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Site Reassessment Report

Litton Systems Inc Site

Volume 1 of 2

Greene County, Missouri

MOD007152903

September 29, 2006

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Missouri Department of Natural Resources
Division of Environmental Quality
Hazardous Waste Program

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Litton Systems Inc.
Greene County, Missouri

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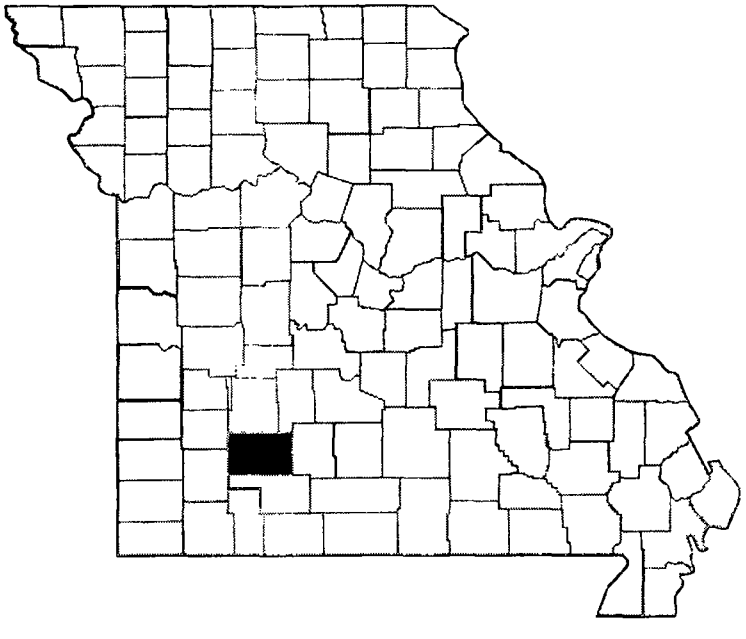

Missouri Department of Natural Resources
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DATE: **September 29, 2006**

PREPARED BY: **Nancy Priddy, Evan Kifer**
Missouri Department of Natural Resources

SITE: **Litton Systems Inc Site**
Greene County

EPA ID. NUMBER: MOD007152903

1.0 INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Missouri Department of Natural Resources (the department), through a cooperative agreement with the U.S. Environmental Protection Agency (EPA), conducted a Site Reassessment (SR) of the Litton Systems Inc Site (Litton site) in Greene County, Missouri. The Litton site consists of soil and groundwater contamination which resulted from releases of volatile organic compounds (VOC's) and metals.

The Litton site is the location of an active facility that manufactures printed circuit boards and uses metals and VOC's in its plating operations. The site was entered in the CERCLA Information System (CERCLIS), EPA's tracking record of potential hazardous waste sites, on October 1, 1979. The department conducted several pre-remedial investigations from 1980 through1988, finding metals and solvent contamination on the site as well as trichloroethylene (TCE) and methylene chloride in private wells and a nearby spring. Following negotiations with DNR, Litton agreed to conduct remediation activities under a Consent Agreement with the state, which was finalized in 1993. The EPA then archived the site on September 29, 1993, since the site was actively undergoing remediation under a state agreement. However, in 2003, analytical results documented VOCs present in springs north of the site. Evidence of fracture systems from geophysical studies and dye traces led the department to determine that the Litton site was at least a contributor to the springs' contamination. The department requested EPA to de-archive the Litton site for further assessment under CERCLA authority.

The SR was initiated on November 7, 2003. The goal of the SR was to evaluate the threat posed to human health and the environment due to the historic releases of contaminants at the site. One objective of the SR was to further investigate off-site impacts to the groundwater and surface water pathways to determine the need for potential removal actions. A second objective was to re-evaluate the site under the Hazard Ranking System (HRS). The HRS score will determine if the site is eligible for placement on the National Priorities List (NPL).

The scope of the investigation included reviewing of previous file information, collecting and analyzing water, sediment and air samples from springs and caves north and east of the site and water samples from nearby drinking water wells during multiple sampling

events, and collecting additional non-sampling information. The investigation included numerous site visits and sampling events throughout 2004 and 2005.

2.0 SITE DESCRIPTION

2.1 Location

The Litton site is located at the Northrop-Grumman Interconnect Technologies facility at 4811 West Kearney Street, Springfield, Missouri, adjacent to the Springfield-Branson Regional Airport. The site is in the Southeast Quarter (SE ¼) of the Southwest Quarter (SW ¼) of Section 6, Township 29 North, Range 22 West in Greene County (Reference 3). The geographic coordinates for the site are 466520.555 Easting and 4122141.674 Northing, Zone 15, as measured at the former percolation terrace on the north side of the Litton facility using a Trimble Geoexplorer XT GPS unit (Reference 4). A site location map is presented in Figure 1 of Appendix A. Directions to the site are as follows: From Highway I-44 in Springfield, take the West Bypass/Hwy 160 Exit and travel south on West Bypass approximately 0.25 mile to West Kearney Street. Travel west on West Kearney Street approximately 1.5 miles. The Litton site is on the north side of West Kearney Street at the Northrop-Grumman Interconnect Technologies facility.

Greene County has a temperate climate with hot summers and moderately cool winters. In winter, the average temperature is 35° Fahrenheit (F), with an average daily minimum temperature of 25° F. In summer, the average temperature is 80° F, with an average daily maximum temperature of 85.9° F (Reference 5, p. 1, 13). The prevailing wind direction is from the south-southeast, with an average speed of 12 miles per hour. The total annual precipitation at the site is approximately 41.47 inches (Reference 5, p. 48, 74). The 2-year, 24-hour rainfall for the area is estimated to be 3.8 inches (Reference 6).

2.2 Site Description

Figure 2 in Appendix A is a facility site map showing areas of concern taken from the SECOR Remedial Investigation Summary Report-Phase II, April 8, 2005. Site photos are included in Appendix B. The Litton site is the location of an active manufacturing facility that produces printed circuit boards. On-site soil and groundwater are known to be contaminated with volatile organic compounds (VOCs) and heavy metals as a result of historic waste disposal activities. The facility property is triangular and approximately 77 acres. The facility building occupies approximately 207,000 square feet and is located on the southern part of the property, facing West Kearney Street (Appendix B, photographs 1 and 3). The building includes administrative offices and warehouse and production areas. A butyl-rubber-lined pond designed to contain water for emergency fire fighting is located southwest of the building. An asphalt parking lot is located north of the building. An industrial water supply well, completed to a depth of 1,390 feet, is present on the north side of the facility building but is no longer in use as a source of water. (Reference 7). The remaining property is undeveloped. The site surface that does not contain structures or pavement is covered with grass or soil. A number of sinkholes are present on and in the vicinity of the site.

Figure 2 also shows former waste management areas that historically received wastes from facility process operations. The wastes generated included chlorinated solvents and metals. These former waste management units include the Former Percolation Terrace, the Former "A" and "B" Lagoon, the Former "Original" Acid Pit, the Former Sludge Pit, the Former "New" Acid Pit, the Former "C" Lagoon, and the Former Sanitary Lagoon, now on Airport property. Also included as areas of concern in Figure 2 are portions of the facility building complex. Numerous monitoring wells and recovery wells are also present on the site as part of on-going Remedial Investigation and Interim Remedial Measures activities being conducted under the Consent Agreement. (Reference 7).

Access to the site is restricted via fencing and a padlocked gate. The surrounding land use is a mixture of industrial, commercial, and agricultural. The site is bordered by West Kearney Street on the south, an industrial park on the east, agricultural lands on the north, and the Springfield-Branson Regional Airport on the west.

2.3 Operational History

Litton Industries purchased the site property in three different parcels. The first parcel was purchased from the Industrial Development Corporation in 1963 after it had been leased first. The second parcel was purchased from the city of Springfield and the third parcel was purchased from Mr. and Mrs. Roscoe Prescott in 1964. Prior to purchase, the land was undeveloped. Litton Industries constructed the first building in 1967-68. Several additions have been built since the initial construction (Reference 8, p. 3).

Litton's Advanced Circuitry Division (ACD) began operation at the site in about 1969, manufacturing printed circuit boards. Processes included plating with copper pyrophosphate, nickel, rhodium, gold and tin (Reference 9, p. 1). The current manufacturing process includes building multi-layer circuit boards for use in the defense, telecom and information technology industries. The boards are constructed from fiberglass reinforced copper clad material. Then, copper is applied during the process and an image is applied to coating on the boards. Next, the boards are electroplated and etched. Following that, the boards are finished and tested prior to shipping to the customer (Reference 7, p. 2-1).

Litton initially disposed of wastewater by irrigation and by discharging to a lagoon and sinkhole on the Litton property (Reference 9, p. 1). The former percolation terrace, located north of the parking lot, was used for process wastewater disposal from 1971 to 1975. The percolation terrace was approximately 2.5 acres in size and removed metals from the water by the cation exchange capacity of clay rich soils. The percolation terrace contained a slotted subsurface discharge pipe that consisted of a series of 180-degree elbows connecting parallel sections of slotted pipe. The sanitary lagoon, northwest of the percolation terrace, was used from the facility's beginning until 1982 when the facility connected to the city sewer. The sanitary lagoon became part of the airport property in 1975, due to a property transfer. It was filled in the 1980's and a hanger was subsequently built over the northern portion of the feature (Reference 7, pp. 2-2, 2-3). Litton received an Operating Permit from the Clean Water Commission in 1972 for the operation of the

wastewater lagoon. An NPDES Permit was issued in 1974 but was terminated in 1975 when the discharge was thought to have been eliminated (Reference 8, p.3).

As the facility expanded and wastewater generation increased, the percolation terrace became inadequate for wastewater disposal. Use of the percolation terrace ceased in the mid-1970's, when the "A" and "B" Lagoon was constructed to handle wastewater discharge. The "A" and "B" Lagoon consisted of two cells separated by a common berm. This lagoon removed metals from the water by using a 1-foot layer of limestone that would raise the pH of the wastewater. The lagoon was operated under an MDNR Letter of Approval for the operation of a no discharge wastewater system, which included land application of the wastewater. Use of "A" and "B" Lagoon ceased in 1982, when the facility connected to the City of Springfield's sanitary sewer system and installed a wastewater treatment system to remove the plating wastes. "A" and "B" Lagoon was closed in 1982, with EPA oversight. The "C" Lagoon was a lined lagoon, used in the 1980's as a holding area for process wastewater when the wastewater treatment system was at capacity. "C" Lagoon was closed at some time prior to 1990 (Reference 7, pp. 2-2, 2-3; Reference 9, p. 1).

Little information is available about the other waste management units, which were closed in the late 1970's. Those include the Former "Original" Acid Pit, the Former "New" Acid Pit, and the Former Sludge Pit (Reference 7, p. 2-3).

Litton ACD submitted a waste survey form to the department in 1976 in which the process flow diagram identified waste streams including cardboard and other loose trash, reclaimable spent etchants, "dirty" methylene chloride, waste acid, caustic and spent solutions, sludge, and treated wastewater. The form identified three on-site disposal features - a sludge pit, a waste acid pit, and a wastewater treatment pond. The form indicated 100,000 gallons/year (gal/yr) of copper-bearing sludge were disposed in an evaporation pit on-site; 500 gal/yr of miscellaneous waste chemicals were disposed in a limestone-lined pit on-site; and 7,200,000 gal/yr of treated wastewater were disposed in the no-discharge wastewater treatment pond. The cupric chloride and ammoniacal etchant wastes were stored in tanks and collected by chemical companies. Although the waste methylene chloride was collected in barrels for off-site treatment or disposal, there was no treatment/disposal method identified for the 18 tons of waste TCE listed in the waste stream (Reference 10).

The Litton site facility remains active. On October 13, 1999, the name of Litton Systems, Inc.'s Advanced Circuitry Division was changed to Interconnect Technologies Division (Reference 11). Litton Systems, Inc. is a wholly-owned subsidary of Litton Industries, Inc. In 2001, Litton Industries, Inc. was acquired by Northrop-Grumman Corporation (Reference 12). Department file information indicates that by September 2001, the Litton site facility was operating as Northrop Grumman Interconnect Technologies (NGIT).

2.4 Site History and Previous Investigations

The first recorded MDNR inspection was on September 25, 1979. MDNR discovered that plating wastewater discharged to an on-site lagoon system was overflowing and releasing wastes into a nearby sinkhole (Reference 16, p. 2).

In September, 1980, the State of Missouri and the Missouri Clean Water Commission issued a Consent Order and Stipulation, which called for the company to connect to the Springfield municipal sewer line once available and to cease discharges from their property (Reference 16, p. 2).

2.4.1 Pre-remedial Assessments, 1980-1993

Numerous investigations and sampling events have taken place at the Litton site. The Litton System Inc site was first entered in EPA's Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) database on October 1, 1979 (Reference 13). The first PA and SI were completed by EPA and the department under CERCLA authority in 1980 and 1981, following a number of citizen complaints that the facility had disposed of hazardous wastes in their process lagoons. The investigations found overflow from the lagoons entering a sinkhole and contaminating the groundwater. Contamination of groundwater was occurring through percolation as well. Sampling of lagoon waters and monitoring wells documented several organic compounds present, including TCE (References 14 and 15). The department completed an additional PA on April 2, 1985 and a more detailed SI on December 23, 1988. SI sampling documented elevated levels of copper (Cu), chromium (Cr) and lead (Pb), and two solvents, TCE and 1,1,1-trichloroethane (1,1,1-TCA), present in the leach field on the site. Arsenic (As), silver (Ag) and nickel (Ni) were also present in the soil at levels above background. Groundwater samples collected from three private wells off the site showed methylene chloride in one well and TCE present in another well; although, the TCE was not detected in follow-up sampling of that well several months later. TCE and 1,2-dichloroethylene (1,2-DCE) were present in a water sample from Ritter Springs West and the sediment sample from that spring showed higher than background Cr and Cu levels. There are other industries in the northwest Springfield area. The SI report stated that the site is surrounded by sinkholes, and the complexities of the karst topography made it difficult to determine the effects of any one site on the groundwater in the area. Additional dye traces were planned (References 8 and 9).

Jacobs Engineering Group, a contractor for EPA, completed a Site Inspection Prioritization (SIP) in September 1993 to evaluate the site as a potential candidate for an Expanded Site Inspection. The report concluded that the Litton site had already been investigated extensively and additional pre-remedial site assessment under CERCLA authority was not needed. The existing analytical data was sufficient to complete a National Priorities List (NPL) HRS scoring package for the site. However, even though the site scored above 28.5, proposal for the NPL was deferred because the site had recently entered into a Consent Agreement with the department to remediate the site with department oversight (Reference 16).

2.4.2 Registry Proposal

On October 24, 1991, the department proposed placing the Litton site on the Missouri Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites. Litton appealed the proposal and agreed to conduct remediation activities under a Consent Agreement with the state, which was finalized July 29, 1993 (Reference 17).

2.4.3 Dye Trace Studies

Dye traces were conducted in the Litton site area by the department's Division of Geology and Land Survey (DGLS) or under DGLS supervision, between 1977 and 1998 to determine groundwater flow direction for remediation, attribution and research purposes. Tracing dyes injected into sinkholes, lagoons, losing streams and monitoring wells were recovered down gradient in gaining streams and springs discharging from both the Springfield Plateau and the Ozark Aquifers. Underground travel distances observed from the dye traces ranged from 0.4 to 6.3 miles. The most common range was between 1 to 3 miles. The Dye Trace Map, Figure 3 in Appendix A, includes dye injection point locations, dye reception point locations and the straight line paths between the two (References 18 and 19).

2.4.4 Remedial Activities

Since 1993, Litton has been conducting Remedial Investigation (RI) activities in several phases at the Litton site with department oversight. The RI Summary Report-Phase II, completed April 8, 2005, summarizes the findings thus far (Appendix C). Investigations have documented chlorinated solvents and metals contamination in the soil at the site. The inorganic compounds found above CALM (Cleanup Levels for Missouri, Groundwater Target Concentrations (GTARC), September 2001) C_{LEACH} values include Cu, Pb, Cr, As, mercury (Hg) and Ag. Although Cr and As levels exceed the CALM C_{LEACH} objectives, they may be due to naturally elevated levels in the soil for this area. Cu, Pb, Hg and Ag were all present above CALM soil objectives; however, Cu was the most widespread inorganic contaminant found in the soil at the site. Numerous VOC's, including TCE and 1,1,1-TCA and associated degradation compounds were found in the soil above CALM C_{LEACH} values and soil objectives. TCE was the most widespread VOC contaminant found in the soil at the site. RI results show groundwater in the Springfield Plateau Aquifer has been impacted by metals and VOCs at levels above Maximum Contaminant Levels (MCLs). Metals present include Cu, Cd, Hg and Pb. The numerous VOCs present include TCE and associated degradation products. TCE was the most widespread VOC groundwater contaminant found. Groundwater in the deeper, Ozark Aquifer also has been impacted. TCE, cis-1,2-DCE and 1,2-DCP are present above MCLs in the facility industrial well and in the deep well on the airport property, west of the facility (Reference 7, p. 4-6).

Beginning in 1994, extraction wells were installed as part of an Interim Remedial Measures (IRM) system. The wells were located near the areas of the former "new" acid pit, the former "original" acid pit and sludge pit, and adjacent to the west property

boundary. The system was installed to inhibit offsite migration of impacted shallow groundwater. Groundwater is extracted from the wells, pumped to a central location and then passed through an air stripper. After air stripping, the water is combined with other treated wastewater and discharged into the city sewer. Currently there are 12 wells in the system, which is currently active. Limited testing of the IRM system indicates the system is not completely capturing the contaminants (Reference 7, p. 2-8 and 2-9).

The VOC and metals impacts to the Springfield Plateau Aquifer are located in or downgradient from the contaminated soil areas. The contaminant transport is affected by the highly variable karst, bedrock topography.

Groundwater flow in the Springfield Plateau Aquifer somewhat mimics surface topography and moves radially away from the Litton facility, which sits on a topographic high (Reference 7, p. 5-9). In the area north of the Litton facility, groundwater flow within the Springfield Aquifer is generally in the north-northwest direction. The deeper Ozark Aquifer flows generally to the west in the area of the Litton facility (Reference 7, p. 5-10).

RI activities continue with Phase III, whose goal is to further delineate and collect sufficient data on the extent of groundwater impacts and migration pathways to support and help develop technically feasible and cost effective remedial alternatives (Reference 20, p.1-2). The Remedial Investigation Summary Report – Phase III is expected to be submitted in the fall of 2006 (Reference 21).

2.5 Waste Characteristics

The primary contaminants of concern for this SR are chlorinated solvents, specifically TCE and its degradation products, and heavy metals. Per Phase II findings, copper and TCE are the most prevalent contaminants in on-site soils and Springfield Plateau Aquifer water (Reference 7, p. 4-2, 4-7, 4-8). Contamination in the Ozark Aquifer is predominantly TCE (Reference 7, p. 3-3).

2.5.1 Chlorinated Solvents and Dense Non-aqueous Phase Liquids (DNAPLs)

Chlorinated solvents, such as TCE, DCE and TCA, are a class of VOCs encountered at various hazardous waste sites. Chlorinated solvents are man-made compounds that are often used by industry as chemical intermediates, or solvents in the metal finishing, textile processing, and paint industries. Many chlorinated solvents are considered hazardous because they are mutagenic, carcinogenic, or teratogenic (Reference 22, p.2). It is not known if people exposed to TCE in the air or drinking water have a higher risk of cancer or reproductive problems. The International Agency for Research on Cancer has determined that TCE is probably carcinogenic to humans (Reference 22, p. 5). TCE can degrade to 1,1-DCE, cis and trans 1,2-DCE, and vinyl chloride (Reference 23). TCA can degrade to 1,1-dichloroethane (DCA) and 1,1-DCE (Reference 23).

Polychlorinated solvents exist as dense, non-aqueous phase liquids (DNAPLs). DNAPLs are separate-phase hydrocarbon liquids that are denser than water. As free-phase product, chlorinated solvents move downward through the soil under the force of gravity then flow laterally along the surface of a confining unit in the subsurface. Once in the subsurface, it is difficult or impossible to recover all of the trapped residual contamination. The chlorinated solvent that remains trapped in the soil/aquifer matrix acts as a continuing source of dissolved contamination to groundwater, preventing the restoration of the contaminated aquifer for many years (Reference 24, p.1).

2.5.2 Copper

Copper is a reddish-brown metal that occurs naturally in rock, soil, water, sediment and air. Copper also occurs naturally in plants and animals. It is an essential element for all known living organisms including humans and other animals. Copper is extensively mined and processed in the United States and is primarily used as the metal or alloy in the manufacturing of wire, sheet metal, pipe, and other metal products. Copper compounds are most commonly used in agriculture to treat plant diseases, like mildew, or for water treatment and as a preservative for wood, leather, and fabrics. Industrial application of copper sulfate include use as an activator in froth flotation of sulfide ores, production of chromated copper arsenate wood preservatives, electroplating, and many others (Reference 25, pp. 2, 118).

Copper is necessary for good health. However, very large single or daily intakes of copper can harm your health. Intentionally high intakes of copper can cause liver and kidney damage and even death (Reference 25 , pp. 6-7). EPA classifies Copper as a priority toxic pollutant (Reference 26, p. 653).

3.0 SUMMARY OF ADDITIONAL WORK

The SR investigation included reviewing files, and previous RI activities and findings. SR field activities were conducted in a phased approach. Phase I activities included collecting surface water and sediment samples from eight springs where groundwater discharges, in an area from north to east of the site, and collecting air samples in the caves at two of those springs. Phase II activities included collecting samples from 105 private, residential drinking water wells drawing water from the Springfield Plateau Aquifer and/or the Ozark Aquifer and from six non-community drinking water wells completed in the Ozark Aquifer. The drinking water wells were also located in the area north and east of the site. In addition, surface water and sediment samples were collected for a spring that was missed during Phase I activities. As a followup, an Additional Limited Site Investigation was conducted to assess risk due to air quality in Fantastic Caverns. The results to sampling conducted are included in sections 5.3, 5.4 and 7.1.

4.0 WASTES/SOURCE SAMPLING

No soil or groundwater sampling was conducted on the site as part of this SR investigation. RI activities conducted by SECOR for the Litton site have documented

metals and VOC contamination in the soil and groundwater of the site at concentrations significantly above background levels and above health-based benchmark levels.

4.1 Soil Sampling and Results (Reference 7, Appendix C)

RI soil sampling conducted at the site from 1993 through 2005 identified nine Areas of Concern (AOCs) and delineated contaminant distribution in those areas. The AOCs included the following former waste management units: the Former Percolation Terrace, the Former "A" and "B" Lagoon, the Former "Original" Acid Pit, the Former Sludge Pit, the Former "New" Acid Pit, the Former "C" Lagoon, and the Former Sanitary Lagoon. Two additional AOCs are the facility Sub_floor area and the northwest portion of the Parking Lot. Phase I RI soil samples were analyzed for VOCs, total metals and cyanide, with select samples analyzed for hexavalent chromium. Phase II RI samples were analyzed for only VOCs and total metals. The cyanide and hexavalent chromium were dropped due to lack of detections during Phase I sampling. Samples from several soil borings on airport property west of the site were used as background samples. Areas of inorganic contamination were delineated in two depth ranges- surface to 4 feet and 4 feet to bedrock.

4.1.1 Metals

RI activities documented Cu, Cr, Pb, and As present in the soil of the site at levels significantly above background soil sample results and exceeding health-based benchmark levels. Ni, mercury (Hg), silver (Ag) and selenium are also present above background sample results or published background levels for soil in Greene County but do not exceed health-based benchmarks levels. Appendix C provides summary data and maps taken from Reference 7.

Copper

Background sample results ranged between non-detect and 18.2 mg/kg. Published background levels for copper in soil in Greene County range from 15 to 41 ppm (Reference 27, p. H29). There is no Superfund Chemical Data Matrix (SCDM) value for copper (Reference 2). The EPA Region 9 Preliminary Remediation Goal (PRG) for copper in industrial soil is 41,000 mg/kg (Reference 25). Cu was the most widespread metal contaminant at the site, present significantly above background levels in all AOCs except the Former "C" Lagoon and the Parking Lot area and at all depths. Concentrations ranged up to 120,000 ppm, found in the vicinity of the Former Sludge Pit. Cu is present above the CALM STARC value for industrial use of 4,700 mg/kg in the AOCs as follows: "A" & "B" Lagoon between 2 and 7 feet, highest concentration is 16,000 mg/kg at 4-5 feet; Percolation Terrace between 0 and 3 feet, highest concentration is 28,000 mg/kg at 2-3 feet; "New" Acid Pit between 0 and 9.5 feet, highest concentration is 17,000 mg/kg at 7-7.5 feet; "Original" Acid Pit between 3.5 and 21 feet at soil interface with bedrock, highest concentration is 22,000 mg/kg at 3.5-4 feet; Sludge Pit between 0 and 14 feet, highest concentration is 120,000 mg/kg at 5-6 feet; Sanitary Lagoon between 8 and 13 feet, highest concentration is 64,200 mg/kg at 8.5–9.5 feet, interface with bedrock;

and Sub-floor of the facility between 0 and 16 feet, highest concentration is 37,000 mg/kg at 6-7 feet.

The RI determined that since copper was the most prevalent inorganic contaminant of concern and the most likely to influence remedial actions, copper concentrations were used to represent the areas of inorganic contamination. The RI delineated areas totaling 59,100 square feet (ft^2) of copper contamination above 4,700 ppm in the 0 to 4 foot depth range. In the depth range of 4 feet to bedrock, areas of copper exceeding 4,700 ppm totaled 51,500 ft^2 (Appendix C, Figures 6 and 7).

Chromium

Background sample results ranged between 23.5 and 86.5 mg/kg. Published background levels for chromium in soil in Greene County range from 25 to 54 ppm (Reference 27, p. H21). The SCDM value for chromium is 230 mg/kg and the EPA PRG for chromium in industrial soil is 450 mg/kg. Although chromium is not present at the site above the CALM STARC value for Scenario C of 4,500 mg/kg, it is present above SCDM and EPA PRG benchmarks in the following areas: "A" & "B" Lagoon between 2 and 7 feet, highest concentration is 1,100 mg/kg at 4-5 feet; Percolation Terrace between 0 and 3 feet, highest concentration is 1,400 mg/kg at 0-1 foot, soil interface with bedrock; "New" Acid Pit between 0 and 7.5 feet, highest concentration is 2,700 mg/kg at 7-7.5 feet; Sanitary Lagoon between 8.5 and 10 feet, highest concentration is 2,740 mg/kg at 8.5-9.5 ft, soil interface with bedrock; and Sub-floor of the facility between 2 and 18 feet, highest concentration is 760 mg/kg at 17-18 feet.

Lead

Background sample results ranged between 12.4 and 33.5 mg/kg. Published background levels for lead in soil in Greene County range from 20 to 42 ppm (Reference 27, p. H29). There is no SCDM value for lead. The EPA PRG for lead in industrial soil is 750 mg/kg. Lead is present above the CALM STARC value for Scenario C of 660 mg/kg in the following areas: "A" & "B" Lagoon between 4 to 6.5 feet, highest concentration is 890 mg/kg; Percolation Terrace between 0 and 3 feet, highest concentration is 2,580 mg/kg at 0-1 foot, soil interface with bedrock; "Original" Acid Pit between 3.5 and 6 feet, highest concentration is 7,250 mg/kg at 5-6 feet, soil interface with bedrock; Sludge Pit between 0 and 6 feet, highest concentration is 15,000 mg/kg at 5-6 feet; Sanitary Lagoon between 8.5 and 13 feet, highest concentration is 5,550 mg/kg at 8.5–9.5 feet, soil interface with bedrock; and Sub-floor of the facility at 0-1 foot, concentration is 50,000 mg/kg.

Arsenic

Background sample results ranged between 9.72 and 17.8 mg/kg. Published background levels for arsenic in soil in Greene County range from 18 to 23 ppm (Reference 27, p. H13). The lowest SCDM value for arsenic is 0.43 mg/kg and the EPA PRG for arsenic in industrial soil is 1.6 mg/kg. Although arsenic is present in several locations at concentrations above the lowest SCDM value, the EPA PRG and the CALM STARC value for Scenario C of 14 mg/kg, only one of the samples is significantly above background levels. Arsenic is present in the Parking Lot area at 77 mg/kg at a depth of 13-14 feet.

Mercury

All background results were non detect for mercury. Published background levels for mercury in soil in Greene County range from 0.017 to 0.030 ppm (Reference 27, p. H33). The lowest SCDM value for mercury is 23 mg/kg and the EPA PRG for mercury is 310 mg/kg. Although mercury is present in several locations at concentrations significantly above background levels, none of the results exceed the SCDM or EPA PRG health-based benchmarks. Mercury is present above the CALM STARC value for Scenario C of 1.0 mg/kg in the following areas: Percolation Terrace between 2- 3 feet at 9.2 mg/kg, "Original" Acid Pit at 20-21 feet at 1.12 mg/kg, Sanitary Lagoon at 8.5-9.5 feet at 2.09 mg/kg, and the Sub-floor of the facility at 1-2 feet at 2.3 mg/kg.

Nickel, Silver and Selenium

These metals are present at concentrations significantly above analytical and/or published background levels at several of the AOCs; however none exceed health-based benchmark levels. Nickel is present in the "New" Acid Pit, nickel and silver are present in the "Old" Acid Pit and the Sanitary Lagoon, silver is present in the Percolation Terrace and selenium is present in the Parking Lot area. The selenium could be naturally occurring as the level present falls within the published background range for selenium in soil in Greene County of 17-27 mg/kg (Reference 27, p. H41).

4.1.2 VOCs

RI activities documented the following VOCs present in soil at the site at concentrations significantly above background levels: 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichloroethane, 1,2-dichloropropane,1,3,5-trimethylbenzene, 1,4-dichlorobenzene, 2-butanone, 2-chlorotoluene, 2-hexanone, 4-chlorotoluene, 4-methyl-2-pentanone, benzene, bromomethane, carbon disulfile, carbon tetrachloride, chlorobenzene, chloroform, chloromethane, cis-1,2-dichloroethene, ethylbenzene, isopropylbenzene, m&p-xylenes, methylene chloride, naphthalene, n-butylbenzene, n-propylbenzene, 0-xylene, tetrachloroethene, toluene, trans-1,2-dichloroethene, trichloroethene, vinyl chloride and total xylenes (Appendix C, Table 3).

Those VOCs that also exceed SCDM benchmark levels for soil exposure and the CALM STARC values for Scenario C include 1,1,2-trichloroethane, 1,2,dichloropropane, tetrachloroethene, trichloroethene, vinyl chloride and total xylenes. Three additional compounds, 1,1,1-trichloroethane, 1,1-dichloroethene and methylene chloride, exceed the CALM STARC values for Scenario C, however, there are no SCDM benchmark values for those compounds.

TCE is the most widespread VOC, present in all AOCs. Concentrations ranged up to 16,000,000 ug/kg found in the "Original" Acid Pit Area at a depth of 6 feet. The RI delineated areas totaling 11,100 ft^2 of TCE in the below 4 feet depth at concentrations above the CALM STARC value for Scenario C of 89,000 ug/kg for TCE (Appendix C, Figures 8 and 9).

4.2 Groundwater Sampling and Results

RI activities included groundwater sampling from 27 monitoring wells and 11 recovery wells screened in the Springfield Plateau Aquifer, and 4 monitoring wells and 3 industrial wells completed in the Ozark Aquifer located on and nearby the site. Table 4 in Appendix C provides summarized sampling results. Figures 38, 39 and 42 in Appendix C provide a graphical representation of the sampling results.

Phase I RI groundwater samples were analyzed for VOCs, dissolved metals and cyanide. Phase II RI Springfield Plateau Aquifer samples were analyzed for VOCs, dissolved metals and total metals. The cyanide analysis was dropped due to lack of detections during Phase I sampling. All Phase II RI Ozark Aquifer samples were analyzed for VOCs. Metals and cyanide were dropped from the Ozark Aquifer analysis due to the lack of detections of these analytes during the Phase I analysis.

4.2.1 Metals

RI sampling documented several metals released to the Springfield Plateau aquifer. Copper, cadmium, nickel, mercury, and lead were present in groundwater at concentrations exceeding MCLs. The dissolved metals copper, cadmium and nickel occurred in two areas- near the facility building and near the "Original"Acid Pit area. Highest copper concentrations were 110,000 ug/L in MW-3 near the building and 23,000 ug/L in RW-6 near the "Original" Acid Pit. The MCL for copper is 1,300 ug/L. Highest cadmium concentrations were 9 ug/L in MW-4 near the building and 87 ug/L in MW-16 near the "Original" Acid Pit. The MCL for cadmium is 5 ug/L. Highest nickel concentrations were 220 ug/L in MW-4 near the building and 3,400 ug/L in RW-6 near the "Original" Acid Pit. The MCL for nickel is 100 ug/L. Dissolved mercury was also present above its MCL of 2 ug/L in MW-16 at 7.8 ug/L near the "Original" Acid Pit. Dissolved lead was present in several wells but not above the MCL of 15 ug/L. Total lead was widespread, occurring in wells on the north and west portions of the site. Highest total lead concentration was 530 ug/L in MW-4 near the building.

4.2.2 VOCs

<u>Springfield Plateau Aquifer</u>

RI sampling documented numerous VOCs present in the Springfield Plateau Aquifer. Chlorinated solvents found in groundwater samples from Springfield Plateau Aquifer wells include PCE, TCE, 1,1,1-TCA, 1,1,2-TCA and numerous degradation products. Additional chlorinated solvents present in those water samples include 1,1,2,2-tetrachloroethane, chloroform, methylene chloride and 1,2-dichloropropane. In addition to chlorinated solvents, benzene, toluene, ethylbenzene, xylene and several other petroleum constituents were also present in the groundwater samples; however, most of these compounds were found in airport monitoring wells. The highest levels of chlorinated solvents were in the vicinity of the Former "Original" Acid Pit and Former Sludge Pit areas, and the Former Sanitary Lagoon area. TCE and 1,1,1-TCA concentrations ranged as high as 330,000 ug/L and 120,000 ug/L, respectively, both occurring in MW-16.

The chlorinated solvents in the Springfield Plateau Aquifer samples at concentrations exceeding the MCL occurred as far west as MW-112 where TCE was present at 110 ug/L, which exceeds the MCL of 5 ug/L TCE; as far south as MW-103 on the south where TCE was present at 1,500 ug/L, as far east as MW-104R, where TCE was present at 18 ug/L, and as far north as MW-115 where TCE was present at 8 ug/L. Although not above the MCL, additional TCE detections extend to MW-118 on the south, where TCE was present at 2 ug/L and as far east as MW-117, where TCE was present at 3 ug/L.

Ozark Aquifer

RI sampling documented chlorinated solvents present in the Ozark Aquifer. TCE, cis-1,2-DCE and 1,2-DCP were present in the Litton industrial well IW-1 and the airport industrial well APD-1 at concentrations exceeding MCLs of 5ug/L for TCE, 1,2-DCP and cis-1,2-DCE. Highest concentrations in IW-1 were 1700ug/L TCE, 280 ug/L cis-1,2-DCE and 98 ug/L 1,2-DCP, collected at the 593 foot depth. Highest concentrations in APD-1 were 470 ug/L TCE, 130 ug/L cis-1,2-DCE and 32 ug/L 1,2-DCP. No VOCs were detected in the four Ozark Aquifer monitoring wells.

4.3 Waste/Source Conclusions

RI activities have established a release of metals and VOCs to soil and groundwater at the Litton site. RI sampling documented Cu, Cr, Pb, and As in the soil of the site, and copper, cadmium, nickel, mercury and lead in the Springfield Plateau Aquifer at concentrations exceeding health-based benchmark levels. Chlorinated solvents were documented in the soil and in both the Springfield Plateau Aquifer and the Ozark Aquifer at concentrations exceeding health-based benchmark levels. Copper is the most widespread metal contaminant and TCE is the most widespread VOC. The contaminants are present in soil predominantly in the vicinity of the former waste management units and beneath the facility building and parking lot. It is anticipated that the Phase III RI Report will determine the extent of the contaminant plumes in the Springfield Plateau and Ozark Aquifers.

A Phase II Feasibility Study was conducted to determine appropriate remedial actions for on-site soils (Reference 28). Remedial actions of choice for on-site soils include in-situ electrical resistive heating (ERH) with soil vapor extraction (SVE) to remediate VOC contaminated areas, and engineered barriers with institutional controls to remediate metals contaminated areas. Full scale implementation of ERH with SVE is expected to occur in November 2006 (Reference 21), and is expected to be completed in approximately two years. Engineered barriers with institutional controls are expected to be implemented site-wide once ERH with SVE is completed.

A Phase III Feasibility Study is expected to be conducted to determine appropriate remedial actions for groundwater once the Phase III RI has been submitted to and accepted by the MDNR. It is expected that the ERH with SVE soil remediation will have a positive impact in reducing VOC contamination in the Springfield Aquifer, although additional treatment may be necessary. Preliminary discussions for remediation of the

Ozark Aquifer have included plugging back the Litton site well to about 700 feet and pumping and treating the contaminated water. The produced water could be used as site process water (Reference 21).

