation initiated in subsequent project phases.

2. Archaeological Sites and Districts:

Archaeological site data for the study corridors were acquired from the Kentucky Office of State Archaeology. Additional research was conducted at the Kentucky Historical Society and at the Kentucky Department for Library and Archives.

The various routes of reconstructing US 461 in Caldwell and Lyon Counties do not intersect any archaeological sites currently listed in or considered eligible for listing in the National Register of Historic Places. However, one site, 15Ca50, (Mill Bluff Spring) a multicomponent site with occupations dating to the Paleoindian through the Woodland Periods has been reported to the Kentucky Office of State Archaeology. Given that this is a large spring in a karst region, it likely has intact archaeological deposits. As an important local natural resource, and potentially significant cultural resource, this area should be avoided, if at all possible.

Only one archaeological survey has been conducted in the project study area. This survey recorded an historic archaeological site, however, where the site was recorded was not within the limits of any project corridor. Three other surveys have been conducted near the southern terminus of the project. These surveys have located one to five sites each. Only one site was considered worthy of further archaeological investigations.

The project corridors appear to bisect a variety of ecological zones that may contain a variety of prehistoric archaeological sites representing, various activities including habitation, hunting, resource procurement and other prehistoric human activities. Of these probable sites, one third would likely need to be evaluated for National Register eligibility. Statistically, it would be expected that approximately ten percent of that number may be considered significant and potentially eligible for listing in the National Register. Historic archaeological sites probably located within the study corridors would be expected to include mineral extraction, iron production related facilities, 19th century pottery manufacturing, stores, and farmsteads. A Phase I archaeological reconnaissance survey will be required for this project in future phases when more specific information on project location and limits become known.

UST/Hazmat Considerations:

A government records search, in addition to preliminary screening/windshield survey of the project area, was performed to locate any current or formerly listed Underground Storage Tank (UST) sites as well as all mappable hazardous waste/hazardous material generator, disposal, and/or transport, sites (see Appendix EO-B). No National Priority List (NPL), i.e. Superfund, sites are listed as occurring in the project area.

Records and field research revealed five (5) UST or former UST sites of potential environmental concern within or near the project corridor. Of these sites, only one is currently active. It is the Lyon County School Bus Garage at 101 Jenkins Road in Eddyville. It was identified in the project area but it is not located adjacent to any study corridor. This site is regulated and currently in compliance with prevailing regulations. It should not pose any problems for the project since the USTs have spill prevention and release detection devices and is outside the study area. The other four (4) sites are former retail gas stations which have likely had their USTs removed but this could not be verified for all sites. These identified sites are located at the southern terminus area of study corridor Alternatives 2 and 2A near the junction of US 641 and US 62. These four sites should be investigated further if they would be impacted by the proposed project.

No other sites of concern, within the limits of the study corridors, were identified.

Residential heating requirements throughout the area are met through the use of electricity, propane, and heating oil. Several propane tanks and a few heating oil tanks were observed throughout the project corridor. The removal of propane and heating oil tanks should be accommodated routinely during the right-of-way acquisition phase.

An Environmental Site Assessment of the project area conducted in accordance with ASTM Practice E 1527 and KYTC Guidance, should be accomplished during future "NEPA" phases of the project to formally confirm UST/HZM findings. Based on currently available information, there are five (5) UST sites, four of which may need Phase II level investigations, that may require additional considerations in future project phases because they could potentially impact decisions on the designated corridor.

Summary of Environmental Overview Data:

Current land use trends in the proposed project area are not expected to experience rapid change as a result of project construction. Current trends are expected to continue and agricultural, residential, small business, and institutional uses would be expected to continue to dominate the study area. Land use effects would be expected to be similar regardless of project location.

Air quality would not be adversely affected and highway noise is not expected to influence project feasibility or alternative location designations.

The USFWS, KDFWR, and KSNPC were contacted for information on protected federal and state listed species that may be affected by the project. Information was also requested from KDFWR and KSNPC concerning critical habitat areas and monitored natural areas in the project corridor. The KDOW was contacted for water quality impacts and groundwater information. The Kentucky Geological Survey (KGS) provided the National Wetland Inventory maps for the project. The NWI mapping, along with data from the United States Department of Agricultural-Natural Resources Conservation Service (USDA-NRCS) was studied to locate possible wetlands. The USACE provided information on any necessary permits. The U. S. Geological Survey (USGS) provided the project's topographic quadrangles and the geologic quadrangles. FEMA provided the Flood Insurance Rate Maps (FIRM) for Caldwell and Lyon Counties, Kentucky.

Sedimentation and erosion in waterways can be accelerated in highway projects that expose soil, remove vegetation and riparian areas, and require channel changes. The use of heavy equipment to move earth and existing vegetation disrupts natural drainage patterns and exposes large areas of disturbed soil causing erosion. Excessive sedimentation can clog stream channels and contribute to increased flooding. It can also increase water temperatures and cause oxygen demands that can damage or destroy fish and invertebrate populations. Deposition of sediment on the channel bottom also degrades aquatic habitat by filling in substrate cavities, burying demersal eggs, and smothering bottom organisms.

In addition, increases in water turbidity results in further damage to aquatic systems. Increased particulate matter suspended in the water column may drive fish from the polluted area by irritating their gills, concealing forage, and/or destroying vegetation that may be

essential for spawning and cover habitat for particular species. Turbidity also degrades water quality by reducing light penetration, pH and oxygen levels, and the buffering capacity of the water. Degraded water quality may continue far downstream from the point where the erosion occurs.

If land is cleared of trees and vegetation, forage and cover for wildlife will be removed, and habitat fragmentation will be increased. Wildlife travel corridors can be disrupted and home range and migration movements will be affected. The removal of vegetation can result in erosion and loss of nutrients in the topsoil. An increase in non-point source pollution due to chemical runoff from the roadway may occur.

On each of the study corridors, aquatic and terrestrial ecosystems could experience adverse impacts from construction activities associated with stream channelization, culvert and bridge structures, and nonpoint source discharges. Best management practices (BMPs) and erosion and sediment control plans should be employed to prevent adverse impacts to sensitive resources. Mill Bluff Spring, located near the point where study corridor Alternative 1A intersects with study corridor Alternative 2, should be avoided due to its unique character as a natural resource as well as its potential as a significant archaeological site.

Any wetlands that must be filled or paved over will be lost, destroying wetland species, increasing sedimentation due to runoff, increasing floodwaters and impacting groundwater filtration. The loss of wetlands could result in a decrease in diversity within the impacted areas. Potential wetland areas exist within the project study area of all Alternatives. Additional investigations should be conducted to confirm the presence of jurisdictional wetlands and establish practicable avoidance measures as necessary.

A careful survey of the area will determine if there exist any suitable roost sites for bats, such as sandstone and limestone caves, rock houses, cliff lines, snags, and abandoned mines. Field surveys for sensitive species, including freshwater mussels and Bald Eagles, will determine if critical habitats will be impacted by the project. Preliminary "windshield" surveys revealed potential habitat for these endangered species along all study corridors.

Federal and state laws require the Kentucky Transportation Cabinet to obtain the appropriate permits and certifications prior to construction activities that involve the waters of the United States, such as rivers, lakes, streams, or wetlands. Permits that will be necessary if there are stream or jurisdictional wetland impacts are the USACE Nationwide Permit #14 under Section 404 of the Clean Water Act and a 401 Water Quality Certification from the Kentucky Natural Resources Environmental Protection Cabinet Division of Water (KNREPC-DOW). Impacts greater than those for a Nationwide Permit #14 will require an Individual Permit. Wetland encroachment with any placement of fill material will require cooperation with the KDOW and may require a 401 Permit. Under Section 404, a permit is needed to discharge dredged or fill material into any waters of the United States. A 401 certification is needed before conducting any activity that may result in a discharge of pollutant into the waters of the United States. These permits will be necessary prior to any activity that obstructs or alters any of the waters of the United States, including navigable water and wetlands. The potential for 404 and 401 permits is present on all study corridors. Additional evaluations of these issues, along with avoidance, minimization, and mitigation measures will be required in subsequent project phases.

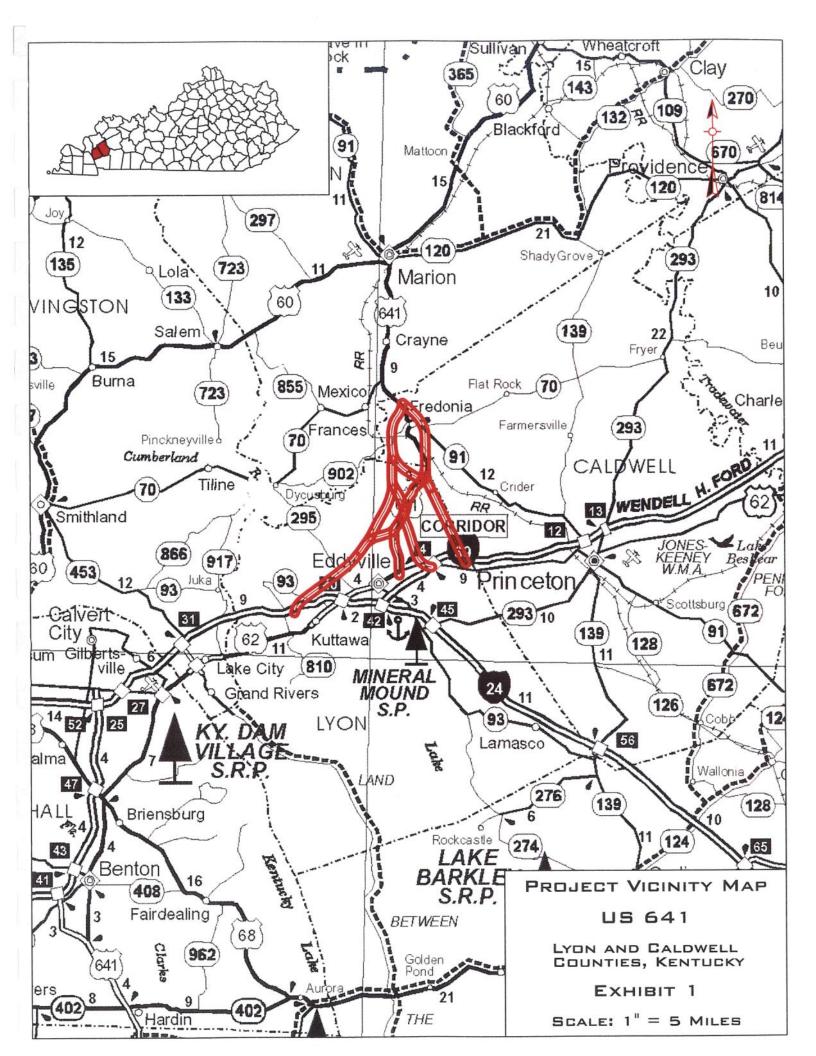
Chapter 151 of the Kentucky Revised Statutes requires prior approval from the KDOW, for the construction, improvement or reconstruction of any structure, deposition of material or other construction across or along any stream that could in any way obstruct flood flows. Floodplain development may also require a permit from the USACE and will require project specific confirmations in future project phases.

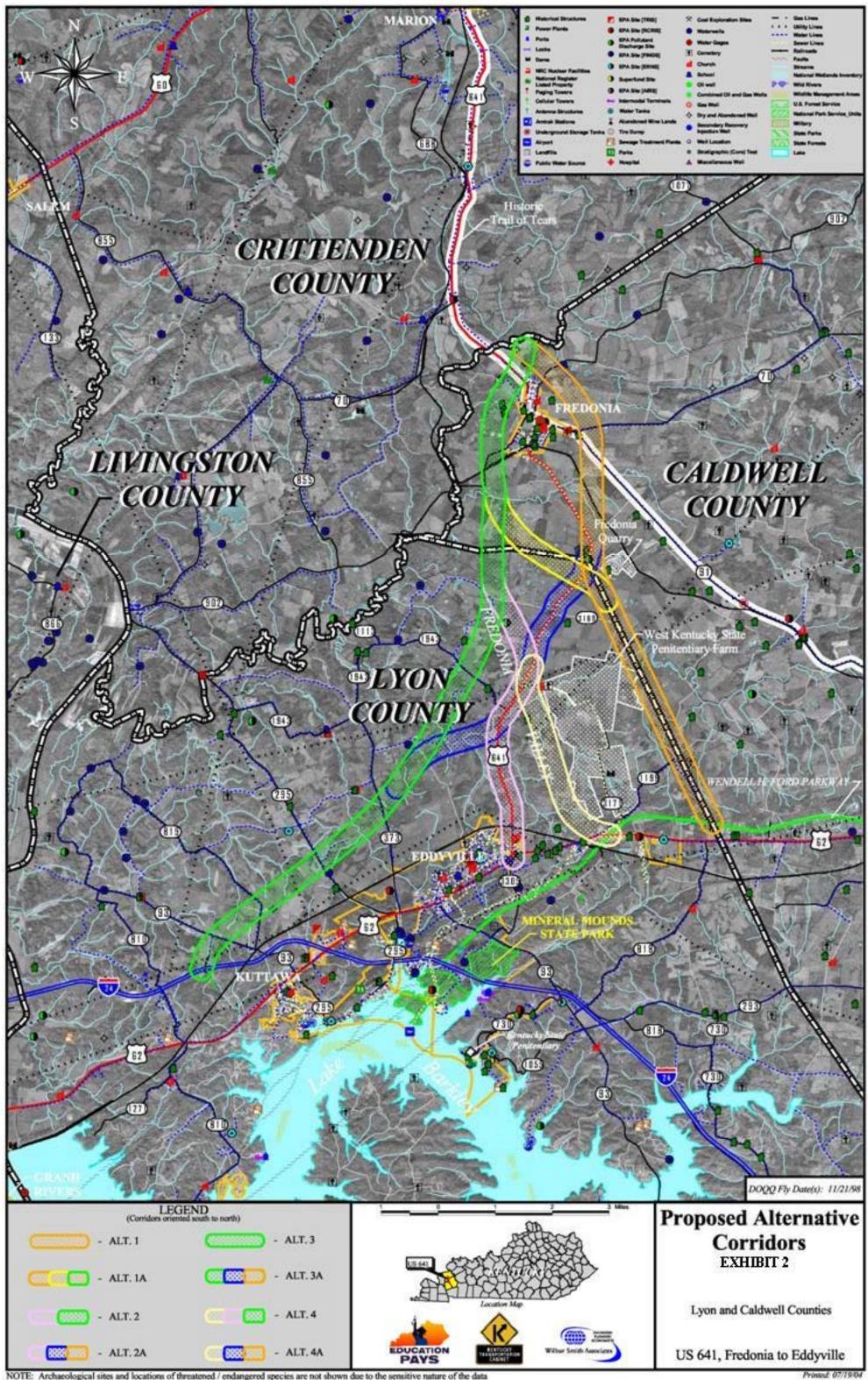
Preliminary examination of archival records and initial field review of study corridors revealed the presence of six sites which appear to be potentially significant as historic resources. Historic sites and historic site potential exists on all study corridors. These sites should be avoided if prudent and feasible to do so. Additional historic resource investigations will be necessary in subsequent project phases to establish historic site boundaries and fulfill regulatory review and coordination requirements.