5.0 GROUNDWATER PATHWAY

5.1 Hydrogeologic Setting (Reference 18 and 29)

The Litton site lies on the northeast edge of the Springfield Plateau of the Ozark Plateau sub-province of the Interior Highlands physiographic province in Missouri. This area is characterized by rolling uplands with shallow dissected valleys. All known drinking water wells within four miles of the site draw from the Springfield Plateau or Ozark Aquifers. Table 2 of Reference 18 illustrates the aquifer stratigraphy and hydrology.

5.1.1 Soil and Residuum

Stratigraphy
Soil and Residuum: The soil beneath the Litton Site consists of Keeno-Eldon cherty silt loam complex. Keeno-Eldon cherty silt loam is composed of roughly twenty-five to fifty percent clay. Residuum beneath the soil is cherty silty clay that grades into cherty silty clayey gravel with depth. The soil and residuum range in thickness from 10 to over 60 feet beneath the site.

Hydrology
The pH of the Keeno-Eldon soil complex is acidic and ranges between 3.6 and 6.5. Permeability is moderate to rapid ranging from 0.2 to 6.0 inches per hour. The hydraulic conductivity is roughly 4.2 x 10-3 to 1.4 x 10-4 centimeters per second (cm/sec). Overburden groundwater flow is toward the north–northwest beneath the site.

5.1.2 Springfield Plateau Aquifer

Stratigraphy
Mississippian-Age Limestone: Mississippian-age limestone is present beneath the site and is divided into the Burlington-Keokuk Limestone, Reeds Spring Formation, and the Pierson Limestone. These formations consist of limestone, cherty limestone, and argillaceous limestone units. The Mississippian-age rocks in this aquifer extend from near the ground surface to approximately 235 feet below the ground surface.

Hydrology
The hydraulic conductivity of the aquifer is roughly 7.8 x 10-3 cm/sec. Due to the karst nature or the area, permeability and gradient characteristics may vary over short distances. Based upon site specific and dye trace data, the Springfield Plateau Aquifer groundwater flow direction is toward the north to north-northwest. Forty-eight of the 432 known wells within a four-mile radius of the site are completed in the Springfield Plateau Aquifer.

5.1.3 Ozark Confining Unit

Stratigraphy
Mississippian-Age Rocks: The deepest and oldest Mississippian-age rocks beneath the site include the Northview and Compton Formations. These Formations make up the Ozark Confining Unit, and form a roughly 40 foot thick semi-effective barrier to downward migration of water in the area. The Northview Formation, which is approximately 25 feet thick beneath the site, is composed of greenish-gray shale and siltstone. The Compton Formation, which lies beneath the Northview Formation, consists of finely crystalline crinoidal limestone and thinly-bedded greenish shale beds.

Hydrology
The hydraulic conductivity of the confining unit ranges from 1.0 x 10-5 to 5.0 x 10-6 cm/sec. Dyes injected into sinkholes, lagoons, and losing streams in the soils above the Springfield Aquifer were recovered in springs and gaining streams discharging from the Ozark Aquifer a few miles north-northeast of the site. This indicates that the Ozark Confining Unit is not an effective aquitard. Table 3 of Reference 18 and Table 3 of Reference 29 indicate the locations and measured flows of the springs that are located within four-miles of the site. Two hundred and sixty-one of the 432 known wells within a four-mile radius of the site are completed through the Ozark Confining Unit.

5.1.4 Ozark Aquifer

Stratigraphy
The Ozark Aquifer extends approximately 1200 feet beneath the Ozark Confining Unit. The aquifer consists dominantly of Ordovician and Cambrian-Age dolomitic formations. The Ozark Aquifer is the dominantly used aquifer by both private and public supply systems. All new well construction in the Greene County area requires that the Springfield Plateau Aquifer be cased out during well construction and the Ozark Aquifer used.

Ordovician-Age Formations: Ordovician-Age formations beneath the site are divided into the Cotter Dolomite, Jefferson City Dolomite, Roubidoux Formation, and Gasconade Dolomite. These rocks consist of dolomite, cherty dolomite, and the occasional sandstone and cherty sandstone bed.

Cambrian-Age Formations: Upper Cambrian-Age formations beneath the site include the Eminence Dolomite and the Potosi Dolomite. The Eminence Dolomite is a light gray fine to medium crystalline dolomite that generally consists of less than 5% chert. The Potosi Dolomite, which lies below the Eminence Dolomite, is a fine to medium-crystalline, massive to thickly bedded brownish-gray dolomite that exhibits vugs or small cavities filled with quartz druse.

Hydrology
The hydraulic conductivity of the Ozark Aquifer ranges from 1 x 10-4 to 1x10-5 cm/sec. Based on injected dyes detected in springs located in the Ordovician-age strata along the

Little Sac River located north of the site, groundwater flow beneath the site may be toward the north-northeast. Two hundred and sixty-one of the 432 known wells within a four-mile radius of the site are completed in the Ozark Aquifer.

5.1.5 St. Francois Confining Unit

Stratigraphy and Hydrology

Cambrian-Age Formations: None of the known wells within a four-mile radius of the site penetrate the Cambrian-age Derby-Doerun Dolomite and Davis Formation of the St. Francois Confining Unit. This sequence of alternating shale and argillaceous dolomite is most likely about 150 feet thick; however, none of the wells extend to such a depth locally. The Derby-Doerun may have hydraulic conductivity as low as 1 x 10-8 cm/sec. The St. Francois Confining Unit is an effective barrier to downward groundwater movement.

5.1.6 Structural Features

Three east-west faults within four miles of the site may influence groundwater flow direction. These faults may allow water to flow from the Springfield Plateau Aquifer into the underlying Ozark Aquifer.

5.2 Groundwater Targets

A hydrogeologic summary report for the site, prepared by the department's DGLS, includes a survey of groundwater use within a four-mile radius of the site. (Reference 18). An addendum to the report was prepared to account for the 77 acre Litton site (Reference 29).

Drinking water in the site area is obtained from a combination of private wells and public wells and systems, with the wells drawing from the Springfield Plateau and Ozark Aquifers. The DGLS databases list information on all wells that were installed after 1987. Prior to 1987, DGLS certification of private wells was not required. The DGLS databases do contain information on wells drilled before 1987, but only for those wells that the owner voluntarily provided information to DGLS (Reference 18). Therefore, some existing private wells within four miles of the site may not be included in this report. In addition, fifty-one of the 432 wells listed do not have sufficient information available to determine if these wells are still in use. Furthermore, thirty-five non-community and nine community wells presented in the DGLS database are not listed in the Missouri Public Drinking Water Branch's Census of Missouri Public Water Systems for 2004 (Reference 30). Therefore, these wells are presumed to no longer be in operation. Additionally, of the 432 wells listed, four are industrial wells, two are heatpump wells, and one is an irrigation well. These wells are not considered potable drinking water sources and, along with the wells mentioned above, are not considered groundwater targets for the purposes of this SR investigation. Therefore, 332 active wells within a four-mile radius of the Litton site are considered groundwater targets.

DGLS databases contain records for 14 public wells within four miles of the Litton site. The City of Springfield's public drinking water system serves a large portion of the residential, commercial, and industrial area south and east of the Litton Site. The City obtains its water from five wells, one spring, two lakes and a river. The system is blended and served approximately 69,293 residential service connections or an estimated 162,146 people in 2005 (Reference 31).

Springfield City Wells #1 and #10 are located within a four-mile radius of the Litton site. The 1,404-foot Well #1 produces water from the Springfield and Ozark Aquifer and is located between three and four miles east-northeast of the Litton site. The 1,215-foot Well #10 produces water from the Ozark Aquifer and is located between two to three miles southeast of the site (Reference 18 and 29). Three of the city wells are located outside of the four-mile radius of the Litton site.

Fulbright Spring is a significant contributor to Springfield's public water supply system. It produces water from the Springfield Plateau Aquifer. The Spring is located between 3 and 4 miles from the site and contribributes approximately 10% of the raw water used in the system (Reference 31).

Since none of the individual water sources produced more than 40% of the total drinking water production, the population served was apportioned equally among six sources. Therefore, approximately 60,804 people are being served by two wells and one spring that are located within a four-mile radius of the Litton site (Reference 32).

Twelve additional Community and Non-Community wells located within a four-mile radius of the Litton site all produce water from the Ozark or Springfield Aquifers. The Country Squire Village well, Players Softball Complex well, and one of the two Evergreen Church wells produce water from the Ozark Aquifer. The second well serving the Evergreen Church produces water from both the Springfield and Ozark Aquifers. All of these wells are located between one and two miles from the site. The Country Squire Village well serves approximately 142 people, the Players Softball Complex well serves approximately 160 people, and the two wells serving Evergreen Church provide water for approximately 225 people. Between two and three miles from the site, the Meadows Water Company well produces water from the Ozark Aquifer and serves approximately 2,670 people. The wells serving Travelers Mobile Home Park, Northwest Baptist Church, and Agape Life Fellowship all produce water from the Ozark Aquifer. These wells are located between two to three miles from the site and serve approximately 50, 80, and 25 people respectively. Within a three to four mile radius of the site, the KOA Campground well, Ritter Springs Park well, and the two Fantastic Caverns wells provide water for 90, 25, and 500 people respectively. The KOA campground well, Ritter Springs Park well, and one of the two Fantastic Caverns wells produce water from the Ozark Aquifer. The second well that serves Fantastic Caverns draws water from both the Springfield and Ozark Aquifers (References 18).

Private residences not connected to a public system depend on domestic drinking water wells. DGLS databases show 312 private domestic wells within four miles of the site. Of

these domestic wells, 20 are drawing water from both the Springfield Plateau and Ozark Aquifers, 232 are drawing water the Ozark Aquifer, 48 are drawing water from the Springfield Aquifer, and 12 are drawing water from either the Springfield or Ozark Aquifers. Using the 2000 U.S. Census figure of 2.34 persons per household in Greene County (Reference 33), an estimated 732 people use domestic drinking water wells within four miles of the site. The table on the following page presents the estimated populations using groundwater from both public and private sources within distance categories. Approximately 65,503 people are using groundwater within four miles of the site for drinking water purposes.

The nearest private well lies between .5 and one mile of the site (Reference 18, Table 2).

5.2 Groundwater Sample Locations

SR field activities were conducted in a phased approach to assess off-site impacts. Phase I activities included collecting water and sediment samples from eight springs where groundwater discharges, in an area from north to east of the site. Phase II activities included collecting samples from 105 private, residential drinking water wells drawing water from the Springfield Plateau Aquifer and/or the Ozark Aquifer and from six non-community drinking water wells completed in the Ozark Aquifer. The drinking water wells were also located in the area north and east of the site. In addition, water and sediment samples were collected for a spring that was missed during Phase I activities.

Figure 4 shows the locations of springs that were sampled. Figure 5 shows the locations of private residential wells sampled. Figure 6 shows the locations for Ozark Aquifer wells that were also sampled as part of the SR.

5.4 Analytical Results

Table D-1 provides spring water sample collection data and Table D-2 provides the analytical results for those samples. Samples were analyzed for VOCs, SVOCs and metals. Samples collected from the emergence of Ritter West Spring and the Williams Spring indicated TCE levels above MCLs in those springs (6.81 and 12.5 micrograms per liter respectively). Samples collected from Fantastic Caverns spring and water inside the cavern indicated the presence of TCE, but at levels below MCLs (.48(e) and .82(e) micrograms per liter respectively). TCE was the only VOC identified in the springs sampled at levels above established limits. Ritter Spring East had an elevated level of the SVOC bis(2-ethylhexyl) phthalate (DEHP), but this contaminant has not been identified at the Litton site. None of the springs had levels of metals above established benchmark values.

Table 1: Estimated Population Served By Groundwater From Both Aquifers Within Four Miles of the Litton Systems, Inc. Site

Distance (In Miles)	Name of Public Supply and Population Served	Total Population Served By Public Wells	Number of Private Wells	Total Population Served By Private Wells[1]	Total Population Served by Groundwater
0-1/4	None	**0**	0	**0**	**0**
> 1/4 –1/2	None	**0**	0	**0**	**0**
> 1/2 – 1	None	**0**	4	**10**	**10**
> 1 –2	Country Squire Mobile Home Park 142				
	Players Softball Complex 160				
	Evergreen Church (2 wells) 225	**527**	52	**122**	**649**
> 2 – 3	Travelers Mobile Home Park 50				
	Meadows Water Company 2,670				
	Northwest Baptist Church 80				
	Agape Life Fellowship 25				
	City of Springfield, Orchard Well (Well # 10) 20,268	**23,093**	118	**277**	**23,370**
> 3 –4	KOA Campground 90				
	Ritter Spring Park 25				
	Fantastic Caverns (2 wells) 500				
	City of Springfield, Fulbright Spring 20,268				
	City of Springfield, Fulbright Well (Well #1) 20,268	**41,151**	138	**323**	**41,474**
TOTAL	14	**64,771**	312	**732**	**65,503**

1 The number of people served per private well was estimated by multiplying the average household size of 2.34 persons per household in Greene County by the number of wells within a distance category (Reference328).

Table D-3 provides collection data on sediment samples collected in proximity to spring water sampling locations. Table D-4 provides the analytical results for those samples. Samples were analyzed for VOCs, SVOCs and metals. Samples from Ritter West Spring and Williams Spring showed elevated levels of TCE. Samples from Vich Spring showed elevated levels of a number of SVOCs. Fantastic Cavern Spring, Fantastic Cavern, Ritter Spring Park, Ritter West Spring, and Williams Spring all showed elevated levels of copper, with the highest levels in Ritter West Spring and Williams Spring.

Table D-5 provides collection data for private residential well sampling conducted north and east of the Litton site. Table D-6 provides the sampling results for these wells. The wells were tested for VOCs and metals. Wells where TCE was detected were sampled an additional three quarters to determine fluctuations in the observed levels. Table D-7 summarizes the quarters of monitoring results. The results from 13 wells indicated the presence of TCE. Well DW-08 was the only well that tested above the established MCL for TCE. A granulated activated carbon treatment system was subsequently installed by Litton Systems, Inc. on this water supply .

Table D-8 provides the results of sampling of Ozark Aquifer wells sampled north and east of the Litton site. None of the wells sampled tested above the MCL for TCE.

5.5 Conclusions

The analytical results show impacts to shallow groundwater north and east of the Litton site. Two springs, Ritter West Spring (2-3 miles from the Litton site) and Williams Spring (3-4 miles from the Litton site) were impacted by TCE, the predominant VOC at the Litton site, above the MCL. Sediment samples collected at the emergence of these two springs also showed copper at levels above EcoTox Threshholds (Reference 25) Copper is also a contaminant of concern at the Litton Systems Inc. site. Based on the Wellhead Protection Area 1-C Casing Requirement Map (Reference 34), which indicates the depth required to case a newly constructed private domestic well below the Ozark Confining Unit, and the available locations for these springs (Reference 18), they both produce water from the Springfield Plateau Aquifer.

Analytical results also indicate that private residential wells three to four miles north-northeast of the Litton site are impacted with TCE. Of 105 wells sampled, 13 showed detectable levels of TCE. One well (DW-08) indicated levels exceeding MCLs.

A comparison was made of calcium to magnesium ratios of wells impacted with TCE versus ratios determined for the Springfield Plateau and Ozark Aquifers (Reference 7). Well DW-08, which had the highest level of TCE, had a ratio comparable to water from the Springfield Plateau Aquifer, which is consistent with the conclusion that the Springfield Plateau Aquifer has been impacted. The remainder of the impacted wells had ratios more similar to the Ozark aquifer. It is suggested that these wells may be cased through the Ozark Confining Unit, but due to poor domestic well construction techniques may be allowing a limited amount of contaminated water from the Springfield Plateau Aquifer to leak downward and mix with Ozark Aquifer water. All of the wells were

constructed prior to 1987 when the regulation of private residential wells began in Missouri, thus there were no minimum casing or grouting requirements in place during the construction of most private residential wells in this area.

Area wide dye traces have shown that dye injected in the vicinity of the Litton site has surfaced in springs in proximity to wells that have shown TCE impacts. This implies a connection between the observed contaminated wells and the Litton site. However, due to the nature of the karst system in the Springfield area, subsurface flow directions may not be limited to the direction of the area sampled. It is strongly recommended that additional private well sampling be conducted, with emphasis on shallow wells constructed prior to 1987.

The apparent absence of contamination in wells to the north and east of the Litton site known to be producing water from the deeper Ozark Aquifer suggests that contamination in this off site area may be predominantly in the shallower Springfield Plateau Aquifer. Offsite contamination to the west of the Litton site is known to exist in the Ozark Aquifer (Reference 7).

6.0 SURFACE WATER PATHWAY

6.1 Hydrologic Setting

The topography of the site is relatively flat with elevation ranging from 1,270 to 1,290 feet above mean sea level. Surface water runoff from the area drains toward several sinkholes during rain events. The infiltrated water most likely discharges from springs located north of the site. Since the discharge to surface water is greater than one mile from potential source areas and the sinkholes on site, there is no probable point of entry for surface water (Reference 18).

6.2 Surface Water Targets

Due to the karst nature of the area, the surface runoff has the potential to influence the habitat of organisms that live in caves. The Litton site is located approximately one to three miles northwest of the southern boundary of the recharge area for the Ozark cavefish (Amblyopsis rosae). The Ozark cavefish is a federally listed threatened specie. The habitat for the Ozark cavefish extends between two and four miles north to northeast of the site and one to three miles northwest of the site. The Ozark cavefish could be adversely affected if the groundwater or surface water feeding the caves were to become contaminated (Reference 35).

6.3 Surface Water Pathway Conclusions

Due to surface discharge being greater than one mile from potential source areas, the surface water pathway was not evaluated as part of this reassessment.

7.0 SOIL EXPOSURE AND AIR PATHWAYS

Site soil exposure and proposed remedial actions for on site soils are presented in detail in Section 4 of this report. No additional off site soil sampling was conducted as part of this SR since there was no reason to expect off site soil exposures.

Air sampling was conducted as part of this SR to assess possible impacts of volatilization of TCE on human health and the environment when exposed to it in the subsurface environment.

7.1 Soil Exposure and Air Pathway Targets

Air sampling was conducted at the emergence of Williams Spring and at two locations in Fantastic Caverns. One sampling event was conducted at William Spring. Three sampling events were conducted in Fantastic Caverns. Table D-8 provides air sample collection data. Table D-9 provides air sampling results.

Williams Spring was chosen for sampling because dye traces have shown it to be an outfall for the karst system that drains the Litton site area (Reference 18). Fantastic Caverns is a commercial cave located northeast of the Litton site. Past testing has shown it to contain volatile organic compounds. It was chosen for air sampling to assess potential health effects to workers and cave visitors.

Sampling results for Williams Spring indicate levels of cis-1,2-Dichloroethene, TCE and Tetrachloroethene above EPA Region 9 Preliminary Remediation Goals (PRGs). It also indicated levels of 1,1-Dichloroethene above Superfund Chemical Data Matrix January 2004 lowest of reference dose and cancer risks for air pathway (SCDM) values.

Initial sampling results for Fantastic Caverns (April 4, 2004 sampling event) indicated levels of TCE above EPA Region 9 PRGs at the sampling location under the bridge overpass near the underground stream. The February 24, 2005 sampling event showed no tested analyte at either sampling location above established benchmark values. The November 2, 2005 sampling event again showed TCE levels above EPA Region 9 PRGs.

7.2 Soil Exposure and Air Pathway Conclusions

Off site soil exposure was not a pathway of concern for the SR. The air pathway was explored through sampling efforts at Williams Spring and Fantastic Caverns. At the request of MDNR, the Missouri Department of Health and Senior Services (MDHSS) evaluated the risk posed by air contamination at Fantastic Caverns. MDHSS concluded that there was not significant risk posed by the TCE levels in Fantastic Cavern (Reference 36).

8.0 SUMMARY AND CONCLUSIONS

This Site Reassessment was conducted to further investigate off-site impacts from historic releases of contaminants at the site. In addition, it was conducted to re-evaluate the site under the Hazard Ranking System, and determine its eligibility for placement on the National Priorities List (NPL).

RI activities have established a release of metals and VOCs to soil and groundwater at the Litton site. RI sampling documented Cu, Cr, Pb, and As in the soil of the site, and copper, cadmium, nickel, mercury and lead in the Springfield Plateau Aquifer at concentrations exceeding health-based benchmark levels. Chlorinated solvents were documented in the soil and in both the Springfield Plateau Aquifer and the Ozark Aquifer at concentrations exceeding health-based benchmark levels. Copper is the most widespread metal contaminant and TCE is the most widespread VOC.

Sampling conducted as part of the Site Reassessment shows impacts to shallow groundwater north and east of the Litton site. Two springs, Ritter West Spring (2-3 miles from the Litton site) and Williams Spring (3-4 miles from the Litton site), were impacted by TCE, the predominant VOC at the Litton site, above the MCL. Sediment samples collected at the emergence of these two springs showed copper at levels above EcoTox benchmark values. Copper is also a contaminant of concern at the Litton Systems Inc. site. Based on the Wellhead Protection Area 1-C Casing Requirement Map (Reference 34), which indicates the depth required to case a newly constructed private domestic well below the Ozark Confining Unit, and the available locations for these springs (Reference 18), they both produce water from the Springfield Plateau Aquifer.

Analytical results from the sampling of private residential wells three to four miles north-northeast of the Litton site shows impacts from TCE. Of 105 wells sampled, 13 showed detectable levels of TCE. One well (DW-08) indicated levels exceeding MCLs.

A comparison was made of calcium to magnesium ratios of wells impacted with TCE versus ratios determined for the Springfield Plateau and Ozark Aquifers (Reference 7). Well DW-08, which had the highest level of TCE, had a ratio comparable to water from the Springfield Plateau Aquifer, which is consistent with the conclusion that the Springfield Plateau Aquifer has been impacted. The remainder of the impacted wells had ratios more similar to the Ozark aquifer. It is suggested that these wells may be cased through the Ozark Confining Unit, but due to poor domestic well construction techniques may be allowing a limited amount of contaminated water from the Springfield Plateau Aquifer to leak downward and mix with Ozark Aquifer water. All of the wells were constructed prior to 1987 when the regulation of private residential wells began in Missouri, thus there were no minimum casing or grouting requirements in place during the construction of most private residential wells in this area.

Area wide dye traces have shown that dye injected in the vicinity of the Litton site has surfaced in springs in proximity to wells that have shown TCE impacts. This implies a

connection between the observed contaminated wells and springs and the contamination in groundwater at the Litton site.

The apparent absence of contamination in wells to the north and east of the Litton site known to be producing water from the deeper Ozark Aquifer suggests that contamination in this off site area may be predominantly in the shallower Springfield Plateau Aquifer. However, off-site contamination to the west of the Litton site is known to exist in the Ozark Aquifer (Reference 7).

Due to surface discharge being greater than one mile from potential source areas, the surface water pathway was not evaluated as part of this reassessment.

Off-site soil exposure was not a pathway of concern for the SR. The air pathway, however, was explored through sampling efforts at Williams Spring and Fantastic Caverns. The Missouri Department of Health and Senior Services has concluded that there was not significant risk posed by the TCE levels in Fantastic Caverns (Reference 35).

Based on the population potentially exposed to groundwater contamination, the Litton Systems Inc. site would likely qualify for placement on the NPL based on a score of 28.5 or higher. Further CERCLA action is warranted, however, as long as the following recommendations are implemented by Litton, further CERCLA action is not recommended at this time.

9.0 RECOMMENDATIONS

Based on this site reassessment the following recommendations are made:

1. The Springfield Plateau Aquifer has been shown to be impacted to the north and east of the Litton Site. Site source areas need to continue to be addressed through the remedial process to prevent the further migration of contamination from the site.

2. The Ozark Aquifer has been shown to be impacted to the west of the Litton Site. Remedial measures need to be implemented to contain and treat this plume.

3. Additional private well sampling should be conducted in the area north and east of the Litton site. Effort should be made to sample the area wells not previously sampled as part of the SR. Priority should be given to wells constructed prior to November 1, 1987, the date regulation of well construction began. Wells should be tested for VOCs.

4. Owners from #3 whose wells are determined to contain TCE at levels above MCLs should be provided with adequate treatment to reduce contaminant levels below MCLs if the well is producing water from the Springfield Plateau Aquifer. Periodic long term sampling and maintenance should be conducted to assure the system is properly functioning.

5. Owners from #3 whose wells are determined to contain TCE at levels above MCLs that are known to be constructed into the Ozark Aquifer should have the well plugged and a new well provided. Alternatively, the well may be reconstructed sealing out the Springfield Plateau Aquifer (assuming well production is sufficient to allow this option).

6. Private residential wells whose test results indicate the presence of TCE should be monitored during remediation activities to assure residents are not exposed to additional risk during such activities.

7. Per MDHSS recommendation, additional monitoring should be conducted in Fantastic Caverns to assure cave worker and visitor exposure levels do not increase during soil remediation and over the long term.

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Evan Kifer, Environmental Specialist* Date
Superfund Section

Reviewed by: Julieann Warren 9-29-06
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Site Assessment Unit
Superfund Section

Approved by: Dennis Stinson by Frances Klaff 9-29-06
Dennis Stinson, Chief Date
Superfund Section

* Coauthor Nancy Priddy retired July 31, 2006

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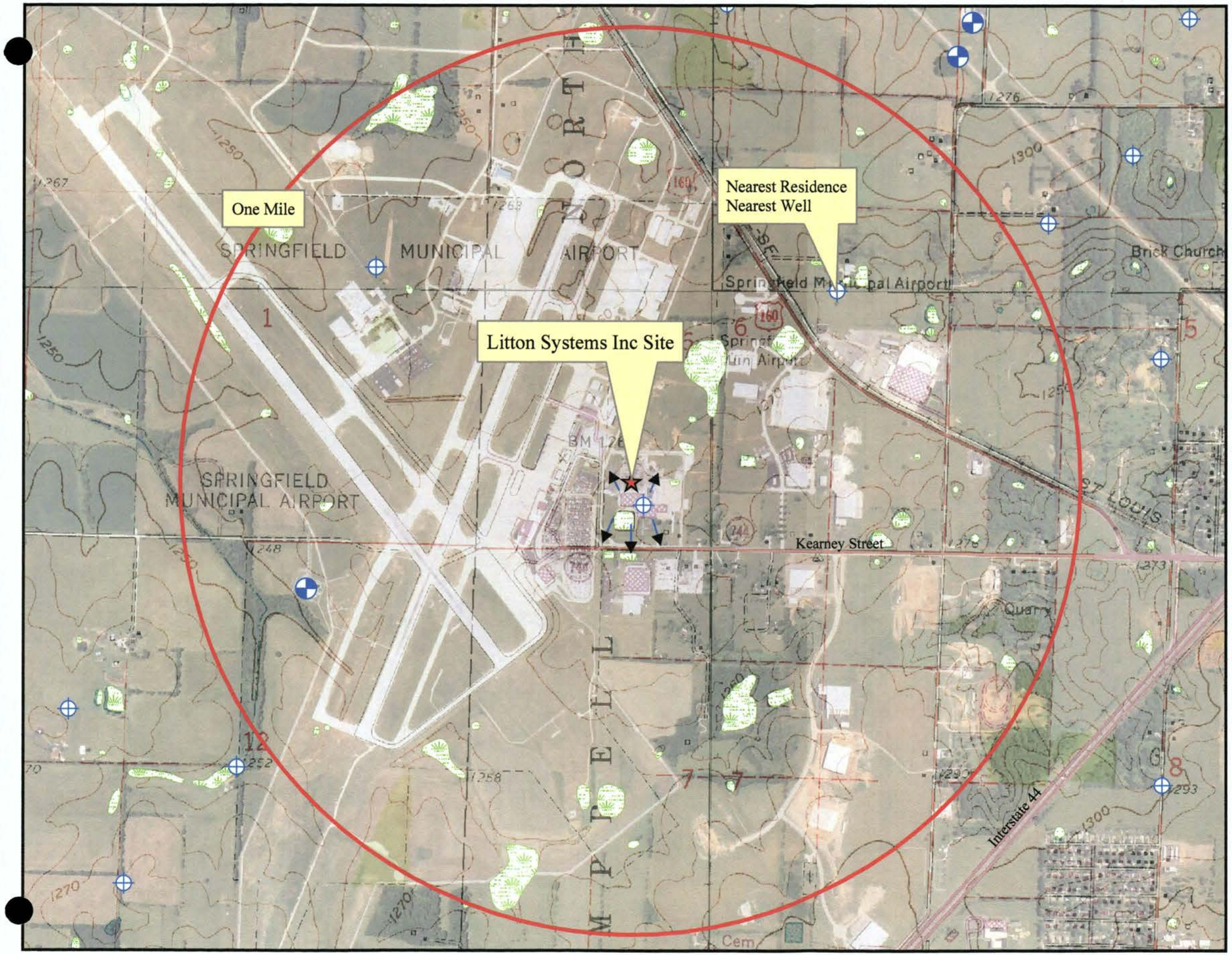
APPENDIX A: FIGURES

Figure 1
Site Location Map
Litton Systems Inc Site
4811 West Kearney Street
Springfield, Greene County, MO



Legend

- Litton Systems Inc, Center of Operations
- Private Drinking Water Well
- Public Drinking Water Well
- One Mile Radius
- Wetland
- Surface Water Drainage Route

Population Within One Mile Radius: 1,081

0.25 0.125 0 0.25 0.5 0.75 1 Mile

N W E S

Created on: September 26, 2006
by Rebecca Wells-Albers

Base Map: USGS Brookline Digital Orthophoto Quad (DOQQ). Flight date March 20, 1997. USGS topographic maps, 7.5 minute series. Digital Raster Graphic, 1: 24,000.

Data Sources: National Wetlands Inventory, US Fish and Wildlife Service; Population Data, US Census 2000; Wellhead Protection, MoDNR Public Drinking Water Branch; Sensitive Environments, Mo Department of Conservation.

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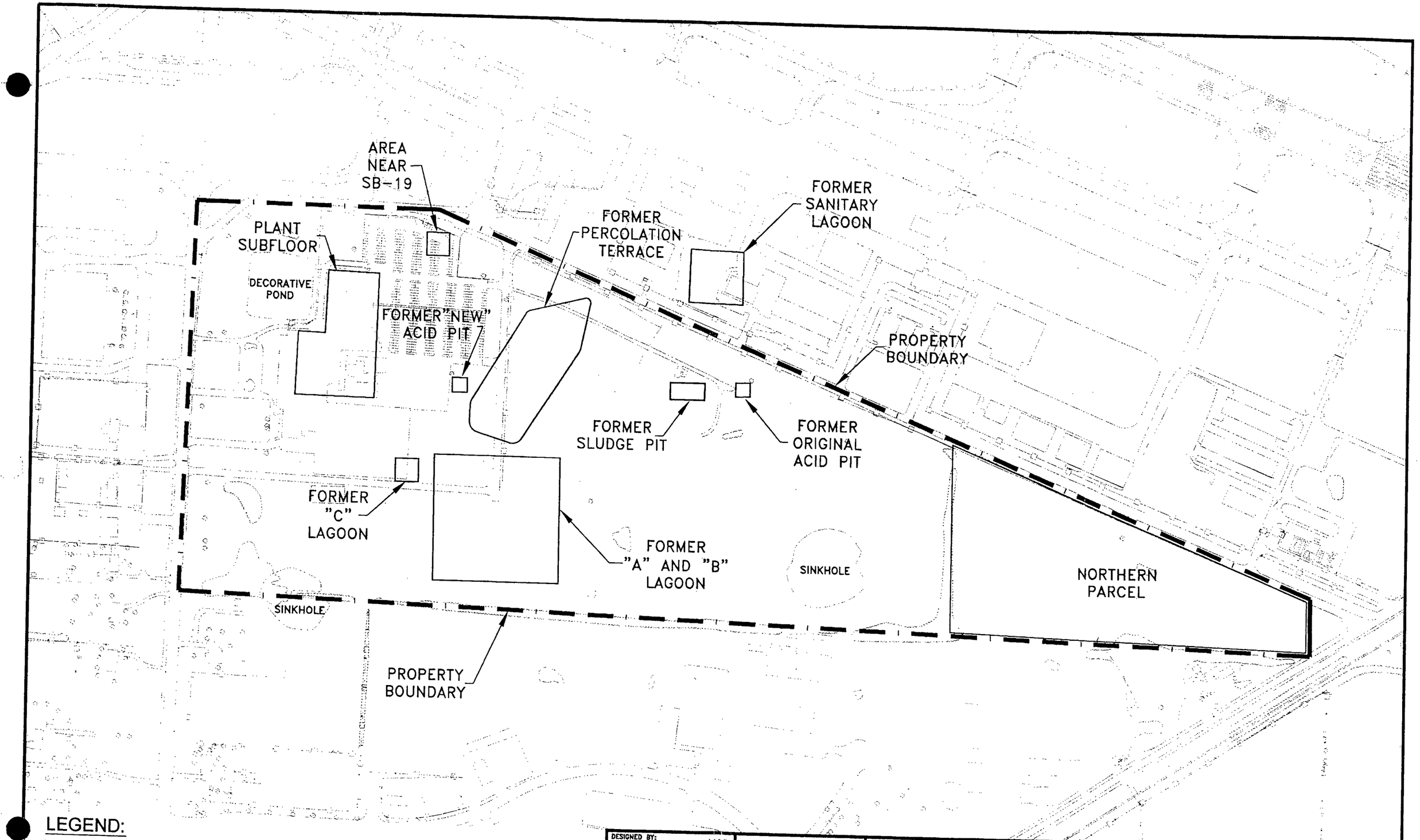
Hazardous Waste Program



LEGEND:

- AREA OF CONCERN
- ITD PROPERTY BOUNDARY
- NORTHERN PARCEL AREA

0 100 200 300
SCALE IN FEET

N

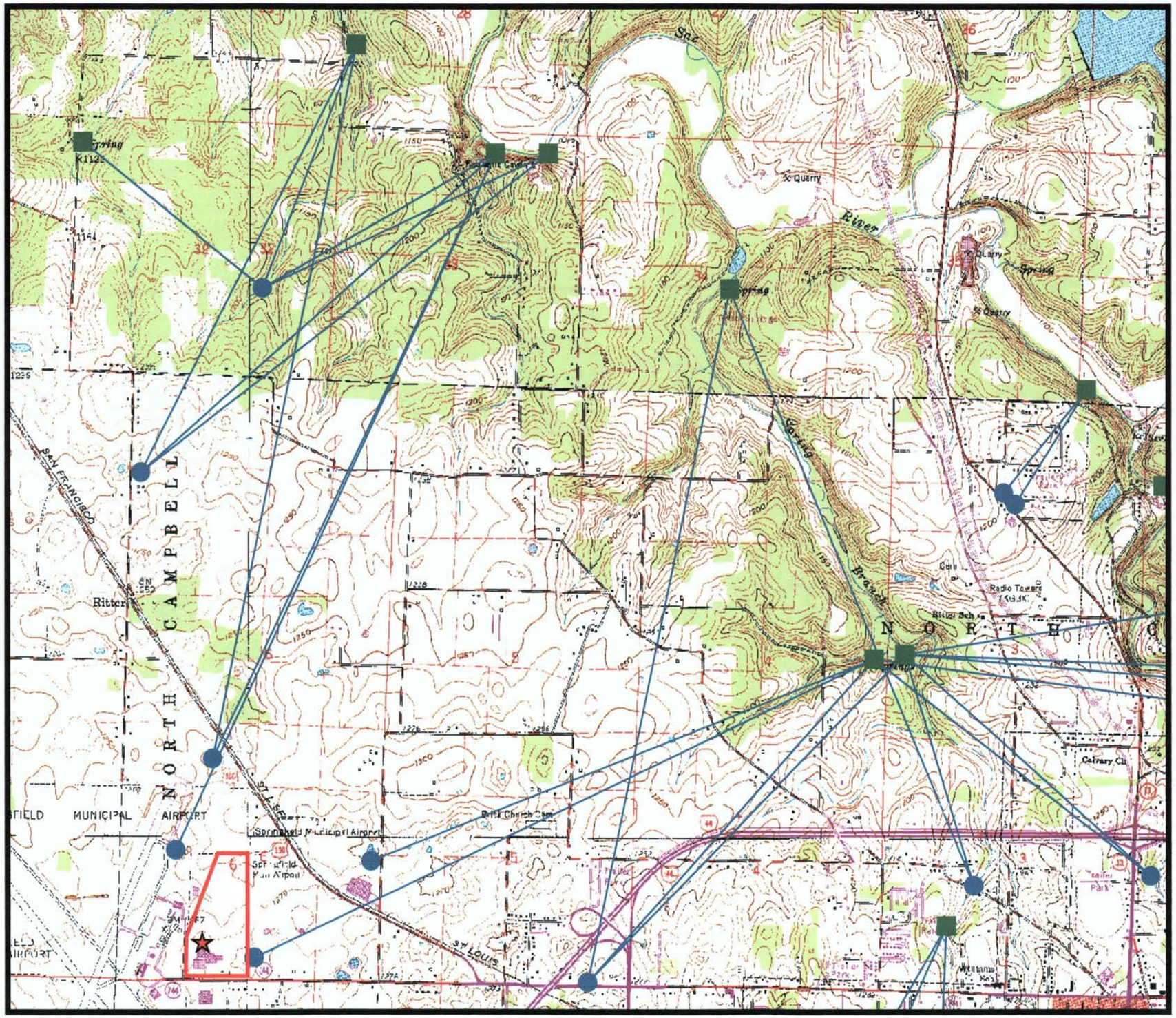
DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	1-14-05

SECOR

FACILITY SITE MAP SHOWING AREAS OF CONCERN
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO 65803

FIGURE 2

Figure 3
Dye Trace Map
Litton Systems Inc Site
4811 West Kearney
Springfield, Greene County, MO 65803



Legend

- Dye Injection Point
- Dye Reception Point
- Center of Operations
- Litton Facility Boundary
- Dye Path

Created on September 26, 2006 by Shelly Jackson, MDNR, HWP

Base Maps: USGS NAIP 2004. Fly date Marcy 20, 1997.