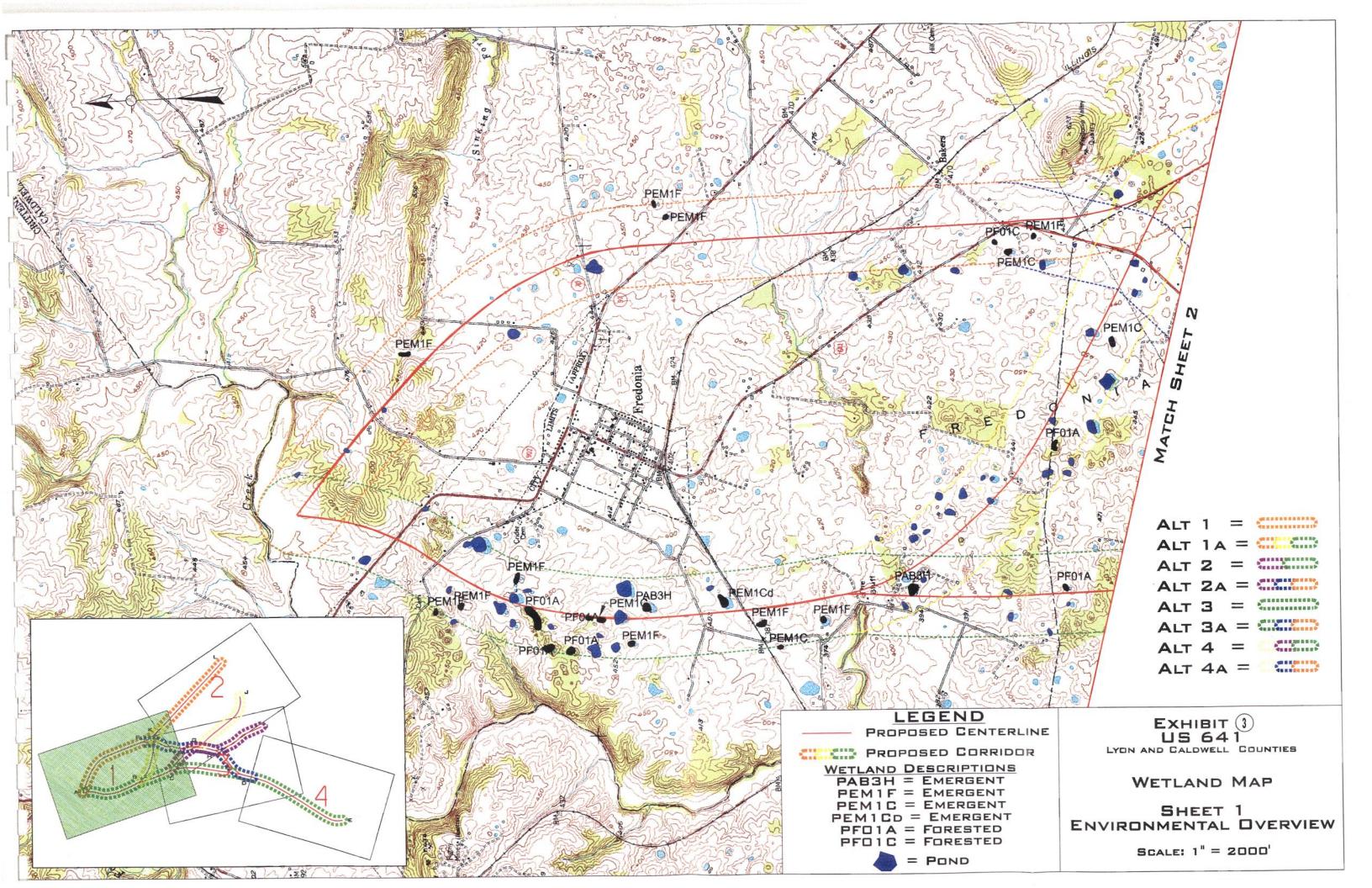
Four (4) former underground storage tank (UST) sites have been designated for additional investigation as sites of potential environmental concern. These identified sites are primarily located at the southern terminus area of study corridor Alternatives 2 and 2A. If any of these sites would be affected by the proposed project, they should be evaluated for petroleum and toxic substances contamination.

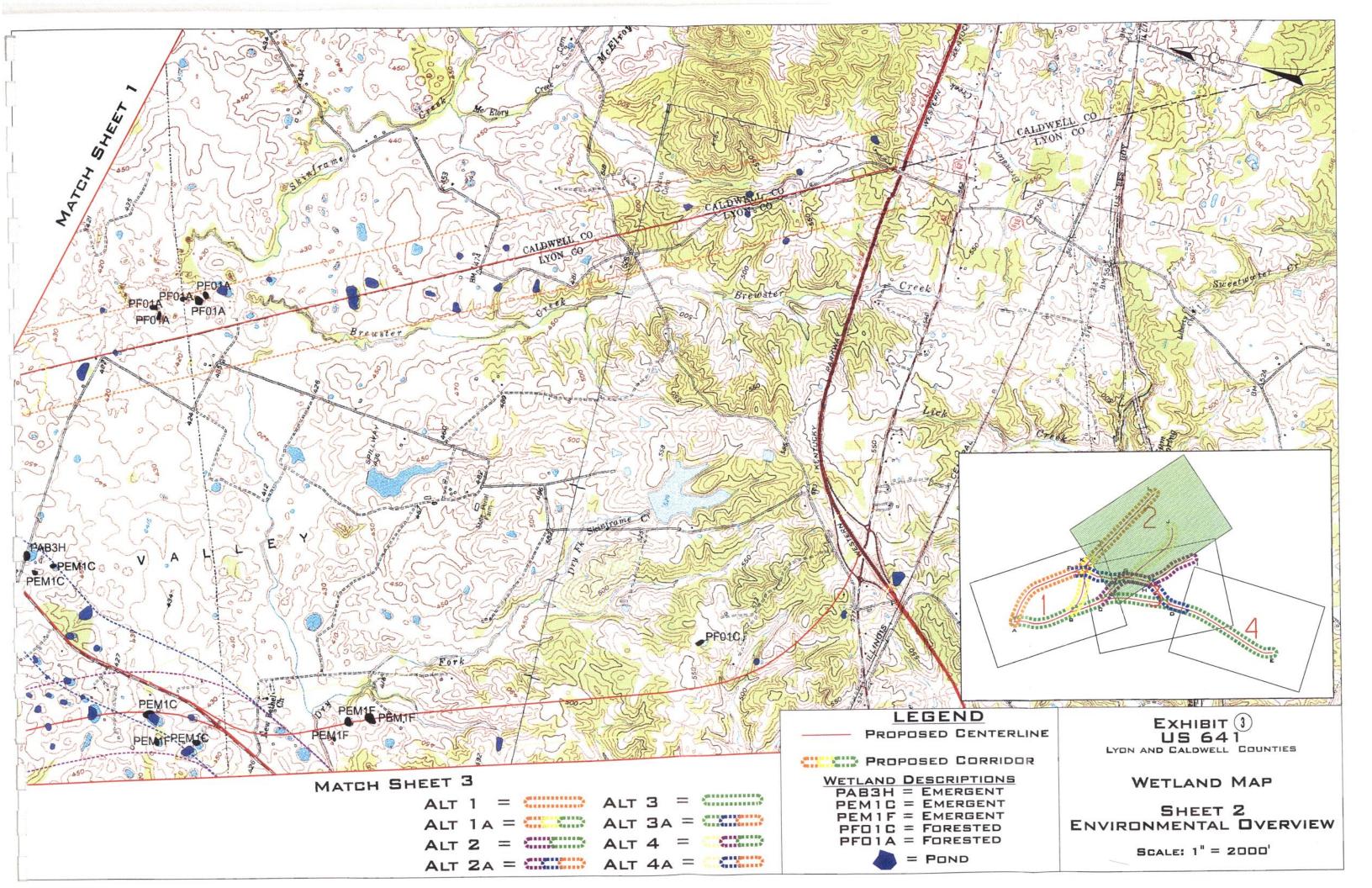
EXHIBITS

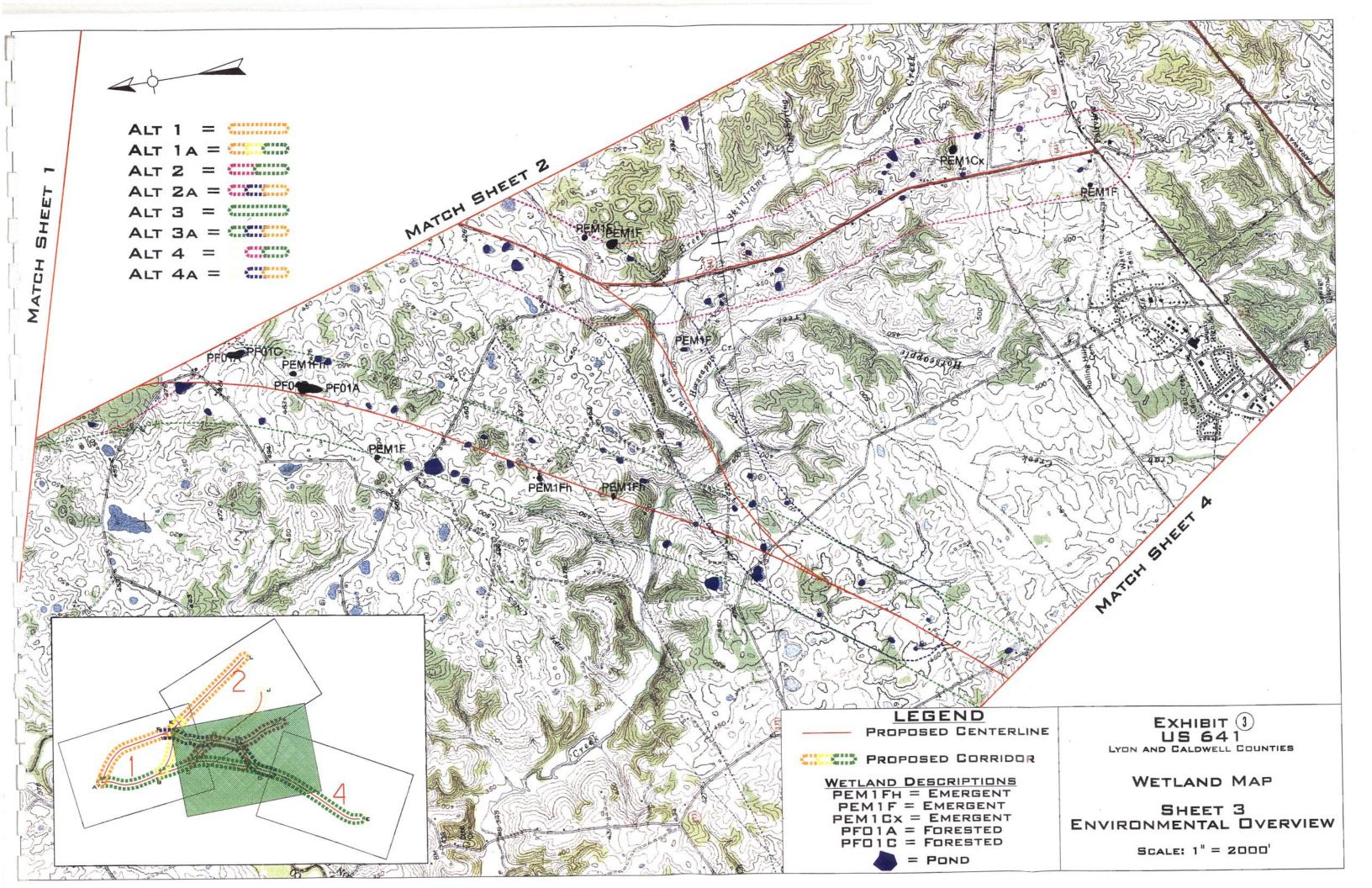
- 1. Project Vicinity Map
- 2. Study Corridors and Project Location Map
- 3. National Wetlands Inventory Sites Map (4 Sheets)
 - 4. Potential Historic Site Locations Map