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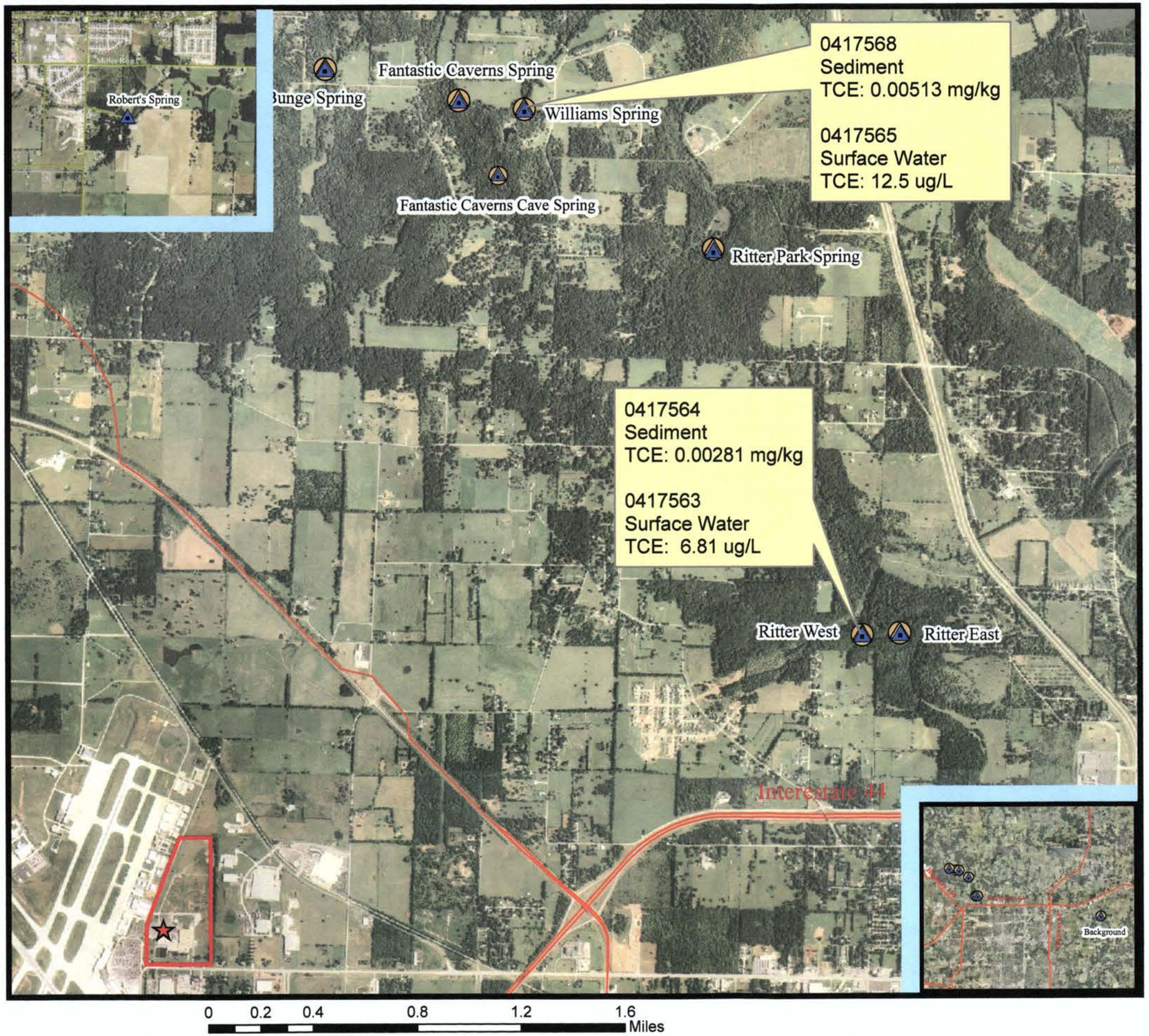
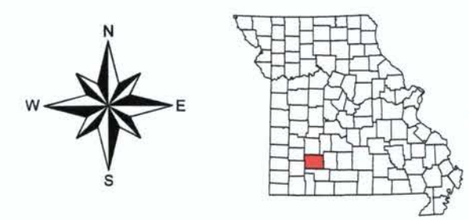
Figure 4
Spring Sampling Location Map
Litton Systems Inc Site
4811 West Kearney
Springfield, Greene County, MO 65803



Legend

- Surface Water Sample Location
- Sediment Sample Location
- Center of Operations
- Litton Facility Boundary
- Highway/Interstate

0######	Sediment Laboratory Sample Number
Sediment: #.#####	Where ###### is the TCE concentration
0######	Surface Water Laboratory Sample Number
Surface Water: #.#####	Where ###### is the TCE concentration



Created on September 26, 2006 by Shelly Jackson, MDNR, HWP

Base Maps: National Agricultural Imagery Program, 2004. Flight Date March 20, 1997.

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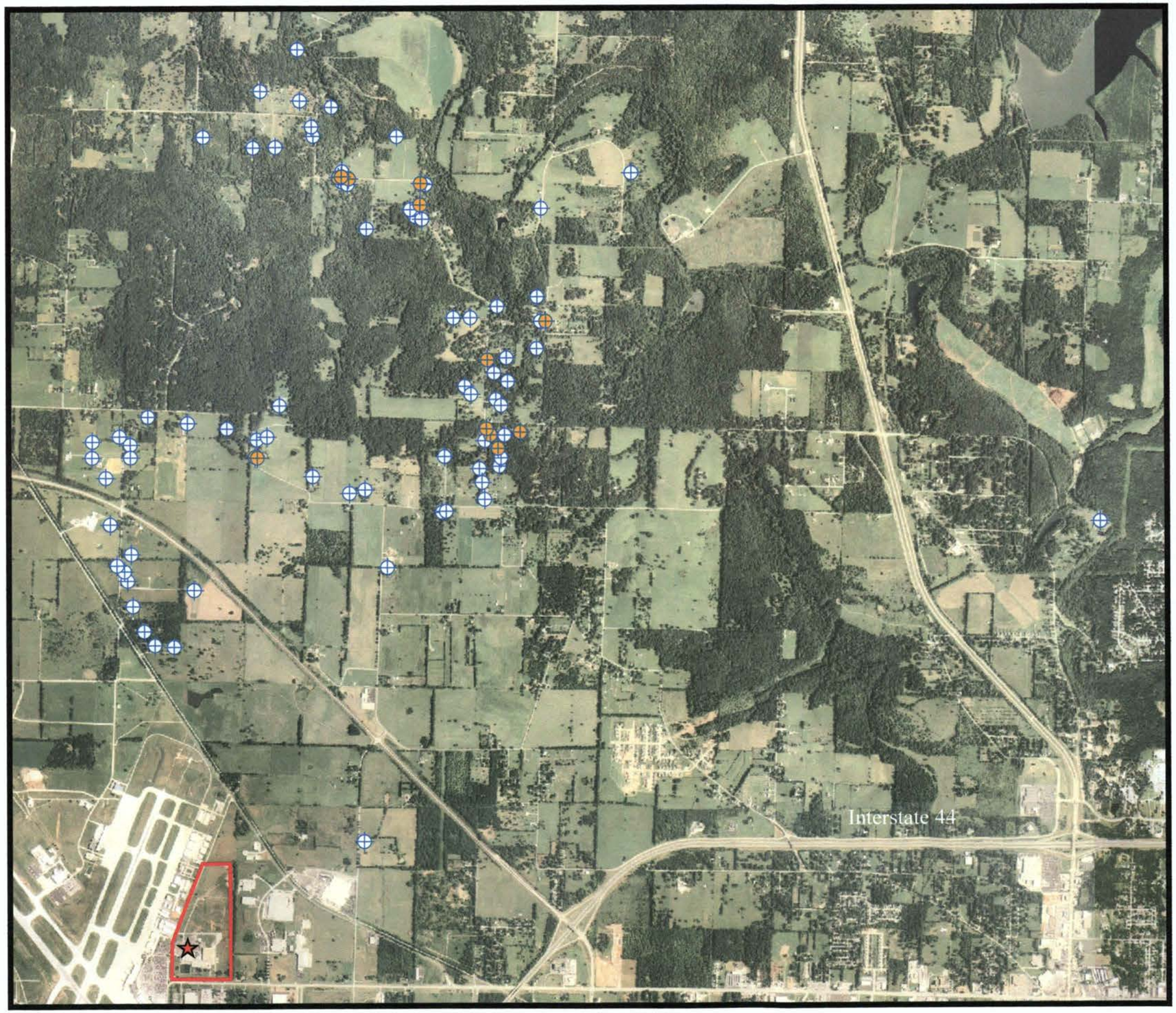
Division of Environmental Quality
Hazardous Waste Program

Figure 5
Private Residential Water Well Sample Location Map
Litton Systems Inc Site
4811 West Kearney
Springfield, Greene County, MO 65803



Legend

- Private Drinking Water Well
  Sampled as part of the SR investigation
- Private Drinking Water Well
  With Levels of TCE Present
- Center of Operations
- Litton Facility Boundary

Created on September 26, 2006 by Shelly Jackson, MDNR, HWP

Base Maps: USGS NAIP 2004. Fly date Marcy 20, 1997.

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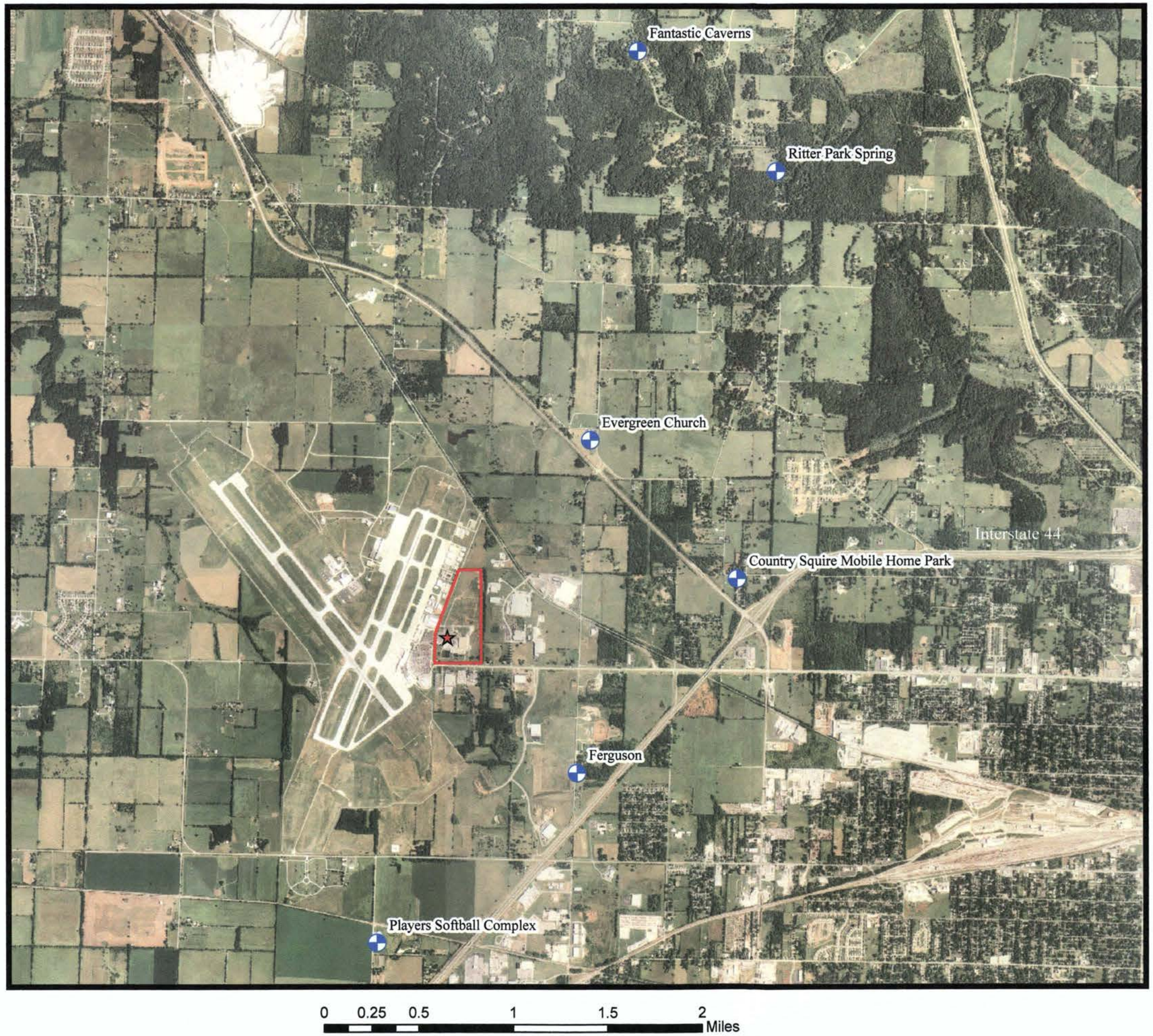
Figure 6
Ozark Aquifer Wells
Litton Systems Inc Site
4811 West Kearney
Springfield, Greene County, MO 65803



Legend

- Ozark Aquifer Well
  Sampled as part of the SR investigation
- Center of Operations
- Litton Facility Boundary

Created on September 26, 2006 by Shelly Jackson, MDNR, HWP

Base Maps: USGS NAIP 2004. Fly date Marcy 20, 1997.

Although data sets used to create this map have been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

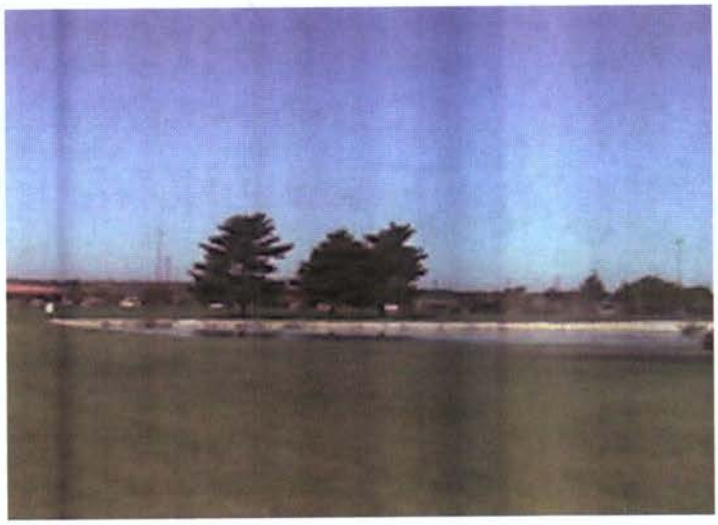
Missouri Department of Natural Resources
Division of Environmental Quality
Hazardous Waste Program

APPENDIX B: PHOTOGRAPHS

Photograph 1

Litton Systems Inc. Site, Springfield, MO. Photo taken September 26, 2006 by Jami Gay, Litton Systems Inc..

View of southcentral face of the Litton facility building. Picture taken looking north northeast from Kearney Street.



Photograph 2

Litton Systems Inc. Site, Springfield, MO. Photo taken September 26, 2006 by Jami Gay, Litton Systems Inc..

View of decorative pond. View of southwest corner of Litton site looking northeast from Kearney Street.

Photograph 3

Litton Systems Inc. Site, Springfield, MO. Photo taken September 26, 2006 by Jami Gay, Litton Systems Inc..

View looking at southwest corner of the Litton facility building. Picture taken looking north from Kearney Street.

Photograph 4

Litton Systems Inc. Site, Springfield, MO. Photo taken September 26, 2006 by Jami Gay, Litton Systems Inc.

View of southeastern corner of the Litton facility building. View looking northwest from facility access road.

Photograph 5

Litton Systems Inc. Site, Springfield, MO. Photo taken August 5, 2004 by DNR Superfund Staff.

View looking south southwest from northern part of the Litton site. Area seen in photo includes all of the major areas of concern.

Photograph 6

Litton Systems Inc. Site, Springfield, MO. Photo taken August 5, 2004 by DNR Superfund Staff.

View looking south toward the Litton facility from near the center of the former percolation terrace.

Photograph 7

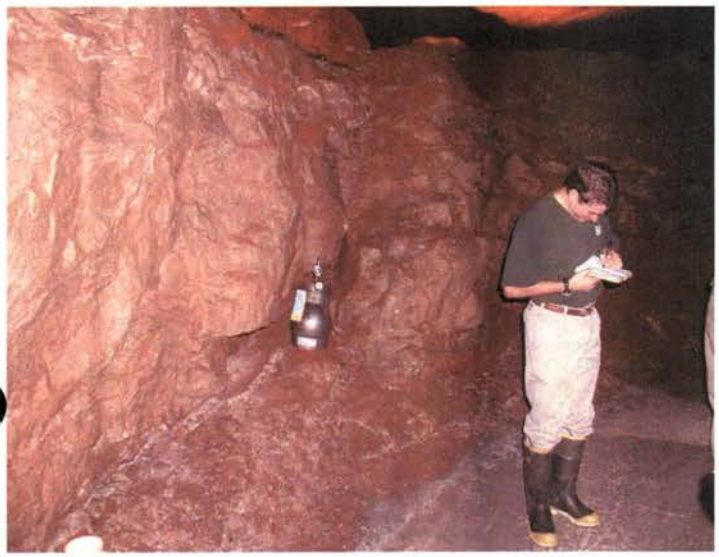
Litton Systems Inc. Site, Springfield, MO. Photo taken August 5, 2004 by DNR Superfund Staff.

View looking south southwest along the western property boundary of the Litton site. Photo taken from the approximate northern extent of contamination.

Photograph 8

Litton Systems Inc. Site, Springfield, MO. Photo taken November 2, 2005 by DNR Superfund Staff.

View of location of summa canister for air sampling in Fantastic Caverns. Location is designated as " under bridge".



Photograph 9

Litton Systems Inc. Site, Springfield, MO. Photo taken November 2, 2005 by DNR Superfund Staff.

View of location of summa canister for air sampling in Fantastic Caverns. Location is designated as "at turnaround".

APPENDIX C: LITTON SITE DATA FROM SECOR RI SUMMARY REPORT – PHASE II, APRIL 18, 2005.

Table 2
Monitoring Well Details
ITD Phase II Remedial Investigation
Springfield, Missouri

Well Number		Total Depth of Well (ft.)	Well Diameter (in.)	Depth to top of screen (ft.)	Depth to bottom of screen (ft.)	Total length of screen (ft.)	Depth to bedrock (ft.)
Overburden Wells	MW-1	34.29	2	20	30	10	Unknown
	MW-2	11.95	2	7	12	5	12
	MW-3	18.85	2	10	20	10	Unknown
	MW-4	20.15	2	15	25	10	Unknown
	MW-5	44	2	30	40	10	Unknown
	MW-6	14.33	2	5.5	10.25	5	11
	MW-8	14.45	2	6.5	11.5	5.5	12
	MW-9	22.29	2	11.88	21.88	10	Unknown
	MW-10	24.3	2	11	21	10	22.5
	MW-11	21.65	2	7.45	17.45	10	22.5
	MW-12	19.1	2	9	19	10	Unknown
	MW-13	25.26	2	13	23	10	26.75
	MW-14	15.7	2	6.5	11.5	5	11.5
	MW-15	20.3	2	6.71	16.2	9.49	N/A
	MW-16	48.37	2	36.8	46.24	9.44	46.4
	MW-17	21.62	2	9.71	19.17	9.46	18
	MW-18	21.31	2	8.96	18.42	9.46	18.6
	MW-19S	44.3	1	37.15	41.67	4.5	42
	MW-20S	35.67	1	24.13	33.57	9.44	N/A
	MW-105	49/20[1]	2	10	20	10	20
	MW-108	33.49	2	24	34	10	32.5
	MW-109	72	2	62	72	10	67
Shallow-Bedrock Wells	MW-103	55.62	6	Open hole	Open hole	Casing to35ft.	21.5
	MW-104R	68	2	55	64.44	9.44	25
	MW-19D	69	1	57.95	67.45	9.5	52.45
	MW-20D	63.29	1	51.73	61.6	9.43	42
	MW-106	39.25	2	30	40	10	23.5
	MW-107A	99/67.5[2]	2	58	68	10	32
	MW-111	80.21	2	71.8	81.8	10	29
	MW-112	105.56	2	95.5	105.5	10	37
	MW-113	219.2	2	209.2	219.2	10	61
	MW-114	40.94	2	27.8	37.8	10	6
	MW-115	107.25	2	94	104	10	27
	MW-116	76.57	2	68	78	10	28.5
	MW-117	142.1	6	Open hole	Open hole	Casing to 17 ft	10
	MW-118	108.2	6	Open hole	Open hole	Casing to 22 ft	20
	MW-119	93	2	82.5	92.5	10	22
Recovery Wells	RW-1	69.01	6	24	69	45	37
	RW-2	59.5	6	19	59	40	23.5
	RW-3	67.5	6	37	67	30	42.5
	RW-4	62	6	31	61	30	38
	RW-5	44.75	6	14	44	30	16.5
	RW-6	44	6	13.5	43.5	30	20.5
	RW-7	48	6	18	48	30	23.5
	RW-8	47	6	17	47	30	39
	RW-9	49	6	14	44	30	22
	RW-10	34	6	14	34	20	16
	MW-101	59.25	6	Open hole	Open hole	Casing to 20.65ft	8.5
	MW-102	119.91/57.37[3]	6	Open hole	Open hole	Casing to 40ft	25
Ozark Aquifer Wells	MWO-1	1460	6	Open Hole	Open Hole	Casing to 255 ft	26.5
	MWO-2	1500	6	Open Hole	Open Hole	Casing to 244 ft	22
	MWO-3	1500	6	Open Hole	Open Hole	Casing to 234 ft	18
	MWO-4	1500	6	Open Hole	Open Hole	Casing to 255 ft	30

1. Originally drilled to 49 feet, plugged back and converted to monitoring well at a depth of 20 feet.
2. Originally drilled to 99 feet, plugged back and converted to monitoring well at a depth of 68 feet.
3. Originally drilled to 119.91 feet, plugged back and converted to recovery well at a depth of 57.37 feet.

Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-AB04-6-6.5	3.8	B			36			
RI-AB05-10	15				130			
RI-AB05-6-7	5.1	B			37			
RI-AB06-5-6		ND			13			
RI-AB06-7-8	13				81			
RI-AB07-4-5	13				120			
RI-AB07-7-8	12				170			
RI-AB08-2.5-3	10				84			
RI-AB08-6.5-7	7.8				56			
RI-AB09-11-12	12				65			
RI-AB09-6-6.5	4.9	B			39			
RI-AB11-10	4.4				24			
RI-AB11-5-6	3.3				110			
RI-AB12-2-3	4.1				120			
RI-AB12-7-8	4.1				79			
RI-AB13-9-10	6				120			
RI-AB14-3-4	5.9				110			
RI-AB14-6	6.1				100			
RI-AB15-10-10.5	16				90			
RI-AB15-6-7	3.3	B			17			
RI-AB16-12	13				110			
RI-AB16-8-9	5.4				120			
RI-AB17-10	13				160			
RI-AB17-9-10	12				130			
RI-AB18-1.5-2	9.7				94			
RI-AB18-5-5.5	9.8				65			
RI-AB19-4-5	6.8				57			
RI-AB19-7-8	6.3				66			
RI-AB20-2-3	12				75			
RI-AB20-7-8	13				110			
RI-AB21-2-3		ND			17			
RI-AB21-7-8	4.2				54			
RI-AB22-4-5	12				54			
RI-AB22-7-8	11				58			
RI-AB23-0-1	4.2				68			
RI-AB23-6-6.5	6.7				100			
RI-AB24-2.5-3	6.3				86			
RI-AB24-7-7.5	7.3				44			
RI-AB25-4-5	8				29			
RI-AB25-8	10				47			
RI-AB26-4-5	13				60			
RI-AB26-6.5	8				37			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-AB27-3-4	18				40			
RI-AB27-7-8	16				64			
RI-AB28-10-10.5	11	B			120			
RI-AB29-8.5-9	7.7				43			
RI-AB29-9.5-10	13				95			
RI-AB30-4-5	4.1	B			25			
RI-AB30-7.5-8	15				140			
RI-AB31-2-3	4.6				120			
RI-AB31-4-4.5	9.2				130			
RI-AB32-8-9	17	B			150			
RI-AB33-2-2.5	17				110			
RI-AB34-2-2.5	3.3				44			
RI-AB34-6-6.5	13				120			
RI-AB35-0-1	5.4				130			
RI-AB35-6.5-7	6.9				44			
RI-AB36-1.5-2	2.8				64			
RI-AB36-6-6.5	9.3				94			
RI-AB37-3-4	6.2				42			
RI-AB37-7.5-8	11				51			
RI-AB38-2-3	6.1				110			
RI-AB38-5.5-6	11				45			
RI-AB39-10-11	8.3				61			
RI-AB39-3-4	4.1				51			
RI-AB40-3-4	5.2				25			
RI-AB40-5.5-6	13				59			
RI-AB41-4-4.5	11				81			
RI-AB41-5.5-6	8.8				54			
RI-AB42-0-1	4.7				47			
RI-AB42-7-7.5	12				54			
RI-AB43-2-2.5	5.9				39			
RI-AB43-7-7.5	14				48			
RI-AB44-3-4	8.4				85			
RI-AB44-7-8	15				51			
RI-AB45-0-1	11				100			
RI-AB45-7-8	14				23			
RI-AB46-3-3.5		ND			16			
RI-AB46-7-8	12	B			87			
RI-AB47-2-3	4				130			
RI-AB47-5.5-6	14				59			
RI-AB48-7-8	4.3				84			
RI-AB48-8	4.8				71			
RI-NP01-3-4	4.8				120			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-NP01-7-8	12				59			
RI-NP02-2-2.5	4.6				100			
RI-NP02-7-7.5	12				58			
RI-NP03-7-7.5	43				150			
RI-NP04-10-11	10				100			
RI-NP05-6-7	14				97			
RI-NP06-4-5	11				81			
RI-NP06-9.9.5	15				160			
RI-NP07-1-2	5.6				110			
RI-NP07-15-16	15				30			
RI-NP07-35.5-36		ND			57			
RI-NP08-0-1	6.8				130			
RI-NP08-22-22.5		ND			120			
RI-OP01-10-11	16				110			
RI-OP01-11.5-12	1.2				3.4			
RI-OP02-12-13	4.6				19			
RI-OP02-3.5-4	3.5				29			
RI-OP03-2.5-3	6.9				150			
RI-OP03-5-5.5	5.1				70			
RI-OP04-12.5-13	3.9	B			9.7			
RI-OP04-5-6	13				190			
RI-OP05-1-2	5.2				130			
RI-OP05-18-19	4.2				32			
RI-OP06-11.5-12	15				180			
RI-OP06-2-3	3.9				150			
RI-OP07-13-14	14				140			
RI-OP07-2-3	3.8				160			
RI-OP08-13-14	15				120			
RI-OP09-15-16	12	B			88			
RI-OP09-18.5-19	19				69			
RI-OP09-4-5	4				52			
RI-OP10-19-20	9.5	B			76			
RI-OP10-5-6	14				45			
RI-OP11-4-5	25				270			
RI-OP12-17-18	8.8	B			58			
RI-OP12-4-5	8.5				36			
RI-OP13-10.5-11	13	B			89			
RI-OP13-1-2	3.7				100			
RI-OP14-12.5-13		ND			120			
RI-OP14-4-5	12				67			
RI-OP15-11-12	14	B			180			
RI-OP15-1-2	3.9				160			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-OP16-12-13	9.8				58			
RI-OP16-22-23	14	B			170			
RI-OP16-2-3	3.6				140			
RI-OP17-0-1	12				20			
RI-OP17-11.5-12	4.7				80			
RI-OP18-0-1	4.2				100			
RI-OP18-13-14	4.4				41			
RI-OP19-24-25		ND			57			
RI-OP19-8-9	4.3				95			
RI-OP20-1-2	4.5				83			
RI-OP20-13-14	10	B			100			
RI-OP21-15.5-16.5	9.1				23			
RI-OP21-2-3	4.7				29			
RI-OP22-0-1	3.4				130			
RI-OP22-18-19		ND			140			
RI-OP23-22-23	19	B			87			
RI-OP23-29-30	8.1				41			
RI-OP23-7-8	7.9				25			
RI-OP24-1-2	5.7				100			
RI-OP24-16-17	16	B			130			
RI-OP25-0-1	4.4				170			
RI-OP25-16-17	14				250			
RI-OP25-25-26		ND			110			
RI-OP26-10-10.5	12				82			
RI-OP26-5-6	28			ND	98		0.044	B
RI-OP27-1-2	5.8				120			
RI-OP27-18-19	12				52			
RI-OP28-21-22		ND			180			
RI-OP28-5-6	5.4				130			
RI-OP29-10-11	6.7				120			
RI-OP29-20-20.5		ND			54			
RI-OP30-1-2	4				150			
RI-OP30-12-13	11				100			
RI-OP30-17.5-18	17				160			
RI-OP8-0-1	3.9				110			
RI-PL01-1-2	5.3				140			
RI-PL01-22-23	21	B			180			
RI-PL02-13-14	77				87			
RI-PL02-7-7.5	13				100			
RI-PL03-25-26		ND			95			
RI-PL03-9-10	11				63			
RI-PL04-1-2	3.4				120			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-PL04-21-22	17				130			
RI-PL05-13-13.5	14				170			
RI-PL05-35-36	20				140			
RI-PL06-11-11.5	22	B			230			
RI-PL06-4-5	15				75			
RI-PL07-1-2	3.6				130			
RI-PL07-15-15.5	7.6				63			
RI-PL08-1-2	3.5				120			
RI-PL08-14-15		ND			150			
RI-PL09-4-5	36				240			
RI-PL10-1-2	4.9				87			
RI-PL10-14-15	15	B			110			
RI-PL11-1-2	3.3				120			
RI-PL11-12-13	11				43			
RI-PL12-1-2	3.7				130			
RI-PL12-14-15	13				98			
RI-PL13-11-12	13				88			
RI-PL13-1-2	3.6				110			
RI-PT01-3-3.8	12				120			
RI-PT02-3-4	5				110			
RI-PT03-0-1	9.8				270			
RI-PT04-0-1	3.2				53			
RI-PT05-0-1	7.1				240			
RI-PT06-1-2	4.2				200			
RI-PT07-1-2	4.7				130			
RI-PT08-8	11				120			
RI-PT09-0-1	4.7				120			
RI-PT100-2-3	5.7				100			
RI-PT101-2-3	2.8				130			
RI-PT102-0-4	4.6				100			
RI-PT10-2-3	9.4				350			
RI-PT103-0-4	8.2				110			
RI-PT11-1-2	4.2				71			
RI-PT12-2-3	4.4				150			
RI-PT13-0-1	5.2				170			
RI-PT14-1-2	4				100			
RI-PT15-1-2	3.8				94			
RI-PT16-1-2	6				130			
RI-PT17-1-2	4.1				110			
RI-PT17-6-7	12				47			
RI-PT18-0-1	5.9				200			
RI-PT18-4	9.8				53			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-PT19-1-2	3.6				140			
RI-PT19-3-3.5	6.3				59			
RI-PT20-0-1	4.8				110			
RI-PT21-0-1	4.7				100			
RI-PT22-0-1	5				140			
RI-PT22-6-6.5	5.4				130			
RI-PT23-1-2	7.1				89			
RI-PT24-0-1	4.5				130			
RI-PT25-0-1	3.6				80			
RI-PT27-2-3	10				180			
RI-PT27-3-3.5	9.3				190			
RI-PT29-0-1	5.9				180			
RI-PT31-3-4	12				65			
RI-PT32-2-3	6.6				43			
RI-PT34-3-4	6.7				34			
RI-PT35-0-1	7				100			
RI-PT36-0-1	4.4				120			
RI-PT41-0-1	4.9				130			
RI-PT41-7-8	6.5				190			
RI-PT42-2-3	4.2				140			
RI-PT44-0-1	6.2				130			
RI-PT48-1-2	7.4				68			
RI-PT50-3-4	6				68			
RI-PT51-2-3	5.5				110			
RI-PT53-0-1	5.1				220			
RI-PT54-0-1	6.6				340			
RI-PT55-0-1	5.6				170			
RI-PT56-0-1	5.5				66			
RI-PT57-0-1	4				140			
RI-PT58-0-1	4.5				150			
RI-PT59-0-1	4.1				110			
RI-PT60-0-1	5.6				180			
RI-PT61-0-1	4.4				120			
RI-PT62-3-4	4.5				58			
RI-PT63-0-1	6				200			
RI-PT64-0-1	5.5				160			
RI-PT65-0-1	4.5				160			
RI-PT66-0-1	5.6				230			
RI-PT67-0-1	4.4				150			
RI-PT68-0-1	6.2				210			
RI-PT68-3-4	5.9				94			
RI-PT69-0-1	4.5				190			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-PT70-1-2	4.4				150			
RI-PT71-0-1	4.6				170			
RI-PT71-7-8	14				87			
RI-PT72-3-4	3.5				31			
RI-PT73-0-1	4.3				130			
RI-PT74-2-3	10				87			
RI-PT74-3-4	7.7				240			
RI-PT75-0-1	4.6				130			
RI-PT76-1-1.5	4.4				130			
RI-PT77-1-1.5	5.3				130			
RI-PT78-1-1.5	4.8				160			
RI-PT79-0-0.5	5				110			
RI-PT80-0-1	4.6				130			
RI-PT81-0-1	3.8				79			
RI-PT82-0-1	4.8				91			
RI-PT83-0-0.5	3.9				85			
RI-PT84-0-0.5	4.4				120			
RI-PT85-1-2	3.6				120			
RI-PT86-1-2	4.3				160			
RI-PT87-3-4	11				26			
RI-PT88-0-1	4.2				92			
RI-PT89-2-3	4.5				170			
RI-PT90-2-2.5	5.2				66			
RI-PT91-0-1	4.6				110			
RI-PT92-2-3	5.3				130			
RI-PT93-1-2	5.6				130			
RI-PT94-2-3	5.8				280			
RI-PT95-1-2	5				110			
RI-PT96-0-1	5.5				130			
RI-PT97-1-2	5.2				130			
RI-PT98-2-3	4.8				100			
RI-PT99-0-1	6.2				130			
RI-SB-10-2-3	9.83				92.6			
RI-SB-11-0-1	4.69				116			
RI-SB-12-2-3	7.01				157			
RI-SB-1-3.5-4.5	4.9				64			
RI-SB-13-4-5	14.9				137			
RI-SB-14-4-5	15.8				129			
RI-SB-15-3-4	11.5				231			
RI-SB-16-3-4	6.63				146			
RI-SB-17-3-4	6.94				122			
RI-SB-18-3-4	6.7				160			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-SB-19-3-4	15				114			
RI-SB-20-4-5	5.09				46.5			
RI-SB-21-3-4	7.06				109			
RI-SB-22-0-1	6.03				110			
RI-SB-2-3-4	9.78				168			
RI-SB-23-4-5	4.95				125			
RI-SB-24-3-4	1.84				29.2			
RI-SB-25-3-4	19.5				129			
RI-SB-26-3-4	20				150			
RI-SB-27-0-1	5.98				135			
RI-SB-28-0-1	7.85				120			
RI-SB-29-1-2	6.8				151			
RI-SB-30-1-2	13.1				116			
RI-SB-31-0-1	6.12				152			
RI-SB-32-3-4	5.44				47.5			
RI-SB-3-3-4	17.4				207			
RI-SB-34-3-4	5.09				101			
RI-SB-35-0-1	6				197			
RI-SB-36-0-1	4.24				175			
RI-SB-37-6-7	7.99				116			
RI-SB-38-2-3	5				197			
RI-SB-39-6-7	13				145			
RI-SB-40-2-3	5.65				223			
RI-SB-41-6.5-7.5	21.3				162			
RI-SB-42-2-3	9.34				162			
RI-SB-4-5-6	18.7				98.5			
RI-SB-5-1-2	5.61				172			
RI-SB-6-3-4	10.9				79.1			
RI-SB-7-3-4	7.71				138			
RI-SB-8-3-4	7.01				254			
RI-SB-9-3-4	27.8				63.4			
RISF-11-19-20	12.7				74.3			
RISF-11-5-6	15.4				65.2			
RISF-12-15-16	24.6				68.4			
RISF-12-21-22	7.48				37.1			
RISF-12-3-4	7.75				138			
RISF-12-5-6	8.04				157			
RISF-13-16-17	7.98				79.1			
RISF-13-9-10	8.08				39.8			
RISF-14-21-22	14.5				170			
RISF-14-9-10	13.7				64.4			
RI-SF15-1-2	5.7				110			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-SF15-4-5	4.3				160			
RI-SF16-17-18	25				110			
RI-SF16-2-3	5				140			
RI-SF17-11-12	10				40			
RI-SF17-17-18	22	B			140			
RI-SF18-11-12	15				86			
RI-SF18-2-2.5	4.1				130			
RI-SF19-0-1	6.4				100			
RI-SF19-9-10	7.8				82			
RI-SF20-6-7	3.1	B			9.8			
RI-SF21-0-1	23				27			
RISF-2-15-16	15.1				166			
RI-SF21-7-8	15				51			
RI-SF22-1-2	2.8				81			
RI-SF22-13-14	8.9				49			
RI-SF23-16-17	10				61			
RI-SF23-3-4	12				67			
RISF-2-4-5		ND			4.7			
RISF-3-10-11	15.4				83.1			
RISF-3-3-4	5.33				61.9			
RISF-4-10-11	22.1				158			
RISF-4-5-6	7.03				24.3			
RISF-5-15-16	25.5				76.2			
RISF-5-2-3	15.2				120			
RISF-6-1-2	12.8				110			
RISF-6-7-8	14.1				137			
RISF-8-1-2	7.37				140			
RISF-8-15-16	14				174			
RI-SI1-0-1	6.02				238			
RI-SI1-5-6	15.7				210			
RI-SI2-13-14	23.3				71.4			
RI-SI22-0-1	7.35				143			
RI-SI22-31-32	7.54				85.9			
RI-SI23-0-1	6.56				146			
RI-SI23-15-16	11.8				134			
RI-SI2-3-4	11				194			
RI-SI23-8-9	14.3				180			
RI-SI24-0-1	4.36				143			
RI-SI24-20-21	8.02				69.3			
RI-SI25-0-1	5.9				143			
RI-SI25-25-26	13.1				105			
RI-SI26-14-15	17.3				199			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-SI26-20-21	10.2				67.8			
RI-SI27-0-1	6.91				164			
RI-SI27-8-9	11				161			
RI-SI29-1-2	7.71				210			
RI-SI29-27-28	1.94				43.2			
RI-SI30-1-2	8.18				114			
RI-SI30-21-22	7.1				94			
RI-SI31-18-19	25.9				51.5			
RI-SI31-23-24	9.45				48.1			
RI-SI32-0-1	6.39				163			
RI-SI32-12-13	15.3				116			
RI-SI32-19-20	13.9				206			
RI-SI33-10-11	13.2				131			
RI-SI33-15-16	20.2				148			
RI-SI34-24-25	8.5				101			
RI-SI34-4-5	7.05				182			
RI-SI34-58-59	7.05				136			
RI-SI35-16-17	15.6				165			
RI-SI35-8.5-9.5	26.6				**8937**			
RI-SI36-1-2	9.43				210			
RI-SI36-15-16	4.75				**9138**			
RI-SI36-30-31	8.64				203			
RI-SI3-6-7	19.7				212			
RI-SI37-0-1	3.3				149			
RI-SI3-7-8	15.3				205			
RI-SI37-9.5-10.5	4.79				218			
RI-SI38-10-11	6.11				125			
RI-SI38-2-3	7.26				93.9			
RI-SI38-29-30	3.43				25.8			
RI-SI39-0-1	10.3				51.7			
RI-SI39-9-10	9.53				91.2			
RI-SI4 J0-7-8	4.19				48.1			
RI-SI4 JO-5-6	10.1				82.7			
RI-SI40-19-20	2.79				20.3			
RI-SI40-20-21	8.39				47			
RI-SI41-5-6	6.99				59.3			
RI-SI41-6-7	2.17				58.9			
RI-SI42-12-13	3.2				32.2			
RI-SI42-2-3	3.09				184			
RI-SI43-0-1	4.79				163			
RI-SI43-19-19.5	7.64				127			
RI-SI7-2-3	11.3				152			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-SI7-9-10	19.3				238			
RI-SL01-11-12	7				77			
RI-SL01-14-15	7.4				110			
RI-SL02-14-15	9.3				130			
RI-SL02-4-5	4.7				130			
RI-SL02-9-10	5.6				100			
RI-SL03-11-12	6.7				150			
RI-SL03-4-5	4.6				140			
RI-SL04-10-11	3.6				30			
RI-SL04-15-16	26.6				178			
RI-SL05-13-14	9.7				150			
RI-SL05-3-4	4.3				160			
RI-SL05-8-9	6.3				46			
RI-SL06-6-7	5				170			
RI-SL06-9-10	4.3				180			
RI-SL08-10-11	6.7				64			
RI-SL08-13-14	11				120			
RI-SL08-7-8		ND			66			
RI-SL09-3-4	6.7				97			
RI-SL10-2-3	11				96			
RI-SL10-6-7	3.8				82			
RI-SL11-2-3	7.4				69			
RI-SL11-8-9	13	B			220			
RI-SL12-10-11	6.9				150			
RI-SL12-15-16	13				120			
RI-SL12-3-4	7.1				80			
RI-SL13-10-11	4.8				140			
RI-SL13-3-4	4.2				160			
RI-SL14-12-13	11				170			
RI-SL14-9-10	4.9				140			
RI-SI-10-17-18	12.1				78.8			
RI-SI-10-3-4	5.24				115			
RI-SI-11-2-3	3.09				150			
RI-SI-11-8-9	7.83				76.8			
RI-SI-12-10-11	11				135			
RI-SI-12-2-3	6.34				200			
RI-SI-13-18-19	15.1				212			
RI-SI-13-2-3	6.87				200			
RI-SI-14-0-1	3.15				185			
RI-SI-14-5-6	9.28				201			
RI-SI-15-20-21	6.16				66.4			
RI-SI-15-2-3	5.68				128			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,TCLP		Barium		Barium,TCLP	
CALM Scenario C	14 mg/kg		14 mg/kg		51,000 mg/kg		51,000mg/kg	
CALM C Leach	No Kd		No Kd		1,700 mg/kg		1,700 mg/kg	
RI-SI-16-11-12	7.04				54.5			
RI-SI-16-5-6	8.78				70.2			
RI-SI-17-1-2	3.33				139			
RI-SI-17-20-21	5.56				64.9			
RI-SI-18-10-11	13.5				42.3			
RI-SI-18-2-3	4				117			
RI-SI-19-1-2	11.2				86			
RI-SI-19-9-10	20.4				113			
RI-SI-20-1-2	8.45				122			
RI-SI-20-5-6	9.1				164			
RI-SI-21-2-3	2.5				68.2			
RI-SI-21-6-7	7.14				36.6			
RI-SI-28-17-18	3.72				16.1			
RI-SI-28-2-3	3.53				185			
RI-SI-5-21-22	12.9				68.3			
RI-SI-5-5-6	16.2				154			
RI-SI-6-1-2	3.78				143			
RI-SI-6-4-5	5.39				87.6			
RI-SI-9-1-2	3.87				157			
RI-SI-9-7-8	14.4				121			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
AP-1-13-14		ND			23.5					
AP-2-8-9		ND			**63.4**			ND		
AP-3-14-15	1.85				**72.7**			ND		
AP-4-8-9		ND			**86.5**					
AP-5-1-2		ND			**84**					
AP-5-8-9		ND			28.7					
GT-01-8.5-10		ND			**120**					
GT-02-6-7.5	0.11	B			**43**					
GT-03-8.5-10		ND			21					
GT-05-3.5-5		ND			17					
GT-09-1-2.5		ND			**110**					
GT-13-10-11.5		ND			21					
GT-14-6-7.5		ND			6.9					
GT-17-6-7.5		ND			23					
GT-20-1-2.5	0.16	B			28					
GT-20-13.5-15		ND			**40**					
GT-21-20		ND			31					
GT-27-3.5-5		ND			36					
GT-28-3.5-5		ND			**52**					
GT-29-10-11.5	0.33				**41**					
GT-2A-6-7.5	0.11	B			16					
GT-30-3.5-5		ND			**79**					
R1-SB43-2-3		ND			34.2					
R1-SB44-6-7	1.5				**47**					
R1-SB45-2-3		ND			26.8					
R1-SB46-1-2		ND			**84.9**					
R1-SB47-1-2		ND			**92.5**					
R1-SB49-1-2		ND			36.1					
R1-SB50-3-4	1.57				**40.1**					
R1-SB51-3-4		ND			35.5					
R1-SB52-6.5-7.5	1.48				**42.2**					
R1-SB53-0-1		ND			37.4					
R1-SB54-6-7	1.92				**80.5**					
R1-SB55-0-1		ND			31.3					
R1-SB56-5-6	2.51				**104**					
RI-AB01-0-1	0.22	B			**45**					
RI-AB01-7-8		ND			38					
RI-AB02-6-7		ND			**620**					
RI-AB-02-8		ND			**160**					
RI-AB03-11-12		ND			**61**					
RI-AB03-4-5		ND			**72**					