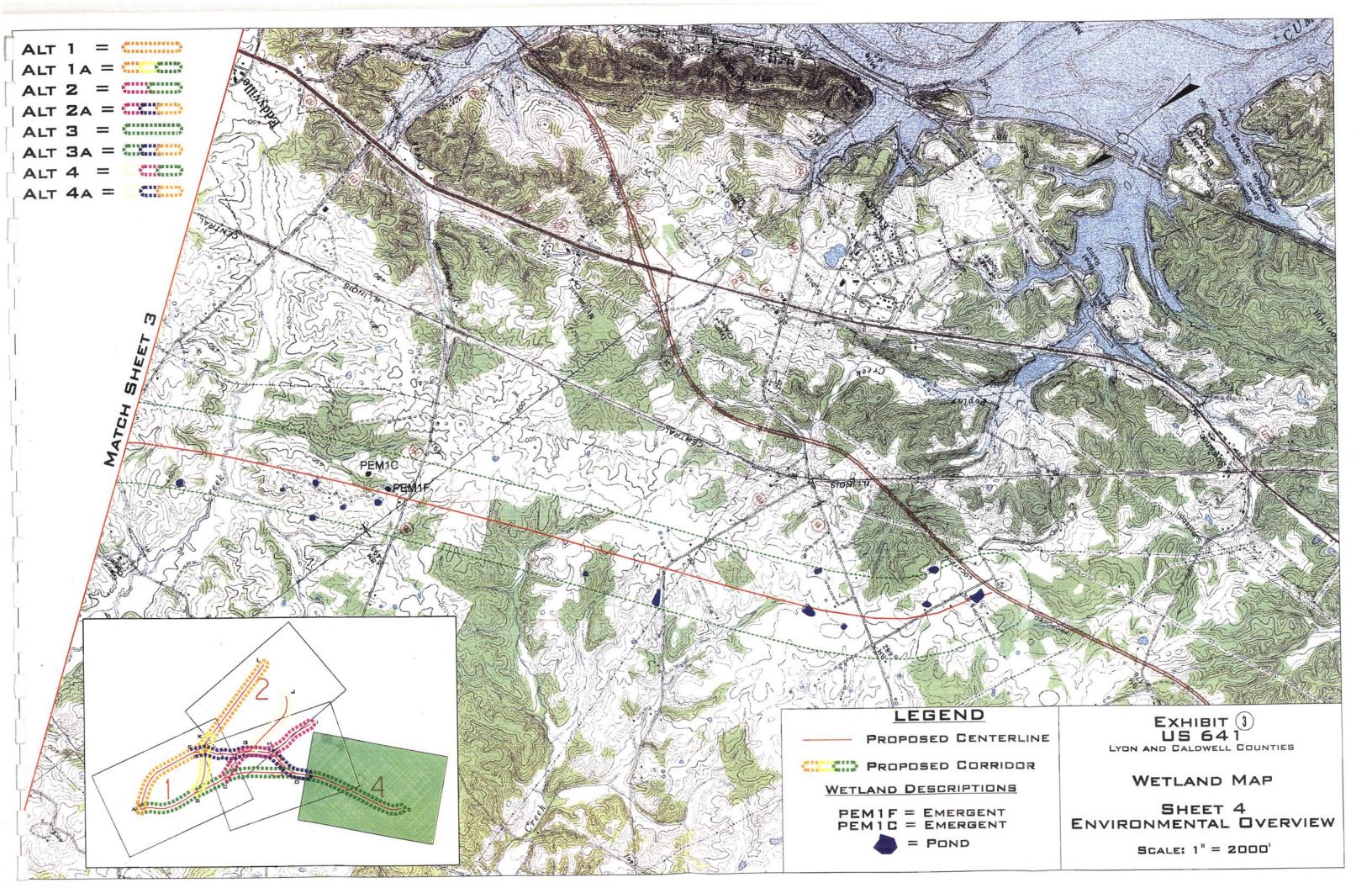


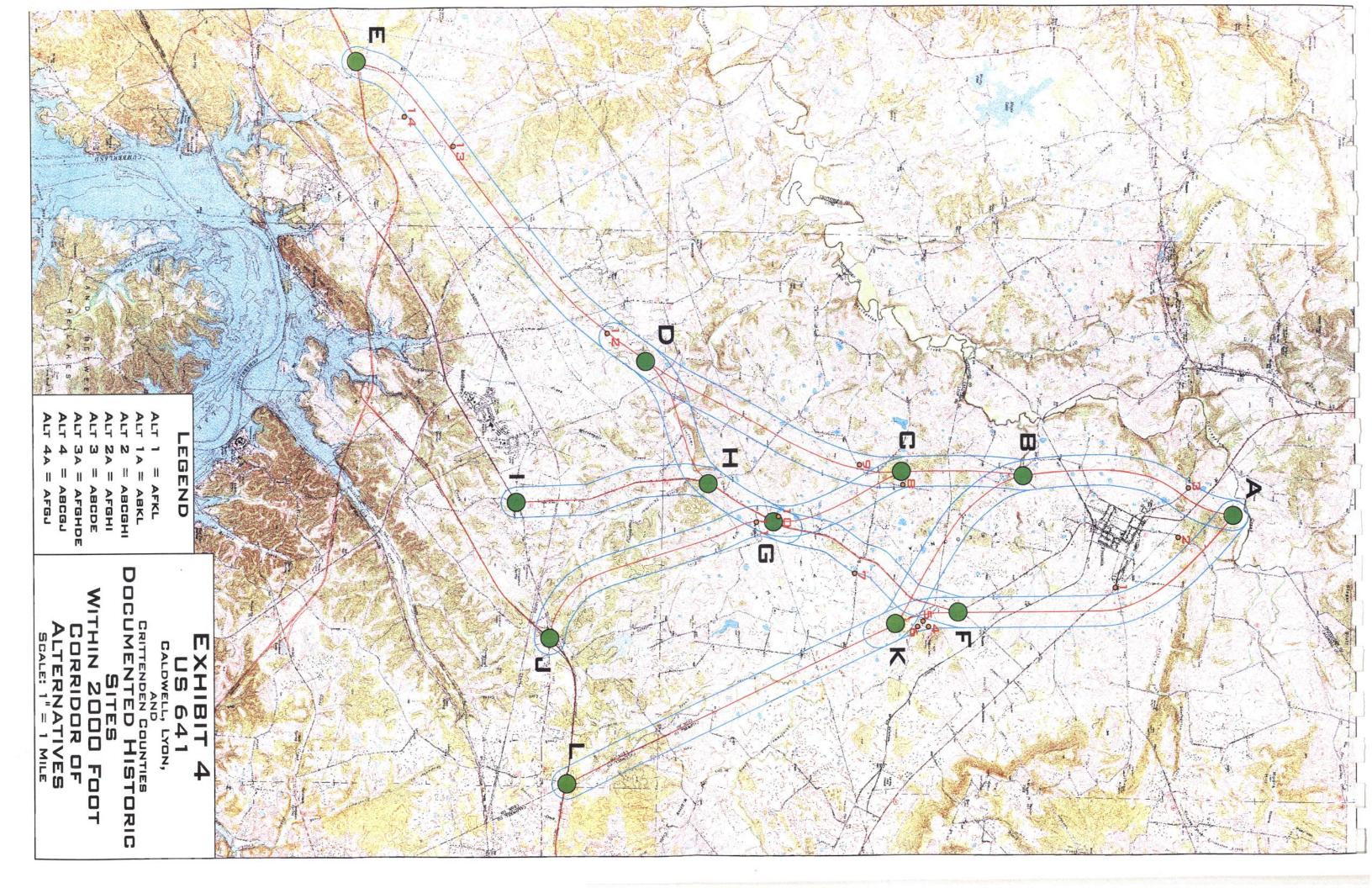












APPENDIX EO-A

EARLY COORDINATION RESPONSES AND MEETING MINUTES

A complete copy of the referenced letters appears in Appendix D:

- Department of the Army, Nashville District, Corps of Engineers—November 13, 2003
- United States Department of the Interior, Fish and Wildlife Service—November 25, 2003
- United States Department of Agriculture, Natural Resources Conservation Service—April 21, 2004
- Kentucky State Nature Preserves Commission—May 10, 2004
- Natural Resources and Environmental Protection Cabinet, Department for Natural Resources, Division of Forestry—April 13, 2004
- Environmental and Public Protection Cabinet, Department for Environmental Protection—April 13, 2004
- Cabinet for Workforce Development, Office of the Secretary—July 21, 2003
- Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division for Air Quality—November 6, 2003
- Commonwealth of Kentucky, Kentucky State Police—October 31, 2003
- Department of Corrections, Western Kentucky Correctional Complex—November 12, 2003
- Natural Resources and Environmental Protection Cabinet, Department for Surface Mining Reclamation and Enforcement—November 24, 2003
- Commonwealth of Kentucky, Department of Fish and Wildlife Resources— November 13, 2003
- Crittenden County Economic Development Corp.—November 26, 2003
- University of Kentucky, Kentucky Geological Survey, Research and Graduate Studies—November 3, 2003
- J. R. Gray, State Representative—November 15, 2003
- Daryl Greer, Kentucky Transportation Cabinet—November 19, 2003
- William Broyles, P.E., Geotechnical Engineering Branch Manager, Division of Materials—November 26, 2003

A complete copy of the referenced minutes from each meeting appears in Appendix C:

- Local Officials/Stakeholders Meeting—Eddyville—July 29, 2003
- Local Officials/Stakeholders Meeting—Fredonia—July 29, 2003
- Project Scoping Meeting—Paducah—March 4, 2004
- Project Scoping Meeting—Paducah—June 23, 2003
- Public Involvement Meeting—Fredonia—September 30, 2003
- Public Involvement Meeting—Eddyville—September 29, 2003

APPENDIX EO-B

UST/HAZMAT DATA

Wilson, Jimmy (KYTC)

From:

Sent:

Ballard, Kim (NREPC, DEP) Tuesday, November 18, 2003 2:05 PM

To:

Cc: Subject: Wilson, Jimmy (KYTC)
Hatton, Tony (NREPC, DEP)
DOT Planning Study-Lyon & Caldwell Counties

On behalf of Tony Hatton, Acting Director:

Division of Waste Management's comments on: Planning Study Lyon & Caldwell Counties

Resource Conservation & Local Assistance Branch (contact Tom Heil):

Request the use of Pulverized Glass Aggregate (PGA) in roadbed construction, where feasible.

Superfund Branch (contact Fazi Sherkat):

Superfund Sites By County For ...

Underground Storage Tank Branch (contact Lori Terry):

caldwell_lyon_dot.xls

Superfund Information System. Sites by County

EPC	×
K	š
	NREPC

Includes Id Name	Date Received	Spill Class	Incident Type	Status	Nearest Community	Latitude	Longitude Section
17243 ROCKWELL INTERNATIONAL	02/16/2001	HAZARDOUS SUBSTANCE OTHER POLITIFANTICONTAMINANT	PCBS	CLOSED	Ransellville		STATE SUPERFUND
PROPERTY AND PROPERTY OF THE 1959	02/13/1998	HAZARDOUS SUBSTANCE	GAS PIPELINES	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
A 10 10 10 10 10 10 10 10 10 10 10 10 10	02/13/1998	HAZARDOUS SUBSTANCE	GAS PIPELINES	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
Social Musician Villa Balloung	05/12/1994	POLLUTANT/CONTAMINANT	OPEN BURNING	CLOSED	RUSSELLVILLE	36.84528	-86.88722 STATE SUPERFUND
2344 BISCHI VII B CITY NIMB	02/16/2001			ACTIVE	Russellville		STATE SUPERFUND
ADDA BURGET OF TRAFF GIARD ARMORY	8661/91/0	PETROLEUM	FACILITY SPILL	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
AND DESCRIPTION OF ANDRESS AND AND DESCR	02/20/2001			ACTIVE	Russellville		STATE SUPERFUND
1270 NOSSELLY LLE SOUTATION CO. LANDFILL 8071 06	02/20/2001			ACTIVE	Russellville		STATE SUPERFUND
1333 BIRGELLVILLE SANITATION COMPANY	02/20/2001			ACTIVE	Russellville		STATE SUPERFUND
20512 SHIFFLETT PROPERTY	01/12/1994	HAZARDOUS SUBSTANCE	ILLEGAL HAZWASTE	ACTIVE	RUSSELLVILLE	36.8656	-86.8638 STATE SUPERFUND
116268 STOKER WELL	04/09/2003	HAZARDOUS SUBSTANCE	GROUNDWATER	ACTIVE	RUSSELLVILLE	36.825944	-86.91269 STATE SUPERFUND
41905 TARCO	03/14/1997		OTHER	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
1715 TVA . HOMBE I. OWENS STRETATION CAPACITORS	02/16/2001			ACTIVE	Russellville		STATE SUPERFUND
CONTRACTOR PLASTICS	09/26/2002		FACILITY SPILL	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
110055 VENTRA PLASTICS	05/15/2003		PACILITY SPILL	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
60388 VENTRA PLASTICS	09/27/2002		PACILITY SPILL	CLOSED	RUSSELLVILLE	36.84528	-86.88722 PETROLEUM
Count of sites in LOGANCounty 34							
County Name LYON							
Incident Id Name	Date Received	Spill Class	Incident Type	Status	Nearest Community	Latitude	Longitude Section
11296 BOYDS LANDING - COAST GUARD AID	09/26/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE	ACTIVE		36.9935	-88.1658 STATE SUPERFUND
FABNISONAN SOSTIONER AND SARES	02/02/1999	HAZARDOUS SUBSTANCE	LEAKING CARGO	CLOSED	EDDYVILLE		STATE SUPERFUND
20184 EDDVVII F 1886	02/13/1998	HAZARDOUS SUBSTANCE	GAS PIPELINES	CLOSED	EDDYVILLE	37.09444	-88.08028 PETROLEUM
11298 HAYES LANDING - COAST GUARD AID	09/26/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE	ACTIVE		36.9632	-88,0377 STATE SUPERFUND
20179 KUTTAWA 1480C	02/12/1998	6	GAS PIPELINES	CLOSED	KUTTAWA	37.05889	-88.1325 PETROLEUM
54105 KLITTAWA PIRE/EXPLOSION	11/22/1999	HAZARDOUS SUBSTANCE	FIRE/EXPLOSION	CLOSED	KUTTAWA	37.05889	-88.1325 STATE SUPERFUND
20212 KUTTAWA KY 1480	02/12/1998	HAZARDOUS SUBSTANCE	GAS PIPELINES	CLOSED	KUTTAWA	37.05889	-88.1325 PETROLEUM
11355 LIVINGSTON - COAST GUARD ALD	09/27/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE DISPOSAL	ACTIVE	KUTTAWA	37.001	-88.134 STATE SUPERFUND
20533 LYON COUNTY DRUMS	01/11/1994	POLLUTANT/CONTAMINANT	ABANDONED DRUMS	CLOSED	EDDYVILLE	37.09444	-88.08028 STATE SUPERFUND
967 MARATHON ASHLAND PETROLEUM	12/07/1999	PETROLEUM	FACILITY SPILL	CLOSED	KUTTAWA	37.05889	-88.1325 PETROLEUM
11297 MONEY CLIFF - COAST GUARD AID	09/26/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE	ACTIVE		37.0312	-88,1417 STATE SUPERFUND
OUTCOM STATE	000270001	POLLUTANTICONTAMINANT	ILLEGAL HAZWASTE	ACTIVE	DRYDEN ESTATES	36.887	-88.1637 STATE SUPERFUND