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-AB04-12		ND			**76**					
RI-AB04-6-6.5	0.67	B			**850**					
RI-AB05-10	0.29	B			**66**					
RI-AB05-6-7	0.62	B			**700**					
RI-AB06-5-6	0.62	B			**760**					
RI-AB06-7-8	0.25	B			**68**					
RI-AB07-4-5	0.23	B			**86**					
RI-AB07-7-8	0.6				**64**					
RI-AB08-2.5-3	0.21	B			**180**					
RI-AB08-6.5-7		ND			**45**					
RI-AB09-11-12		ND			**56**					
RI-AB09-6-6.5	0.66	B			**980**					
RI-AB11-10		ND			**160**					
RI-AB11-5-6		ND			28					
RI-AB12-2-3		ND			21					
RI-AB12-7-8		ND			28					
RI-AB13-9-10		ND			28					
RI-AB14-3-4		ND			**76**					
RI-AB14-6		ND			21					
RI-AB15-10-10.5		ND			**78**					
RI-AB15-6-7	0.55	B			**620**					
RI-AB16-12		ND			**54**					
RI-AB16-8-9		ND			**73**					
RI-AB17-10	0.5				**55**					
RI-AB17-9-10	0.18	B			**59**					
RI-AB18-1.5-2		ND			**98**					
RI-AB18-5-5.5		ND			**60**					
RI-AB19-4-5		ND			37					
RI-AB19-7-8		ND			**39**					
RI-AB20-2-3		ND			**84**					
RI-AB20-7-8	0.2	B			**70**					
RI-AB21-2-3	0.57	B			**810**					
RI-AB21-7-8		ND			21					
RI-AB22-4-5		ND			**170**					
RI-AB22-7-8		ND			**49**					
RI-AB23-0-1		ND			29					
RI-AB23-6-6.5		ND			32					
RI-AB24-2.5-3	0.11	B			**42**					
RI-AB24-7-7.5		ND			**61**					
RI-AB25-4-5		ND			**39**					
RI-AB25-8		ND			**46**					
RI-AB26-4-5		ND			**55**					
RI-AB26-6.5		ND			**42**					
RI-AB27-3-4		ND			**65**					
RI-AB27-7-8		ND			**46**					

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Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-AB28-10-10.5		ND			32					
RI-AB29-8.5-9	0.58				**360**					
RI-AB29-9.5-10	0.25	B			**55**					
RI-AB30-4-5	0.72	B			**1100**					
RI-AB30-7.5-8	0.3				**77**					
RI-AB31-2-3	0.1	B			**100**					
RI-AB31-4-4.5	0.44				**59**					
RI-AB32-8-9		ND			**46**					
RI-AB33-2-2.5		ND			35					
RI-AB34-2-2.5	0.32				**510**					
RI-AB34-6-6.5	1.6				**51**					
RI-AB35-0-1	0.35				37					
RI-AB35-6.5-7		ND			**55**					
RI-AB36-1.5-2	0.21	B			**47**					
RI-AB36-6-6.5		ND			**51**					
RI-AB37-3-4	0.27				**230**					
RI-AB37-7.5-8		ND			**51**					
RI-AB38-2-3	0.21	B			**50**					
RI-AB38-5.5-6		ND			**53**					
RI-AB39-10-11		ND			**93**					
RI-AB39-3-4	0.25				35					
RI-AB40-3-4		ND			30					
RI-AB40-5.5-6		ND			**64**					
RI-AB41-4-4.5		ND			**67**					
RI-AB41-5.5-6		ND			**46**					
RI-AB42-0-1		ND			32					
RI-AB42-7-7.5		ND			**53**					
RI-AB43-2-2.5		ND			31					
RI-AB43-7-7.5		ND			**73**					
RI-AB44-3-4		ND			**44**					
RI-AB44-7-8	0.15	B			**65**					
RI-AB45-0-1	0.12	B			**97**					
RI-AB45-7-8		ND			**62**					
RI-AB46-3-3.5	0.43	B			12					
RI-AB46-7-8		ND			**51**					
RI-AB47-2-3		ND			17					
RI-AB47-5.5-6		ND			**79**					
RI-AB48-7-8		ND			21					
RI-AB48-8		ND			24					
RI-NP01-3-4		ND			**210**					
RI-NP01-7-8		ND			**45**					
RI-NP02-1-1.5								ND		
RI-NP02-2-2.5		ND			**470**					
RI-NP02-7-7.5		ND			**73**					
RI-NP03-7-7.5		ND			**2700**					
RI-NP04-10-11		ND			**52**					

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CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-NP05-6-7	0.43				**490**					
RI-NP06-4-5		ND			**120**					
RI-NP06-9.9.5		ND			**65**					
RI-NP07-1-2		ND			**1200**					
RI-NP07-15-16	0.15	B			**54**					
RI-NP07-35.5-36		ND			14	B				
RI-NP08-0-1		ND			**1700**					
RI-NP08-22-22.5		ND			**55**	B				
RI-OP01-10-11		ND			**88**					
RI-OP01-11.5-12	0.3				15					
RI-OP02-12-13		ND			29					
RI-OP02-3.5-4	1.7				**61**					
RI-OP03-2.5-3		ND			33					
RI-OP03-5-5.5		ND			**97**					
RI-OP04-12.5-13		ND			15					
RI-OP04-5-6		ND			**78**					
RI-OP05-1-2	0.084	B			**91**					
RI-OP05-18-19		ND			20					
RI-OP06-11.5-12	0.22	B			**50**					
RI-OP06-2-3	0.17	B			13					
RI-OP07-13-14	0.64	B			**49**					
RI-OP07-2-3	0.11	B			12					
RI-OP08-13-14	1.7				**49**					
RI-OP09-15-16	1.3	B			37					
RI-OP09-18.5-19	1.4	B			**44**					
RI-OP09-4-5		ND			13					
RI-OP10-19-20		ND			**43**					
RI-OP10-5-6		ND			**76**					
RI-OP10-7-8								ND		
RI-OP11-4-5	1.5	B			**62**					
RI-OP12-17-18		ND			**81**					
RI-OP12-4-5		ND			**65**					
RI-OP13-10.5-11		ND			**58**					
RI-OP13-1-2		ND			15					
RI-OP14-12.5-13		ND			**73**					
RI-OP14-4-5		ND			**53**					
RI-OP15-11-12		ND			**65**					
RI-OP15-1-2		ND			22					
RI-OP16-12-13	0.24	B			**50**					
RI-OP16-22-23	1.6	B			**52**					
RI-OP16-2-3		ND			16					
RI-OP17-0-1		ND			5.1	B				
RI-OP17-11.5-12		ND			**45**					
RI-OP18-0-1		ND			26					
RI-OP18-13-14		ND			21					
RI-OP19-24-25		ND			24	B				

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Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-OP19-8-9		ND			23					
RI-OP20-1-2		ND			27					
RI-OP20-13-14		ND			17					
RI-OP21-15.5-16.5		ND			**43**					
RI-OP21-2-3		ND			32					
RI-OP22-0-1	0.21	B			11					
RI-OP22-18-19		ND			**47**	B				
RI-OP23-22-23		ND			**41**					
RI-OP23-29-30		ND			27					
RI-OP23-7-8		ND			**50**					
RI-OP24-1-2		ND			25			ND		
RI-OP24-16-17		ND			31					
RI-OP25-0-1	0.26				14					
RI-OP25-16-17	1.3	B			29					
RI-OP25-25-26		ND			37	B				
RI-OP26-10-10.5	0.22	B			**49**					
RI-OP26-5-6	3.6		0.003	B	**250**				0.029	B
RI-OP27-1-2	0.86				**100**					
RI-OP27-18-19		ND			**45**					
RI-OP28-21-22	1.6	B			22					
RI-OP28-5-6		ND			22					
RI-OP29-10-11		ND			31					
RI-OP29-20-20.5		ND			37					
RI-OP30-1-2		ND			18					
RI-OP30-12-13	0.22	B			**53**					
RI-OP30-17.5-18		ND			**65**					
RI-OP8-0-1	0.25				15					
RI-PL01-1-2		ND			20					
RI-PL01-22-23		ND			37					
RI-PL02-13-14		ND			**78**					
RI-PL02-7-7.5	0.31				**41**					
RI-PL03-25-26		ND			**50**					
RI-PL03-9-10	0.29				**46**					
RI-PL04-1-2		ND			16					
RI-PL04-21-22	1.2	B			37					
RI-PL05-13-13.5	1.4	B			**47**					
RI-PL05-35-36	2.2	B			**46**					
RI-PL06-11-11.5		ND			**51**					
RI-PL06-4-5	0.16	B			**71**					
RI-PL07-1-2		ND			17					
RI-PL07-15-15.5	0.61				**45**					
RI-PL08-1-2		ND			18					
RI-PL08-14-15		ND			**54**					
RI-PL09-4-5	1	B			**78**					
RI-PL10-1-2		ND			15					

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ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-PL10-14-15	1.9	B			**67**					
RI-PL11-1-2		ND			19					
RI-PL11-12-13		ND			**45**					
RI-PL12-1-2		ND			13					
RI-PL12-14-15	0.32	B			**51**					
RI-PL13-11-12		ND			**63**					
RI-PL13-1-2		ND			21					
RI-PT01-3-3.8		ND			**63**					
RI-PT02-3-4		ND			21					
RI-PT03-0-1	0.46				**174**					
RI-PT04-0-1	1.3				**150**					
RI-PT05-0-1	0.12	B			**93**					
RI-PT06-1-2		ND			**460**					
RI-PT07-1-2	0.31				**91**					
RI-PT08-8	0.13	B			**78**					
RI-PT09-0-1	0.67				**53**					
RI-PT100-2-3		ND			**39**					
RI-PT101-2-3		ND			9.9					
RI-PT102-0-4	0.13	B			**71**					
RI-PT10-2-3		ND			**88**					
RI-PT103-0-4	0.39				**75**					
RI-PT11-1-2	0.29				**51**					
RI-PT12-2-3	0.17	B			21					
RI-PT13-0-1	0.096	B			**80**					
RI-PT14-1-2	0.14	B			29					
RI-PT15-1-2	0.088	B			33					
RI-PT16-1-2	0.88				**140**					
RI-PT17-1-2		ND			**46**					
RI-PT17-6-7	0.11	B			**70**					
RI-PT18-0-1	0.45				**460**					
RI-PT18-4		ND			**75**			ND		
RI-PT19-1-2		ND			23					
RI-PT19-3-3.5		ND			**42**					
RI-PT20-0-1	0.21				**770**					
RI-PT21-0-1	0.23				36					
RI-PT22-0-1	0.21	B			28					
RI-PT22-6-6.5		ND			27					
RI-PT23-1-2	0.23	B			27					
RI-PT24-0-1	0.11	B			29					
RI-PT25-0-1	0.13	B			24					
RI-PT27-2-3	0.65				**390**					
RI-PT27-3-3.5	0.11	B			25					
RI-PT29-0-1	0.14	B			**46**					
RI-PT31-3-4	0.23	B			**78**					
RI-PT32-2-3		ND			32					

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CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-PT34-3-4	0.16	B			**130**					
RI-PT35-0-1	0.15	B			**240**					
RI-PT36-0-1	0.099	B			32					
RI-PT41-0-1	0.19	B			37					
RI-PT41-7-8		ND			**53**					
RI-PT42-2-3	0.098	B			**44**					
RI-PT44-0-1	0.61				**240**					
RI-PT48-1-2		ND			**120**					
RI-PT50-3-4	0.091	B			34					
RI-PT51-2-3		ND			31					
RI-PT53-0-1		ND			21					
RI-PT54-0-1		ND			21					
RI-PT55-0-1		ND			**43**					
RI-PT56-0-1		ND			**100**					
RI-PT57-0-1		ND			23					
RI-PT58-0-1		ND			24					
RI-PT59-0-1		ND			**62**					
RI-PT60-0-1		ND			30					
RI-PT61-0-1		ND			**67**					
RI-PT62-3-4		ND			23					
RI-PT63-0-1		ND			21					
RI-PT64-0-1		ND			15					
RI-PT65-0-1		ND			15					
RI-PT66-0-1		ND			15					
RI-PT67-0-1		ND			**42**					
RI-PT68-0-1		ND			25					
RI-PT68-3-4		ND			28					
RI-PT69-0-1		ND			**62**					
RI-PT70-1-2		ND			21					
RI-PT71-0-1	0.16	B			**55**					
RI-PT71-7-8	0.26	B			**67**					
RI-PT72-3-4		ND			22					
RI-PT73-0-1		ND			**46**					
RI-PT74-2-3	0.54				**93**					
RI-PT74-3-4		ND			18					
RI-PT75-0-1	0.15	B			**53**					
RI-PT76-1-1.5	0.13	B			34					
RI-PT77-1-1.5	0.31				**92**					
RI-PT78-1-1.5	0.14	B			31					
RI-PT79-0-0.5	0.2	B			**120**					
RI-PT80-0-1		ND			**66**					
RI-PT81-0-1		ND			26					
RI-PT82-0-1		ND			**76**					
RI-PT83-0-0.5		ND			15					
RI-PT84-0-0.5		ND			34					

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CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-PT85-1-2		ND			19					
RI-PT86-1-2		ND			**58**					
RI-PT87-3-4		ND			**190**					
RI-PT88-0-1	0.31				21					
RI-PT89-2-3		ND			25					
RI-PT90-2-2.5		ND			32					
RI-PT91-0-1	0.11	B			21					
RI-PT92-2-3		ND			**53**					
RI-PT93-1-2	0.13	B			**64**					
RI-PT94-2-3	0.18	B			**58**					
RI-PT95-1-2	0.24				17					
RI-PT96-0-1	0.24				**160**					
RI-PT97-1-2	0.21	B			**820**			ND		
RI-PT98-2-3		ND			29					
RI-PT99-0-1	0.15	B			**120**					
RI-SB-10-2-3		ND			**288**					
RI-SB-11-0-1		ND			**65.8**					
RI-SB-12-2-3		ND			36.7					
RI-SB-1-3.5-4.5		ND			27.6					
RI-SB-13-4-5	2.11				**69.7**					
RI-SB-14-4-5	2.34				**98.4**					
RI-SB-15-3-4		ND			**46.4**					
RI-SB-16-3-4		ND			31.5					
RI-SB-17-3-4		ND			**39.2**					
RI-SB-18-3-4		ND			34.9					
RI-SB-19-3-4		ND			**81**					
RI-SB-20-4-5		ND			23.7					
RI-SB-21-3-4		ND			**64.3**					
RI-SB-22-0-1	1.15				**99.2**					
RI-SB-2-3-4		ND			36.3					
RI-SB-23-4-5		ND			**316**					
RI-SB-24-3-4		ND			**874**					
RI-SB-25-3-4	3.54				**97.1**					
RI-SB-26-3-4	3				**109**					
RI-SB-27-0-1		ND			**55**					
RI-SB-28-0-1	1.38				**87.5**					
RI-SB-29-1-2		ND			**69.4**					
RI-SB-30-1-2	2.02				**565**					
RI-SB-31-0-1		ND			29.2					
RI-SB-32-3-4		ND			35.5					
RI-SB-3-3-4	1.93				**105**					
RI-SB-34-3-4		ND			28					
RI-SB-35-0-1		ND			**81.5**					
RI-SB-36-0-1		ND			**89.6**					
RI-SB-37-6-7		ND			36.8					

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CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-SB-38-2-3		ND			**49.6**					
RI-SB-39-6-7	1.73				**57.8**					
RI-SB-40-2-3		ND			21.6					
RI-SB-41-6.5-7.5	2.61				**106**					
RI-SB-42-2-3	1.17				34.4					
RI-SB-4-5-6	1.45				**101**					
RI-SB-5-1-2		ND			26.8					
RI-SB-6-3-4	1.43				**59.6**					
RI-SB-7-3-4		ND			**58.1**					
RI-SB-8-3-4		ND			21.2					
RI-SB-9-3-4	3.01				**299**					
RISF-11-19-20		ND			**60.5**					
RISF-11-5-6		ND			**112**					
RISF-12-15-16		ND			23.9					
RISF-12-21-22		ND			15.5					
RISF-12-3-4		ND			37.8					
RISF-12-5-6		ND			**46.3**					
RISF-13-16-17		ND			31.9					
RISF-13-9-10		ND			**62.6**					
RISF-14-21-22		ND			**74.2**					
RISF-14-9-10		ND			**88**					
RI-SF15-1-2	1.2				**54**					
RI-SF15-4-5	0.17	B			35					
RI-SF16-14-15								ND		
RI-SF16-17-18		ND			**760**					
RI-SF16-2-3		ND			**460**					
RI-SF17-11-12		ND			**44**					
RI-SF17-17-18		ND			**51**					
RI-SF18-11-12		ND			**76**					
RI-SF18-2-2.5	0.2	B			**250**					
RI-SF19-0-1	0.82				**73**					
RI-SF19-9-10	0.15	B			**39**					
RI-SF20-6-7	0.55	B			18					
RI-SF21-0-1	0.25				**270**					
RISF-2-15-16		ND			**57.6**					
RI-SF21-7-8		ND			**97**					
RI-SF22-1-2		ND			16					
RI-SF22-13-14		ND			**48**					
RI-SF23-16-17		ND			**51**					
RI-SF23-3-4		ND			**85**					
RISF-2-4-5		ND			3.53					
RISF-3-10-11		ND			**91.1**					
RISF-3-3-4		ND			**66.2**					
RISF-4-10-11		ND			**85.7**					
RISF-4-5-6		ND			25.3					
RISF-5-15-16		ND			30					

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CLIENT_ID	Cadmium		Cadmium,TCLP		Chromium		Chromium, hexavalent		Chromium,TCLP	
CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RISF-5-2-3		ND			**94.1**					
RISF-6-1-2		ND			24.9					
RISF-6-7-8		ND			**95.9**					
RISF-8-1-2		ND			**45.6**					
RISF-8-15-16		ND			**81.1**					
RI-SI1-0-1		ND			24.5					
RI-SI1-5-6	1.99				**87.4**					
RI-SI2-13-14		ND			25.1					
RI-SI22-0-1		ND			**46.9**					
RI-SI22-31-32	3.61				17.7					
RI-SI23-0-1		ND			**194**					
RI-SI23-15-16		ND			**42.6**					
RI-SI2-3-4		ND			**51.8**					
RI-SI23-8-9		ND			**81.2**					
RI-SI24-0-1		ND			**56.9**					
RI-SI24-20-21		ND			20.9					
RI-SI25-0-1	4.13				**1450**					
RI-SI25-25-26		ND			**52.2**					
RI-SI26-14-15	1.73				**68.4**					
RI-SI26-20-21		ND			2.18					
RI-SI27-0-1		ND			**128**					
RI-SI27-8-9		ND			**80.2**					
RI-SI29-1-2		ND			**78.6**					
RI-SI29-27-28		ND			18.1					
RI-SI30-1-2		ND			**247**					
RI-SI30-21-22		ND			4.39					
RI-SI31-18-19		ND			6.94					
RI-SI31-23-24		ND				ND				
RI-SI32-0-1		ND			**80.1**					
RI-SI32-12-13		ND			**90.6**					
RI-SI32-19-20		ND			**70.8**					
RI-SI33-10-11		ND			**77.7**					
RI-SI33-15-16		ND			33.7					
RI-SI34-24-25		ND			**59.9**					
RI-SI34-4-5		ND			**44.5**					
RI-SI34-58-59		ND			25.2					
RI-SI35-16-17	1.72				**148**					
RI-SI35-8.5-9.5	**24**				**2740**			ND		
RI-SI36-1-2		ND			**52.7**					
RI-SI36-15-16		ND			19.5					
RI-SI36-30-31		ND			15.5					
RI-SI3-6-7	2.67				**113**					
RI-SI37-0-1		ND			25.9					
RI-SI3-7-8		ND			**68.3**					
RI-SI37-9.5-10.5		ND			28.9					

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CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-SI38-10-11		ND			**88.5**					
RI-SI38-2-3		ND			10.7					
RI-SI38-29-30		ND				ND				
RI-SI39-0-1		ND			26.9					
RI-SI39-9-10		ND			26.3					
RI-SI4 J0-7-8		ND			22.7					
RI-SI4 JO-5-6		ND			**41.1**					
RI-SI40-19-20		ND			3.55					
RI-SI40-20-21		ND			18.6					
RI-SI41-5-6		ND			**161**					
RI-SI41-6-7		ND			**441**					
RI-SI42-12-13		ND			7.18					
RI-SI42-2-3		ND			20.2					
RI-SI43-0-1		ND			**226**					
RI-SI43-19-19.5		ND			35.2					
RI-SI7-2-3		ND			**135**					
RI-SI7-9-10	2.33				**89.1**					
RI-SL01-11-12		ND			**76**					
RI-SL01-14-15		ND			27					
RI-SL02-14-15		ND			**90**					
RI-SL02-4-5		ND			**54**					
RI-SL02-9-10	5.7				**1100**					
RI-SL03-11-12		ND			25					
RI-SL03-4-5		ND			**48**					
RI-SL04-10-11	0.094	B			**68**					
RI-SL04-15-16	1.45	B			**93**					
RI-SL05-13-14		ND			**180**					
RI-SL05-3-4	0.087	B			16					
RI-SL05-8-9	0.51				**200**					
RI-SL06-6-7		ND			29					
RI-SL06-9-10	0.13	B			16					
RI-SL08-10-11		ND			**62**					
RI-SL08-13-14	0.18	B			**61**					
RI-SL08-7-8		ND			7.7					
RI-SL09-3-4		ND			29					
RI-SL10-2-3	0.25				22					
RI-SL10-6-7		ND			35					
RI-SL11-2-3	0.39				**64**					
RI-SL11-8-9		ND			37					
RI-SL12-10-11		ND			**430**					
RI-SL12-15-16		ND			**91**					
RI-SL12-3-4		ND			**71**					
RI-SL13-10-11	0.21	B			**55**					
RI-SL13-3-4	0.15	B			17					
RI-SL14-12-13	0.38				**240**					
RI-SL14-9-10	0.26				22					
RI-SI-10-17-18		ND			**61.9**					
RI-SI-10-3-4		ND			27.4					

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CALM Scenario C	380 mg/kg		380 mg/kg		4,500 mg/kg		No Listing		4,500 mg/kg	
CALM C Leach	11 mg/kg		11 mg/kg		38 mg/kg		No Listing		38 mg/kg	
RI-SI-11-2-3		ND			30.9					
RI-SI-11-8-9		ND			**65.4**					
RI-SI-12-10-11		ND			**42.9**					
RI-SI-12-2-3		ND			24.4					
RI-SI-13-18-19		ND			**64.3**					
RI-SI-13-2-3		ND			35.5					
RI-SI-14-0-1		ND			**665**					
RI-SI-14-5-6		ND			**63**					
RI-SI-15-20-21		ND			29.2					
RI-SI-15-2-3		ND			28.1					
RI-SI-16-11-12		ND			**62.1**					
RI-SI-16-5-6		ND			**64.2**					
RI-SI-17-1-2		ND			26.5					
RI-SI-17-20-21		ND			**40.7**					
RI-SI-18-10-11		ND			15.9					
RI-SI-18-2-3		ND			**775**					
RI-SI-19-1-2		ND			**82.1**					
RI-SI-19-9-10		ND			13.1					
RI-SI-20-1-2		ND			**76.3**					
RI-SI-20-5-6		ND			27					
RI-SI-21-2-3		ND			**459**					
RI-SI-21-6-7		ND			**38.5**					
RI-SI-28-17-18		ND			1.55					
RI-SI-28-2-3		ND			18.5					
RI-SI-5-21-22		ND			**48.4**					
RI-SI-5-5-6		ND			**98.4**					
RI-SI-6-1-2		ND			21					
RI-SI-6-4-5		ND			**43.6**					
RI-SI-9-1-2		ND			34.2					
RI-SI-9-7-8		ND			**67.7**					

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
AP-1-13-14		ND				ND	12.4			
AP-2-8-9	11.8					ND	29.2			
AP-3-14-15	18.2					ND	29.5			
AP-4-8-9	11.4					ND	33.5			
AP-5-1-2	13.4					ND	29.8			
AP-5-8-9	2.19					ND	18.7			
GT-01-8.5-10	4300						30			
GT-02-6-7.5	1700						82			
GT-03-8.5-10	9.3						20			
GT-05-3.5-5	32						14			
GT-09-1-2.5	1500						52			
GT-13-10-11.5	17						17			
GT-14-6-7.5	2200						5.4			
GT-17-6-7.5	17						22			
GT-20-1-2.5	1800						26			
GT-20-13.5-15	12						19			
GT-21-20	550						25			
GT-27-3.5-5	12						22			
GT-28-3.5-5	8.4						24			
GT-29-10-11.5	14						24			
GT-2A-6-7.5	83						28			
GT-30-3.5-5	11						38			
R1-SB43-2-3	8.99					ND	15.5			
R1-SB44-6-7	12.2					ND	48.2			
R1-SB45-2-3	8.12					ND	20.8			
R1-SB46-1-2	1440					ND	96.7			
R1-SB47-1-2	1580					ND	109			
R1-SB49-1-2	2270					ND	175			
R1-SB50-3-4	7.65					ND	21.1			
R1-SB51-3-4	9.52					ND	14.7			
R1-SB52-6.5-7.5	14					ND	33.9			
R1-SB53-0-1	150					ND	22.2			
R1-SB54-6-7	7.67					ND	26.1			
R1-SB55-0-1	170					ND	35.2			
R1-SB56-5-6	13.7					ND	30.5			
RI-AB01-0-1	10						23			
RI-AB01-7-8	12						22			
RI-AB02-6-7	6800						300			
RI-AB-02-8	19						21			
RI-AB03-11-12	13						21			
RI-AB03-4-5	930						890			
RI-AB04-12	20						32			

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-AB04-6-6.5	12000						660			
RI-AB05-10	270						32			
RI-AB05-6-7	10000						540			
RI-AB06-5-6	10000						530			
RI-AB06-7-8	17						51			
RI-AB07-4-5	9300						30			
RI-AB07-7-8	23						30			
RI-AB08-2.5-3	4100						94			
RI-AB08-6.5-7	9.2						15			
RI-AB09-11-12	16						38			
RI-AB09-6-6.5	12000						670			
RI-AB11-10	6.9						6.9			
RI-AB11-5-6	230						18			
RI-AB12-2-3	290						14			
RI-AB12-7-8	8.3						11			
RI-AB13-9-10	1300						18			
RI-AB14-3-4	500						36			
RI-AB14-6	16						19			
RI-AB15-10-10.5	160						35			
RI-AB15-6-7	7500						270			
RI-AB16-12	14						78			
RI-AB16-8-9	1200						35			
RI-AB17-10	24						36			
RI-AB17-9-10	28						44			
RI-AB18-1.5-2	710						34			
RI-AB18-5-5.5	22						26			
RI-AB19-4-5	130						18			
RI-AB19-7-8	18						15			
RI-AB20-2-3	9.9						23			
RI-AB20-7-8	14						75			
RI-AB21-2-3	7000						360			
RI-AB21-7-8	10						22			
RI-AB22-4-5	640						21			
RI-AB22-7-8	11						23			
RI-AB23-0-1	380						13			
RI-AB23-6-6.5	11						18			
RI-AB24-2.5-3	1000						12			
RI-AB24-7-7.5	7.5						14			
RI-AB25-4-5	130						17			
RI-AB25-8	12						24			
RI-AB26-4-5	17						34			
RI-AB26-6.5	9.3						18			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-AB27-3-4	14						25			
RI-AB27-7-8	13						49			
RI-AB28-10-10.5	890						26			
RI-AB29-8.5-9	4200						280			
RI-AB29-9.5-10	20						31			
RI-AB30-4-5	16000						710			
RI-AB30-7.5-8	49						33			
RI-AB31-2-3	7300						15			
RI-AB31-4-4.5	830						33			
RI-AB32-8-9	800						33			
RI-AB33-2-2.5	5400						21			
RI-AB34-2-2.5	9700						350			
RI-AB34-6-6.5	25						36			
RI-AB35-0-1	300						45			
RI-AB35-6.5-7	12						16			
RI-AB36-1.5-2	4100						22			
RI-AB36-6-6.5	15						23			
RI-AB37-3-4	2900						99			
RI-AB37-7.5-8	200						46			
RI-AB38-2-3	770						33			
RI-AB38-5.5-6	15						32			
RI-AB39-10-11	6.5						16			
RI-AB39-3-4	35						33			
RI-AB40-3-4	37						10			
RI-AB40-5.5-6	52						27			
RI-AB41-4-4.5	900						59			
RI-AB41-5.5-6	93						24			
RI-AB42-0-1	270						10			
RI-AB42-7-7.5	34						30			
RI-AB43-2-2.5	5.4						11			
RI-AB43-7-7.5	9.4						27			
RI-AB44-3-4	590						18			
RI-AB44-7-8	22						37			
RI-AB45-0-1	470						41			
RI-AB45-7-8	16						34			
RI-AB46-3-3.5	1500						4.4			
RI-AB46-7-8	93						60			
RI-AB47-2-3	19						15			
RI-AB47-5.5-6	12						23			
RI-AB48-7-8	260						11			
RI-AB48-8	60						14			
RI-NP01-3-4	1900						32			

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Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-NP01-7-8	1000						53			
RI-NP02-2-2.5	2300						39			
RI-NP02-7-7.5	630						31			
RI-NP03-7-7.5	17000						38			
RI-NP04-10-11	910						21			
RI-NP05-6-7	7200						250			
RI-NP06-4-5	2000						43			
RI-NP06-9.9.5	4800						45			
RI-NP07-1-2	190						27			
RI-NP07-15-16	320						38			
RI-NP07-35.5-36	810						12	B		
RI-NP08-0-1	1700						200			
RI-NP08-22-22.5	1800						51			
RI-OP01-10-11	770						120			
RI-OP01-11.5-12	8400						33			
RI-OP02-12-13	54						13			
RI-OP02-3.5-4	22000						960			
RI-OP03-2.5-3	790						50			
RI-OP03-5-5.5	260						14			
RI-OP04-12.5-13	8300						41			
RI-OP04-5-6	1100						43			
RI-OP05-1-2	1700						150			
RI-OP05-18-19	7.6						11			
RI-OP06-11.5-12	19						26			
RI-OP06-2-3	12						24			
RI-OP07-13-14	17						31			
RI-OP07-2-3	7.9						13			
RI-OP08-13-14	21						35			
RI-OP09-15-16	1100						28			
RI-OP09-18.5-19	22						39			
RI-OP09-4-5	45						7			
RI-OP10-19-20	3900						26			
RI-OP10-5-6	630						31			
RI-OP11-4-5	26						48			
RI-OP12-17-18	19						30			
RI-OP12-4-5	6.6						15			
RI-OP13-10.5-11	99						37			
RI-OP13-1-2	8.7						11			
RI-OP14-12.5-13	58						37			
RI-OP14-4-5	16						27			
RI-OP15-11-12	19						34			
RI-OP15-1-2	1500						15			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-OP16-12-13	11						21			
RI-OP16-22-23	27						33			
RI-OP16-2-3	8.6						14			
RI-OP17-0-1	10000						8.8			
RI-OP17-11.5-12	990						65			
RI-OP18-0-1	350						37			
RI-OP18-13-14	8.3						11			
RI-OP19-24-25	28	B					30			
RI-OP19-8-9	120						24			
RI-OP20-1-2	890						44			
RI-OP20-13-14	5600						19			
RI-OP21-15.5-16.5	3300						20			
RI-OP21-2-3	130						67			
RI-OP22-0-1	50						15			
RI-OP22-18-19		ND					44			
RI-OP23-22-23	1500						37			
RI-OP23-29-30	11						16			
RI-OP23-7-8	160						16			
RI-OP24-1-2	1100						70			
RI-OP24-16-17	400						35			
RI-OP25-0-1	630						13			
RI-OP25-16-17	1400						28			
RI-OP25-25-26		ND					23			
RI-OP26-10-10.5	210						31			
RI-OP26-5-6	120000		210				15000		0.11	
RI-OP27-1-2	2700						130			
RI-OP27-18-19	12						39			
RI-OP28-21-22		ND					18			
RI-OP28-5-6	11						21			
RI-OP29-10-11	990						51			
RI-OP29-20-20.5		ND					20			
RI-OP30-1-2	1000						20			
RI-OP30-12-13	1300						47			
RI-OP30-17.5-18	1700						36			
RI-OP8-0-1	1300						90			
RI-PL01-1-2	7.2						29			
RI-PL01-22-23		ND					29			
RI-PL02-13-14		ND					37			
RI-PL02-7-7.5	15						35			
RI-PL03-25-26		ND					28			
RI-PL03-9-10	13						28			
RI-PL04-1-2	6.4						11			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-PL04-21-22	29						41			
RI-PL05-13-13.5	17						69			
RI-PL05-35-36	21						41			
RI-PL06-11-11.5		ND					48			
RI-PL06-4-5	13						30			
RI-PL07-1-2	6.1						14			
RI-PL07-15-15.5	11						27			
RI-PL08-1-2	6.3						14			
RI-PL08-14-15		ND					32			
RI-PL09-4-5	17						41			
RI-PL10-1-2	5.5						17			
RI-PL10-14-15	14	B					36			
RI-PL11-1-2	5.7						18			
RI-PL11-12-13	11						23			
RI-PL12-1-2	5.5						14			
RI-PL12-14-15	16						29			
RI-PL13-11-12	12						31			
RI-PL13-1-2	5.7						22			
RI-PT01-3-3.8	18						23			
RI-PT02-3-4	8.6						20			
RI-PT03-0-1	4260						237			
RI-PT04-0-1	1500						300			
RI-PT05-0-1	410						68			
RI-PT06-1-2	720						150			
RI-PT07-1-2	6800						290			
RI-PT08-8	750						38			
RI-PT09-0-1	5800						400			
RI-PT100-2-3	7.7						14			
RI-PT101-2-3	6.5						10			
RI-PT102-0-4	1600						110			
RI-PT10-2-3	77						64			
RI-PT103-0-4	790						44			
RI-PT11-1-2	3200						320			
RI-PT12-2-3	100						18			
RI-PT13-0-1	2000						71			
RI-PT14-1-2	230						25			
RI-PT15-1-2	520						43			
RI-PT16-1-2	20000						970			
RI-PT17-1-2	1600						110			
RI-PT17-6-7	22						23			
RI-PT18-0-1	15000						660			
RI-PT18-4	140						26			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-PT19-1-2	510						19			
RI-PT19-3-3.5	15						9.1			
RI-PT20-0-1	4200						180			
RI-PT21-0-1	580						82			
RI-PT22-0-1	33						33			
RI-PT22-6-6.5	14						14			
RI-PT23-1-2	9.5						21			
RI-PT24-0-1	450						59			
RI-PT25-0-1	290						32			
RI-PT27-2-3	28000						1200			
RI-PT27-3-3.5	280						28			
RI-PT29-0-1	230						55			
RI-PT31-3-4	8.9						24			
RI-PT32-2-3	17						13			
RI-PT34-3-4	5.2						19			
RI-PT35-0-1	1400						68			
RI-PT36-0-1	270						28			
RI-PT41-0-1	190						28			
RI-PT41-7-8	8.8						17			
RI-PT42-2-3	1300						27			
RI-PT44-0-1	6400						370			
RI-PT48-1-2	300						15			
RI-PT50-3-4	5.1						25			
RI-PT51-2-3	4.7						13			
RI-PT53-0-1	160						24			
RI-PT54-0-1	140						36			
RI-PT55-0-1	740						35			
RI-PT56-0-1	820						44			
RI-PT57-0-1	260						19			
RI-PT58-0-1	130						21			
RI-PT59-0-1	1600						91			
RI-PT60-0-1	410						30			
RI-PT61-0-1	1800						88			
RI-PT62-3-4	33						18			
RI-PT63-0-1	250						31			
RI-PT64-0-1	120						18			
RI-PT65-0-1	15						18			
RI-PT66-0-1	46						21			
RI-PT67-0-1	730						28			
RI-PT68-0-1	250						28			
RI-PT68-3-4	14						17			
RI-PT69-0-1	1400						91			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-PT70-1-2	34						14			
RI-PT71-0-1	1400						110			
RI-PT71-7-8	17						45			
RI-PT72-3-4	15						6.3			
RI-PT73-0-1	1000						62			
RI-PT74-2-3	4000						60			
RI-PT74-3-4	9.7						32			
RI-PT75-0-1	1300						78			
RI-PT76-1-1.5	830						68			
RI-PT77-1-1.5	2300						160			
RI-PT78-1-1.5	1400						43			
RI-PT79-0-0.5	1800						110			
RI-PT80-0-1	1500						94			
RI-PT81-0-1	480						32			
RI-PT82-0-1	550						62			
RI-PT83-0-0.5	32						14			
RI-PT84-0-0.5	420						35			
RI-PT85-1-2	390						26			
RI-PT86-1-2	10						18			
RI-PT87-3-4	6.2						14			
RI-PT88-0-1	340						48			
RI-PT89-2-3	50						12			
RI-PT90-2-2.5	5.1						13			
RI-PT91-0-1	290						44			
RI-PT92-2-3	2900						77			
RI-PT93-1-2	510						33			
RI-PT94-2-3	1000						58			
RI-PT95-1-2	45						21			
RI-PT96-0-1	3000						170			
RI-PT97-1-2	2900						350			
RI-PT98-2-3	13						15			
RI-PT99-0-1	4300						180			
RI-SB-10-2-3	7.67					ND	13.2			
RI-SB-11-0-1	82.4					ND	22.2			
RI-SB-12-2-3	6.56					ND	18			
RI-SB-1-3.5-4.5	64.9					ND	8.91			
RI-SB-13-4-5	13					ND	25.7			
RI-SB-14-4-5	13.4					ND	43.3			
RI-SB-15-3-4	12.2					ND	23.7			
RI-SB-16-3-4	9.48					ND	13.5			
RI-SB-17-3-4	8.67					ND	14.1			
RI-SB-18-3-4	10.3					ND	14.7			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-SB-19-3-4	8.18					ND	21.9			
RI-SB-20-4-5	3.32					ND	9.97			
RI-SB-21-3-4	6.19					ND	12.9			
RI-SB-22-0-1	3170					ND	196			
RI-SB-2-3-4	6.33					ND	15			
RI-SB-23-4-5	3600					ND	151			
RI-SB-24-3-4	14700					ND	698			
RI-SB-25-3-4	82.2					ND	41			
RI-SB-26-3-4	70.6					ND	35.6			
RI-SB-27-0-1	331					ND	24.6			
RI-SB-28-0-1	988					ND	33.7			
RI-SB-29-1-2	1920					ND	108			
RI-SB-30-1-2	22800				2.32		457			
RI-SB-31-0-1	164					ND	22.1			
RI-SB-32-3-4	3.17					ND	7.93			
RI-SB-3-3-4	15.1					ND	32.5			
RI-SB-34-3-4	13.8					ND	13.8			
RI-SB-35-0-1	1710					ND	117			
RI-SB-36-0-1	2160					ND	129			
RI-SB-37-6-7	8.96					ND	22.7			
RI-SB-38-2-3	195					ND	22.9			
RI-SB-39-6-7	11.7					ND	25.5			
RI-SB-40-2-3	5.88					ND	12.3			
RI-SB-41-6.5-7.5	15.1					ND	38.1			
RI-SB-42-2-3	10.7					ND	15.2			
RI-SB-4-5-6	16.1					ND	61.8			
RI-SB-5-1-2	10.6					ND	71.6			
RI-SB-6-3-4	8.55					ND	11.4			
RI-SB-7-3-4	7.25					ND	13.2			
RI-SB-8-3-4	9.67					ND	15			
RI-SB-9-3-4	67.2					ND	28.5			
RISF-11-19-20	15.3					ND	48.4			
RISF-11-5-6	60.1					ND	36.1			
RISF-12-15-16	5430					ND	19.4			
RISF-12-21-22		ND				ND	11.4			
RISF-12-3-4	10.2					ND	15			
RISF-12-5-6	32.2					ND	24.1			
RISF-13-16-17	27.9					ND	25.4			
RISF-13-9-10	177					ND	66.2			
RISF-14-21-22	763					ND	28.1			
RISF-14-9-10	176					ND	31			
RI-SF15-1-2	1400						140			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-SF15-4-5	1700						82			
RI-SF16-17-18	1600						510			
RI-SF16-2-3	250						20			
RI-SF17-11-12	730						35			
RI-SF17-17-18	1100						36			
RI-SF18-11-12	1300						73			
RI-SF18-2-2.5	5200						81			
RI-SF19-0-1	8000						520			
RI-SF19-9-10	740						37			
RI-SF20-6-7	37000						130			
RI-SF21-0-1	22000						50000			
RISF-2-15-16	1650					ND	35.3			
RI-SF21-7-8	1400						64			
RI-SF22-1-2	17						14			
RI-SF22-13-14	21						33			
RI-SF23-16-17	18						23			
RI-SF23-3-4	12						23			
RISF-2-4-5	138					ND	4.77			
RISF-3-10-11	348					ND	54.9			
RISF-3-3-4	35.1					ND	10.4			
RISF-4-10-11	490					ND	78.5			
RISF-4-5-6	71.9					ND	51			
RISF-5-15-16	8.09					ND	21.2			
RISF-5-2-3	48.7					ND	29.1			
RISF-6-1-2	87.9					ND	12.8			
RISF-6-7-8	16.3					ND	52.6			
RISF-8-1-2	10.2					ND	18.3			
RISF-8-15-16	1800					ND	56.7			
RI-SI1-0-1	35.7					ND	33.3			
RI-SI1-5-6	12					ND	50.6			
RI-SI2-13-14	734					ND	13.9			
RI-SI22-0-1	559					ND	35.4			
RI-SI22-31-32	9.84					ND	14.4			
RI-SI23-0-1	2090					ND	121			
RI-SI23-15-16	14.2					ND	24.6			
RI-SI2-3-4	50.5					ND	16.7			
RI-SI23-8-9	19.7					ND	28			
RI-SI24-0-1	292					ND	27.8			
RI-SI24-20-21	46.9					ND	19			
RI-SI25-0-1	44000				3.9		2580			
RI-SI25-25-26	39					ND	28.6			
RI-SI26-14-15	21.1					ND	101			

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-SI26-20-21		ND				ND	10.2			
RI-SI27-0-1	2670					ND	157			
RI-SI27-8-9	16.1					ND	40.1			
RI-SI29-1-2	1040					ND	74			
RI-SI29-27-28	7.55					ND	18.3			
RI-SI30-1-2	14100				4.68		834			
RI-SI30-21-22	28.6					ND	12.8			
RI-SI31-18-19		ND				ND	12.5			
RI-SI31-23-24		ND				ND	4.92			
RI-SI32-0-1	1540					ND	87.4			
RI-SI32-12-13	15.9					ND	30.2			
RI-SI32-19-20	27.3					ND	27.4			
RI-SI33-10-11	152					ND	32			
RI-SI33-15-16	6.41					ND	24.4			
RI-SI34-24-25	12.4					ND	16.1			
RI-SI34-4-5	165					ND	41.9			
RI-SI34-58-59	13.8					ND	32.7			
RI-SI35-16-17	386					ND	27.9			
RI-SI35-8.5-9.5	64200				32.7		5550			
RI-SI36-1-2	85.1					ND	35			
RI-SI36-15-16	15.6					ND	18.5			
RI-SI36-30-31	169					ND	17.3			
RI-SI3-6-7	16.3					ND	47.6			
RI-SI37-0-1	192					ND	32.3			
RI-SI3-7-8	12.7					ND	28.8			
RI-SI37-9.5-10.5	10.8					ND	22.3			
RI-SI38-10-11	449					ND	31.7			
RI-SI38-2-3	11.7					ND	11.7			
RI-SI38-29-30	486					ND	7.78			
RI-SI39-0-1	661					ND	35.3			
RI-SI39-9-10		ND				ND	16.5			
RI-SI4 J0-7-8	7.66					ND	16.8			
RI-SI4 JO-5-6	13.6					ND	24.3			
RI-SI40-19-20	431					ND	7.6			
RI-SI40-20-21	10300					ND	27.7			
RI-SI41-5-6	12200				22.2		7250			
RI-SI41-6-7	13100				8.49		323			
RI-SI42-12-13	245					ND	6.91			
RI-SI42-2-3	10.5					ND	16.9			
RI-SI43-0-1	8920					ND	787			
RI-SI43-19-19.5	26.4					ND	71.3			
RI-SI7-2-3	5.51					ND	17			

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CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-SI7-9-10	20.6					ND	40.1			
RI-SL01-11-12	140						29			
RI-SL01-14-15	14						31			
RI-SL02-14-15	12						23			
RI-SL02-4-5	6.5						16			
RI-SL02-9-10	22000						810			
RI-SL03-11-12	21						28			
RI-SL03-4-5	980						76			
RI-SL04-10-11	3500						34			
RI-SL04-15-16	33						45			
RI-SL05-13-14	28						45			
RI-SL05-3-4	8.8						16			
RI-SL05-8-9	9200						84			
RI-SL06-6-7	9.8						19			
RI-SL06-9-10	9.9						31			
RI-SL08-10-11	1300						60			
RI-SL08-13-14	22						28			
RI-SL08-7-8	8.4						5.6			
RI-SL09-3-4	10						21			
RI-SL10-2-3	11						23			
RI-SL10-6-7	190						13			
RI-SL11-2-3	7.5						86			
RI-SL11-8-9		ND					29			
RI-SL12-10-11	720						32			
RI-SL12-15-16	57						25			
RI-SL12-3-4	4.4						15			
RI-SL13-10-11	540						42			
RI-SL13-3-4	8						22			
RI-SL14-12-13	20000						1800			
RI-SL14-9-10	40						24			
RI-SI-10-17-18	13.6					ND	42.9			
RI-SI-10-3-4	59.3					ND	21.3			
RI-SI-11-2-3	20.5					ND	21.4			
RI-SI-11-8-9	9.18					ND	25.7			
RI-SI-12-10-11	4.1					ND	24			
RI-SI-12-2-3	37.1					ND	19.7			
RI-SI-13-18-19	12.4					ND	31.1			
RI-SI-13-2-3	8.34					ND	14.4			
RI-SI-14-0-1	5050				2.43		338			
RI-SI-14-5-6	16.1					ND	34.2			
RI-SI-15-20-21	9.37					ND	22.5			
RI-SI-15-2-3	7.66					ND	13.4			

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Copper		Copper,TCLP		Cyanide		Lead		Lead,TCLP	
CALM Scenario C	4,700 mg/kg		4,700 mg/kg		20,400 mg/kg		660 mg/kg		660 mg/kg	
CALM C Leach	No Kd		No Kd		39 mg/kg		No Kd		No Kd	
RI-SI-16-11-12	11.9					ND	54.8			
RI-SI-16-5-6	9.6					ND	25.2			
RI-SI-17-1-2	1230					ND	23.8			
RI-SI-17-20-21	6.18					ND	25.4			
RI-SI-18-10-11		ND				ND	14.4			
RI-SI-18-2-3	5540					ND	339			
RI-SI-19-1-2	9.55					ND	34.6			
RI-SI-19-9-10	2.68					ND	16.1			
RI-SI-20-1-2	13.8					ND	30.7			
RI-SI-20-5-6	17.1					ND	28.8			
RI-SI-21-2-3	10700					ND	164			
RI-SI-21-6-7	8.07					ND	25.4			
RI-SI-28-17-18		ND				ND	8.69			
RI-SI-28-2-3	7.89					ND	21.2			
RI-SI-5-21-22		ND				ND	19.3			
RI-SI-5-5-6	15.5					ND	34.4			
RI-SI-6-1-2	7.35					ND	12.3			
RI-SI-6-4-5	7.45					ND	16			
RI-SI-9-1-2	7.74					ND	18.5			
RI-SI-9-7-8	14.1					ND	47.8			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
AP-1-13-14		ND						
AP-2-8-9		ND						
AP-3-14-15		ND						
AP-4-8-9		ND						
AP-5-1-2		ND						
AP-5-8-9		ND						
GT-01-8.5-10	0.11				130			
GT-02-6-7.5	0.03				57			
GT-03-8.5-10	0.02	B			22			
GT-05-3.5-5	0.033				8.8			
GT-09-1-2.5	0.045				36			
GT-13-10-11.5	0.026				15			
GT-14-6-7.5	0.036				25			
GT-17-6-7.5	0.019	B			13			
GT-20-1-2.5	0.029				23			
GT-20-13.5-15	0.029				11			
GT-21-20	0.087				66			
GT-27-3.5-5	0.13				18			
GT-28-3.5-5	0.041				13			
GT-29-10-11.5	0.065				20			
GT-2A-6-7.5	0.028				8.2			
GT-30-3.5-5	0.14				20			
R1-SB43-2-3		ND						
R1-SB44-6-7		ND						
R1-SB45-2-3		ND						
R1-SB46-1-2		ND						
R1-SB47-1-2		ND						
R1-SB49-1-2		ND						
R1-SB50-3-4		ND						
R1-SB51-3-4		ND						
R1-SB52-6.5-7.5		ND						
R1-SB53-0-1		ND						
R1-SB54-6-7		ND						
R1-SB55-0-1		ND						
R1-SB56-5-6		ND						
RI-AB01-0-1	0.04				14			
RI-AB01-7-8	0.013	B			16			
RI-AB02-6-7	0.07				170			
RI-AB-02-8	0.057				16			
RI-AB03-11-12	0.049				19			
RI-AB03-4-5	0.15				30			
RI-AB04-12	0.042				95			

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ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-AB04-6-6.5	0.15				110			
RI-AB05-10	0.04				61			
RI-AB05-6-7	0.041				79			
RI-AB06-5-6	0.1				110			
RI-AB06-7-8	0.046				28			
RI-AB07-4-5	0.028				72			
RI-AB07-7-8	0.12				35			
RI-AB08-2.5-3	0.068				65			
RI-AB08-6.5-7	0.024				13			
RI-AB09-11-12	0.015	B			21			
RI-AB09-6-6.5	0.19				130			
RI-AB11-10	0.029				68			
RI-AB11-5-6	0.02	B			14			
RI-AB12-2-3	0.022				14			
RI-AB12-7-8	0.031				33			
RI-AB13-9-10	0.019	B			22			
RI-AB14-3-4	0.038				21			
RI-AB14-6	0.023				17			
RI-AB15-10-10.5	0.07				57			
RI-AB15-6-7	0.052				58			
RI-AB16-12	0.097				27			
RI-AB16-8-9	0.031				32			
RI-AB17-10	0.061				33			
RI-AB17-9-10	0.077				28			
RI-AB18-1.5-2	0.058				34			
RI-AB18-5-5.5	0.075				17			
RI-AB19-4-5	0.02	B			10			
RI-AB19-7-8	0.022				10			
RI-AB20-2-3	0.12				17			
RI-AB20-7-8	0.11				27			
RI-AB21-2-3	0.062				92			
RI-AB21-7-8	0.016	B			10			
RI-AB22-4-5	0.021				30			
RI-AB22-7-8	0.054				17			
RI-AB23-0-1	0.022				43			
RI-AB23-6-6.5	0.045				14			
RI-AB24-2.5-3	0.011	B			100			
RI-AB24-7-7.5	0.035				12			
RI-AB25-4-5	0.044				20			
RI-AB25-8	0.071				17			
RI-AB26-4-5	0.091				25			
RI-AB26-6.5	0.037				12			

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Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-AB27-3-4	0.075				24			
RI-AB27-7-8	0.048				25			
RI-AB28-10-10.5	0.097				51			
RI-AB29-8.5-9	0.097				84			
RI-AB29-9.5-10	0.072				19			
RI-AB30-4-5	0.077				150			
RI-AB30-7.5-8	0.034				21			
RI-AB31-2-3		ND			42			
RI-AB31-4-4.5	0.046				27			
RI-AB32-8-9	0.047				78			
RI-AB33-2-2.5	0.069				140			
RI-AB34-2-2.5	0.09				71			
RI-AB34-6-6.5	0.022	B			39			
RI-AB35-0-1	0.061				54			
RI-AB35-6.5-7	0.036				11			
RI-AB36-1.5-2	0.011	B			39			
RI-AB36-6-6.5	0.026				18			
RI-AB37-3-4	0.033				41			
RI-AB37-7.5-8	0.057				24			
RI-AB38-2-3	0.019	B			22			
RI-AB38-5.5-6	0.052				15			
RI-AB39-10-11	0.028				8.5			
RI-AB39-3-4	0.01	B			5.8			
RI-AB40-3-4	0.043				8.5			
RI-AB40-5.5-6	0.044				17			
RI-AB41-4-4.5	0.097				31			
RI-AB41-5.5-6	0.044				25			
RI-AB42-0-1	0.023				10			
RI-AB42-7-7.5	0.087				15			
RI-AB43-2-2.5	0.017	B			6.5			
RI-AB43-7-7.5	0.052				11			
RI-AB44-3-4	0.091				29			
RI-AB44-7-8	0.012	B			19			
RI-AB45-0-1	0.024				28			
RI-AB45-7-8	0.03				16			
RI-AB46-3-3.5	0.0053	B			24			
RI-AB46-7-8	0.056				50			
RI-AB47-2-3	0.024	B			7.9			
RI-AB47-5.5-6	0.088				14			
RI-AB48-7-8	0.049				12			
RI-AB48-8	0.03				13			
RI-NP01-3-4	0.06				74			

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CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-NP01-7-8	0.012	B			50			
RI-NP02-2-2.5	0.029				18			
RI-NP02-7-7.5	0.032				33			
RI-NP03-7-7.5	0.42				**420**			
RI-NP04-10-11	0.032				32			
RI-NP05-6-7	0.026				61			
RI-NP06-4-5	0.013	B			32			
RI-NP06-9.9.5	0.11				90			
RI-NP07-1-2	0.014	B			13			
RI-NP07-15-16	0.06				41			
RI-NP07-35.5-36	0.02	B			25	B		
RI-NP08-0-1	0.062				34			
RI-NP08-22-22.5	0.07				77	B		
RI-OP01-10-11	0.13				33			
RI-OP01-11.5-12	0.12				6.7			
RI-OP02-12-13	0.031				6.6			
RI-OP02-3.5-4	0.4				36			
RI-OP03-2.5-3	0.27				11			
RI-OP03-5-5.5	0.071				5.9			
RI-OP04-12.5-13	0.37				20			
RI-OP04-5-6	0.25				25			
RI-OP05-1-2	0.11				27			
RI-OP05-18-19	0.02	B			6.6			
RI-OP06-11.5-12	0.069				23			
RI-OP06-2-3	0.045				6.2			
RI-OP07-13-14	0.062				24			
RI-OP07-2-3	0.025				6.8			
RI-OP08-13-14	0.062				48			
RI-OP09-15-16	0.046				30			
RI-OP09-18.5-19	0.074				43			
RI-OP09-4-5	0.034				5.3			
RI-OP10-19-20	0.28				48			
RI-OP10-5-6	0.077				33			
RI-OP11-4-5	0.12				120			
RI-OP12-17-18	0.058				25			
RI-OP12-4-5	0.06				9.2			
RI-OP13-10.5-11	0.082				35			
RI-OP13-1-2	0.029				7.5			
RI-OP14-12.5-13	0.07				33	B		
RI-OP14-4-5	0.089				16			
RI-OP15-11-12	0.09				75			
RI-OP15-1-2	0.028				21			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-OP16-12-13	0.074				19			
RI-OP16-22-23	0.092				31			
RI-OP16-2-3	0.033				6.1			
RI-OP17-0-1	0.066				9.7	B		
RI-OP17-11.5-12	0.05				24			
RI-OP18-0-1	0.052				14			
RI-OP18-13-14	0.024				7.4			
RI-OP19-24-25	0.036				20	B		
RI-OP19-8-9	0.031				9.1			
RI-OP20-1-2	0.078				21			
RI-OP20-13-14	0.084				49			
RI-OP21-15.5-16.5	0.071				72			
RI-OP21-2-3	0.1				4.5			
RI-OP22-0-1	0.036				6.7			
RI-OP22-18-19	0.1				52	B		
RI-OP23-22-23	0.063				65			
RI-OP23-29-30	0.043				12			
RI-OP23-7-8	0.036				15			
RI-OP24-1-2	0.03				11			
RI-OP24-16-17	0.08				88			
RI-OP25-0-1	0.026				23			
RI-OP25-16-17	0.088				35			
RI-OP25-25-26	0.042				25	B		
RI-OP26-10-10.5	0.056				19			
RI-OP26-5-6	0.32			ND	**1100**		4.2	
RI-OP27-1-2	0.17				54			
RI-OP27-18-19	0.11				13			
RI-OP28-21-22		ND			20			
RI-OP28-5-6	0.026				7.9			
RI-OP29-10-11	0.024				24			
RI-OP29-20-20.5	0.074				12	B		
RI-OP30-1-2	0.025				8.4			
RI-OP30-12-13	0.28				34			
RI-OP30-17.5-18	0.62				41			
RI-OP8-0-1	0.081				36			
RI-PL01-1-2	0.015	B			8.8			
RI-PL01-22-23	0.045				49			
RI-PL02-13-14	0.046				65	B		
RI-PL02-7-7.5	0.033				24			
RI-PL03-25-26	0.067				25	B		
RI-PL03-9-10	0.056				17			
RI-PL04-1-2	0.018	B			6.7			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-PL04-21-22	0.093				58			
RI-PL05-13-13.5	0.066				30			
RI-PL05-35-36	0.08				37			
RI-PL06-11-11.5	0.1				66			
RI-PL06-4-5	0.2				25			
RI-PL07-1-2	0.016	B			7.6			
RI-PL07-15-15.5	0.068				22			
RI-PL08-1-2	0.02	B			7.4			
RI-PL08-14-15	0.064				31	B		
RI-PL09-4-5	0.11				74			
RI-PL10-1-2		ND			6.1			
RI-PL10-14-15	0.055				57			
RI-PL11-1-2		ND			6.7			
RI-PL11-12-13	0.022	B			21			
RI-PL12-1-2		ND			6.7			
RI-PL12-14-15	0.022	B			22			
RI-PL13-11-12	0.036				25			
RI-PL13-1-2		ND			7			
RI-PT01-3-3.8	0.056				21			
RI-PT02-3-4	0.018	B			13			
RI-PT03-0-1	0.616				60			
RI-PT04-0-1	0.39				82			
RI-PT05-0-1	0.097				24			
RI-PT06-1-2	0.019	B			17			
RI-PT07-1-2	0.14				24			
RI-PT08-8	0.037				58			
RI-PT09-0-1	0.13				99			
RI-PT100-2-3	0.026				8.6			
RI-PT101-2-3	0.028				5.2			
RI-PT102-0-4	0.06				42			
RI-PT10-2-3	0.033	B			25			
RI-PT103-0-4	0.009	B			47			
RI-PT11-1-2	0.16				43			
RI-PT12-2-3	0.022				23			
RI-PT13-0-1	0.046				30			
RI-PT14-1-2	0.025				13			
RI-PT15-1-2	0.045				9.8			
RI-PT16-1-2	0.45				79			
RI-PT17-1-2	0.18				13			
RI-PT17-6-7	0.08				21			
RI-PT18-0-1	0.12				35			
RI-PT18-4	0.098				34			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-PT19-1-2	0.01	B			24			
RI-PT19-3-3.5	0.024				11			
RI-PT20-0-1	0.04				34			
RI-PT21-0-1	0.11				19			
RI-PT22-0-1	0.034				9.5			
RI-PT22-6-6.5	0.027				14			
RI-PT23-1-2	0.03				14			
RI-PT24-0-1	0.032				27			
RI-PT25-0-1	0.042				22			
RI-PT27-2-3	0.54				120			
RI-PT27-3-3.5	0.025				37			
RI-PT29-0-1	0.075				11			
RI-PT31-3-4	0.082				16			
RI-PT32-2-3	0.046				8.7			
RI-PT34-3-4	0.0053	B			8.7			
RI-PT35-0-1	0.046				14			
RI-PT36-0-1	0.023				19			
RI-PT41-0-1	0.025				20			
RI-PT41-7-8	0.0072	B			11			
RI-PT42-2-3	0.031				16			
RI-PT44-0-1	0.16				98			
RI-PT48-1-2	0.006	B			13			
RI-PT50-3-4	0.019	B			9.6			
RI-PT51-2-3	0.0068	B			5.7			
RI-PT53-0-1	0.018	B			21			
RI-PT54-0-1	0.014	B			16			
RI-PT55-0-1	0.034				7.8			
RI-PT56-0-1	0.033				9.1			
RI-PT57-0-1	0.017	B			9.6			
RI-PT58-0-1	0.02	B			6.9			
RI-PT59-0-1	0.032				16			
RI-PT60-0-1	0.023				12			
RI-PT61-0-1	0.056				11			
RI-PT62-3-4	0.028				9.4			
RI-PT63-0-1	0.023				13			
RI-PT64-0-1	0.012	B			20			
RI-PT65-0-1	0.021	B			6.9			
RI-PT66-0-1	0.016	B			9			
RI-PT67-0-1	0.039				31			
RI-PT68-0-1	0.0093	B			7.1			
RI-PT68-3-4	0.043				13			
RI-PT69-0-1	0.066				11			

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-PT70-1-2	0.016	B			13			
RI-PT71-0-1	0.063				49			
RI-PT71-7-8	0.07				30			
RI-PT72-3-4	0.037				5.8			
RI-PT73-0-1	0.048				31			
RI-PT74-2-3	0.19				60			
RI-PT74-3-4	0.013	B			9.5			
RI-PT75-0-1	0.037				35			
RI-PT76-1-1.5	0.038				27			
RI-PT77-1-1.5	0.096				66			
RI-PT78-1-1.5	0.056				39			
RI-PT79-0-0.5	0.13				56			
RI-PT80-0-1	0.051				18			
RI-PT81-0-1	0.052				5.8			
RI-PT82-0-1	0.023				11			
RI-PT83-0-0.5	0.017	B			9.9			
RI-PT84-0-0.5	0.027				7.4			
RI-PT85-1-2	0.02	B			8.5			
RI-PT86-1-2	0.058				13			
RI-PT87-3-4	0.026				36			
RI-PT88-0-1	0.038				14			
RI-PT89-2-3	0.014	B			8			
RI-PT90-2-2.5	0.012	B			6.2			
RI-PT91-0-1	0.034				48			
RI-PT92-2-3	0.12				34			
RI-PT93-1-2	0.024				43			
RI-PT94-2-3	0.049				51			
RI-PT95-1-2	0.038				10			
RI-PT96-0-1	0.11				47			
RI-PT97-1-2	0.093				51			
RI-PT98-2-3	0.034				13			
RI-PT99-0-1	0.091				19			
RI-SB-10-2-3		ND						
RI-SB-11-0-1		ND						
RI-SB-12-2-3		ND						
RI-SB-1-3.5-4.5		ND						
RI-SB-13-4-5	0.159							
RI-SB-14-4-5	0.279							
RI-SB-15-3-4		ND						
RI-SB-16-3-4		ND						
RI-SB-17-3-4		ND						
RI-SB-18-3-4		ND						

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-SB-19-3-4	0.217							
RI-SB-20-4-5		ND						
RI-SB-21-3-4		ND						
RI-SB-22-0-1		ND						
RI-SB-2-3-4		ND						
RI-SB-23-4-5		ND						
RI-SB-24-3-4	0.127							
RI-SB-25-3-4	0.219							
RI-SB-26-3-4		ND						
RI-SB-27-0-1		ND						
RI-SB-28-0-1		ND						
RI-SB-29-1-2		ND						
RI-SB-30-1-2	0.259							
RI-SB-31-0-1		ND						
RI-SB-32-3-4		ND						
RI-SB-3-3-4	0.314							
RI-SB-34-3-4	0.114							
RI-SB-35-0-1		ND						
RI-SB-36-0-1		ND						
RI-SB-37-6-7		ND						
RI-SB-38-2-3		ND						
RI-SB-39-6-7	0.212							
RI-SB-40-2-3		ND						
RI-SB-41-6.5-7.5	0.295							
RI-SB-42-2-3		ND						
RI-SB-4-5-6	0.258							
RI-SB-5-1-2		ND						
RI-SB-6-3-4	0.173							
RI-SB-7-3-4	0.118							
RI-SB-8-3-4		ND						
RI-SB-9-3-4	0.207							
RISF-11-19-20		ND						
RISF-11-5-6		ND						
RISF-12-15-16		ND						
RISF-12-21-22		ND						
RISF-12-3-4		ND						
RISF-12-5-6		ND						
RISF-13-16-17		ND						
RISF-13-9-10		ND						
RISF-14-21-22		ND						
RISF-14-9-10		ND						
RI-SF15-1-2	2.3				110			