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County transce					Manage Community	Tariffeeda	Lastinda Longituda Sartion
Incident Id Name	Date Received	Spill Class	Incident Type DISPOSAL	SERVERS	Nearth Columning		morrow mendings
11200 SHELLY ISLAND - COAST GUARD AID	09/26/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE	ACTIVE		36.9354	-88.014 STATE SUPERFUND
	901/31/01	PETROLEUM	FACILITY SPILL	CLOSED	EDDYVILLE	37.09444	-88.08028 PETROLEUM
42223 W. KY CORRECTIONAL COMPLEX 11384 WEST ENTRANCE CANAL - COAST GUARD AID	10/03/2000	POLLUTANT/CONTAMINANT	ILLEGAL HAZWASTE	ACTIVE	CROSS ROAD	36,9851	-88.2335 STATE SUPERFUND
5	09/12/1997	PETROLEUM	OTHER	CLOSED	EDDYVILLE	37.09444	-88,08028 PETROLEUM
Count of sites in LYONCounty 16		36					
County Name MADISON				-		Testing	Toughtude Careforn
Incident Id Name	Date Received	Spill Class	Incident Type	STATUS	Nearest Community	Tantana.	Longuage Section
120723 ADRIAN DOTSON RESTDENCE	10/21/2003		UST (EXEMPT)	CLOSED	BERHA	37.572007	MAZSZY) PETROLEOM
41661 ALLEN CO. SPILL	08/12/1996	PETROLEUM	FACILITY SPILL	CLOSED	BERHA	37.56861	-84.29639 PEIROLEOM
SAME AND CHARACTER AND CONTROL DRIVES	03/20/1995	OTHER	ABANDONED DRUMS	CLOSED	BEREA	37.56861	-84.29639 STATE SUPERFUND
COUNTAIN SEASON OF THE PROPERTY OF THE PROPERT	02/20/2001			ACTIVE	Richmond		STATE SUPERFUND
THE PERSON OF A PERSON OF A PERSON OF THE PE	02/20/2001			ACTIVE	Richmond		STATE SUPERFUND
	10/26/1995	PETROLEUM	PACILITY SPILL	CLOSED	RICHMOND	37.74778	-84.29472 PETROLEUM
System broke yourself in the source of the system of the s	01/11/1994	PETROLEUM	UST (EXEMPT)	CLOSED	RICHMOND	37.74778	-84.29472 STATE SUPERFUND
20673 BUILDERS CONCRETE BLOCK	01/12/2000			CLOSED	RICHMOND	37.754444	-84.28 PETROLEUM
2024 CALDWELL DISCOUNT UNDERNI	1002002001			ACTIVE	Richmond		STATE SUPERFUND
17591 CHENAULI RECLIFIERS	11/10/1994		GAS PIPELINES	ACTIVE	BYBEE	37.73306	-84.12472 STATE SUPERFUND
34957 COLUMBIA GULT - BIBER / COLUMBIA GAS AND	11/10/1994		OAS PIPELINES	ACTIVE	KINDSTON		STATE SUPERFUND
34958 COLUMBIA GULT - DELTA KINGSTON/ COLUMBIA CAS AND	11/10/1994		GAS PIPELINES	ACTIVE	RICHMOND		STATE SUPERFUND
34961 COLUMBIA GULF - TRANEA / COLUMBIA GAS AND TRANSPILIS	2001121700	MIR COTTR	FACILITY SPILL	CLOSED	RICHMOND	37.74778	-84.29472 PETROLEUM
47439 COX LUXON REALTY	8001/24/10	PETBOLEUM	OIL SHEEN	CLOSED	RICHMOND	37.74778	-84.29472 PETROLEUM
47303 COXS AUTO	200000000			ACTIVE	Richmond		STATE SUPERFUND
19379 DREAMING CREEK SITE	100001000		ARANDONED DRUMS	CLOSED	Richmond	37.74778	-84.29472 STATE SUPERFUND
14621 DRUM NEAR BLUE GRASS ARMY DEPOT	12/11/2000	All location	TEXT (HXHMPT)	CHOSED	RICHMOND	37,74778	-84.29472 PETROLEUM
41026 GOODYEAR STORE #6260	06/21/1990	FEIROLEOM	in management				CA Classic Strate
41654 1-75 EXIT 90 / NORTH STAR TRANSPORT, WILLIAM SCANN	9661/11/80		ACCIDENT	ACTIVE	RICHMOND		STATESUPERFUR
44058 K LUSA	04/06/1999	PETROLEUM	MULTIPLE INCIDENTS	ACTIVE	BEREA	37.60417	-84.31083 PETROLEUM
36133 KARATE CLUB DRUM	03/22/1995	POLLUTANT/CONTAMINANT	ABANDONED DRUMS	CLOSED	RICHMOND	37.74778	-84,29472 STATE SUPERFUND
17181 KELLER INDUSTRIES - BEREA PLANT	02/20/2001			ACTIVE	Berea		STATE SUPERFUND
11616 KOKOKU RUBBER	05/13/1994	HAZARDOUS SUBSTANCE	OPEN DUMPING	CLOSED	RICHMOND	37.74778	44.29472 STATE SUPERFUND
SARMY CORPS OF ENGINEERS	8 04/15/1994	HAZARDOUS SUBSTANCE	SOIL CONTAMINATION	ACTIVE	RICHMOND	37.89452	-84,26529 STATE SUPERFUND
20100 Pri process (co.) and a second co.				the product of	-		THE RESIDENCE OF THE PARTY AND

Superfund Information System Sites by County

Commonwealth of Kentucky	NREPC	DWM	

County Name Do Leave	Date Beceived	Spill Class	Incident Type	Status	Nearest Community	Latitude	Longitude Section
Incident 1d Name	Dance Mercelland	THE POST OF THE PARTY OF THE PA	TICT (RXBMPT)	CLOSED	MORGANTOWN	37,22556	-86,68361 PETROLEUM
33675 KANE INDUSTRIES	06/13/1994	PEIROLEUM	Control (September 1)	-	TANDOUNT ORDERS		CTATE STIPPRETIND
SELECTION INDIGENERS	10/13/1994	PETROLEUM	UST (EXBMPT)	CLOSED	MACKGANIOWN		and the state of t
SHOOL THE SAME AND ASSESSED.	01/08/1997	PETROLEUM	OTHER	CLOSED	MORGANTOWN	37.22556	-86.68361 STATE SUPERFUND
43061 KELLWOOD APPAREL UNOUP	10/04/1999	HAZARDOUS SUBSTANCE	ABANDONED DRUMS	CLOSED	BUTLER CO	37,11642	-86.71849 STATE SUPERFUND
54011 MASON CEMETERY ROAD DRUMS	100011000			CLOSED	MORGANTOWN	37,23383	-86.7067 STATE SUPERFUND
48747 MORGANTOWN DRUM	03/21/1998						
Count of sites in BUTLERCounty 8							
County Name CALDWELL							
Total Id Mana	Date Received	Spill Class	Incident Type	Status	Nearest Community	Latitude	Latitude Longitude Section
THE MODELLY IN THE PROPERTY OF THE PARTY OF	01/04/2001			ACTIVE	Princeton		STATE SUPERFUND
15116 CHEVRON DISTRIBUTION F.M. WILCOX, 11VC	01/04/7001			CLOSED	Princeton		STATE SUPERFUND
15123 CRIDER AND ROGERS LANDFILL	100000000	HAZARDOUS SUBSTANCE	LANDFILL	ACTIVE	PRINCETON	37,15556	-87.86667 FEDERAL SUPERFUND
35356 CRIDER AND ROGERS LANDFILL	MO1/2/1004	MIN TOUTH	UST (EXEMPT)	CLOSED	PRINCETON	37.10917	-87.88194 STATE SUPERFUND
34318 FISH N MORE RESTAURANT	100013000	BHILL	OPEN DUMPING	CLOSED	PRINCETON	37.10917	47.38194 STATE SUPERFUND
50301 GEORGE COLEMAN PROPERTY	0.000			ACTIVE	Cleeton		STATE SUPERFUND
15121 LC.G. RAILROAD DERAILMENT	01/04/2001			ACTIVE	Princeton		STATE SUPERFUND
15122 TTT GRINNELL WELDING PRODUCTS DIVISION	01/04/2001		-	20000	MABION		PETROI BIRM
20190 MARJON 1940	02/13/1998	HAZARDOUS SUBSTANCE	GAS FIFELINES	CLUSED	MARKON		
SOLD MANUFACTURE AND SOLD SOLD SOLD SOLD SOLD SOLD SOLD SOL	02/13/1998	HAZARDOUS SUBSTANCE	GAS PIPELINES	CLOSED	MARION	2012 Sept. 100 S	
DOMESTICATION OF THE ASSESSMENT OF THE PROPERTY OF THE PROPERT	01/02/1997	PETROLEUM	FACILITY SPILL	CLOSED	PRINCETON	37.10917	
THE PROPERTY OF THE PROPERTY O	10/05/2001		ABANDONED DRUMS	CLOSED	PRINCETON	37,110361	-87.88986 STATE SUPERFUND
60848 PRINCETON HOSIERY MILL	A0111/1005	HAZARDOUS SUBSTANCE	ABANDONED DRUMS	CLOSED	PRINCETON	37,10917	-87,88194 STATE SUPERFUND
39902 THOMPSON STEEL PIPE COMPANY	03/22/1996	PETROLEUM	PACILITY SPILL	CLOSED	PRINCETON	37.10917	-87,88194 PETROLEUM
Count of sites in CALDWELLCounty 13							
County Name CALLOWAY			Total dans There	Chalters	Nearest Community	Latitude	Longitude Section
Incident Id Name	Date Received	Spill Class	menous rabe	Section 1		26 6107	
11320 BLOOD RIVER - COAST GUARD AID	09029260	POLLUTANT/CONTAMINANT	DISPOSAL	CLOSED		2000	STATE STREETING
15125 CALLOWAY DUMP	01/04/2001			ACHAE	Mustray		
AND DECISION CONTROL HAVENSTOCK, BELL & PITMAN	10/13/1998	HAZARDOUS SUBSTANCE	FACILITY SPILL	ACTIVE	MURRAY	36,618333	-
SOLD DOMESTIC CONTROL AND BUT	03/17/1998	HAZARDOUS SUBSTANCE	LANDFILL	ACTIVE	MURRAY	36.60222	-88.19333
47900 ECCLOSI SISIRMS AND SISI	01/04/2001		LANDFILL	CLOSED	Murray		STATE SUPERFUND
Call Oppose Michael Patter	02/04/1998	HAZARDOUS SUBSTANCE	ABANDONED DRUMS	CLOSED	MURRAY	36.61028	
4-4-14 GEORGE NUMBER DECOME	06/23/2000	PETROLEUM	OTHER	ACTIVE	MURRAY	36.61028	-88.31472 PETROLEUM
8073 KENLANE MODES	08/22/1997		FACILITY SPILL	CLOSED	MURRAY	36.61028	-88,31472 PETROLEUM
45373 MALIEL							A STATE OF THE PARTY OF THE PAR

NVL(¥ M H	SJE	3121	WES	405	1026	303 /	495	310 ;	CAS	800	Š.	1366	2540	SK	HOP	101	1161	300	2992	304	Š I	ROU	501	4000	S I	1000	106	S I	1137	S I	129	SH.	DEP	490
SITE_SEQ_ID_SITE_NAME	56017 TRICE HUGHES CHEVROLET INC	202017 ONE STOP 10	203017 PARKWAY BP	757017 CALDWELL COUNTY/MAINT GARAGE	915017 SOUTH CENTRAL PRTNKYES REAL ES	1002017 C & K AUTO REPAIR	1003017 TMART 536 (MINIT MART #2227)	1004017 HEATONS CITGO (PRINCETON FAST LUBE) (ASHLAND)	1005017 CITY OF PRINCETON	1008017 VALLEY INN RESTAURANT	1009017 CROWTOWN STORE	1010017 BUILD RITE LUMBER	1011017 HOLEMAN PROPERTY	1160017 PRINCETON WASTEWATER TREATMENT P	1454017 S R 139	1521017 U C MILK CO INC	1576017 FREDONIA FOOD & MORE	1670017 J DOUGLAS OSTING DBA FARMERS D	1734017 JUNIOR RAY BEAVERS	1770017 CRUCES CROSSROADS	1807017 PRINCETON ELECTRIC PLANT BOARD	2103017 CMI PRINCETON INC	2150017 THOMAS CAYCE		2380017 FARMERSVILLE COUNTRY STORE	2444017 DON HANCOCK	2728017 IDEAL #15 (ROCKET OIL)	2797017 FREDONIA BULK PLT (ABM 251 0121)	3129017 FREDONIA ASHLAND		3306017 THE KENTUCKY STONE COMPANY	3324017 KILGORE SERVICE STATION	3370017 FARMERS CROP SERVICE	3396017 # 1290116	3544017 MAX ARNOLD & SONS LLC DBA MAXFUEL #27
COUNTY_CODE COUNTY_NAME	17 CALDWELL	47 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL		17 CALDWELL		17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL												17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CAI DWELL	17 CALDWELL	17 CAI DWELL	17 CALDWELL