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CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-SF15-4-5	0.13				16			
RI-SF16-17-18	0.31				26			
RI-SF16-2-3	0.014	B			46			
RI-SF17-11-12	0.037				31			
RI-SF17-17-18	0.035				40			
RI-SF18-11-12	0.1				59			
RI-SF18-2-2.5	0.43				120			
RI-SF19-0-1	0.021				140			
RI-SF19-9-10	0.013	B			100			
RI-SF20-6-7	0.25				20			
RI-SF21-0-1	0.14				31			
RISF-2-15-16		ND						
RI-SF21-7-8		ND			59			
RI-SF22-1-2		ND			5.7			
RI-SF22-13-14		ND			13			
RI-SF23-16-17	0.008	B			14			
RI-SF23-3-4	0.0069	B			13			
RISF-2-4-5		ND						
RISF-3-10-11		ND						
RISF-3-3-4		ND						
RISF-4-10-11		ND						
RISF-4-5-6		ND						
RISF-5-15-16		ND						
RISF-5-2-3		ND						
RISF-6-1-2		ND						
RISF-6-7-8		ND						
RISF-8-1-2		ND						
RISF-8-15-16		ND						
RI-SI1-0-1		ND						
RI-SI1-5-6		ND						
RI-SI2-13-14		ND						
RI-SI22-0-1		ND						
RI-SI22-31-32		ND						
RI-SI23-0-1	0.261							
RI-SI23-15-16		ND						
RI-SI2-3-4		ND						
RI-SI23-8-9		ND						
RI-SI24-0-1		ND						
RI-SI24-20-21		ND						
RI-SI25-0-1	0.278							
RI-SI25-25-26		ND						
RI-SI26-14-15		ND						

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CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-SI26-20-21		ND						
RI-SI27-0-1		ND						
RI-SI27-8-9		ND						
RI-SI29-1-2		ND						
RI-SI29-27-28		ND						
RI-SI30-1-2	0.298							
RI-SI30-21-22		ND						
RI-SI31-18-19		ND						
RI-SI31-23-24		ND						
RI-SI32-0-1		ND						
RI-SI32-12-13		ND						
RI-SI32-19-20		ND						
RI-SI33-10-11		ND						
RI-SI33-15-16		ND						
RI-SI34-24-25		ND						
RI-SI34-4-5		ND						
RI-SI34-58-59		ND						
RI-SI35-16-17		ND						
RI-SI35-8.5-9.5	2.09							
RI-SI36-1-2		ND						
RI-SI36-15-16		ND						
RI-SI36-30-31		ND						
RI-SI3-6-7		ND						
RI-SI37-0-1		ND						
RI-SI3-7-8		ND						
RI-SI37-9.5-10.5		ND						
RI-SI38-10-11		ND						
RI-SI38-2-3		ND						
RI-SI38-29-30		ND						
RI-SI39-0-1		ND						
RI-SI39-9-10		ND						
RI-SI4 J0-7-8		ND						
RI-SI4 JO-5-6		ND						
RI-SI40-19-20		ND						
RI-SI40-20-21	1.12							
RI-SI41-5-6		ND						
RI-SI41-6-7	0.241							
RI-SI42-12-13		ND						
RI-SI42-2-3		ND						
RI-SI43-0-1		ND						
RI-SI43-19-19.5		ND						
RI-SI7-2-3		ND						

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CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-SI7-9-10		ND						
RI-SL01-11-12	0.021				**310**			
RI-SL01-14-15	0.029				18			
RI-SL02-14-15	0.014	B			16			
RI-SL02-4-5	0.018	B			6.3			
RI-SL02-9-10	0.53				**260**			
RI-SL03-11-12	0.023				17			
RI-SL03-4-5	0.089				25			
RI-SL04-10-11	0.02				150			
RI-SL04-15-16	0.116				68			
RI-SL05-13-14	0.031				**180**			
RI-SL05-3-4	0.019	B			8.3			
RI-SL05-8-9	0.13				170			
RI-SL06-6-7	0.032				12			
RI-SL06-9-10	0.028				11			
RI-SL08-10-11	0.17				41			
RI-SL08-13-14	0.06				35			
RI-SL08-7-8		ND			4.4			
RI-SL09-3-4	0.066				12			
RI-SL10-2-3	0.068				9.3			
RI-SL10-6-7	0.015	B			10			
RI-SL11-2-3	0.039				8.5			
RI-SL11-8-9	0.08				46			
RI-SL12-10-11	1				**360**			
RI-SL12-15-16	0.061				57			
RI-SL12-3-4	0.021				6.2			
RI-SL13-10-11	0.019	B			17			
RI-SL13-3-4		ND			6			
RI-SL14-12-13	0.23				110			
RI-SL14-9-10		ND			12			
RI-SI-10-17-18		ND						
RI-SI-10-3-4		ND						
RI-SI-11-2-3		ND						
RI-SI-11-8-9		ND						
RI-SI-12-10-11		ND						
RI-SI-12-2-3		ND						
RI-SI-13-18-19		ND						
RI-SI-13-2-3		ND						
RI-SI-14-0-1		ND						
RI-SI-14-5-6		ND						
RI-SI-15-20-21		ND						
RI-SI-15-2-3		ND						

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,TCLP		Nickel		Nickel,TCLP	
CALM Scenario C	1 mg/kg		1 mg/kg		17,000 mg/kg		17,000 mg/kg	
CALM C Leach	3.2 mg/kg		3.2 mg/kg		170 mg/kg		170 mg/kg	
RI-SI-16-11-12		ND						
RI-SI-16-5-6		ND						
RI-SI-17-1-2		ND						
RI-SI-17-20-21		ND						
RI-SI-18-10-11		ND						
RI-SI-18-2-3	9.2							
RI-SI-19-1-2		ND						
RI-SI-19-9-10		ND						
RI-SI-20-1-2		ND						
RI-SI-20-5-6		ND						
RI-SI-21-2-3		ND						
RI-SI-21-6-7		ND						
RI-SI-28-17-18		ND						
RI-SI-28-2-3		ND						
RI-SI-5-21-22		ND						
RI-SI-5-5-6		ND						
RI-SI-6-1-2		ND						
RI-SI-6-4-5		ND						
RI-SI-9-1-2		ND						
RI-SI-9-7-8		ND						

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
AP-1-13-14		ND				ND		
AP-2-8-9		ND				ND		
AP-3-14-15		ND				ND		
AP-4-8-9		ND				ND		
AP-5-1-2		ND				ND		
AP-5-8-9		ND				ND		
GT-01-8.5-10		ND			3.2			
GT-02-6-7.5		ND				ND		
GT-03-8.5-10		ND				ND		
GT-05-3.5-5		ND				ND		
GT-09-1-2.5		ND				ND		
GT-13-10-11.5		ND				ND		
GT-14-6-7.5		ND				ND		
GT-17-6-7.5	0.57	B				ND		
GT-20-1-2.5		ND				ND		
GT-20-13.5-15		ND				ND		
GT-21-20		ND				ND		
GT-27-3.5-5		ND				ND		
GT-28-3.5-5		ND				ND		
GT-29-10-11.5		ND				ND		
GT-2A-6-7.5	0.51	B				ND		
GT-30-3.5-5		ND				ND		
R1-SB43-2-3		ND				ND		
R1-SB44-6-7		ND				ND		
R1-SB45-2-3		ND				ND		
R1-SB46-1-2		ND			1.52			
R1-SB47-1-2		ND				ND		
R1-SB49-1-2		ND				ND		
R1-SB50-3-4		ND				ND		
R1-SB51-3-4		ND				ND		
R1-SB52-6.5-7.5		ND				ND		
R1-SB53-0-1	2.72				2.05			
R1-SB54-6-7	3.55					ND		
R1-SB55-0-1		ND				ND		
R1-SB56-5-6		ND				ND		
RI-AB01-0-1	0.63	B				ND		
RI-AB01-7-8	1.3					ND		
RI-AB02-6-7		ND				ND		
RI-AB-02-8	0.99	B				ND		
RI-AB03-11-12		ND				ND		
RI-AB03-4-5		ND				ND		
RI-AB04-12		ND				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-AB04-6-6.5		ND				ND		
RI-AB05-10	0.76	B				ND		
RI-AB05-6-7		ND				ND		
RI-AB06-5-6		ND				ND		
RI-AB06-7-8	0.86	B				ND		
RI-AB07-4-5		ND				ND		
RI-AB07-7-8	0.87	B				ND		
RI-AB08-2.5-3	0.55	B				ND		
RI-AB08-6.5-7	1	B				ND		
RI-AB09-11-12	0.6	B				ND		
RI-AB09-6-6.5		ND				ND		
RI-AB11-10	0.87	B				ND		
RI-AB11-5-6	0.69	B				ND		
RI-AB12-2-3	0.87	B				ND		
RI-AB12-7-8	0.85	B				ND		
RI-AB13-9-10	0.66	B				ND		
RI-AB14-3-4	0.88	B				ND		
RI-AB14-6	0.96	B				ND		
RI-AB15-10-10.5	1	B				ND		
RI-AB15-6-7		ND				ND		
RI-AB16-12	0.84	B				ND		
RI-AB16-8-9	0.67	B				ND		
RI-AB17-10	1.1	B				ND		
RI-AB17-9-10	0.73	B				ND		
RI-AB18-1.5-2	0.93	B				ND		
RI-AB18-5-5.5	1.6					ND		
RI-AB19-4-5		ND				ND		
RI-AB19-7-8	0.78	B				ND		
RI-AB20-2-3	1.6					ND		
RI-AB20-7-8	1.2	B				ND		
RI-AB21-2-3		ND				ND		
RI-AB21-7-8	0.66	B				ND		
RI-AB22-4-5	1	B				ND		
RI-AB22-7-8	0.9	B				ND		
RI-AB23-0-1		ND				ND		
RI-AB23-6-6.5	0.47	B				ND		
RI-AB24-2.5-3		ND				ND		
RI-AB24-7-7.5		ND				ND		
RI-AB25-4-5	0.98	B				ND		
RI-AB25-8	1.1	B				ND		
RI-AB26-4-5	0.87	B				ND		
RI-AB26-6.5	0.71	B				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-AB27-3-4	1.3	B				ND		
RI-AB27-7-8		ND				ND		
RI-AB28-10-10.5		ND				ND		
RI-AB29-8.5-9	0.88	B			0.39	B		
RI-AB29-9.5-10	0.81	B				ND		
RI-AB30-4-5		ND				ND		
RI-AB30-7.5-8	1	B				ND		
RI-AB31-2-3	0.58	B				ND		
RI-AB31-4-4.5	0.92	B				ND		
RI-AB32-8-9		ND				ND		
RI-AB33-2-2.5		ND				ND		
RI-AB34-2-2.5		ND				ND		
RI-AB34-6-6.5		ND				ND		
RI-AB35-0-1		ND				ND		
RI-AB35-6.5-7	0.51	B				ND		
RI-AB36-1.5-2		ND				ND		
RI-AB36-6-6.5	0.53	B				ND		
RI-AB37-3-4		ND				ND		
RI-AB37-7.5-8	0.9	B				ND		
RI-AB38-2-3	0.99	B				ND		
RI-AB38-5.5-6	0.98	B				ND		
RI-AB39-10-11	0.91	B				ND		
RI-AB39-3-4		ND				ND		
RI-AB40-3-4		ND				ND		
RI-AB40-5.5-6	1.4	B				ND		
RI-AB41-4-4.5	1.3	B				ND		
RI-AB41-5.5-6	0.85	B				ND		
RI-AB42-0-1	0.49	B				ND		
RI-AB42-7-7.5	1.4	B				ND		
RI-AB43-2-2.5		ND				ND		
RI-AB43-7-7.5	1.2	B				ND		
RI-AB44-3-4	0.9	B				ND		
RI-AB44-7-8	1	B				ND		
RI-AB45-0-1	1.4					ND		
RI-AB45-7-8	1.8					ND		
RI-AB46-3-3.5		ND				ND		
RI-AB46-7-8		ND				ND		
RI-AB47-2-3	0.8	B				ND		
RI-AB47-5.5-6	1.5					ND		
RI-AB48-7-8	0.44	B				ND		
RI-AB48-8	0.57	B				ND		
RI-NP01-3-4	0.55	B				ND		

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-NP01-7-8	1	B				ND		
RI-NP02-2-2.5	0.62	B				ND		
RI-NP02-7-7.5	0.74	B				ND		
RI-NP03-7-7.5		ND				ND		
RI-NP04-10-11	0.72	B				ND		
RI-NP05-6-7	0.65	B				ND		
RI-NP06-4-5	0.82	B				ND		
RI-NP06-9.9.5		ND				ND		
RI-NP07-1-2	0.75	B				ND		
RI-NP07-15-16		ND				ND		
RI-NP07-35.5-36		ND				ND		
RI-NP08-0-1	0.98	B				ND		
RI-NP08-22-22.5		ND				ND		
RI-OP01-10-11		ND				ND		
RI-OP01-11.5-12	1.2					ND		
RI-OP02-12-13	1.1	ND				ND		
RI-OP02-3.5-4	0.81	B			1.6			
RI-OP03-2.5-3		ND				ND		
RI-OP03-5-5.5		ND				ND		
RI-OP04-12.5-13		ND				ND		
RI-OP04-5-6		ND				ND		
RI-OP05-1-2	0.52	B			2.5			
RI-OP05-18-19	0.71	B				ND		
RI-OP06-11.5-12	1.1	B				ND		
RI-OP06-2-3	0.65	B				ND		
RI-OP07-13-14		ND				ND		
RI-OP07-2-3	0.92	B				ND		
RI-OP08-13-14	4.2	B				ND		
RI-OP09-15-16		ND				ND		
RI-OP09-18.5-19		ND				ND		
RI-OP09-4-5	0.65	B				ND		
RI-OP10-19-20		ND				ND		
RI-OP10-5-6	0.59	B				ND		
RI-OP11-4-5		ND				ND		
RI-OP12-17-18		ND				ND		
RI-OP12-4-5		ND				ND		
RI-OP13-10.5-11		ND				ND		
RI-OP13-1-2		ND				ND		
RI-OP14-12.5-13		ND				ND		
RI-OP14-4-5	0.9	B				ND		
RI-OP15-11-12		ND				ND		
RI-OP15-1-2		ND				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-OP16-12-13		ND				ND		
RI-OP16-22-23		ND				ND		
RI-OP16-2-3		ND				ND		
RI-OP17-0-1		ND				ND		
RI-OP17-11.5-12		ND				ND		
RI-OP18-0-1		ND				ND		
RI-OP18-13-14		ND				ND		
RI-OP19-24-25		ND				ND		
RI-OP19-8-9		ND				ND		
RI-OP20-1-2		ND				ND		
RI-OP20-13-14		ND				ND		
RI-OP21-15.5-16.5	3.7	B				ND		
RI-OP21-2-3	0.5	B			0.36	B		
RI-OP22-0-1	0.73	B				ND		
RI-OP22-18-19		ND				ND		
RI-OP23-22-23		ND				ND		
RI-OP23-29-30	3.1	B				ND		
RI-OP23-7-8	0.67	B				ND		
RI-OP24-1-2	0.61	B				ND		
RI-OP24-16-17		ND				ND		
RI-OP25-0-1	0.89	B				ND		
RI-OP25-16-17		ND				ND		
RI-OP25-25-26		ND				ND		
RI-OP26-10-10.5	0.85	B				ND		
RI-OP26-5-6	1.4	B		ND	8.5			ND
RI-OP27-1-2	0.55	B				ND		
RI-OP27-18-19	1.2	B				ND		
RI-OP28-21-22		ND				ND		
RI-OP28-5-6	0.67	B				ND		
RI-OP29-10-11	0.71	B				ND		
RI-OP29-20-20.5		ND				ND		
RI-OP30-1-2	0.84	B				ND		
RI-OP30-12-13	0.96	B				ND		
RI-OP30-17.5-18		ND				ND		
RI-OP8-0-1	0.76	B				ND		
RI-PL01-1-2	1.4					ND		
RI-PL01-22-23	**17**	B				ND		
RI-PL02-13-14		ND				ND		
RI-PL02-7-7.5	1.2	B				ND		
RI-PL03-25-26		ND				ND		
RI-PL03-9-10	0.83	B				ND		
RI-PL04-1-2	0.82	B				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-PL04-21-22		ND				ND		
RI-PL05-13-13.5		ND				ND		
RI-PL05-35-36		ND				ND		
RI-PL06-11-11.5		ND				ND		
RI-PL06-4-5	1.7					ND		
RI-PL07-1-2	0.93	B				ND		
RI-PL07-15-15.5	1.9					ND		
RI-PL08-1-2	1.5					ND		
RI-PL08-14-15		ND				ND		
RI-PL09-4-5		ND				ND		
RI-PL10-1-2		ND				ND		
RI-PL10-14-15		ND				ND		
RI-PL11-1-2		ND				ND		
RI-PL11-12-13		ND				ND		
RI-PL12-1-2		ND				ND		
RI-PL12-14-15		ND				ND		
RI-PL13-11-12		ND				ND		
RI-PL13-1-2		ND				ND		
RI-PT01-3-3.8	1	B				ND		
RI-PT02-3-4	0.78	B				ND		
RI-PT03-0-1	1.58	B				ND		
RI-PT04-0-1		ND			1.3			
RI-PT05-0-1	1.5	B				ND		
RI-PT06-1-2		ND				ND		
RI-PT07-1-2	0.66	B			0.41	B		
RI-PT08-8	1.1	B				ND		
RI-PT09-0-1	1.1	B			0.49	B		
RI-PT100-2-3	1.4					ND		
RI-PT101-2-3		ND				ND		
RI-PT102-0-4		ND			1.7			
RI-PT10-2-3	2.3					ND		
RI-PT103-0-4		ND				ND		
RI-PT11-1-2	0.77	B				ND		
RI-PT12-2-3	1.5					ND		
RI-PT13-0-1	1	B				ND		
RI-PT14-1-2	0.61	B				ND		
RI-PT15-1-2	0.86	B				ND		
RI-PT16-1-2	0.66	B			1.6			
RI-PT17-1-2	0.91	B				ND		
RI-PT17-6-7	0.77	B				ND		
RI-PT18-0-1	0.63	B			0.99			
RI-PT18-4	1.6					ND		

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Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-PT19-1-2	0.8	B				ND		
RI-PT19-3-3.5	1.2					ND		
RI-PT20-0-1	0.6	B			0.33	B		
RI-PT21-0-1	1.2					ND		
RI-PT22-0-1	1	B				ND		
RI-PT22-6-6.5	0.67	B				ND		
RI-PT23-1-2		ND				ND		
RI-PT24-0-1	1					ND		
RI-PT25-0-1	0.57	B				ND		
RI-PT27-2-3	1.2	B			1.7			
RI-PT27-3-3.5	1.2					ND		
RI-PT29-0-1	1.4					ND		
RI-PT31-3-4	1.8					ND		
RI-PT32-2-3	1.3					ND		
RI-PT34-3-4	1.4					ND		
RI-PT35-0-1	1	B				ND		
RI-PT36-0-1		ND				ND		
RI-PT41-0-1	1					ND		
RI-PT41-7-8	0.92	B				ND		
RI-PT42-2-3	0.88	B				ND		
RI-PT44-0-1		ND			0.39	B		
RI-PT48-1-2		ND				ND		
RI-PT50-3-4	1.6					ND		
RI-PT51-2-3	1.3					ND		
RI-PT53-0-1	0.98	B				ND		
RI-PT54-0-1	1.7					ND		
RI-PT55-0-1		ND				ND		
RI-PT56-0-1	0.74	B				ND		
RI-PT57-0-1	0.62	B				ND		
RI-PT58-0-1	0.94	B				ND		
RI-PT59-0-1	0.69	B				ND		
RI-PT60-0-1	1.2					ND		
RI-PT61-0-1	0.75	B				ND		
RI-PT62-3-4		ND				ND		
RI-PT63-0-1	0.48	B				ND		
RI-PT64-0-1		ND				ND		
RI-PT65-0-1	1.1	B				ND		
RI-PT66-0-1	1.3					ND		
RI-PT67-0-1	1	B				ND		
RI-PT68-0-1		ND				ND		
RI-PT68-3-4	0.86	B				ND		
RI-PT69-0-1	1.5					ND		

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-PT70-1-2	1.3					ND		
RI-PT71-0-1	0.59	B				ND		
RI-PT71-7-8	1.6					ND		
RI-PT72-3-4	0.92	B				ND		
RI-PT73-0-1	0.64	B			0.48	B		
RI-PT74-2-3	1.1	B				ND		
RI-PT74-3-4	2.2					ND		
RI-PT75-0-1	0.6	B			0.56	B		
RI-PT76-1-1.5	0.71	B				ND		
RI-PT77-1-1.5	0.88	B			2.5			
RI-PT78-1-1.5	0.65	B				ND		
RI-PT79-0-0.5	1.1	B			0.8			
RI-PT80-0-1	0.61	B			0.44	B		
RI-PT81-0-1	1.1					ND		
RI-PT82-0-1	0.88	B				ND		
RI-PT83-0-0.5	1.3					ND		
RI-PT84-0-0.5	0.97	B				ND		
RI-PT85-1-2		ND				ND		
RI-PT86-1-2	1.1					ND		
RI-PT87-3-4	1.5					ND		
RI-PT88-0-1	0.58	B				ND		
RI-PT89-2-3	0.96	B				ND		
RI-PT90-2-2.5	0.59	B				ND		
RI-PT91-0-1	0.9	B				ND		
RI-PT92-2-3		ND				ND		
RI-PT93-1-2		ND				ND		
RI-PT94-2-3		ND			0.5	B		
RI-PT95-1-2		ND				ND		
RI-PT96-0-1	0.64	B			0.75			
RI-PT97-1-2		ND				ND		
RI-PT98-2-3		ND				ND		
RI-PT99-0-1	0.81	B				ND		
RI-SB-10-2-3		ND				ND		
RI-SB-11-0-1		ND				ND		
RI-SB-12-2-3		ND				ND		
RI-SB-1-3.5-4.5		ND				ND		
RI-SB-13-4-5		ND				ND		
RI-SB-14-4-5		ND				ND		
RI-SB-15-3-4		ND				ND		
RI-SB-16-3-4		ND				ND		
RI-SB-17-3-4		ND				ND		
RI-SB-18-3-4		ND				ND		

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
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M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-SB-19-3-4		ND				ND		
RI-SB-20-4-5		ND				ND		
RI-SB-21-3-4		ND				ND		
RI-SB-22-0-1		ND				ND		
RI-SB-2-3-4		ND				ND		
RI-SB-23-4-5		ND				ND		
RI-SB-24-3-4		ND				ND		
RI-SB-25-3-4		ND				ND		
RI-SB-26-3-4		ND				ND		
RI-SB-27-0-1		ND				ND		
RI-SB-28-0-1		ND				ND		
RI-SB-29-1-2		ND				ND		
RI-SB-30-1-2		ND			2.26			
RI-SB-31-0-1		ND				ND		
RI-SB-32-3-4		ND				ND		
RI-SB-3-3-4		ND				ND		
RI-SB-34-3-4		ND			1.55			
RI-SB-35-0-1		ND				ND		
RI-SB-36-0-1		ND				ND		
RI-SB-37-6-7		ND				ND		
RI-SB-38-2-3		ND				ND		
RI-SB-39-6-7		ND				ND		
RI-SB-40-2-3		ND				ND		
RI-SB-41-6.5-7.5		ND				ND		
RI-SB-42-2-3		ND				ND		
RI-SB-4-5-6		ND				ND		
RI-SB-5-1-2		ND				ND		
RI-SB-6-3-4		ND				ND		
RI-SB-7-3-4		ND				ND		
RI-SB-8-3-4		ND				ND		
RI-SB-9-3-4		ND			1.62			
RISF-11-19-20		ND				ND		
RISF-11-5-6		ND				ND		
RISF-12-15-16		ND				ND		
RISF-12-21-22		ND				ND		
RISF-12-3-4		ND				ND		
RISF-12-5-6		ND				ND		
RISF-13-16-17		ND				ND		
RISF-13-9-10		ND				ND		
RISF-14-21-22		ND				ND		
RISF-14-9-10		ND				ND		
RI-SF15-1-2		ND			1.2			

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-SF15-4-5		ND				ND		
RI-SF16-17-18		ND				ND		
RI-SF16-2-3	0.49	B				ND		
RI-SF17-11-12	0.86	B				ND		
RI-SF17-17-18		ND				ND		
RI-SF18-11-12		ND				ND		
RI-SF18-2-2.5		ND				ND		
RI-SF19-0-1		ND				ND		
RI-SF19-9-10	0.74	B				ND		
RI-SF20-6-7		ND			2.1	B		
RI-SF21-0-1		ND			4.8			
RISF-2-15-16		ND				ND		
RI-SF21-7-8	1.7					ND		
RI-SF22-1-2		ND				ND		
RI-SF22-13-14		ND				ND		
RI-SF23-16-17	0.58	B				ND		
RI-SF23-3-4		ND				ND		
RISF-2-4-5		ND				ND		
RISF-3-10-11		ND				ND		
RISF-3-3-4		ND				ND		
RISF-4-10-11		ND				ND		
RISF-4-5-6		ND				ND		
RISF-5-15-16		ND				ND		
RISF-5-2-3	3.46					ND		
RISF-6-1-2		ND				ND		
RISF-6-7-8		ND				ND		
RISF-8-1-2		ND				ND		
RISF-8-15-16		ND				ND		
RI-SI1-0-1		ND				ND		
RI-SI1-5-6		ND				ND		
RI-SI2-13-14		ND				ND		
RI-SI22-0-1		ND				ND		
RI-SI22-31-32		ND				ND		
RI-SI23-0-1		ND				ND		
RI-SI23-15-16		ND				ND		
RI-SI2-3-4		ND				ND		
RI-SI23-8-9		ND				ND		
RI-SI24-0-1		ND				ND		
RI-SI24-20-21		ND				ND		
RI-SI25-0-1		ND			11.5			
RI-SI25-25-26		ND				ND		
RI-SI26-14-15		ND				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-SI26-20-21		ND				ND		
RI-SI27-0-1		ND				ND		
RI-SI27-8-9		ND				ND		
RI-SI29-1-2		ND				ND		
RI-SI29-27-28		ND				ND		
RI-SI30-1-2		ND			2.43			
RI-SI30-21-22		ND				ND		
RI-SI31-18-19		ND				ND		
RI-SI31-23-24		ND				ND		
RI-SI32-0-1		ND				ND		
RI-SI32-12-13	3.82					ND		
RI-SI32-19-20		ND				ND		
RI-SI33-10-11		ND				ND		
RI-SI33-15-16		ND				ND		
RI-SI34-24-25		ND				ND		
RI-SI34-4-5		ND				ND		
RI-SI34-58-59		ND				ND		
RI-SI35-16-17	3.16					ND		
RI-SI35-8.5-9.5		ND			**109**			
RI-SI36-1-2		ND				ND		
RI-SI36-15-16		ND				ND		
RI-SI36-30-31		ND				ND		
RI-SI3-6-7	3.86					ND		
RI-SI37-0-1		ND				ND		
RI-SI3-7-8		ND				ND		
RI-SI37-9.5-10.5		ND				ND		
RI-SI38-10-11		ND				ND		
RI-SI38-2-3		ND				ND		
RI-SI38-29-30		ND				ND		
RI-SI39-0-1		ND				ND		
RI-SI39-9-10		ND				ND		
RI-SI4 J0-7-8		ND				ND		
RI-SI4 JO-5-6		ND				ND		
RI-SI40-19-20		ND				ND		
RI-SI40-20-21		ND				ND		
RI-SI41-5-6		ND				ND		
RI-SI41-6-7		ND				ND		
RI-SI42-12-13		ND				ND		
RI-SI42-2-3	2.27					ND		
RI-SI43-0-1		ND			1.91			
RI-SI43-19-19.5		ND				ND		
RI-SI7-2-3		ND				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-SI7-9-10		ND				ND		
RI-SL01-11-12		ND				ND		
RI-SL01-14-15	0.56	B				ND		
RI-SL02-14-15	0.75	B				ND		
RI-SL02-4-5	0.78	B				ND		
RI-SL02-9-10	0.67	B			**85**			
RI-SL03-11-12	0.84	B				ND		
RI-SL03-4-5	0.89	B			8.1			
RI-SL04-10-11	0.65	B			2.5			
RI-SL04-15-16		ND				ND		
RI-SL05-13-14	0.52	B				ND		
RI-SL05-3-4	0.45	B				ND		
RI-SL05-8-9		ND			6			
RI-SL06-6-7		ND				ND		
RI-SL06-9-10		ND				ND		
RI-SL08-10-11		ND				ND		
RI-SL08-13-14		ND				ND		
RI-SL08-7-8		ND				ND		
RI-SL09-3-4		ND				ND		
RI-SL10-2-3	0.61	B				ND		
RI-SL10-6-7	0.74	B				ND		
RI-SL11-2-3		ND				ND		
RI-SL11-8-9		ND				ND		
RI-SL12-10-11		ND				ND		
RI-SL12-15-16	0.62	B				ND		
RI-SL12-3-4	1.2					ND		
RI-SL13-10-11		ND			3.1			
RI-SL13-3-4		ND				ND		
RI-SL14-12-13		ND			**53**			
RI-SL14-9-10		ND				ND		
RI-SI-10-17-18		ND				ND		
RI-SI-10-3-4		ND				ND		
RI-SI-11-2-3		ND				ND		
RI-SI-11-8-9		ND				ND		
RI-SI-12-10-11		ND				ND		
RI-SI-12-2-3		ND				ND		
RI-SI-13-18-19		ND				ND		
RI-SI-13-2-3		ND				ND		
RI-SI-14-0-1		ND				ND		
RI-SI-14-5-6		ND				ND		
RI-SI-15-20-21		ND				ND		
RI-SI-15-2-3		ND				ND		

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Table 3
Key Sample Summary for Soils - Inorganics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,TCLP		Silver		Silver,TCLP	
CALM Scenario C	970 mg/kg		970 mg/kg		450 mg/kg		450 mg/kg	
CALM C Leach	4.3 mg/kg		4.3 mg/kg		26 mg/kg		26 mg/kg	
RI-SI-16-11-12		ND				ND		
RI-SI-16-5-6		ND				ND		
RI-SI-17-1-2		ND				ND		
RI-SI-17-20-21		ND				ND		
RI-SI-18-10-11		ND				ND		
RI-SI-18-2-3		ND				ND		
RI-SI-19-1-2		ND				ND		
RI-SI-19-9-10		ND				ND		
RI-SI-20-1-2		ND				ND		
RI-SI-20-5-6		ND				ND		
RI-SI-21-2-3		ND				ND		
RI-SI-21-6-7		ND				ND		
RI-SI-28-17-18		ND				ND		
RI-SI-28-2-3		ND				ND		
RI-SI-5-21-22		ND				ND		
RI-SI-5-5-6		ND				ND		
RI-SI-6-1-2		ND				ND		
RI-SI-6-4-5		ND				ND		
RI-SI-9-1-2		ND				ND		
RI-SI-9-7-8		ND				ND		

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
AP-1-10		ND		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND		ND		ND		ND
AP-4-16		ND		ND		ND		ND		ND		ND
AP-4-8		ND		ND		ND		ND		ND		ND
AP-5-5		ND		ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND	560			ND		ND	160	Ja	1100	
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3		ND	3			ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND	63.3			ND		ND		ND	12.4	
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND	90			ND
RI-AB04-6.5		ND		ND		ND		ND	17			ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND	9.5			ND
RI-NP01-3		ND	870			ND		ND		ND		ND
RI-NP01-7		ND	350			ND		ND		ND	15	
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND	19000			ND		ND		ND	**4400**	
RI-NP06-6		ND	180			ND		ND		ND	23	
RI-NP06-8		ND	1700			ND		ND		ND	**830**	
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND	760			ND		ND		ND	**440**	
RI-NP08-17		ND	2100			ND		ND		ND	**1100**	
RI-NP08-2		ND	33			ND		ND		ND		ND
RI-NP4-11		ND	2000			ND		ND		ND	**1700**	
RI-NP4-2.5		ND	1200			ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-OP01-10		ND	23000			ND		ND		ND	**580**	
RI-OP01-11.5		ND	29000			ND		ND	130	Ja	**1900**	
RI-OP02-14		ND	5900			ND	**230**			ND	**6400**	
RI-OP02-8		ND	7700			ND	**150**			ND	**5100**	
RI-OP03-2.5		ND	1800			ND		ND		ND		ND
RI-OP03-5.5		ND	1200			ND		ND		ND		ND
RI-OP04-10		ND	27000			ND		ND		ND	**5500**	
RI-OP04-12		ND	**41000**			ND		ND		ND	**6300**	
RI-OP10-13		ND	1700			ND		ND		ND	**3100**	
RI-OP10-6		ND	9.7			ND		ND		ND	63	
RI-OP11-4.5		ND		ND		ND		ND		ND	7	ND
RI-OP12-14		ND	9.4			ND		ND		ND	50	
RI-OP12-9		ND		ND		ND		ND		ND	6.2	Ja
RI-OP13-10.5		ND	260			ND		ND		ND		ND
RI-OP13-6		ND	230			ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND	300			ND		ND		ND		ND
RI-OP15-10		ND	270			ND		ND		ND	**270**	
RI-OP15-7.5		ND	160			ND		ND		ND		ND
RI-OP16-12		ND	8			ND		ND	26		48	
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND	250			ND		ND		ND	**1300**	
RI-OP18-5.5		ND	20			ND		ND		ND	79	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-OP19-14		ND	9100			ND	**400**		440		**28000**	
RI-OP19-6		ND		ND		ND		ND		ND	**110**	
RI-OP20-13		ND	3000			ND		ND	410		**1100**	
RI-OP20-4		ND	510			ND		ND		ND	**150**	
RI-OP21-16		ND	5100			ND		ND		ND	**11000**	
RI-OP21-4	**98**		**140000**		**280**		**110**	H	80		**2000**	
RI-OP22-17		ND		ND		ND		ND		ND	**180**	
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND	57			ND		ND		ND		ND
RI-OP23-5		ND	1200			ND		ND		ND		ND
RI-OP24-14.5		ND	21			ND		ND	47		**230**	
RI-OP24-16		ND	14			ND		ND	290		**1100**	
RI-OP24-3		ND		ND		ND		ND		ND	5.4	
RI-OP25-11		ND		ND		ND		ND	35		29	
RI-OP25-4		ND	4.2	Ja		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND	23000			ND		ND	1900		**3600**	
RI-OP26-6.5		ND	**990000**			ND		ND	24000			ND
RI-OP27-14.5		ND		ND		ND		ND		ND	**190**	
RI-OP27-7.5		ND	6.5			ND		ND		ND		ND
RI-OP28-14		ND	3000			ND		ND	470		**8000**	
RI-OP28-3.5		ND	72			ND		ND		ND		ND
RI-OP29-10		ND	1200			ND	**110**	H		ND	**6100**	
RI-OP29-4		ND	3300			ND		ND		ND	**1400**	
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND	230			ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND		ND	2.7	
RI-SB-20-2		ND		ND		ND		ND		ND		ND

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CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6		ND	19.2			ND		ND		ND	5.4	
RI-SB-23-4		ND		ND		ND		ND		ND		ND
RI-SB-24-3		ND		ND		ND		ND	2.1			ND
RI-SB-2-5		ND		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND	3			ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND	5.1			ND		ND		ND	1.6	
RI-SB-30-1		ND	1.8			ND		ND		ND	1.1	J
RI-SB-31-5		ND	2.6			ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5		ND	12.1			ND		ND		ND	3.1	
RI-SB-35-5		ND		ND		ND		ND		ND		ND
RI-SB-36-7		ND	29.6			ND		ND	0.9	J	21.5	
RI-SB-37-3-4		ND	3.7			ND		ND		ND	1	J
RI-SB-38-5		ND	3.7			ND		ND	6.3		1	J
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND		ND
RISF-11-8-9		ND		ND		ND		ND		ND		ND
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2		ND		ND		ND		ND		ND	1.8	J
RISF-13-9-10		ND		ND		ND		ND		ND	1.8	J
RISF-14-10-11		ND		ND		ND	6.1		7.3		44.8	
RISF-14-21-22		ND		ND		ND	3	J	3	J	**108**	
RISF-14-7-8		ND		ND		ND	3.6		2.4	J	8	
RI-SF15-4		ND		ND		ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2		ND	2.8			ND		ND		ND		ND
RISF-4-8-9		ND		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND		ND	5.6	
RISF-5-4		ND		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22		ND	166			ND	5.8		12.1		**434**	
RI-SI22-27		ND	79.6			ND	2.6		7.2		**199**	

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

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CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10		ND	111			ND	0.9	J	1.5	J	72.9	
RI-SI23-6		ND	11.9			ND		ND		ND	8.8	
RI-SI24-10		ND	1.8			ND		ND	4.9		24.9	
RI-SI24-19		ND	17			ND		ND	4.6		30.4	
RI-SI25-1		ND		ND		ND		ND		ND	1.4	J
RI-SI25-12		ND		ND		ND		ND		ND		ND
RI-SI25-6		ND		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18		ND	3.1			ND		ND	2.3		9.5	
RI-SI26-8		ND	0.9	J		ND		ND		ND	1.4	J
RI-SI27-10		ND	12.5			ND		ND	2	J	11.7	
RI-SI27-6		ND	2.3			ND		ND	0.9	J	2.6	
RI-SI29-6		ND	1.6	BJ		ND		ND		ND		ND
RI-SI29-9		ND	4.2	B		ND		ND	0.7	J	1.7	
RI-SI30-11		ND	2220	B		ND	**49.9**		255		**689**	
RI-SI30-16		ND	5170	B		ND	**48.2**		282		**506**	
RI-SI30-6		ND	283	B		ND	3.6		24.8		65.1	
RI-SI31-12		ND	1	J		ND		ND		ND	11.9	
RI-SI31-21		ND	153			ND	7.4		9		**337**	
RI-SI32-15		ND	36.2			ND	1.9		8.2		12.1	
RI-SI32-8		ND		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND		ND

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CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SI34-16		ND	1.3			ND		ND		ND		ND
RI-SI34-20		ND	1	J		ND		ND	2.5		0.9	J
RI-SI34-6		ND	2.3			ND		ND		ND		ND
RI-SI35-12		ND	**70800**		**118**			ND	683		43.9	J
RI-SI35-17		ND	972			ND		ND	956		**119**	
RI-SI35-6		ND	42.9			ND		ND	0.9	J		ND
RI-SI35-9		ND	319			ND		ND	766			ND
RI-SI36-18		ND		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND		ND
RI-SI37-10.5		ND	228	B		ND		ND	2	J	88.6	
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND		ND
RI-SI38-12	1.13	J	179	B	0.7	J	4.2		6.3		**222**	
RI-SI38-23		ND	3530	B		ND	**98.5**	J	81.2	J	**2720**	
RI-SI38-26		ND	11000	B		ND	**104**		116		**3230**	
RI-SI38-29		ND	20900	B		ND	**130**		178		**4940**	
RI-SI39-6		ND	50.9	J		ND		ND	1.3		48.7	
RI-SI39-8		ND	167	B		ND	2.6		2.5		68.1	
RI-SI4 JO-6		ND		ND		ND		ND		ND		ND
RI-SI40-19	1.23		535	B	**9.7**		21.4		24.5		**577**	
RI-SI40-7		ND	1780	B		ND	1.1	J	2.9		72.1	
RI-SI41-2	5.39		23300	B		ND	10.8		14.1		49.3	J
RI-SI41-6	**21100**		**1.26E+08**	B		ND	**52700**		16100		**1350000**	
RI-SI42-12		ND	2950			ND	15	J	121		**824**	
RI-SI42-7		ND	102	B		ND		ND	1.7		12	

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CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SI43-12	1.17	J	31400	B		ND	**171**		439		**7820**	
RI-SI43-4		ND	695	B		ND	2.4		7.1		34.2	
RI-SI43-8		ND	18500	B	**5.1**		**95.2**		197		**1460**	
RI-SI7-10		ND		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND		ND		ND		ND		ND
RI-SL04-15		ND		ND		ND		ND	6.2			ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND		ND
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND	9.5			ND		ND	6.9	Ja		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
CALM Scenario C	24,000 ug/kg		1,200,000 ug/kg		5,000 ug/kg		14,000 ug/kg		No listing		1,000 ug/kg	
CALM C Leach	80 ug/kg		35,000 ug/kg		4 ug/kg		40 ug/kg		No listing		90 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
AP-1-10		ND		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND		ND		ND		ND
AP-4-16		ND		ND		ND		ND		ND		ND
AP-4-8		ND		ND		ND		ND		ND		ND
AP-5-5		ND		ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3		ND		ND		ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5		ND		ND		ND		ND		ND		ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND	700			ND
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND	460			ND
RI-NP4-2.5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-OP01-10		ND		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND		ND		ND
RI-OP02-8		ND		ND		ND		ND		ND		ND
RI-OP03-2.5		ND		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-OP19-14		ND		ND		ND		ND		ND		ND
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND	87			ND
RI-OP22-17		ND		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND		ND
RI-OP24-16		ND		ND		ND		ND	170			ND
RI-OP24-3		ND		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND		ND		ND
RI-OP26-6.5		ND		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND		ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND	0.7	J		ND
RI-SB-20-2		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND		ND
RI-SB-23-4		ND		ND		ND		ND	1.1	J		ND
RI-SB-24-3		ND		ND		ND		ND		ND		ND
RI-SB-2-5		ND		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND		ND
RI-SB-31-5		ND		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND		ND
RI-SB-36-7		ND		ND		ND		ND		ND		ND
RI-SB-37-3-4		ND		ND		ND		ND		ND		ND
RI-SB-38-5		ND		ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND		ND
RISF-11-8-9		ND		ND		ND		ND		ND		ND
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2		ND		ND		ND		ND	1	J		ND
RISF-13-9-10		ND		ND		ND		ND		ND		ND
RISF-14-10-11		ND		ND		ND		ND		ND		ND
RISF-14-21-22		ND		ND		ND		ND	3.2	J		ND
RISF-14-7-8		ND		ND		ND		ND		ND		ND
RI-SF15-4		ND		ND		ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SF19-9		ND		ND		ND		ND		ND		ND
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND		ND		ND
RISF-4-8-9		ND		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND		ND		ND
RISF-5-4		ND		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22		ND		ND		ND		ND		ND		ND
RI-SI22-27		ND		ND		ND		ND		ND		ND

ND - Non detect
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H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
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M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND		ND		ND
RI-SI23-6		ND		ND		ND		ND		ND		ND
RI-SI24-10		ND		ND		ND		ND		ND		ND
RI-SI24-19		ND		ND		ND		ND		ND		ND
RI-SI25-1		ND		ND		ND		ND		ND		ND
RI-SI25-12		ND		ND		ND		ND		ND		ND
RI-SI25-6		ND		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18		ND		ND		ND		ND		ND		ND
RI-SI26-8		ND		ND		ND		ND		ND		ND
RI-SI27-10		ND		ND		ND		ND		ND		ND
RI-SI27-6		ND		ND		ND		ND		ND		ND
RI-SI29-6		ND		ND		ND		ND	1.8			ND
RI-SI29-9		ND		ND		ND		ND		ND		ND
RI-SI30-11		ND		ND		ND		ND	3.3			ND
RI-SI30-16		ND		ND		ND		ND	28.3			ND
RI-SI30-6		ND		ND		ND		ND		ND		ND
RI-SI31-12		ND		ND		ND		ND		ND		ND
RI-SI31-21		ND		ND		ND		ND		ND		ND
RI-SI32-15		ND		ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SI34-16		ND		ND		ND		ND		ND		ND
RI-SI34-20		ND		ND		ND		ND		ND		ND
RI-SI34-6		ND		ND		ND		ND		ND		ND
RI-SI35-12		ND		ND		ND		ND	37.2	J		ND
RI-SI35-17		ND		ND		ND		ND		ND		ND
RI-SI35-6		ND		ND		ND		ND	0.7	J		ND
RI-SI35-9		ND		ND		ND		ND	1370			ND
RI-SI36-18		ND		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND		ND
RI-SI37-10.5		ND		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND		ND		ND		ND
RI-SI38-23		ND		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND		ND		ND		ND
RI-SI39-6		ND		ND		ND		ND		ND		ND
RI-SI39-8		ND		ND		ND		ND		ND		ND
RI-SI4 JO-6		ND		ND		ND		ND		ND		ND
RI-SI40-19		ND		ND		ND		ND		ND		ND
RI-SI40-7		ND		ND		ND		ND		ND		ND
RI-SI41-2		ND		ND		ND		ND		ND		ND
RI-SI41-6		ND		ND		ND		ND	47800			ND
RI-SI42-12		ND		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SI43-12		ND		ND		ND		ND	5.3			ND
RI-SI43-4		ND		ND		ND		ND		ND		ND
RI-SI43-8		ND		ND		ND		ND	9.9			ND
RI-SI7-10		ND		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND	1.3	J		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND	310	*		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND		ND	6.9		9.1			ND
RI-SL04-15		ND		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND	640			ND
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
CALM Scenario C	No Listing		No Listing		400 ug/kg		860,000 ug/kg		180,000 ug/kg		5,000 ug/kg	
CALM C Leach	No Listing		No Listing		300 ug/kg		15,000 ug/kg		No GTARC		1 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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a - Concentration is below method Reporting Limit
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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
AP-1-10		ND		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND		ND		ND		ND
AP-4-16		ND		ND		ND		ND		ND		ND
AP-4-8		ND		ND		ND		ND		ND		ND
AP-5-5		ND		ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3		ND		ND		ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5		ND		ND		ND		ND	6.4			ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND	11			ND
RI-NP01-3		ND		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND	**390**			ND
RI-NP06-6		ND		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND		ND	230	
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND	170	
RI-NP4-2.5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-OP01-10		ND		ND		ND		ND	**410**			ND
RI-OP01-11.5		ND		ND		ND		ND	**530**			ND
RI-OP02-14		ND		ND		ND		ND	**270**			ND
RI-OP02-8		ND		ND		ND		ND	**240**			ND
RI-OP03-2.5		ND		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-OP19-14		ND		ND		ND	**180**			ND		ND
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND		ND		ND
RI-OP22-17		ND		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND		ND
RI-OP24-16		ND		ND		ND		ND		ND	66	
RI-OP24-3		ND		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND		ND		ND
RI-OP26-6.5		ND		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND	5.4	Ja		ND
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND		ND		ND
RI-SB-20-2		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND		ND
RI-SB-23-4		ND		ND		ND		ND		ND		ND
RI-SB-24-3		ND		ND		ND		ND		ND		ND
RI-SB-2-5		ND		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND		ND
RI-SB-31-5		ND		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND		ND
RI-SB-36-7		ND		ND		ND		ND	10.1			ND
RI-SB-37-3-4		ND		ND		ND		ND		ND		ND
RI-SB-38-5		ND		ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND		ND
RISF-11-8-9		ND		ND		ND		ND		ND		ND
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2		ND		ND		ND		ND		ND		ND
RISF-13-9-10		ND		ND		ND		ND		ND		ND
RISF-14-10-11		ND		ND		ND	4.6		**298**			ND
RISF-14-21-22		ND		ND		ND	2.7	J	**326**			ND
RISF-14-7-8		ND		ND		ND	1.8	J	**207**			ND
RI-SF15-4		ND		ND		ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND	**310**			ND
RI-SF16-17		ND		ND		ND		ND	**250**	H		ND
RI-SF16-6		ND		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND	**720**			ND
RI-SF18-6		ND		ND		ND		ND	**200**	H		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND		ND		ND
RISF-4-8-9		ND		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND	17.4			ND
RISF-5-4		ND		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22		ND		ND		ND		ND	**81.1**			ND
RI-SI22-27		ND		ND		ND		ND	**56**			ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND	9.6			ND
RI-SI23-6		ND		ND		ND		ND	1.5			ND
RI-SI24-10		ND		ND		ND		ND	**68.1**			ND
RI-SI24-19		ND		ND		ND		ND	37			ND
RI-SI25-1		ND		ND		ND		ND		ND		ND
RI-SI25-12		ND		ND		ND		ND	14.9			ND
RI-SI25-6		ND		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18		ND		ND		ND		ND	**53.1**			ND
RI-SI26-8		ND		ND		ND		ND	11.7			ND
RI-SI27-10		ND		ND		ND		ND	15.9			ND
RI-SI27-6		ND		ND		ND		ND	6.8			ND
RI-SI29-6		ND		ND		ND		ND		ND		ND
RI-SI29-9		ND		ND		ND		ND		ND		ND
RI-SI30-11		ND		ND		ND	9.8			ND	2.21	J
RI-SI30-16	15			ND		ND	7.9			ND	20.6	
RI-SI30-6		ND		ND		ND		ND		ND		ND
RI-SI31-12		ND		ND		ND		ND		ND		ND
RI-SI31-21		ND		ND		ND		ND		ND		ND
RI-SI32-15		ND		ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SI34-16		ND		ND		ND		ND		ND		ND
RI-SI34-20		ND		ND		ND		ND		ND		ND
RI-SI34-6		ND		ND		ND		ND		ND		ND
RI-SI35-12		ND		ND		ND		ND		ND		ND
RI-SI35-17		ND		ND		ND		ND		ND		ND
RI-SI35-6		ND		ND		ND		ND		ND		ND
RI-SI35-9		ND		ND		ND		ND		ND	540	
RI-SI36-18		ND		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND		ND
RI-SI37-10.5		ND		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND	1.6		17.6			ND
RI-SI38-23		ND		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND	**105**	J		ND		ND
RI-SI39-6		ND		ND		ND		ND		ND		ND
RI-SI39-8		ND		ND		ND		ND	5			ND
RI-SI4 JO-6		ND		ND		ND		ND		ND		ND
RI-SI40-19		ND		ND		ND	11.3		**67.9**			ND
RI-SI40-7		ND		ND		ND		ND	6.5			ND
RI-SI41-2		ND		ND		ND		ND	**92.7**			ND
RI-SI41-6		ND		ND		ND		ND	**252000**		14800	
RI-SI42-12		ND		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SI43-12		ND		ND		ND	**30.1**		36.4		5.43	
RI-SI43-4		ND		ND		ND		ND		ND		ND
RI-SI43-8		ND		ND		ND	9.3		20.7		3.6	
RI-SI7-10		ND		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND		ND		ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND	280	
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Chloroethane		1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
CALM Scenario C	No Listing		No Listing		600,000 ug/kg		6,000 ug/kg		25,000 ug/kg		76,000 ug/kg	
CALM C Leach	No Listing		No Listing		45,000 ug/kg		20 ug/kg		40 ug/kg		No GTARC	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
AP-1-10		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND		ND		ND
AP-4-16		ND		ND		ND		ND		ND
AP-4-8		ND		ND		ND		ND		ND
AP-5-5		ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND	42	
GT-29-10-11.5		ND		ND		ND		ND	5.5	Ja
GT-30-3.5-5		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND	16.3	J
R1-SB46-3		ND		ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND	27.7	J
R1-SB49-4-5		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
R1-SB52-3-4		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND	15	
RI-AB04-6.5		ND		ND		ND		ND	26	
RI-AB13-8		ND		ND		ND		ND	12	
RI-AB14-5		ND		ND		ND		ND	26	
RI-AB2-6		ND		ND		ND		ND	39	
RI-AB28-10.5		ND		ND		ND		ND	51	
RI-AB45-7		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND	220	
RI-NP01-7		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND	250	
RI-NP06-6		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND	410	
RI-NP07-10		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND	340	
RI-NP08-2		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND	200	

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CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-OP01-10		ND		ND		ND		ND	290	
RI-OP01-11.5		ND		ND		ND		ND	290	
RI-OP02-14		ND		ND		ND		ND	1800	
RI-OP02-8		ND		ND		ND		ND	700	
RI-OP03-2.5		ND		ND		ND		ND	330	
RI-OP03-5.5		ND		ND		ND		ND	220	
RI-OP04-10		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND	230	
RI-OP10-13		ND		ND		ND		ND	220	
RI-OP10-6		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND

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CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-OP19-14		ND		ND		ND		ND	2100	
RI-OP19-6		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND	170	
RI-OP22-17		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND
RI-OP24-16		ND		ND		ND		ND		ND
RI-OP24-3		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND	1100	
RI-OP26-6.5		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND	260	
RI-OP27-7.5		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND	3000	
RI-OP28-3.5		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND	210	
RI-OP29-4		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND

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CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-OP30-3		ND		ND		ND		ND	25	
RI-OP5-15		ND		ND		ND		ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND	17	
RI-OP6-12		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND	30	
RI-OP7-9		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND	17	
RI-PL04-14		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND	14	
RI-PL10-1		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND

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CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-PL11-13		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND	7.8	
RI-PL1-15		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND	430	
RI-PL12-11		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND	32.8	J
RI-SB-14-3		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND		ND
RI-SB-20-2		ND		ND		ND		ND		ND

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CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SB-21-3		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND
RI-SB-23-4		ND		ND		ND		ND	36.6	J
RI-SB-24-3		ND		ND		ND		ND	29.3	
RI-SB-2-5		ND		ND		ND		ND	26.7	J
RI-SB-25-3		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND
RI-SB-31-5		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND
RI-SB-36-7		ND		ND		ND		ND		ND
RI-SB-37-3-4		ND		ND		ND		ND		ND
RI-SB-38-5		ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND

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CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SF20-1		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		
RISF-2-14-15		ND		ND		ND		ND		
RI-SF21-7.5		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND	21.5	J
RISF-4-8-9		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND		ND
RISF-5-4		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND
RI-SI22-22		ND		ND		ND		ND		ND
RI-SI22-27		ND		ND		ND		ND		ND

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CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SI2-3		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND		ND
RI-SI23-6		ND		ND		ND		ND		ND
RI-SI24-10		ND		ND		ND		ND		ND
RI-SI24-19		ND		ND		ND		ND		ND
RI-SI25-1		ND		ND		ND		ND		ND
RI-SI25-12		ND		ND		ND		ND		ND
RI-SI25-6		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND
RI-SI26-18		ND		ND		ND		ND		ND
RI-SI26-8		ND		ND		ND		ND		ND
RI-SI27-10		ND		ND		ND		ND		ND
RI-SI27-6		ND		ND		ND		ND		ND
RI-SI29-6		ND		ND		ND		ND	29.3	J
RI-SI29-9		ND		ND		ND		ND		ND
RI-SI30-11		ND		ND		ND		ND		ND
RI-SI30-16		ND		ND		ND		ND	696	
RI-SI30-6		ND		ND		ND		ND		ND
RI-SI31-12		ND		ND		ND		ND		ND
RI-SI31-21		ND		ND		ND		ND		ND
RI-SI32-15		ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND

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CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SI34-16		ND		ND		ND		ND		ND
RI-SI34-20		ND		ND		ND		ND		ND
RI-SI34-6		ND		ND		ND		ND	17.4	J
RI-SI35-12		ND		ND	622			ND		ND
RI-SI35-17		ND		ND		ND		ND		ND
RI-SI35-6		ND		ND		ND		ND		ND
RI-SI35-9		ND		ND	5230			ND		ND
RI-SI36-18		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND	20.4	J
RI-SI37-10.5		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND		ND		ND
RI-SI38-23		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND		ND		ND
RI-SI39-6		ND		ND		ND		ND		ND
RI-SI39-8		ND		ND		ND		ND		ND
RI-SI4 JO-6		ND		ND		ND		ND		ND
RI-SI40-19		ND		ND		ND		ND	184	
RI-SI40-7		ND		ND		ND		ND		ND
RI-SI41-2		ND		ND		ND		ND		ND
RI-SI41-6		ND		ND		ND		ND		ND
RI-SI42-12		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SI43-12		ND		ND		ND		ND		ND
RI-SI43-4		ND		ND		ND		ND		ND
RI-SI43-8		ND		ND		ND		ND		ND
RI-SI7-10		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND
RI-SIFD01		ND		ND		ND		ND		ND
RI-SL01-11		ND		ND		ND		ND	14	
RI-SL01-5		ND		ND		ND		ND	8.3	
RI-SL02-5		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND	360			ND	970	
RI-SL03-5		ND		ND		ND		ND	14	
RI-SL03-9		ND		ND	13			ND	340	
RI-SL04-15		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND	260			ND	570	
RI-SL06-12		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND	18	
RI-SL08-5		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND	8.3	
RI-SL10-5		ND		ND		ND		ND	7.4	
RI-SL10-6		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND	19	
RI-SL11-9		ND		ND		ND		ND	16	
RI-SL12-12		ND		ND		ND		ND	23	

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
CALM Scenario C	No Listing		No Listing		51,000 ug/kg		No Listing		16,000,000 ug/kg	
CALM C Leach	No Listing		No Listing		5,600 ug/kg		No Listing		No GTARC	
RI-SL12-6.5		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
AP-1-10		ND		ND		ND		ND	17.4	J
AP-1-14		ND		ND		ND		ND	22	J
AP-1-6		ND		ND		ND		ND	45.2	J
AP-2-8		ND		ND		ND		ND	30.8	J
AP-3-10		ND		ND		ND		ND	16	J
AP-3-6		ND		ND		ND		ND	25.7	J
AP-4-12		ND		ND		ND		ND	10.1	J
AP-4-16		ND		ND		ND		ND	17.3	J
AP-4-8		ND		ND		ND		ND	14.3	J
AP-5-5		ND		ND		ND		ND	30.5	J
GT-01-6-7.5		ND		ND		ND		ND	110	
GT-03-8.5-10		ND		ND		ND		ND	78	
GT-05-3.5-5		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND	440	A
GT-29-10-11.5		ND		ND		ND		ND	110	
GT-30-3.5-5		ND		ND		ND		ND	200	
R1-SB43-3		ND		ND		ND		ND	98.6	
R1-SB44-3		ND		ND		ND		ND	21.4	J
R1-SB45-3		ND		ND		ND		ND	199	
R1-SB46-3		ND		ND		ND		ND	59.4	
R1-SB47-3-4	2.59			ND		ND		ND	233	
R1-SB49-4-5		ND		ND		ND		ND	12.4	J
R1-SB50-5		ND		ND		ND		ND	20.4	J
R1-SB51-3		ND		ND		ND		ND	13.3	J

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
R1-SB52-3-4		ND		ND		ND		ND	46.6	
R1-SB53-5-6		ND		ND		ND		ND	34	J
R1-SB54-6-7		ND		ND		ND		ND	18.2	J
R1-SB55-3-4		ND		ND		ND		ND	28.7	J
R1-SB56-3-4		ND		ND		ND		ND	18	J
RI-AB04-11		ND		ND		ND	8.3	H	160	
RI-AB04-6.5		ND		ND		ND		ND	160	
RI-AB13-8		ND		ND		ND		ND	160	A
RI-AB14-5		ND		ND		ND		ND	170	A
RI-AB2-6		ND		ND		ND		ND	270	A
RI-AB28-10.5		ND		ND		ND		ND	610	A
RI-AB45-7		ND		ND		ND		ND	8.8	
RI-NP01-3		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND	66	*
RI-NP06-8		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND
RI-NP08-17	460			ND	140			ND		ND
RI-NP08-2		ND		ND		ND		ND	41	*
RI-NP4-11	280			ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND		ND

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Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-OP01-10		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND	620	
RI-OP02-8		ND		ND		ND		ND		ND
RI-OP03-2.5		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND	110	
RI-OP14-8		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND	16	
RI-OP17-12		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND	24	
RI-OP18-15		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND	16	

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Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-OP19-14		ND		ND		ND		ND		ND
RI-OP19-6		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND		ND
RI-OP22-17		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND	28	
RI-OP23-3		ND		ND		ND		ND	45	
RI-OP23-5		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND	190	
RI-OP24-16	29			ND		ND		ND	710	A
RI-OP24-3		ND		ND		ND		ND	47	
RI-OP25-11		ND		ND		ND		ND	15	
RI-OP25-4		ND		ND		ND		ND	59	
RI-OP26-1		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND		ND
RI-OP26-6.5		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND	17	
RI-OP28-14		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND	210	A
RI-OP29-10		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND

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Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-OP30-3		ND		ND		ND		ND	230	
RI-OP5-15		ND		ND		ND		ND	8.3	
RI-OP5-4.5		ND		ND		ND		ND	31	
RI-OP6-1.5		ND		ND		ND		ND	180	
RI-OP6-12		ND		ND		ND		ND	220	
RI-OP7-2.5		ND		ND		ND		ND	240	A
RI-OP7-9		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND	66	
RI-OP8-4		ND		ND		ND		ND	110	
RI-OP9-15		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND	69	
RI-PL04-14		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND	32	
RI-PL07-10		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND	120	
RI-PL10-1		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-PL11-13		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND	27	
RI-PL1-15		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND	11	H
RI-PL12-3		ND		ND		ND		ND	8.1	
RI-PL13-1		ND		ND		ND		ND	33	
RI-PL13-10		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND	28.2	J
RI-SB-11-3		ND		ND		ND		ND	15	J
RI-SB-12-4		ND		ND		ND		ND	27.7	J
RI-SB-13-4		ND		ND		ND		ND	28.1	J
RI-SB-1-4		ND		ND		ND		ND	312	
RI-SB-14-3		ND		ND		ND		ND	50	
RI-SB-15-3		ND		ND		ND		ND	55.6	
RI-SB-16-5		ND		ND		ND		ND	16.1	J
RI-SB-17-3		ND		ND		ND		ND	9.5	J
RI-SB-18-7		ND		ND		ND		ND	14.3	J
RI-SB-19-5		ND		ND		ND		ND	19.4	J
RI-SB-20-2		ND		ND		ND		ND	58.3	

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SB-21-3		ND		ND .		ND		ND	44.5	J
RI-SB-22-6		ND		ND		ND		ND	31	J
RI-SB-23-4		ND		ND		ND		ND	291	
RI-SB-24-3		ND		ND		ND		ND	288	
RI-SB-2-5		ND		ND		ND		ND	204	
RI-SB-25-3		ND		ND		ND		ND	18.8	J
RI-SB-26-3		ND		ND		ND		ND	16	J
RI-SB-27-3		ND		ND		ND		ND	13.6	J
RI-SB-28-4.5		ND		ND		ND		ND	23.9	J
RI-SB-29-2.5		ND		ND		ND		ND	139	
RI-SB-30-1		ND		ND		ND		ND	36.7	J
RI-SB-31-5		ND		ND		ND		ND	35.2	
RI-SB-32-5.5-6.5		ND		ND		ND		ND	13.3	J
RI-SB-3-3		ND		ND		ND		ND	43.4	
RI-SB-34-5		ND		ND		ND		ND	31.5	
RI-SB-35-5		ND		ND		ND		ND	16.4	J
RI-SB-36-7		ND		ND		ND		ND	11	J
RI-SB-37-3-4		ND		ND		ND		ND	105	
RI-SB-38-5		ND		ND		ND		ND	592	
RI-SB-39-3		ND		ND		ND		ND	8	J
RI-SB-40-4-5		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND	66.4	
RI-SB-42-3		ND		ND		ND		ND	14	J
RI-SB-4-4-5		ND		ND		ND		ND	37	
RI-SB-5-5		ND		ND		ND		ND	79.1	

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SB-6-3		ND		ND		ND		ND	28.6	
RI-SB-7-2.5		ND		ND		ND		ND	218	
RI-SB-8-3		ND		ND		ND		ND	180	
RI-SB-9-5		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND	634	
RISF-10-5-6		ND		ND		ND		ND	77.6	
RISF-11-1-2		ND		ND		ND		ND	107	
RISF-11-8-9		ND		ND		ND		ND	25.2	J
RISF-12-4-5		ND		ND		ND		ND	14.6	J
RISF-12-8		ND		ND		ND		ND	22.9	J
RISF-13-1-2		ND		ND		ND		ND	113	
RISF-13-9-10		ND		ND		ND		ND	42.3	J
RISF-14-10-11	4.73			ND		ND	21		284	
RISF-14-21-22	3.45	J		ND		ND		ND	128	
RISF-14-7-8	3.12			ND		ND	17.3		228	
RI-SF15-4		ND		ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND	16	
RI-SF19-9		ND		ND		ND		ND	40	

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SF20-1		ND		ND		ND		ND	93	
RI-SF21-0.5		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND	93.2	
RISF-2-14-15		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND	25	
RISF-3-10-11		ND		ND		ND		ND	27.9	J
RISF-3-4-5		ND		ND		ND		ND	89.1	
RISF-4-1-2		ND		ND		ND		ND	249	
RISF-4-8-9		ND		ND		ND		ND	66.8	J
RISF-5-16		ND		ND		ND		ND	11.7	J
RISF-5-4		ND		ND		ND		ND	27.5	J
RISF-6-5-6		ND		ND		ND		ND	30.4	J
RISF-6-9-10		ND		ND		ND		ND	75.9	J
RISF-8-15-16		ND		ND		ND		ND	23.6	J
RISF-8-5-6		ND		ND		ND		ND	122	
RI-SI1-2		ND		ND		ND		ND	74	
RI-SI1-6		ND		ND		ND		ND	83.2	
RI-SI2-10		ND		ND		ND		ND	26.8	J
RI-SI2-13		ND		ND		ND		ND	17.3	J
RI-SI22-22		ND		ND		ND		ND	15.4	J
RI-SI22-27		ND		ND		ND		ND	14.8	J

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SI2-3		ND		ND		ND		ND	38.1	J
RI-SI23-10		ND		ND		ND		ND	27.4	J
RI-SI23-6		ND		ND		ND		ND	39.3	
RI-SI24-10		ND		ND		ND		ND	18.2	J
RI-SI24-19		ND		ND		ND		ND	27.5	J
RI-SI25-1		ND		ND		ND		ND	404	
RI-SI25-12		ND		ND		ND		ND	15.4	J
RI-SI25-6		ND		ND		ND		ND	29.5	J
RI-SI2-6		ND		ND		ND		ND	24.2	J
RI-SI26-18		ND		ND		ND		ND	24.8	J
RI-SI26-8		ND		ND		ND		ND	19.3	J
RI-SI27-10		ND		ND		ND		ND	64.3	
RI-SI27-6		ND		ND		ND		ND	13.6	J
RI-SI29-6		ND		ND		ND		ND	123	
RI-SI29-9		ND		ND		ND		ND	14.5	J
RI-SI30-11		ND		ND		ND	20.2		166	
RI-SI30-16	4.2		197			ND	58.3		1310	
RI-SI30-6		ND		ND		ND		ND	46.1	J
RI-SI31-12		ND		ND		ND		ND	9.7	J
RI-SI31-21		ND		ND		ND		ND	45.4	J
RI-SI32-15		ND		ND		ND		ND	22.7	J
RI-SI32-8		ND		ND		ND		ND	179	
RI-SI3-3		ND		ND		ND		ND	76.1	
RI-SI33-12		ND		ND		ND		ND	87.3	
RI-SI33-8		ND		ND		ND		ND	48.2	

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CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SI34-16		ND		ND		ND		ND	18	J
RI-SI34-20		ND		ND		ND		ND	11.2	J
RI-SI34-6		ND		ND		ND		ND	118	
RI-SI35-12		ND		ND		ND		ND	1110	J
RI-SI35-17		ND		ND		ND		ND	964	J
RI-SI35-6		ND		ND		ND		ND	64.2	
RI-SI35-9	8940			ND	378			ND	2430	J
RI-SI36-18		ND		ND		ND		ND	48.9	
RI-SI36-8	4.95			ND		ND		ND	176	
RI-SI37-10.5		ND		ND		ND		ND	47.4	J
RI-SI37-3.5-8.5		ND		ND		ND		ND	41.1	J
RI-SI3-8.5		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND		ND		ND
RI-SI38-23		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND		ND		ND
RI-SI39-6		ND		ND		ND		ND	71.9	
RI-SI39-8		ND		ND		ND		ND	17.9	J
RI-SI4 JO-6		ND		ND		ND		ND	39.1	J
RI-SI40-19	7.37			ND	0.76	J	61.4		918	J
RI-SI40-7		ND		ND		ND		ND	546	
RI-SI41-2		ND		ND		ND		ND		ND
RI-SI41-6	178000			ND	55600			ND		ND
RI-SI42-12		ND		ND		ND		ND	224	J
RI-SI42-7		ND		ND		ND		ND		ND

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CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SI43-12	33.8		24.7		2.07	J	13.3			ND
RI-SI43-4		ND		ND		ND		ND	76.5	
RI-SI43-8	23.6			ND	1.8			ND		ND
RI-SI7-10		ND		ND		ND		ND	32.1	J
RI-SI7-6		ND		ND		ND		ND	52.4	
RI-SL01-11		ND		ND		ND		ND	240	*
RI-SL01-5		ND		ND		ND		ND	84	*
RI-SL02-5		ND		ND		ND		ND	32	
RI-SL02-9	1300			ND		ND		ND	1600	*
RI-SL03-5		ND		ND		ND		ND	160	
RI-SL03-9	17			ND		ND		ND	250	*
RI-SL04-15		ND		ND		ND		ND	19	
RI-SL04-9		ND		ND		ND		ND	42	
RI-SL05-9	4000			ND		ND		ND	630	
RI-SL06-12		ND		ND		ND		ND	28	
RI-SL06-8		ND		ND		ND		ND	28	
RI-SL08-10		ND		ND		ND		ND	150	
RI-SL08-5		ND		ND		ND		ND	40	
RI-SL09-15		ND		ND		ND		ND	39	
RI-SL09-5		ND		ND		ND		ND	89	
RI-SL10-5		ND		ND		ND		ND	57	
RI-SL10-6		ND		ND		ND		ND	40	
RI-SL11-6		ND		ND		ND		ND	250	A
RI-SL11-9		ND		ND		ND		ND	170	
RI-SL12-12		ND		ND		ND		ND	170	

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CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone		Acetone	
CALM Scenario C	No Listings		No Listings		No Listings		No Listings		8,700,000 ug/kg	
CALM C Leach	No Listings		No Listings		No Listings		No Listings		No GTARC	
RI-SL12-6.5		ND		ND		ND		ND	65	
RI-SL13-10		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND	80	
RI-SL14-10	17			ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
AP-1-10		ND		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12	3.6			ND		ND		ND		ND		ND
AP-4-16	4.7			ND		ND		ND		ND		ND
AP-4-8	2.9			ND		ND		ND		ND		ND
AP-5-5		ND		ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3		ND		ND		ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5		ND		ND		ND		ND		ND		ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND		ND		ND
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND		ND		ND

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CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-OP01-10		ND		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND		ND		ND
RI-OP02-8		ND		ND		ND		ND		ND		ND
RI-OP03-2.5		ND		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND		ND

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Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-OP19-14		ND		ND		ND		ND		ND		ND
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND		ND		ND
RI-OP22-17		ND		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND		ND
RI-OP24-16		ND		ND		ND		ND		ND		ND
RI-OP24-3		ND		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND		ND		ND
RI-OP26-6.5		ND		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND		ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND		ND		ND
RI-SB-20-2		ND		ND		ND		ND		ND		ND

ND - Non detect
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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND		ND
RI-SB-23-4		ND		ND		ND		ND		ND		ND
RI-SB-24-3		ND		ND		ND		ND		ND		ND
RI-SB-2-5	0.8	J		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND		ND
RI-SB-31-5		ND		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND		ND
RI-SB-36-7		ND		ND		ND		ND		ND		ND
RI-SB-37-3-4		ND		ND		ND		ND		ND		ND
RI-SB-38-5		ND		ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND		ND
RISF-11-8-9		ND		ND		ND		ND		ND		ND
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2		ND		ND		ND		ND		ND		ND
RISF-13-9-10		ND		ND		ND		ND		ND		ND
RISF-14-10-11	1.9	J		ND		ND		ND		ND		ND
RISF-14-21-22		ND		ND		ND		ND		ND		ND
RISF-14-7-8		ND		ND		ND		ND		ND		ND
RI-SF15-4		ND		ND		ND		ND		ND	12	
RI-SF16-11		ND		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND		ND		ND
RISF-4-8-9		ND		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND		ND		ND
RISF-5-4		ND		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22		ND		ND		ND		ND		ND		ND
RI-SI22-27		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND		ND		ND
RI-SI23-6		ND		ND		ND		ND		ND		ND
RI-SI24-10		ND		ND		ND		ND		ND		ND
RI-SI24-19		ND		ND		ND		ND		ND		ND
RI-SI25-1		ND		ND		ND		ND		ND		ND
RI-SI25-12		ND		ND		ND		ND		ND		ND
RI-SI25-6		ND		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18		ND		ND		ND		ND		ND		ND
RI-SI26-8		ND		ND		ND		ND		ND		ND
RI-SI27-10		ND		ND		ND		ND		ND		ND
RI-SI27-6		ND		ND		ND		ND		ND		ND
RI-SI29-6		ND		ND		ND		ND		ND	1	J
RI-SI29-9		ND		ND		ND		ND		ND		ND
RI-SI30-11	2.8			ND		ND		ND		ND		ND
RI-SI30-16	4.9			ND		ND		ND		ND	9.9	
RI-SI30-6		ND		ND		ND		ND		ND		ND
RI-SI31-12		ND		ND		ND		ND		ND		ND
RI-SI31-21		ND		ND		ND		ND		ND		ND
RI-SI32-15		ND		ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND	3.4	
RI-SI3-3		ND		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND		ND