HWY 9	HWY 9	119 YO	BOX 17	115 E N	HWY 6	400 HV	911 HC	126 E (HWY 1	HWY 6	US 62	HWY 9	700 W/	21212	326 S.	55 WY.	Κ Κ Ε	314 R/	RT 59	375 SF	RT3F	309 LI	206 M.	301 M.	309 M.	RT 2	RTE 3	201 W	RI 4	328 S	216 M	7612 (105 M	985 B	374 N	377 W	
3721017 WEST KENTUCKY SUBSTATION	3915017 II-RIDE INC	5114017 CALDWELL CO SCHOOLS/BUS GARAGE	5115017 FREDONIA FLEA MARKET (ELEM SCHL)		5484017 FORD LEASING DEVELOPMENT COMPANY	5517017 MAX FUEL #10	5774017 JERRYS MARKET (MACS MARKET)	5807017 MAXFUEL #28	6724017 ROBERT BROADBENT FARM	6725017 ARVIN AFTERMARKET PRODUCTS DIV	6739017 PRINCETON B331010	6797017 C A WOODALL	6826017 BILL LEWIS SERVICE STATION	6827017 LARUES PIT STOP	6837017 SOUTH SIDE PETRO	7212017 AKRIDGE FARM SUPPLY	7214017 ABM 251 003 0597	8521017 FLETCHER PROPERTY (KY DELIVERY	8524017 BARNES STORE INC	8536017 BAYS COUNTRY STORE	8539017 HOPSONS STORE	8544017 SAMS SHELL & CARWASH (MOGAS)	8545017 MAX FUEL #14 (OLIVERS CHEVRON)	8546017 RAYS CHEVRON	8550017 D & L PROPERTIES	8551017 HANCOCKS MOR FOR LESS FOOD STORE	8821017 62 MARKET	9658017 PRINCETON LAWN & GARDEN SUPPLY	9804017 THOMAS GROC & STATION	9982017 THE PANTRY #351	20140890 THE SADDLE SHOP	205072 EDDY CREEK MARINA	206072 EDDYVILLE BP	259072 BUZZARD ROCK RESORT & MARINA	286072 WESTERN KY CORRECTIONAL COMPLEX	288072 KENTUCKY STATE PENITENTIARY	7,000
13 OAL DIWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL									17 CALDWELL			14 CALDWELL	17 CALDWELL	17 CALDWELL	17 CALDWELL	47 CALDWELL	47 CALDWELL	17 CALDWELL	17 CALDWELL	17 CAI DWELL	17 CALDWELL	17 CALDWELL	12 CALDILLE	NOV 1 CZ	72 LYON	72 LYON	72 LYON	72 LYON

I Y	FAIR	KY 37	28 DA	638 T	29 D/	505 F	2680	8970	5045	1709	ROU.	1860	PO B	RTE	FAIR	174 S	2975	620 F	HW	980	101	1983	LAKE	8874	980	HW	1999	FAIR	Œ Ż	ROU	RTB	HW	-MH	ROU	1677	
414072 RAMEY CAMPGROUND	670072 LYON CO BOARD OF EDUCATION	731072 LYON COUNTY/MAINT GARAGE	1001072 KUTTAWA \$4540	1002072 NU-KRO	1003072 WENDYS BP	1004072 LYON CO AMBULANCE SERVICE	1005072 COUNTRY VILLAGE FLEA MARKET	1006072 CUMMINGS GROCERY	1533072 HEAD & LISA'S TACKLE BOX	1931072 KUTTAWA HARBOR INC	1961072 OVERLOOK MARKET	1983072 SARATOGA BAIT & TACKLE	2479072 KUTTAWA MARKET	2973072 HUCKS TRAVEL CENTER (SWIFTY)	3325072 EDDYVILLE TIRE	3513072 MAXFUEL #22 (DRURYS SHORT STOP)	3764072 FORMER DAVES OIL	3950072 EDDYVILLE FIVESTAR #3300	4057072 YATES BUILDING	4417072 PHILLIPS 66 CO 021481	5137072 LYON COUNTY SCHOOL BUS GARAGE	5246072 SOUTHERN EXCAVATING (DUNCANS)	5678072 SHAWNEE PLASTICS INC	5736072 CJ'S (T J'S JUNCTION)	5813072 KUTTAWA FIVESTAR #539	5970072 BLUEGRASS OIL CO/EDDYVILLE GULF	6831072 EDDYVILLE CITGO	7213072 FREDONIA KY BULK PLANT 251	7215072 TOM & BARBS GROCERY & BAIT	8526072 TARRYON RESORT	8534072 GRADY WHITE	8548072 BILL & BILLY INC	8549072 RAYMOND GUESS		ACCOUNTY CADACE	TUUUUSUS COONIT GARAGE
72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	NOX 1 ZZ	NOX1 22	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	NOX 1 ZZ	72 LYON	72 LYON	72 LYON	72 LYON	72 LYON	NOX 1 CZ	72 LYON	72 LYON	72 LYON	10 17 2/	72 LYON

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

US 641 - REPORT 1 OF 6

EDDYVILLE KY 42038

Job Number: 03-415

PREPARED FOR:

Palmer Enginering
201 South Orange Avenue, Suite 890
Orlando, Florida 32801

www.palmernet.com

04-13-04



Tel: (407) 265-8900

Fax: (407) 265-8904

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Environmental FirstSearch Federal Databases and Sources

ASTM Databases:

CERCLIS: Comprehensive Environmental Response Compensation and Liability Information System. The EPA's database of current and potential Superfund sites currently or previously under investigation. Source: Environmental Protection Agency.

Updated quarterly.

CERCLIS-NFRAP (Archive): Comprehensive Environmental Response Compensation and Liability Information System Archived Sites. The Archive designation means 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). 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.

Updated quarterly.

ERNS: Emergency Response Notification System. The EPA's database of emergency response actions. Source: Environmental Protection Agency. Data since January, 2001, has been received from the National Response Center as the EPA no longer maintains this data.

Updated quarterly.

FINDS: The Facility Index System. The EPA's Index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility. Source: Environmental Protection Agency.

Updated semi-annually.

NPL: National Priority List. The EPA's list of confirmed or proposed Superfund sites. Source: Environmental Protection Agency.

Updated quarterly.

RCRIS: Resource Conservation and Recovery Information System. The EPA's database of registered hazardous waste generators and treatment, storage and disposal facilities. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List). Source: Environmental Protection Agency.

RCRA TSD: Resource Conservation and Recovery Information System Treatment, Storage, and Disposal Facilities. The EPA's database of RCRIS sites which treat, store, dispose, or incinerate hazardous waste. This information is also reported in the standard RCRIS detailed data.

ASTM Databases (continued):

RCRA COR: Resource Conservation and Recovery Information System Corrective Action Sites. The EPA's database of RCRIS sites with reported corrective action. This information is also reported in the standard RCRIS detailed data.

RCRA GEN: Resource Conservation and Recovery Information System Large and Small Quantity Generators. The EPA's database of RCRIS sites that create more than 100kg of hazardous waste per month or meet other RCRA requirements. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List).

RCRA NLR: Resource Conservation and Recovery Information System sites No Longer Regulated. The EPA's database of RCRIS sites that create less than 100kg of hazardous waste per month or do not meet other RCRA requirements.

All RCRA databases are Updated quarterly

Environmental FirstSearch Federal Databases and Sources

Non-ASTM Databases:

HMIRS: Hazardous Materials Incident Response System. This database contains information from the US Department of Transportation regarding materials, packaging, and a description of events for tracked incidents.

Updated quarterly.

NCDB: National Compliance Database. The National Compliance Data Base System (NCDB) tracks regional compliance and enforcement activity and manages the Pesticides and Toxic Substances Compliance and Enforcement program at a national level. The system tracks all compliance monitoring and enforcement activities from the time an inspector conducts and inspection until the time the inspector closes or the case settles the enforcement action. NCDB is the national repository of the 10 regional and Headquarters FIFRA/TSCA Tracking System (FTTS). Data collected in the regional FTTS is transferred to NCDB to support the need for monitoring national performance of regional programs.

Updated quarterly

NPDES: National Pollution Discharge Elimination System. The EPA's database of all permitted facilities receiving and discharging effluents. Source: Environmental Protection Agency.

Updated semi-annually.

NRDB: National Radon Database. The NRDB was created by the EPA to distribute information regarding the EPA/State Residential Radon Surveys and the National Residential Radon Survey. The data is presented by zipcode in Environmental FirstSearch Reports. Source: National Technical Information Service (NTIS)

Updated Periodically

Nuclear: The Nuclear Regulatory Commission's (NRC) list of permitted nuclear facilities.

Updated Periodically

PADS: PCB Activity Database System

The EPA's database PCB handlers (generators, transporters, storers and/or disposers) that are required to notify the EPA, the rules being similar to RCRA. This database indicates the type of handler and registration number. Also included is the PCB Transformer Registration Database.

Updated semi-annually.

Receptors: 1995 TIGER census listing of schools and hospitals that may house individuals deemed sensitive to environmental discharges due to their fragile immune systems.

Updated Periodically

Non-ASTM Databases (continued):

RELEASES: Air and Surface Water Releases. A subset of the EPA's ERNS database which have impacted only air or surface water.

Updated semi-annually.

Soils: This database includes the State Soil Geographic (STATSGO) data for the conterminous United States. It contains information regarding soil characteristics such as water capacity, percent clay, organic material, permeability, thickness of layers, hydrological characteristics, quality of drainage, surface, slope, liquid limit, and the annual frequency of flooding. Source: United States Geographical Survey (USGS).

Updated quarterly

TRIS: Toxic Release Inventory System. The EPA's database of all facilities that have had or may be prone to toxic material releases. Source: Environmental Protection Agency.

Updated semi-annually.

Environmental FirstSearch Kentucky Databases and Sources

1. LANDFILLS: The Kentucky Department for Environmental Protection listing of contained and construction/demolition debris landfills as maintained by the Division of Waste Management Solid Waste Program.

Updated Yearly

2. STATE SITES: The Kentucky Department for Environmental Protection State Lead List as maintained by the Division of Waste Management Superfund Branch.

Updated Quarterly

3. UST: Underground Storage Tanks. The Kentucky Department for Environmental Protection listing of all underground storage tanks as maintained by the Underground Storage Tanks Branch.

Updated Quarterly

Environmental FirstSearch Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE:

US 641 - REPORT 1 OF 6 EDDYVILLE KY 42038

JOB: 03-415 US 641 (GREEN)

Street Name	Dist/Dir	Street Name	Dist/Dir
Bennett Rd	0.00		
Brasher Rd	0.00		
Clift Rd	0.15 NE		
Coleman Doles Rd	0.04 NE		
Dycusburg Rd	0.00		
Free Betty Ford Rd	0.06 NW		
Hillside Dr	0.17 SE		
I-24	0.05 SE		
J C Garner Rd	0.01 SE		
Jones Rd	0.25 SE		
Oak Grove Rd	0.00		
Old Mexico Rd	0.00		
Poplar Creek Rd	0.00		
Popular Creek	0.05 SE		
Scott Rd	0.13 NW		
State Highway 1943	0.00		
State Highway 295	0.00		
State Highway 373	0.00		
State Highway 70	0.00		
State Highway 819	0.00		
State Highway 93	0.00		
W Dycus Ave	0.19 NE		
WEST Dycus Ave	0.19 NE		

Environmental FirstSearch Search Summary Report

Target Site: US 641 - REPORT 1 OF 6 EDDYVILLE KY 42038

n	C 1	W. L. J.		earch S		1/4	1/2	1/2>	ZIP	TOTALS
Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2	ZIP	TOTALS
NPL	Y	02-09-04	0.50	0	0	0	0	2	0	0
CERCLIS	Y	02-09-04	0.50	0	0	0	0	-	0	0
NFRAP	Y	02-09-04	0.50	0	0	0	0	-	1	1
RCRA TSD	Y	02-09-04	0.50	0	0	0	0	-	0	0
RCRA COR	Y	02-09-04	0.50	0	0	0	0		0	0
RCRA GEN	Y	02-09-04	0.50	0	0	0	0		3	3
RCRA NLR	N	02-09-04	0.25	-		7	7	-	-	-
ERNS	Y	12-31-03	0.50	0	0	0	0		9	9
NPDES	N	01-26-04	0.25	20	2	-	-		-	2
FINDS	N	05-29-03	0.25	-	-	-	-	-		90
TRIS	N	01-30-04	0.25		-		-			-
State Sites	Y	03-01-04	0.50	0	0	0	0	-	21	21
Spills-1990	Y	NA	0.50	0	0	0	0	-	0	0
Spills-1980	N	NA	0.25		-	-	-	_		2
SWL	Y	01-01-03	0.50	0	0	0	0	12	0	0
Permits	N	NA	0.25	_		_	-	-	-	-
Other	N	NA	0.25	*	-			-	-	*
REG UST/AST	Y	01-14-04	0.50	0	0	1	0		55	56
Leaking UST	Y	02-01-04	0.50	0	0	0	0		6	6
State Wells	N	NA	0.25	-	_	-	-		-	-
Aquifers	N	NA	0.25	-	_	2		-	23	-
ACEC	N	NA	0.25	-	-	-		39	-	-
Wetlands	N	11-20-00	0.25	-	-			-	+0	
Floodplains	N	05-04-98	0.25	-	~		1000	107	-	
Nuclear Permits	N	04-30-99	0.25	-	-			-		-
Historic/Landmark	N	09-01-02	0.25	-	-	2	_	-	2	0
Federal Land Use	N	06-17-98	0.25	2	1			12	21	-
Federal Wells	N	05-19-03	0.25	2	-			-	+3	-
Releases(Air/Water) N	12-31-03	0.25	-	-		-		-	-
HMIRS	N	03-31-03	0.25		-	194		-	75	
NCDB	N	01-15-04	0.25	-	-				-	-
PADS	N	09-01-03	0.25		-		-	-	2	2
Federal Other	N	NA	0.25	2	2		-	2		
Misc	N	NA	0.25	-	-		149	-	-	9
Towers	N	08-16-01	0.25	-	-	-	-	-	+3	-
Soils	N	03-18-97	0.25		-	-	(4.0	100	-	-
Receptors	N	01-01-95	0.25	-						-
- TOTALS -				0	0	1	0	0	95	96

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Request Date:

04-13-04

Requestor Name: Standard:

palmer/trobinson/dana

LINEAR

Search Type:

LINEAR

Job Number:

03-415

TARGET ADDRESS: US 641 - REPORT 1 OF 6

EDDYVILLE KY 42038

Demographics

Sites:

96

Non-Geocoded: 95

Population: NA

Radon:

0.4 - 6.5 PCI/L

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		<u>UTMs</u>
Longitude:	-88.115024	-88:6:54	Easting:	400978.658
Latitude:	37.148476	37:8:55	Northing:	4111721.834
			Zone:	16

Comment

Comment: US 641 (GREEN)

Additional Requests/Services

ZIP Code	City Name	ST	Dist/Dir	Sel
42055	KUTTAWA	KY	0.00	Y
42064	MARION	KY	0.00	Y
42411	FREDONIA	KY	0.00	Υ

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Request Date:

04-13-04

Requestor Name:

palmer/trobinson/dana

Standard:

LINEAR

Search Type:

LINEAR

Job Number:

03-415

TARGET ADDRESS: US 641 - REPORT 2 OF 6

EDDYVILLE KY 42038

Demographics

Sites:

48

Non-Geocoded: 47

Population: NA

Radon: 0.4 - 6.5 PCI/L

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		<u>UTMs</u>
Longitude:	-88.072909	-88:4:22	Easting:	404717.088
Latitude:	37.14706	37:8:49	Northing:	4111521.614
			Zone:	16

Comment

Comment: US 641 BLUE

Additional Requests/Services

	ent ZIP Codes:	0.25 Mile(5)		_
ZIP Code	City Name	ST	Dist/Dir	Sel
42411	FREDONIA	KY	0.00	Υ

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Request Date:

04-13-04

Requestor Name:

palmer/trobinson/dana

Standard:

LINEAR

Search Type:

LINEAR

Job Number:

03-415

TARGET ADDRESS: US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

Demographics

Sites:

39

Non-Geocoded: 33

Population: NA

Radon:

0.4 - 6.5 PCI/L

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	-88.066315	-88:3:59	Easting:	405286.131
Latitude:	37.133765	37:8:2	Northing:	4110040.083
			Zone:	16

Comment

Comment: US 641 WHITE

Additional Requests/Services

Services:

Adjacent ZIP Codes: 0 Mile(s) ZIP ST Dist/Dir Sel Code City Name

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Request Date:

Standard:

04-13-04

Requestor Name:

palmer/trobinson/dana

LINEAR

Search Type:

LINEAR

Job Number:

03-415

TARGET ADDRESS: US 641 - REPORT 5 OF 6

FREDONIA KY 42411

Demographics

Sites:

46

Non-Geocoded: 46

Population: NA

Radon: NA

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	-88.055326	-88:3:19	Easting:	406319.076
Latitude:	37.179808	37:10:47	Northing:	4115137.125
			Zone:	16

Comment

Comment: US 641 YELLOW

Additional Requests/Services

Adjace	ent ZIP Codes: 0.2	5 Mile(s)			Services
ZIP Code	City Name	ST	Dist/Dir	Sel	
42038	EDDYVILLE	KY	0.00	Y	Sa A Te Ci

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Request Date:

04-13-04

Requestor Name:

palmer/trobinson/dana

Standard:

LINEAR

Search Type:

LINEAR

Job Number:

03-415

TARGET ADDRESS: US 641 - REPORT 6 OF 6

FREDONIA KY 42411

Demographics

Sites:

122

Non-Geocoded: 122

Population: NA

Radon: NA

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		<u>UTMs</u>
Longitude:	-88.034596	-88:2:5	Easting:	408146.107
Latitude:	37.168889	37:10:8	Northing:	4113905.499
			Zone:	16

Comment

Comment: US 641 GOLD

Additional Requests/Services

Services:

ZIP Code	City Name	ST	Dist/Dir	Sel
42038	EDDYVILLE	KY	0.00	Y
42064	MARION	KY	0.00	Y
42445	PRINCETON	KY	0.00 -	Y

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

TADCET SITE.

US 641 - REPORT 1 OF 6

ACTIVE

DIESEL

10000 GALLONS

IOR: 03-415

TARGET SITE:	EDDYVILLE KY 420		US 641 (GREEN)	03-413	
	REGISTERED UN	DERGROUND ST	ORAGE TANKS		
SEARCH ID: 1	1	DIST/DIR: 0.18	NW	MAP ID:	1
NAME: LYON COUNTY SO ADDRESS: 101 JENKINS RD EDDYVILLE KY 42 LYON CONTACT:	CHOOL BUS GARAGE		REV: 1/14/04 ID1: 5137077 ID2: STATUS: PHONE:		
OWNER INFORMATION					
OWNER NAME:					
	LYON CO BD OF ED				
OWNER ADDRESS:	217 JENKINS RD EDDYVILLE KY 4	2038			
TANK INFORMATION					
TANK NUMBER:	1	TANK STATUS:	ACTIVE		
TANK INSTALLED DATE:	12/1/1992	TANK CAPACITY: REMOVED DATE:	2000 GALLONS		
CONTAINED DATE: CLOSED DATE:		TEMP CLOSED:			
INERT MATERIAL:		TANK CONTENTS:	GASOLINE		
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL				

COATING AND CATHODIC PROTECTION

VAPOR MONITORING INTERNAL LINING NOT APPLICABLE

INTERNAL PROTECTION: OVERFILL PROTECTION: SECONDARY CONTAINMENT:

CORROSION PROTECTION:

FLOW RESTRICTOR

SPILL PREVENTION:

RELEASE DETECTION:

CATCHMENT BASIN

PIPE MATERIAL: PIPE TYPE:

STEEL SUCTION

12/1/1992

CORROSION PROTECTION: PIPE RELEASE DETECTION: FIELD INSTALLED CATHODIC PROTECTION

TANK STATUS:

TANK CAPACITY:

REMOVED DATE: TEMP CLOSED:

TANK CONTENTS:

SECONDARY CONAINMENT:

TANK NUMBER:

TANK INSTALLED DATE: CONTAINED DATE:

CLOSED DATE: INERT MATERIAL:

CONSTRUCTION MATERIAL: SINGLE WALL STEEL

CORROSION PROTECTION: RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT: SPILL PREVENTION:

FLOW RESTRICTOR CATCHMENT BASIN

VAPOR MONITORING

PIPE MATERIAL: PIPE TYPE:

CORROSION PROTECTION: PIPE RELEASE DETECTION: SUCTION FIELD INSTALLED CATHODIC PROTECTION

COATING AND CATHODIC PROTECTION

INTERNAL LINING NOT APPLICABLE

SECONDARY CONAINMENT:

STEEL

TARGET SITE:

US 641 - REPORT 2 OF 6

EDDYVILLE KY 42038

JOB:

03-415

1

US 641 BLUE

CE L DCH ID.	DIST/DID.	0.24 NW	MAD ID.
SEARCH ID: 1	DIST/DIR:	0.34 NW	MAP II

NAME: LYON COUNTY SCHOOL BUS GARAGE ADDRESS: 101 JENKINS RD

EDDYVILLE KY 42038

LYON

CONTACT:

REV: ID1:

1/14/04 5137072

STATUS: PHONE:

ACTIVE

GASOLINE

2000 GALLONS

ID2:

OWNER INFORMATION OWNER NAME:

OWNER ADDRESS:

LYON CO BD OF ED 217 JENKINS RD

EDDYVILLE KY 42038

TANK INFORMATION

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE:

CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL: CORROSION PROTECTION:

RELEASE DETECTION: INTERNAL PROTECTION:

OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE: CORROSION PROTECTION:

PIPE RELEASE DETECTION:

SECONDARY CONAINMENT:

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE: CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL: CORROSION PROTECTION:

RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL: PIPE TYPE:

CORROSION PROTECTION: PIPE RELEASE DETECTION: SECONDARY CONAINMENT:

12/1/1992

TANK STATUS: TANK CAPACITY: REMOVED DATE:

TEMP CLOSED: TANK CONTENTS: SINGLE WALL STEEL

COATING AND CATHODIC PROTECTION VAPOR MONITORING

INTERNAL LINING NOT APPLICABLE

FLOW RESTRICTOR

CATCHMENT BASIN

STEEL SUCTION

12/1/1992

FIELD INSTALLED CATHODIC PROTECTION

TANK STATUS:

TANK CAPACITY:

TANK CONTENTS:

REMOVED DATE: TEMP CLOSED:

DIESEL

ACTIVE

10000 GALLONS

CATCHMENT BASIN

FLOW RESTRICTOR

SINGLE WALL STEEL

VAPOR MONITORING

STEEL SUCTION

FIELD INSTALLED CATHODIC PROTECTION

COATING AND CATHODIC PROTECTION

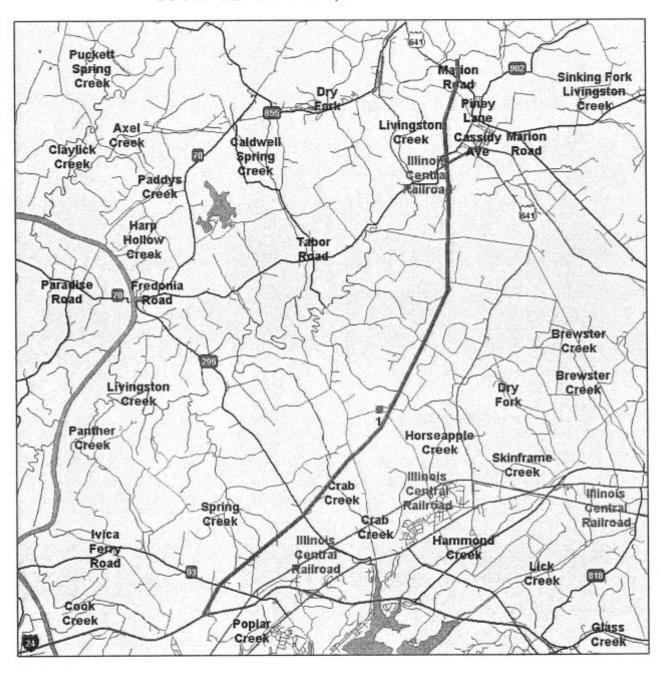
INTERNAL LINING NOT APPLICABLE



.5 Mile Radius from Line LINEAR: All Databases



US 641 - REPORT 1 OF 6, EDDYVILLE KY 42038



Source: 1999 U.S. Census TIGER Files			
Linear Search Line		-	-
Identified Site, Multiple Sites, Receptor	×	×	由
NPL, Solid Waste Landfill (SWL) or Hazardous Waste			883
Railroads			-

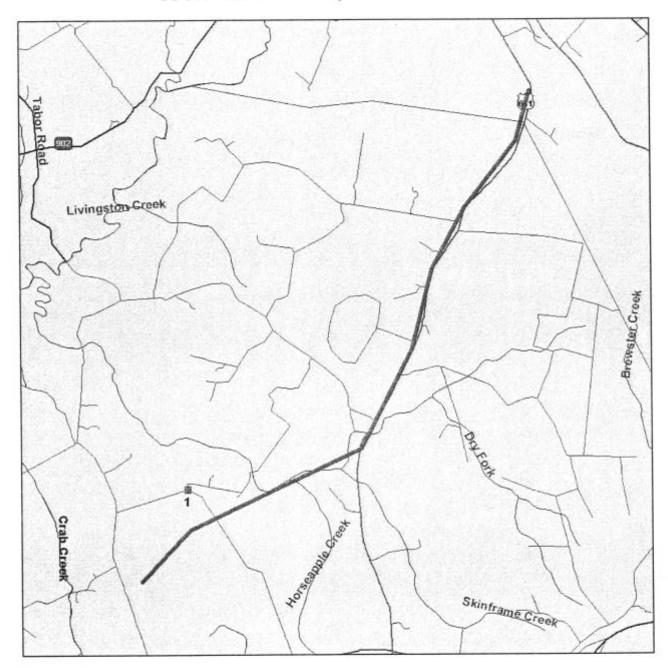
Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius



.5 Mile Radius from Line LINEAR: All Databases



US 641 - REPORT 2 OF 6, EDDYVILLE KY 42038



Source: 1999 U.S. Census TIGER Files		
Linear Search Line	-	-
Identified Site, Multiple Sites, Receptor		靈
NPL, Solid Waste Landfill (SWL) or Hazardous Waste		. 🕸
22/22/2015		_

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

03-415

US 641 WHITE

RCRA	CEN	ED /	TOP	SITE
KU.K.A	CIEN	CKA	NUK	SHIE

SEARCH ID: 1

DIST/DIR:

0.02 SW

MAP ID:

1

NAME:

BARKLEY LOCK

ADDRESS: HIGHWAY 62/641 - BARKLEY DAM

ID1: ID2: 2/9/04

KY8960019398

GRAND RIVERS KY 42045 LIVINGSTON

LIVINGSTON
CONTACT: GERALD B. CUNNINGHAM

STATUS: PHONE:

REV:

VGN

5023

5023624222

SITE INFORMATION

UNIVERSE TYPE:

CEG - CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

9199 - PUBLIC ADMIN. - GENRAL GOVERNMENT, NEC

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

03-415

US 641 WHITE

DOD A	CONTRA	ATOD	CHETT
KUKA	GENER	AIUK	SHE

SEARCH ID: 2

DIST/DIR:

0.02 SW

MAP ID:

NAME: ADDRESS:

KENTUCKY LOCK

HWY 62/641 - KENTUCKY DAM

GRAND RIVERS KY 42045

LIVINGSTON CONTACT: GARY H. HUBBARD REV: IDI:

2/9/04

KY9960019397

ID2:

STATUS:

PHONE:

5023624322

SITE INFORMATION

UNIVERSE TYPE:

CEG - CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

9199 - PUBLIC ADMIN. - GENRAL GOVERNMENT, NEC

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

TARGET SITE:

US 641 - REPORT 3 OF 6

JOB: 03-415

	EDDYVILLE KY 42	038	1	US 641 WH	ITE		
	REGISTERED UI	NDERGROUN	ND STO	RAGE TAI	NKS	54	
SEARCH ID: 3		DIST/DIR:	0.03 SE	1	11	MAP ID:	2
NAME: BLUEGRASS OIL C ADDRESS: HWY 641 & 62 EDDYVILLE KY 42 LYON CONTACT: RAYMOND BELT	O/EDDYVILLE GULF 038	9		REV: ID1: ID2: STATUS: PHONE:	1/14/04 5970072		
OWNER INFORMATION OWNER NAME:	RAYMOND BELT						
OWNER ADDRESS:	411 S MAIN ST MARION KY 42	2064					
TANK INFORMATION							
TANK NUMBER:	1	TANK STAT	3737733		D REMOVAL	L	
TANK INSTALLED DATE:	6/1/1962	TANK CAPA		6000 GA			
CONTAINED DATE: CLOSED DATE:		TEMP CLOS		1/18/199	7		
NERT MATERIAL:		TANK CON		GASOLI	VF.		
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL	TANK COM	LENIS	OASOLI	N.C.		
CORROSION PROTECTION:	XNA						
RELEASE DETECTION:	INVENTORY RECORDS	S /TANK TIGHTNE	ESS TEST				
INTERNAL PROTECTION:	INTERIOR LINING PRO	TECTION					
OVERFILL PROTECTION:	NONE						
SECONDARY CONTAINMENT: SPILL PREVENTION:	CATCHMENT BASIN						
	owner						
PIPE MATERIAL:	STEEL						
PIPE TYPE: CORROSION PROTECTION:	PRESSURIZED NONE						
PIPE RELEASE DETECTION:	NONE						
SECONDARY CONAINMENT:	110110						
TANK MIMBED.	2	TANK STAT	TIC.	VEDIEIE	D REMOVA		
TANK NUMBER: TANK INSTALLED DATE:	6/1/1962	TANK CAP		6000 GA		-	
CONTAINED DATE:	W1/1702	REMOVED		1/18/199			
CLOSED DATE:		TEMP CLOS		-77.7-70.7-71	T-1/2		
INERT MATERIAL:		TANK CON	TENTS:	GASOLI	NE		
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL						
CORROSION PROTECTION:	XNA						
RELEASE DETECTION:	INVENTORY RECORDS		ESS TEST				
INTERNAL PROTECTION:	INTERIOR LINING PRO	TECTION					
OVERFILL PROTECTION:	NONE						
SECONDARY CONTAINMENT: SPILL PREVENTION:	CATCHMENT BASIN						
PIPE MATERIAL:	STEEL						
PIPE TYPE:	PRESSURIZED						
CORROSION PROTECTION:	NONE						
PIPE RELEASE DETECTION:	NONE						
SECONDARY CONAINMENT:							

Site Details Page - 3

- Continued on next page -

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

US 641 WHITE

REC	GISTEREL	UNDERGROUND	STORAGE TANKS

SEARCH ID: 3

DIST/DIR:

0.03 SE

MAP ID:

2

NAME:

BLUEGRASS OIL CO/EDDYVILLE GULF

ADDRESS: HWY 641 & 62

EDDYVILLE KY 42038

LYON

CONTACT: RAYMOND BELT

REV:

1/14/04 5970072

ID1: ID2:

STATUS: PHONE:

TANK NUMBER:

TANK INSTALLED DATE:

6/1/1985

SINGLE WALL STEEL

MANUAL TANK GAUGING

TANK STATUS:

TANK CAPACITY:

REMOVED DATE:

TEMP CLOSED:

VERIFIED REMOVAL 2000 GALLONS

1/18/1995

TANK CONTENTS:

DIESEL

CLOSED DATE: INERT MATERIAL:

CONTAINED DATE:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION:

RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT: SPILL PREVENTION:

NONE NONE

NONE

NONE

PIPE MATERIAL:

PIPE TYPE: CORROSION PROTECTION: PIPE RELEASE DETECTION: STEEL

SUCTION NONE CKV

SECONDARY CONAINMENT:

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

03-415

US 641 WHITE

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID:

DIST/DIR:

0.02 SW

MAP ID:

3

NAME: ADDRESS: OLD CHEVRON STATION

HWY 62 & 641

GRAND RIVERS KY 42045

LIVINGSTON

REV: IDI:

1/14/04 5927070

ID2: STATUS: PHONE:

CONTACT:

OWNER INFORMATION

OWNER NAME:

REED CRUSHED STONE COMPANY INC

OWNER ADDRESS:

947 HWY 62

1/1/2001

UNKNOWN

NONE

SINGLE WALL STEEL

TANK INFORMATION

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE:

CLOSED DATE: INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION:

RELEASE DETECTION:

INTERNAL PROTECTION:

OVERFILL PROTECTION: SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE:

CORROSION PROTECTION:

PIPE RELEASE DETECTION:

SECONDARY CONAINMENT:

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE: CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION: RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE: CORROSION PROTECTION:

PIPE RELEASE DETECTION: SECONDARY CONAINMENT:

GRAND RIVERS KY 42045

TANK STATUS:

TANK CAPACITY: REMOVED DATE:

TEMP CLOSED: TANK CONTENTS:

10/11/1989

OIL

5000 GALLONS

UNKNOWN UNKNOWN

UNKNOWN

STEEL

1/1/2001

NONE

UNKNOWN

UNKNOWN

UNKNOWN

UNKNOWN UNKNOWN

STEEL UNKNOWN

SINGLE WALL STEEL UNKNOWN

UNKNOWN UNKNOWN

UNKNOWN

TANK STATUS: TANK CAPACITY: REMOVED DATE:

TEMP CLOSED: TANK CONTENTS: UNVERIFIED REMOVAL/CLOSURE 5000 GALLONS

UNVERIFIED REMOVAL/CLOSURE

10/11/1989

OIL

- Continued on next page -

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB: 03-415 US 641 WHITE

SEARCH ID: 4		DIST/DIR:	0.02 S	W	MAP ID:	-
NAME: OLD CHEVRON ST	ATION			REV:	1/14/04	
ADDRESS: HWY 62 & 641	THON			ID1:	5927070	
GRAND RIVERS KY	42045			ID2:		
LIVINGSTON				STATUS:		
CONTACT:				PHONE:		
TANK NUMBER:	3	TANK STAT	US:	UNVER	IFIED REMOVAL/CLOSURE	
TANK INSTALLED DATE:	1/1/2001	TANK CAPA			ALLONS	
CONTAINED DATE:		REMOVED		10/11/19		
CLOSED DATE:		TEMP CLOS	ED:			
INERT MATERIAL:		TANK CONT	ENTS:	OIL		
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL					
CORROSION PROTECTION:	UNKNOWN					
RELEASE DETECTION:	NONE UNKNOWN					
INTERNAL PROTECTION: OVERFILL PROTECTION:	UNKNOWN					
SECONDARY CONTAINMENT:	ONKINOWIN					
SPILL PREVENTION:	UNKNOWN					
PIPE MATERIAL:	STEEL					
PIPE TYPE:	UNKNOWN					
CORROSION PROTECTION:	UNKNOWN					
PIPE RELEASE DETECTION:	UNKNOWN					
SECONDARY CONAINMENT:						
TANK NUMBER:	4	TANK STAT		1,000	IFIED REMOVAL/CLOSURE	
TANK INSTALLED DATE:	1/1/2001	TANK CAPA			ALLONS	
CONTAINED DATE:		REMOVED TEMP CLOS		10/11/1	767	
CLOSED DATE:		TANK CON		OIL		
INERT MATERIAL: CONSTRUCTION MATERIAL:	SINGLE WALL STEEL	TAIK CON	1211131	OIL		
CORROSION PROTECTION:	UNKNOWN					
RELEASE DETECTION:	NONE					
INTERNAL PROTECTION:	UNKNOWN					
OVERFILL PROTECTION:	UNKNOWN					
SECONDARY CONTAINMENT:						
SPILL PREVENTION:	UNKNOWN					
PIPE MATERIAL:	STEEL					
PIPE TYPE:	UNKNOWN					
CORROSION PROTECTION:	UNKNOWN					
PIPE RELEASE DETECTION:	UNKNOWN					

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

03-415

JOB: US 641 WHITE

SEARCH ID: 5		DIST/DIR:	0.26 N	Е		MAP ID:	4
NAME: SOUTHERN EXCAV ADDRESS: 1983 US HWY 62 E EDDYVILLE KY 420	ATING (DUNCANS)			REV: ID1: ID2: STATUS:	1/14/04 5246072		
CONTACT:				PHONE:			
out the surround of the surround							
OWNER INFORMATION OWNER NAME:							
DWINER NAME.	SOUTHERN EXCAVAT	ING					
OWNER ADDRESS:	PO BOX 793						
OTTER ADDRESS.		42038					
	DESCRIPTIONS INT.						
TANK INFORMATION							
TANK NUMBER:	1	TANK STA	TUS:	VERIFIE	ED REMOVA	AL	
TANK INSTALLED DATE:	9/1/1962	TANK CAP			ALLONS	1.75	
CONTAINED DATE:		REMOVED		9/14/199			
CLOSED DATE:		TEMP CLO		2/5/1996			
INERT MATERIAL:		TANK CON		GASOL			
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL				57.000		
CORROSION PROTECTION:	UNKNOWN						
RELEASE DETECTION:	NONE						
INTERNAL PROTECTION:	NONE						
OVERFILL PROTECTION:	NONE						
SECONDARY CONTAINMENT:	TOTAL						
SPILL PREVENTION:	NONE						
STILL FREVENTION:	HOME						
PIPE MATERIAL:	STEEL						
PIPE TYPE:	SUCTION						
CORROSION PROTECTION:	UNKNOWN						
PIPE RELEASE DETECTION:	NONE						
SECONDARY CONAINMENT:	5400						
TANK NUMBER:	2	TANK STA	TUS:	VERIFI	ED REMOV	AL	
TANK INSTALLED DATE:	9/1/1962	TANK CAR	ACITY:	4000 G	ALLONS		
CONTAINED DATE:		REMOVED	DATE:	9/14/19	96		
CLOSED DATE:		TEMP CLO	SED:	2/5/199	6		
INERT MATERIAL:		TANK COM	TENTS:	GASOL	INE		
CONSTRUCTION MATERIAL:	SINGLE WALL STEEL						
CORROSION PROTECTION:	UNKNOWN						
RELEASE DETECTION:	NONE						
INTERNAL PROTECTION:	NONE						
OVERFILL PROTECTION:	NONE						
SECONDARY CONTAINMENT:	MST02000						
SPILL PREVENTION:	NONE						
PIPE MATERIAL:	STEEL						
PIPE TYPE:	SUCTION						
CORROSION PROTECTION:	UNKNOWN						
PIPE RELEASE DETECTION:	NONE						

- Continued on next page -

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

03-415

US 641 WHITE

REGISTERED UNDER	GROUND STO	DRAGE TANKS
------------------	------------	-------------

SEARCH ID: 5

DIST/DIR:

0.26 NE

MAP ID:

4

NAME: ADDRESS: SOUTHERN EXCAVATING (DUNCANS)

1/1/1970

UNKNOWN

NONE

NONE

NONE

NONE

STEEL

SUCTION

UNKNOWN

SINGLE WALL STEEL

1983 US HWY 62 E

EDDYVILLE KY 42038

REV: ID1:

1/14/04

5246072

ID2: STATUS: PHONE:

CONTACT:

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE: CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION:

RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE: CORROSION PROTECTION: PIPE RELEASE DETECTION:

SECONDARY CONAINMENT:

TANK STATUS:

TANK CAPACITY: REMOVED DATE: TEMP CLOSED: TANK CONTENTS:

VERIFIED REMOVAL 6000 GALLONS 9/14/1996

2/5/1996 GASOLINE

TARGET SITE:

US 641 - REPORT 3 OF 6

EDDYVILLE KY 42038

JOB:

03-415

US 641 WHITE

REGISTERED UNDERGROUND	STOR	AGE	TANKS
------------------------	------	-----	-------

SEARCH ID: 6

DIST/DIR:

0.02 SE

MAP ID:

5

NAME: ADDRESS:

CONTACT:

TVA KENTUCKY DAM

HWY 62 & 641

GILBERTSVILLE KY 42045

LIVINGSTON

REV: ID1:

1/14/04 3459070

ID2:

STATUS: PHONE:

OWNER INFORMATION

OWNER NAME:

US TENNESSEE VALLEY AUTORITY

OWNER ADDRESS:

640 KENTUCKY DAM RD BOX 22

GRAND RIVERS KY 42045

SINGLE WALL STEEL

TANK INFORMATION

TANK NUMBER:

TANK INSTALLED DATE:

CONTAINED DATE:

CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION: RELEASE DETECTION:

INTERNAL PROTECTION:

OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE:

CORROSION PROTECTION:

PIPE RELEASE DETECTION: SECONDARY CONAINMENT:

1/1/2001

UNKNOWN NONE

UNKNOWN UNKNOWN

UNKNOWN

UNKNOWN

UNKNOWN

STEEL. UNKNOWN

TANK STATUS: TANK CAPACITY:

REMOVED DATE:

TEMP CLOSED:

TANK CONTENTS:

VERIFIED CLOSED IN PLACE 3200 GALLONS

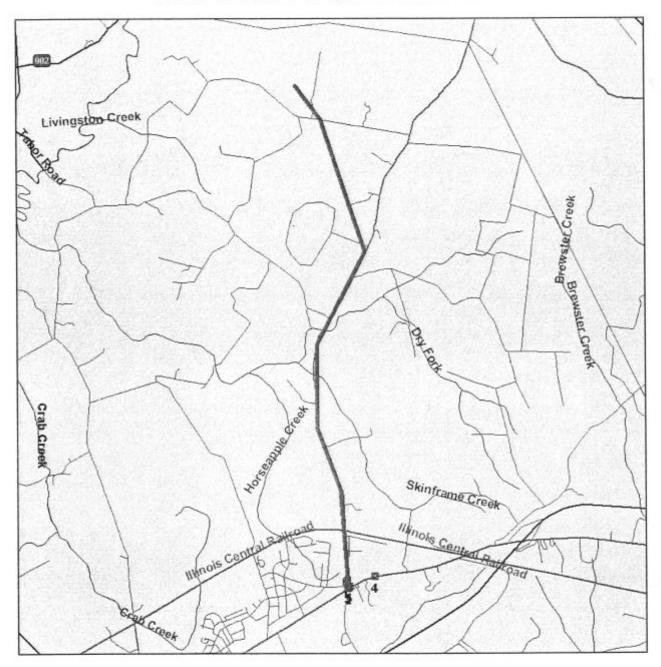
GASOLINE



.5 Mile Radius from Line LINEAR: All Databases



US 641 - REPORT 3 OF 6, EDDYVILLE KY 42038



Source: 1999 U.S. Census TIGER Files		
Linear Search Line		-
Identified Site, Multiple Sites, Receptor	×	自
NPL, Solid Waste Landfill (SWL) or Hazardous Waste		 883

Black Rings Represent I/4 Mile Radii; Red Ring Represents 500 ft. Radius

Railroads ...

TARGET SITE:

US 641 - REPORT 4 OF 6

EDDYVILLE KY 42038

JOB:

1/14/04

3764072

TEMPORARILY CLOSED

TEMPORARILY CLOSED

10000 GALLONS

8/1/2000

GASOLINE

10000 GALLONS

8/1/2000

GASOLINE

03-415

MAP ID:

1

US 641 BEIGE

REV:

ID1:

ID2:

STATUS:

PHONE:

		REGISTERED UNDERGROU	ND STORAGE TANKS
SEARCH ID:	1	DIST/DIR:	0.04 SE

NAME: ADDRESS: FORMER DAVES OIL 2975 US 62 E

EDDYVILLE KY 42038

CONTACT: HAROLD CUMMINS

LYON

OWNER INFORMATION

OWNER NAME:

OWNER ADDRESS:

TANK INFORMATION

TANK NUMBER:

TANK INSTALLED DATE: CONTAINED DATE:

CLOSED DATE:

INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION: RELEASE DETECTION:

INTERNAL PROTECTION:

OVERFILL PROTECTION: SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL:

PIPE TYPE:

CORROSION PROTECTION:

PIPE RELEASE DETECTION:

SECONDARY CONAINMENT:

TANK NUMBER:

TANK INSTALLED DATE: CONTAINED DATE:

CLOSED DATE: INERT MATERIAL:

CONSTRUCTION MATERIAL:

CORROSION PROTECTION: RELEASE DETECTION:

INTERNAL PROTECTION: OVERFILL PROTECTION:

SECONDARY CONTAINMENT:

SPILL PREVENTION:

PIPE MATERIAL: PIPE TYPE:

CORROSION PROTECTION:

PIPE RELEASE DETECTION: SECONDARY CONAINMENT:

HAROLD CUMMINS

16262 DAWSON RD

DAWSON SPRINGS KY 42408

TANK STATUS:

TANK CAPACITY: REMOVED DATE:

TEMP CLOSED: TANK CONTENTS:

SINGLE WALL STEEL

IMPRESSED CURRENT CATHODIC PROTECTION INVENTORY RECORDS /TANK TIGHTNESS TEST

INTERNAL LINING NOT APPLICABLE AUTOMATIC SHUTOFF DEVICE

CATCHMENT BASIN

STEEL

1/1/1971

PRESSURIZED

IMPRESSED CURRENT CATHODIC PROTECTION

AUTO. LINE LEAK DETECTOR

TANK STATUS: 1/1/1971

TANK CAPACITY: REMOVED DATE:

TEMP CLOSED:

TANK CONTENTS:

SINGLE WALL STEEL

IMPRESSED CURRENT CATHODIC PROTECTION INVENTORY RECORDS /TANK TIGHTNESS TEST

INTERNAL LINING NOT APPLICABLE AUTOMATIC SHUTOFF DEVICE

CATCHMENT BASIN

STEEL

PRESSURIZED

IMPRESSED CURRENT CATHODIC PROTECTION

AUTO. LINE LEAK DETECTOR

- Continued on next page -

TARGET SITE:

US 641 - REPORT 4 OF 6

EDDYVILLE KY 42038

JOB: 03-415 US 641 BEIGE

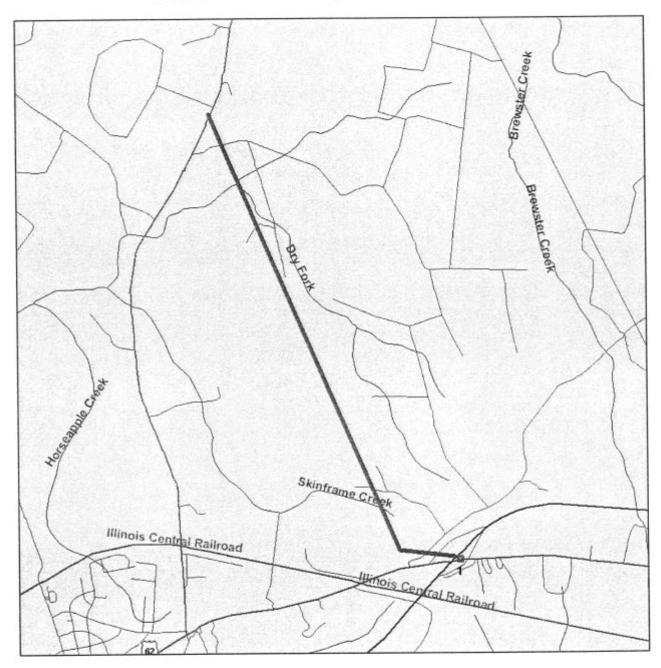
		Promers	0.04.03	r.	MADID	1
SEARCH ID: 1		DIST/DIR:	0.04 SI	E	MAP ID:	1
NAME: FORMER DAVES OF 2975 US 62 E EDDYVILLE KY 420 LYON CONTACT: HAROLD CUMMINS	38			REV: ID1: ID2: STATUS: PHONE:	1/14/04 3764072	
CONTACT. HAROLD COMMEN	·			1101101		
TANK NUMBER: TANK INSTALLED DATE: CONTAINED DATE: CLOSED DATE: INERT MATERIAL: CORROSION PROTECTION: RELEASE DETECTION: INTERNAL PROTECTION: OVERFILL PROTECTION: SECONDARY CONTAINMENT: SPILL PREVENTION: PIPE MATERIAL: PIPE TYPE: CORROSION PROTECTION: SECONDARY CONAINMENT: SECONDARY CONAINMENT:	3 1/1/1971 SINGLE WALL STEEL IMPRESSED CURRENT INVENTORY RECORD INTERNAL LINING NO AUTOMATIC SHUTOF CATCHMENT BASIN STEEL PRESSURIZED IMPRESSED CURRENT AUTO. LINE LEAK DE	S /TANK TIGHTN IT APPLICABLE F DEVICE IT CATHODIC PRO	ACITY: DATE: SED: TENTS: TECTION ESS TEST			
TANK NUMBER: TANK INSTALLED DATE: CONTAINED DATE: CLOSED DATE: INERT MATERIAL: CONSTRUCTION MATERIAL: CORROSION PROTECTION: RELEASE DETECTION: INTERNAL PROTECTION: OVERFILL PROTECTION: SECONDARY CONTAINMENT: SPILL PREVENTION:	4 1/1/1971 FIBERGLASS REINFOI FIBERGLASS REIN-PI MANUAL TANK GAUGINTERNAL LINING NO NONE NONE	ASTIC GING	ACITY: DATE: OSED:		PT FROM UST REGS ALLONS DIL	
PIPE MATERIAL: PIPE TYPE: CORROSION PROTECTION: PIPE RELEASE DETECTION: SECONDARY CONAINMENT:	STEEL SUCTION NONE ANN. LINE TIGHTNES	SS TEST				



.5 Mile Radius from Line LINEAR: All Databases



US 641 - REPORT 4 OF 6, EDDYVILLE KY 42038



Source: 1999 U.S. Census TIGER Files			
Linear Search Line		_	-
Identified Site, Multiple Sites, Receptor	×	\times	幽
NPL, Solid Waste Landfill (SWL) or Hazardous Waste			888
Railroads			

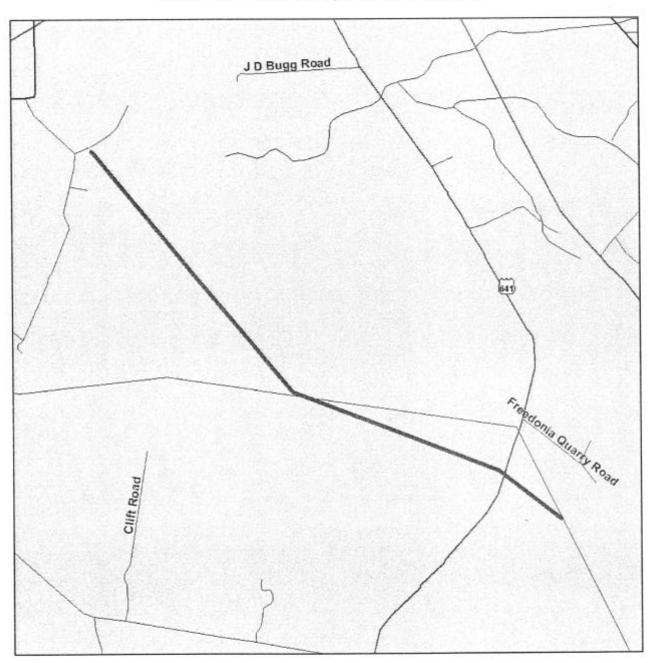
Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius



.25 Mile Radius from Line ASTM Map: RCRAGEN, ERNS, UST



US 641 - REPORT 5 OF 6, FREDONIA KY 42411



Source: 1	1999	U.S.	Census	TIGER	Files
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Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste Railroads



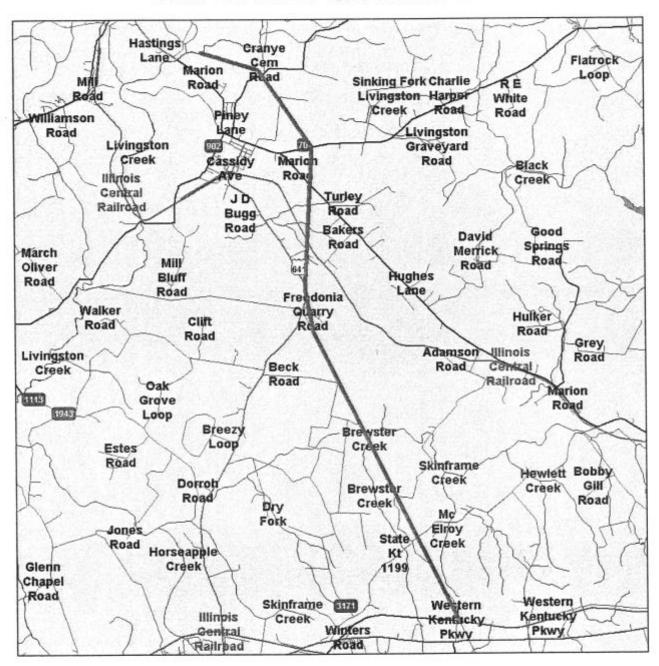




.25 Mile Radius from Line ASTM Map: RCRAGEN, ERNS, UST



US 641 - REPORT 6 OF 6, FREDONIA KY 42411



a teaction of Troop Cit			
Source: 1999 U.S. Census TIGER Files			
Linear Search Line		_	-
Identified Site, Multiple Sites, Receptor	🗵	\times	由
NPL, Solid Waste Landfill (SWL) or Hazardous Waste			888
Railmads			_

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

APPENDIX EO-C

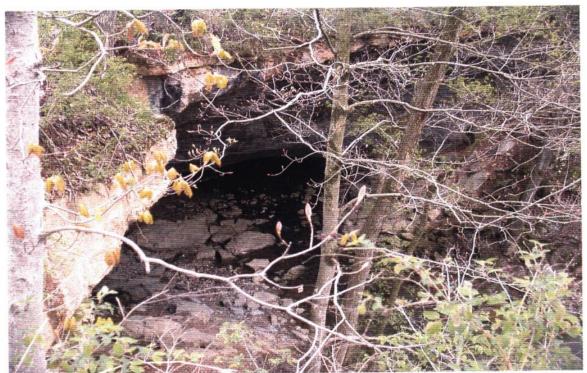
Project Study Area Photographs



Livestock grazing in pastures is a common sight seen from project area roads.



Large agricultural fields are another frequently seen sight from project area roads.



One mile southwest of Fredonia is Mill Bluff Spring, is one of the largest known springs in the project corridor.



Mill Bluff Spring is a tributary of Livingston Creek and drains several sinking creeks in Lyon and Caldwell Counties.