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CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SI34-16		ND		ND		ND		ND		ND		ND
RI-SI34-20		ND		ND		ND		ND		ND		ND
RI-SI34-6		ND		ND		ND		ND		ND	5.2	
RI-SI35-12		ND		ND		ND		ND		ND		ND
RI-SI35-17		ND		ND		ND		ND		ND		ND
RI-SI35-6		ND		ND		ND		ND		ND		ND
RI-SI35-9		ND		ND		ND		ND		ND		ND
RI-SI36-18		ND		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND		ND
RI-SI37-10.5	1.5	J		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND		ND		ND		ND
RI-SI38-23		ND		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND		ND		ND		ND
RI-SI39-6		ND		ND		ND		ND		ND		ND
RI-SI39-8		ND		ND		ND		ND		ND		ND
RI-SI4 JO-6		ND		ND		ND		ND		ND		ND
RI-SI40-19		ND		ND		ND		ND		ND		ND
RI-SI40-7		ND		ND		ND		ND		ND	8.2	
RI-SI41-2		ND		ND		ND		ND		ND		ND
RI-SI41-6		ND		ND		ND		ND		ND		ND
RI-SI42-12		ND		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloromethane		Bromodichloromethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SI43-12	3.5			ND		ND		ND		ND		ND
RI-SI43-4		ND		ND		ND		ND		ND	0.9	J
RI-SI43-8	1.7			ND		ND		ND		ND		ND
RI-SI7-10		ND		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND	3.1	Ja*
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND		ND		ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND		ND
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochlorom ethane		Bromodichlorom ethane		Bromoform		Bromomethane	
CALM Scenario C	13,000 ug/kg		No Listing		No Listing		41,000 ug/kg		450,000 ug/kg		No Listing	
CALM C Leach	50 ug/kg		No Listing		No Listing		700 ug/kg		1,000 ug/kg		No Listing	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroform		Chloromethane	
CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
AP-1-10		ND		ND		ND	1.6			ND
AP-1-14		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND		ND		ND
AP-4-16		ND		ND		ND		ND		ND
AP-4-8		ND		ND		ND		ND		ND
AP-5-5	1.86			ND		ND		ND		ND
GT-01-6-7.5	8.6			ND		ND		ND		ND
GT-03-8.5-10	45			ND		ND		ND		ND
GT-05-3.5-5	51			ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND	20			ND
GT-29-10-11.5		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND
R1-SB46-3		ND		ND		ND		ND		ND
R1-SB47-3-4	4.74			ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND
R1-SB50-5	2.5			ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroform		Chloromethane	
CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
R1-SB52-3-4		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND
RI-AB04-6.5	15			ND		ND		ND		ND
RI-AB13-8	5.2			ND		ND		ND		ND
RI-AB14-5	14			ND		ND		ND		ND
RI-AB2-6	7.4			ND		ND		ND		ND
RI-AB28-10.5	29			ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND		ND
RI-NP08-2		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroform		Chloromethane	
CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-OP01-10		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND		ND
RI-OP02-8		ND		ND		ND		ND		ND
RI-OP03-2.5		ND	**1000**			ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-OP19-14		ND		ND		ND		ND		ND
RI-OP19-6		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND		ND		ND		ND
RI-OP22-17		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND
RI-OP24-16	26			ND	87			ND		ND
RI-OP24-3		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND	710			ND		ND
RI-OP26-6.5		ND		ND		ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-OP30-3		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-PL11-13		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND
RI-PL13-1	7.8			ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND
RI-SB-17-3		ND		ND		ND		ND		ND
RI-SB-18-7		ND		ND		ND		ND		ND
RI-SB-19-5		ND		ND		ND		ND		ND
RI-SB-20-2		ND		ND		ND		ND		ND

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CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroform		Chloromethane	
CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SB-21-3		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND
RI-SB-23-4	30.3			ND		ND		ND		ND
RI-SB-24-3	37.2			ND		ND		ND		ND
RI-SB-2-5		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND
RI-SB-28-4.5	24.6			ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND
RI-SB-31-5		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND
RI-SB-36-7		ND		ND		ND		ND		ND
RI-SB-37-3-4		ND		ND		ND		ND		ND
RI-SB-38-5		ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND
RI-SB-5-5	0.84	J		ND		ND		ND		ND

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CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SB-6-3		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND
RI-SB-9-5	1.21	J		ND		ND		ND		ND
RISF-10-11-12	120			ND		ND		ND		ND
RISF-10-5-6	1.18	J		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND
RISF-11-8-9		ND		ND		ND	3.3			ND
RISF-12-4-5		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND
RISF-13-1-2	7.33			ND		ND		ND		ND
RISF-13-9-10	8.8			ND		ND		ND		ND
RISF-14-10-11		ND		ND		ND	13.2			ND
RISF-14-21-22		ND		ND		ND	4.1	J		ND
RISF-14-7-8		ND		ND		ND	7			ND
RI-SF15-4	190			ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SF20-1		ND		ND		ND	13			ND
RI-SF21-0.5	12			ND		ND		ND		ND
RISF-2-1-2	1.98			ND		ND		ND	3.1	
RISF-2-14-15	5.77			ND		ND		ND		ND
RI-SF21-7.5	60			ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND		ND
RISF-4-8-9		ND		ND		ND		ND		ND
RISF-5-16		ND		ND		ND		ND		ND
RISF-5-4		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND
RI-SI2-10	8.25			ND		ND		ND		ND
RI-SI2-13	32.7			ND		ND		ND		ND
RI-SI22-22		ND		ND		ND				ND
RI-SI22-27		ND		ND		ND	1.3	J		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SI2-3		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND		ND
RI-SI23-6		ND		ND		ND		ND		ND
RI-SI24-10		ND		ND		ND		ND		ND
RI-SI24-19		ND		ND		ND		ND		ND
RI-SI25-1		ND		ND		ND		ND	1.4	J
RI-SI25-12		ND		ND		ND		ND		ND
RI-SI25-6		ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND
RI-SI26-18		ND		ND		ND		ND		ND
RI-SI26-8		ND		ND		ND		ND		ND
RI-SI27-10		ND		ND		ND		ND		ND
RI-SI27-6		ND		ND		ND		ND		ND
RI-SI29-6		ND		ND		ND		ND		ND
RI-SI29-9		ND		ND		ND		ND		ND
RI-SI30-11		ND		ND	38.9		3			ND
RI-SI30-16		ND		ND	128		2.9		5.2	
RI-SI30-6		ND		ND	5			ND		ND
RI-SI31-12		ND		ND		ND		ND		ND
RI-SI31-21		ND		ND		ND		ND		ND
RI-SI32-15		ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND
RI-SI33-8	4.04			ND		ND		ND		ND

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CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SI34-16		ND		ND		ND		ND		ND
RI-SI34-20		ND		ND		ND		ND		ND
RI-SI34-6		ND		ND		ND		ND		ND
RI-SI35-12		ND		ND	108			ND		ND
RI-SI35-17	51.3	J		ND		ND		ND		ND
RI-SI35-6	0.96	J		ND		ND		ND		ND
RI-SI35-9		ND		ND		ND		ND		ND
RI-SI36-18		ND		ND		ND		ND		ND
RI-SI36-8	3.95			ND		ND		ND		ND
RI-SI37-10.5		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND
RI-SI3-8.5		ND		ND		ND		ND		ND
RI-SI38-12		ND		ND		ND	1.8			ND
RI-SI38-23		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND
RI-SI38-29		ND		ND		ND		ND		ND
RI-SI39-6		ND		ND		ND		ND		ND
RI-SI39-8		ND		ND		ND		ND		ND
RI-SI4 JO-6		ND		ND		ND		ND		ND
RI-SI40-19		ND		ND		ND	9.5		1.5	
RI-SI40-7		ND		ND		ND		ND	1.3	
RI-SI41-2		ND		ND		ND	4.2			ND
RI-SI41-6		ND		ND		ND		ND		ND
RI-SI42-12		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND

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CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SI43-12		ND		ND	2.7		13.3		1.8	J
RI-SI43-4		ND		ND	2.4			ND	1.1	J
RI-SI43-8		ND		ND	2.6		6.3			ND
RI-SI7-10		ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND
RI-SL01-11	87			ND		ND		ND		ND
RI-SL01-5	4.7	Ja		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND
RI-SL03-9	68			ND		ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND
RI-SL04-9	6.5			ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND
RI-SL06-12		ND		ND		ND		ND		ND
RI-SL06-8	13			ND		ND		ND		ND
RI-SL08-10	95			ND		ND		ND		ND
RI-SL08-5		ND		ND		ND	12			ND
RI-SL09-15		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND
RI-SL12-12	74			ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroform		Chloromethane	
CALM Scenario C	721,000 ug/kg		5,000 ug/kg		180,000 ug/kg		1,000 ug/kg		No Listing	
CALM C Leach	No GTARC		130 ug/kg		2,800 ug/kg		600 ug/kg		No Listing	
RI-SL12-6.5		ND		ND		ND		ND		ND
RI-SL13-10	2.4	Ja		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND
RI-SL14-10	6.6			ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloro methane		Dibromomethane		Dichlorodifluoro methane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
AP-1-10	7.3			ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND		ND
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12	114			ND		ND		ND		ND	6.6	
AP-4-16	170			ND		ND		ND		ND		ND
AP-4-8	66.1			ND		ND		ND		ND	0.7	J
AP-5-5	37.9			ND		ND		ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5	**900**			ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3	1.8			ND		ND		ND		ND		ND
R1-SB47-3-4		ND		ND		ND		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND		ND
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND		ND
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5	7.2			ND		ND		ND		ND		ND
RI-AB13-8	5.6			ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5	8.3			ND		ND		ND		ND		ND
RI-AB45-7	20			ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND		ND
RI-NP08-17		ND		ND		ND		ND		ND		ND
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-OP01-10		ND		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND		ND		ND
RI-OP02-8		ND		ND		ND		ND		ND		ND
RI-OP03-2.5		ND		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10	**2500**			ND		ND		ND		ND		ND
RI-OP15-7.5	**980**			ND		ND		ND		ND		ND
RI-OP16-12	350			ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12	**2800**			ND		ND		ND		ND		ND
RI-OP17-4	35			ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5	6.8			ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-OP19-14	**1400**			ND		ND		ND		ND		ND
RI-OP19-6	**2600**			ND		ND		ND		ND		ND
RI-OP20-13	**5900**			ND		ND		ND		ND		ND
RI-OP20-4	**1500**			ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND		ND
RI-OP21-4	110			ND		ND		ND		ND	63	a
RI-OP22-17	180			ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5	**1200**			ND		ND		ND		ND		ND
RI-OP24-16	**8300**			ND		ND		ND		ND	52	
RI-OP24-3	8			ND		ND		ND		ND		ND
RI-OP25-11	220			ND		ND		ND		ND		ND
RI-OP25-4	7.5			ND		ND		ND		ND		ND
RI-OP26-1	**1100**			ND		ND		ND		ND		ND
RI-OP26-10.5	**13000**			ND		ND		ND		ND		ND
RI-OP26-6.5	**27000**			ND		ND		ND		ND	14000	
RI-OP27-14.5	**940**			ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14	**7400**			ND		ND		ND		ND		ND
RI-OP28-3.5	100			ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15	20			ND		ND		ND		ND		ND
RI-OP5-4.5	6.7			ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12	8.5	Ja		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9	16			ND		ND		ND		ND		ND
RI-OP8-12	280			ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15	210			ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11	85			ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14	280			ND		ND		ND		ND		ND
RI-PL05-31	**650**			ND		ND		ND		ND		ND
RI-PL05-9	**1600**			ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9	**1000**			ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10	**990**			ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14	**15000**			ND		ND		ND		ND		ND
RI-PL09-5	100			ND		ND		ND		ND		ND
RI-PL10-1	5.4			ND		ND		ND		ND		ND
RI-PL10-10	220			ND		ND		ND		ND		ND

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CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15	**570**			ND		ND		ND		ND		ND
RI-PL1-18	**8800**			ND		ND		ND		ND	130	
RI-PL12-11	6.1	Ja		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14	350			ND		ND		ND		ND		ND
RI-PL2-7	11			ND		ND		ND		ND		ND
RI-PL3-22	29			ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND		ND
RI-SB-17-3	1			ND		ND		ND		ND		ND
RI-SB-18-7	4			ND		ND		ND		ND		ND
RI-SB-19-5	478			ND		ND		ND		ND		ND
RI-SB-20-2		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloro methane		Dibromomethane		Dichlorodifluoro methane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6	7.7			ND		ND		ND		ND		ND
RI-SB-23-4		ND		ND		ND		ND		ND		ND
RI-SB-24-3	1	J		ND		ND		ND		ND		ND
RI-SB-2-5		ND		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5	3.5			ND		ND		ND		ND		ND
RI-SB-30-1		ND		ND		ND		ND		ND		ND
RI-SB-31-5	1.2	J		ND		ND		ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5	5			ND		ND		ND		ND		ND
RI-SB-35-5		ND		ND		ND		ND		ND		ND
RI-SB-36-7	11.4			ND		ND		ND		ND		ND
RI-SB-37-3-4	2.2			ND		ND		ND		ND		ND
RI-SB-38-5	17.5			ND		ND		ND		ND		ND
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5	1.1	J		ND		ND		ND		ND		ND
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2	4.1			ND		ND		ND		ND		ND
RISF-11-8-9	22.2			ND		ND		ND		ND		ND
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2	5.9			ND		ND		ND		ND		ND
RISF-13-9-10	2.6			ND		ND		ND		ND		ND
RISF-14-10-11	**3290**			ND		ND		ND		ND	1.9	J
RISF-14-21-22	**18500**			ND		ND		ND		ND	3.7	J
RISF-14-7-8	**1800**			ND		ND		ND		ND		ND
RI-SF15-4	140			ND		ND		ND		ND		ND
RI-SF16-11	380			ND		ND		ND		ND		ND
RI-SF16-17	**52000**			ND		ND		ND		ND		ND
RI-SF16-6	220			ND		ND		ND		ND		ND
RI-SF17-12	440			ND		ND		ND		ND		ND
RI-SF17-6	170			ND		ND		ND		ND		ND
RI-SF18-10	**4600**			ND		ND		ND		ND		ND
RI-SF18-6	**760**			ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		ND		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13	**780**			ND		ND		ND		ND		ND
RI-SF22-9	170			ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2	1.4	J		ND		ND		ND		ND		ND
RISF-4-8-9	2.2	J		ND		ND		ND		ND		ND
RISF-5-16	**1610**			ND		ND		ND		ND		ND
RISF-5-4	1.2	J		ND		ND		ND		ND		ND
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND		ND
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22	156			ND		ND		ND		ND		ND
RI-SI22-27	104			ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10	15.2			ND		ND		ND		ND		ND
RI-SI23-6	2.7			ND		ND		ND		ND		ND
RI-SI24-10	105			ND		ND		ND		ND		ND
RI-SI24-19	79.5			ND		ND		ND		ND		ND
RI-SI25-1	4.1			ND		ND		ND		ND		ND
RI-SI25-12	22.6			ND		ND		ND		ND		ND
RI-SI25-6	1.9			ND		ND		ND		ND		ND
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18	53.8			ND		ND		ND		ND		ND
RI-SI26-8	14.2			ND		ND		ND		ND		ND
RI-SI27-10	28.6			ND		ND		ND		ND		ND
RI-SI27-6	11.4			ND		ND		ND		ND		ND
RI-SI29-6	2.3			ND		ND		ND		ND		ND
RI-SI29-9	10.1			ND		ND		ND		ND		ND
RI-SI30-11	**1440**			ND		ND		ND		ND	6.1	
RI-SI30-16	**1360**			ND		ND		ND		ND	26	
RI-SI30-6	142			ND		ND		ND		ND		ND
RI-SI31-12		ND		ND		ND		ND		ND		ND
RI-SI31-21	19.3			ND		ND		ND		ND		ND
RI-SI32-15	37.3			ND		ND		ND		ND		ND
RI-SI32-8		ND		ND		ND		ND		ND		ND
RI-SI3-3		ND		ND		ND		ND		ND		ND
RI-SI33-12		ND		ND		ND		ND		ND		ND
RI-SI33-8		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloro methane		Dibromomethane		Dichlorodifluoro methane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SI34-16	1.4			ND		ND		ND		ND		ND
RI-SI34-20	115			ND		ND		ND		ND		ND
RI-SI34-6	1	J		ND		ND		ND		ND		ND
RI-SI35-12	**4890**			ND		ND		ND		ND	949	
RI-SI35-17	**30900**			ND		ND		ND		ND	39.5	J
RI-SI35-6	2.9			ND		ND		ND		ND		ND
RI-SI35-9	**1110**			ND		ND		ND		ND	8350	
RI-SI36-18	30.6			ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND		ND
RI-SI37-10.5		ND		ND		ND		ND		ND		ND
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND		ND
RI-SI3-8.5	3.3			ND		ND		ND		ND		ND
RI-SI38-12	0.6	J		ND		ND		ND		ND		ND
RI-SI38-23		ND		ND		ND		ND		ND		ND
RI-SI38-26		ND		ND		ND		ND		ND		ND
RI-SI38-29	59.7	J		ND		ND		ND		ND		ND
RI-SI39-6	3.5			ND		ND		ND		ND		ND
RI-SI39-8	6.7			ND		ND		ND		ND		ND
RI-SI4 JO-6		ND		ND		ND		ND		ND		ND
RI-SI40-19	0.7	J		ND		ND		ND		ND	0.9	J
RI-SI40-7		ND		ND		ND		ND		ND		ND
RI-SI41-2		ND		ND		ND		ND		ND		ND
RI-SI41-6	**14000**	ND		ND		ND		ND		ND	14000	
RI-SI42-12	9	J		ND		ND		ND		ND		ND
RI-SI42-7		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SI43-12	**5880**			ND		ND		ND		ND	2.7	
RI-SI43-4	380			ND		ND		ND		ND		ND
RI-SI43-8	**2630**			ND		ND		ND		ND	2.3	
RI-SI7-10	21.1			ND		ND		ND		ND		ND
RI-SI7-6		ND		ND		ND		ND		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND	220	
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND		ND		ND		ND	21	
RI-SL04-15	39			ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND	300	
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15	15			ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloro methane		Dibromomethane		Dichlorodifluoro methane		Ethylbenzene	
CALM Scenario C	1,200,000 ug/kg		No Listing		77,000 ug/kg		No Listing		No Listing		400,000 ug/kg	
CALM C Leach	500 ug/kg		No Listing		800 ug/kg		No Listing		No Listing		32,000 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
AP-1-10		ND		ND			1.4	J				ND
AP-1-14		ND		ND			1.3	J				ND
AP-1-6		ND		ND			1.9	J				ND
AP-2-8		ND		ND			1.1	J				ND
AP-3-10		ND		ND			1.5	J				ND
AP-3-6		ND		ND			1	J				ND
AP-4-12		ND	1.4	J				ND				ND
AP-4-16		ND		ND				ND				ND
AP-4-8		ND		ND				ND				ND
AP-5-5		ND		ND				ND				ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND	**290**			ND	940	
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND				ND				ND
R1-SB44-3		ND		ND				ND				ND
R1-SB45-3		ND		ND				ND				ND
R1-SB46-3		ND		ND				ND				ND
R1-SB47-3-4		ND		ND				ND				ND
R1-SB49-4-5		ND		ND				ND				ND
R1-SB50-5		ND		ND				ND				ND
R1-SB51-3		ND		ND				ND				ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
R1-SB52-3-4		ND		ND				ND				ND
R1-SB53-5-6		ND		ND				ND				ND
R1-SB54-6-7		ND		ND				ND				ND
R1-SB55-3-4		ND		ND				ND				ND
R1-SB56-3-4		ND		ND				ND				ND
RI-AB04-11		ND		ND		ND	11			ND		ND
RI-AB04-6.5		ND		ND		ND	5.7			ND		ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND	260	
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND	**1800**			ND	1300	
RI-NP06-6		ND		ND		ND	**100**			ND		ND
RI-NP06-8		ND		ND		ND	**13000**			ND		ND
RI-NP07-10		ND		ND		ND	3.5	Ja		ND		ND
RI-NP07-16		ND		ND		ND	**43000**			ND		ND
RI-NP08-17		ND		ND		ND	**6800**			ND	210	
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND	**8300**	B		ND		ND
RI-NP4-2.5		ND		ND		ND	**540**	B		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-OP01-10		ND		ND		ND	**380**			ND	420	
RI-OP01-11.5		ND		ND		ND	**460**			ND		ND
RI-OP02-14		ND		ND		ND	**9300**			ND		ND
RI-OP02-8		ND		ND		ND	**4900**			ND		ND
RI-OP03-2.5		ND		ND		ND	**400**	B		ND		ND
RI-OP03-5.5		ND		ND		ND	**290**	B		ND		ND
RI-OP04-10		ND		ND		ND	**460**			ND		ND
RI-OP04-12		ND		ND		ND	**610**			ND		ND
RI-OP10-13		ND		ND		ND	**820**			ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND	350	
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-OP19-14		ND		ND		ND	**990**			ND		ND
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND	**6200**			ND		ND
RI-OP21-4		ND		ND	190		**150**			ND		
RI-OP22-17		ND		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND		ND
RI-OP24-16		ND	14		130			ND		ND	70	
RI-OP24-3		ND		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND	**1100**			ND		ND
RI-OP26-6.5		ND		ND	38000			ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND	**2300**			ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND	**1800**			ND		ND
RI-OP29-4		ND		ND		ND	**140**			ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND	8.2			ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND	6.4			ND		ND
RI-OP6-12		ND		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND	12			ND		ND
RI-OP8-4		ND		ND		ND	7.5			ND		ND
RI-OP9-15		ND		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND	**120**	B		ND		ND
RI-PL04-1		ND		ND		ND	5.2			ND		ND
RI-PL04-14		ND		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND	**120**	HB		ND		ND
RI-PL05-9		ND		ND		ND	**110**	B		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND	310	
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND	390			ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND	**380**	B		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND	**240**	B		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND				ND				ND
RI-SB-11-3		ND		ND				ND				ND
RI-SB-12-4		ND		ND				ND				ND
RI-SB-13-4		ND		ND				ND				ND
RI-SB-1-4		ND		ND				ND				ND
RI-SB-14-3		ND		ND				ND				ND
RI-SB-15-3		ND		ND				ND				ND
RI-SB-16-5		ND		ND				ND				ND
RI-SB-17-3		ND		ND				ND				ND
RI-SB-18-7		ND		ND				ND				ND
RI-SB-19-5		ND		ND				ND				ND
RI-SB-20-2		ND		ND				ND				ND

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Springfield, Missouri

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CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SB-21-3		ND		ND				ND				ND
RI-SB-22-6		ND		ND				ND				ND
RI-SB-23-4		ND		ND				ND				ND
RI-SB-24-3		ND		ND				ND			0.69	BJ
RI-SB-2-5		ND		ND				ND				ND
RI-SB-25-3		ND		ND				ND				ND
RI-SB-26-3		ND		ND				ND				ND
RI-SB-27-3		ND		ND				ND				ND
RI-SB-28-4.5		ND		ND				ND				ND
RI-SB-29-2.5		ND		ND				ND				ND
RI-SB-30-1		ND		ND				ND				ND
RI-SB-31-5		ND		ND				ND				ND
RI-SB-32-5.5-6.5		ND		ND				ND				ND
RI-SB-3-3		ND		ND				ND				ND
RI-SB-34-5		ND		ND				ND				ND
RI-SB-35-5		ND		ND				ND				ND
RI-SB-36-7		ND		ND				ND				ND
RI-SB-37-3-4		ND		ND				ND				ND
RI-SB-38-5		ND		ND				ND				ND
RI-SB-39-3		ND		ND				ND				ND
RI-SB-40-4-5		ND		ND				ND				ND
RI-SB-41-5		ND		ND				ND				ND
RI-SB-42-3		ND		ND				ND				ND
RI-SB-4-4-5		ND		ND				ND				ND
RI-SB-5-5		ND		ND				ND				ND

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Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SB-6-3		ND		ND				ND				ND
RI-SB-7-2.5		ND		ND				ND				ND
RI-SB-8-3		ND		ND				ND				ND
RI-SB-9-5		ND		ND				ND				ND
RISF-10-11-12		ND		ND			3.4	J				ND
RISF-10-5-6		ND		ND			3	J				ND
RISF-11-1-2		ND		ND			5.5	B				ND
RISF-11-8-9		ND		ND			7.1	B				ND
RISF-12-4-5		ND		ND			1.6	J				ND
RISF-12-8		ND		ND			5.4	J				ND
RISF-13-1-2		ND		ND			5.2	BJ				ND
RISF-13-9-10		ND		ND			4.1	BJ				ND
RISF-14-10-11		ND		ND			**796**	B				ND
RISF-14-21-22		ND		ND			**368**	B				ND
RISF-14-7-8		ND		ND			**416**	B				ND
RI-SF15-4		ND		ND		ND		ND		ND	5.1	
RI-SF16-11		ND		ND		ND	**960**			ND		ND
RI-SF16-17		ND		ND		ND	**280**			ND		ND
RI-SF16-6		ND		ND		ND	**440**			ND		ND
RI-SF17-12		ND		ND		ND	**250**			ND		ND
RI-SF17-6		ND		ND		ND	**220**			ND		ND
RI-SF18-10		ND		ND		ND	**480**			ND		ND
RI-SF18-6		ND		ND		ND	**230**			ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND	11	
RISF-2-1-2		ND		ND			5.7	B				ND
RISF-2-14-15		ND		ND			6.8	B				ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND			3.6	J				ND
RISF-3-4-5		ND		ND			3.1	J				ND
RISF-4-1-2		ND		ND			3.3	BJ				ND
RISF-4-8-9		ND		ND			4.7	BJ				ND
RISF-5-16		ND		ND			3.4	J				ND
RISF-5-4		ND		ND			1.8	BJ				ND
RISF-6-5-6		ND		ND			3.1	J				ND
RISF-6-9-10		ND		ND			5.4	J				ND
RISF-8-15-16		ND		ND			4.6	J				ND
RISF-8-5-6		ND		ND			3.1	J				ND
RI-SI1-2		ND		ND			0.8	J				ND
RI-SI1-6		ND		ND			1.4	J				ND
RI-SI2-10		ND		ND			2.7	J				ND
RI-SI2-13		ND		ND			3.3	J				ND
RI-SI22-22		ND		ND			3.6	BJ				ND
RI-SI22-27		ND		ND			3.4	BJ				ND

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CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SI2-3		ND		ND			2.1	J				ND
RI-SI23-10		ND		ND			3.3	BJ				ND
RI-SI23-6		ND		ND			3.3	BJ				ND
RI-SI24-10		ND		ND			3.1	BJ				ND
RI-SI24-19		ND		ND			3.1	BJ				ND
RI-SI25-1		ND		ND			13.7					ND
RI-SI25-12		ND		ND			1.5	J				ND
RI-SI25-6		ND		ND			1.4	J				ND
RI-SI2-6		ND		ND			1.8	J				ND
RI-SI26-18		ND		ND			3.2	BJ				ND
RI-SI26-8		ND		ND			2.9	BJ				ND
RI-SI27-10		ND		ND			5.3	BJ				ND
RI-SI27-6		ND		ND			2.5	BJ				ND
RI-SI29-6		ND		ND				ND				ND
RI-SI29-9		ND		ND				ND				ND
RI-SI30-11		ND		ND			**219**	B			1.74	J
RI-SI30-16		ND	6.14				**168**	B			9.31	
RI-SI30-6		ND		ND				ND				ND
RI-SI31-12		ND		ND			2.6	BJ				ND
RI-SI31-21		ND		ND			5	BJ				ND
RI-SI32-15		ND		ND			3.1	BJ				ND
RI-SI32-8		ND		ND			2.1	BJ				ND
RI-SI3-3		ND		ND			1.1	J				ND
RI-SI33-12		ND		ND			1.8	BJ				ND
RI-SI33-8		ND		ND			1.3	BJ				ND

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CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SI34-16		ND		ND			1.2	BJ				ND
RI-SI34-20		ND		ND			1.4	BJ				ND
RI-SI34-6		ND		ND			0.9	BJ				ND
RI-SI35-12		ND		ND				ND				ND
RI-SI35-17		ND		ND				ND				ND
RI-SI35-6		ND		ND			0.9	J			1.02	J
RI-SI35-9		ND	287					ND			481	
RI-SI36-18		ND		ND			2.1	J				ND
RI-SI36-8		ND		ND			1.8	J				ND
RI-SI37-10.5		ND		ND				ND				ND
RI-SI37-3.5-8.5		ND		ND				ND				ND
RI-SI3-8.5		ND		ND			2.4	J				ND
RI-SI38-12		ND		ND			**75.2**	J				ND
RI-SI38-23		ND		ND			**7130**					ND
RI-SI38-26		ND		ND			**6280**					ND
RI-SI38-29		ND		ND			**7440**					ND
RI-SI39-6		ND		ND				ND				ND
RI-SI39-8		ND		ND				ND				ND
RI-SI4 JO-6		ND		ND			1.2	BJ				ND
RI-SI40-19		ND		ND			**2320**					ND
RI-SI40-7		ND		ND				ND				ND
RI-SI41-2		ND		ND				ND				ND
RI-SI41-6		ND		ND			**54800**				7730	BJ
RI-SI42-12		ND		ND				ND				ND
RI-SI42-7		ND		ND				ND				ND

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CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SI43-12		ND	1.94	J			**153**	B			3.37	J
RI-SI43-4		ND		ND				ND				ND
RI-SI43-8		ND	1.04	J			**27.8**	B			4.89	
RI-SI7-10		ND		ND			1.6	J				ND
RI-SI7-6		ND		ND			1.9	J				ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND	950			ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND	36			ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND	1200		**340**			ND	480	
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND	6.8			ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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CLIENT_ID	Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride		Methyl-tert-butyl-ether (MTBE)		Naphthalene	
CALM Scenario C	45,000 ug/kg		210,000 ug/kg		No Listing		150,000 ug/kg		8,760,000 ug/kg		240,000 ug/kg	
CALM C Leach	6,300 ug/kg		No GTARC		No Listing		20 ug/kg		67 ug/kg		24,000 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND	4.6	Ja		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
AP-1-10		ND		ND				ND		ND		ND
AP-1-14		ND		ND				ND		ND		ND
AP-1-6		ND		ND				ND		ND		ND
AP-2-8		ND		ND				ND		ND		ND
AP-3-10		ND		ND				ND		ND		ND
AP-3-6		ND		ND				ND		ND		ND
AP-4-12		ND		ND				ND		ND		ND
AP-4-16		ND		ND				ND		ND		ND
AP-4-8		ND		ND				ND		ND		ND
AP-5-5		ND		ND				ND		ND		ND
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		ND		ND		ND		ND
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND				ND		ND		ND
R1-SB44-3		ND		ND				ND		ND		ND
R1-SB45-3		ND		ND				ND		ND		ND
R1-SB46-3		ND		ND				ND		ND		ND
R1-SB47-3-4		ND		ND				ND		ND		ND
R1-SB49-4-5		ND		ND				ND		ND		ND
R1-SB50-5		ND		ND				ND		ND		ND
R1-SB51-3		ND		ND				ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
R1-SB52-3-4		ND		ND				ND		ND		ND
R1-SB53-5-6		ND		ND				ND		ND		ND
R1-SB54-6-7		ND		ND				ND		ND		ND
R1-SB55-3-4		ND		ND				ND		ND		ND
R1-SB56-3-4		ND		ND				ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5		ND		ND		ND		ND		ND		ND
RI-AB13-8		ND		ND		ND		ND		ND		ND
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND		ND
RI-NP01-7		ND		ND		ND		ND		ND		ND
RI-NP02-7.5		ND		ND		ND		ND		ND		ND
RI-NP03-6		ND		ND		ND		ND		ND		ND
RI-NP05-7		ND		ND		ND		ND		ND		ND
RI-NP06-6		ND		ND		ND		ND		ND		ND
RI-NP06-8		ND		ND		ND		ND		ND		ND
RI-NP07-10		ND		ND		ND		ND		ND		ND
RI-NP07-16		ND		ND		ND		ND		ND		ND
RI-NP08-17		ND	120			ND		ND		ND		ND
RI-NP08-2		ND		ND		ND		ND		ND		ND
RI-NP4-11		ND		ND		ND		ND		ND		ND
RI-NP4-2.5		ND		ND		ND		ND		ND		ND

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Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-OP01-10		ND		ND		ND		ND		ND		ND
RI-OP01-11.5		ND		ND		ND		ND		ND		ND
RI-OP02-14		ND		ND		ND		ND		ND		ND
RI-OP02-8		ND		ND		ND		ND		ND		ND
RI-OP03-2.5		ND		ND		ND		ND		ND		ND
RI-OP03-5.5		ND		ND		ND		ND		ND		ND
RI-OP04-10		ND		ND		ND		ND		ND		ND
RI-OP04-12		ND		ND		ND		ND		ND		ND
RI-OP10-13		ND		ND		ND		ND		ND		ND
RI-OP10-6		ND		ND		ND		ND		ND		ND
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND		ND
RI-OP12-9		ND		ND		ND		ND		ND		ND
RI-OP13-10.5		ND		ND		ND		ND		ND		ND
RI-OP13-6		ND		ND		ND		ND		ND		ND
RI-OP14-3		ND		ND		ND		ND		ND		ND
RI-OP14-8		ND		ND		ND		ND		ND		ND
RI-OP15-10		ND		ND		ND		ND		ND		ND
RI-OP15-7.5		ND		ND		ND		ND		ND		ND
RI-OP16-12		ND		ND		ND		ND		ND		ND
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND		ND
RI-OP17-4		ND		ND		ND		ND		ND		ND
RI-OP18-15		ND		ND		ND		ND		ND		ND
RI-OP18-5.5		ND		ND		ND		ND		ND		ND

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CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-OP19-14		ND		ND		ND		ND		ND		ND
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND		ND
RI-OP20-4		ND		ND		ND		ND		ND		ND
RI-OP21-16		ND		ND		ND		ND		ND		ND
RI-OP21-4		ND		ND	72	a		ND		ND		ND
RI-OP22-17		ND		ND		ND		ND		ND		ND
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND		ND
RI-OP23-5		ND		ND		ND		ND		ND		ND
RI-OP24-14.5		ND		ND		ND		ND		ND		ND
RI-OP24-16		ND	41		34			ND		ND		ND
RI-OP24-3		ND		ND		ND		ND		ND		ND
RI-OP25-11		ND		ND		ND		ND		ND		ND
RI-OP25-4		ND		ND		ND		ND		ND		ND
RI-OP26-1		ND		ND		ND		ND		ND		ND
RI-OP26-10.5		ND		ND		ND		ND		ND		ND
RI-OP26-6.5		ND		ND	7000			ND		ND		ND
RI-OP27-14.5		ND		ND		ND		ND		ND		ND
RI-OP27-7.5		ND		ND		ND		ND		ND		ND
RI-OP28-14		ND		ND		ND		ND		ND		ND
RI-OP28-3.5		ND		ND		ND		ND		ND		ND
RI-OP29-10		ND		ND		ND		ND		ND		ND
RI-OP29-4		ND		ND		ND		ND		ND		ND
RI-OP30-12		ND		ND		ND		ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND		ND		ND
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND		ND
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND		ND
RI-OP8-12		ND		ND		ND		ND		ND		ND
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND		ND
RI-OP9-8		ND		ND		ND		ND		ND		ND
RI-PL03-11		ND		ND		ND		ND		ND		ND
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND		ND
RI-PL05-31		ND		ND		ND		ND		ND		ND
RI-PL05-9		ND		ND		ND		ND		ND		ND
RI-PL06-2		ND		ND		ND		ND		ND		ND
RI-PL06-9		ND		ND		ND		ND		ND		ND
RI-PL07-1		ND		ND		ND		ND		ND		ND
RI-PL07-10		ND		ND		ND		ND		ND		ND
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND		ND
RI-PL09-5		ND		ND		ND		ND		ND		ND
RI-PL10-1		ND		ND		ND		ND		ND		ND
RI-PL10-10		ND		ND		ND		ND		ND		ND

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND		ND
RI-PL11-2		ND		ND		ND		ND		ND		ND
RI-PL1-15		ND		ND		ND		ND		ND		ND
RI-PL1-18		ND		ND	92	a		ND		ND		ND
RI-PL12-11		ND		ND		ND		ND		ND		ND
RI-PL12-3		ND		ND		ND		ND		ND		ND
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND		ND
RI-PL2-14		ND		ND		ND		ND		ND		ND
RI-PL2-7		ND		ND		ND		ND		ND		ND
RI-PL3-22		ND		ND		ND		ND		ND		ND
RI-PT84-1		ND		ND		ND		ND		ND		ND
RI-PT97-1		ND		ND		ND		ND		ND		ND
RI-SB-10-6		ND		ND				ND		ND		ND
RI-SB-11-3		ND		ND				ND		ND		ND
RI-SB-12-4		ND		ND				ND		ND		ND
RI-SB-13-4		ND		ND				ND		ND		ND
RI-SB-1-4		ND		ND				ND		ND		ND
RI-SB-14-3		ND		ND				ND		ND		ND
RI-SB-15-3		ND		ND				ND		ND		ND
RI-SB-16-5		ND		ND				ND		ND		ND
RI-SB-17-3		ND		ND				ND		ND		ND
RI-SB-18-7		ND		ND				ND		ND		ND
RI-SB-19-5		ND		ND				ND		ND		ND
RI-SB-20-2		ND		ND				ND		ND		ND

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Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SB-21-3		ND		ND				ND		ND		ND
RI-SB-22-6		ND		ND				ND		ND		ND
RI-SB-23-4		ND		ND				ND		ND		ND
RI-SB-24-3		ND		ND				ND		ND		ND
RI-SB-2-5		ND		ND				ND		ND		ND
RI-SB-25-3		ND		ND				ND		ND		ND
RI-SB-26-3		ND		ND				ND		ND		ND
RI-SB-27-3		ND		ND				ND		ND		ND
RI-SB-28-4.5		ND		ND				ND		ND		ND
RI-SB-29-2.5		ND		ND				ND		ND		ND
RI-SB-30-1		ND		ND				ND		ND		ND
RI-SB-31-5		ND		ND				ND		ND		ND
RI-SB-32-5.5-6.5		ND		ND				ND		ND		ND
RI-SB-3-3		ND		ND				ND		ND		ND
RI-SB-34-5		ND		ND				ND		ND		ND
RI-SB-35-5		ND		ND				ND		ND		ND
RI-SB-36-7		ND		ND				ND		ND		ND
RI-SB-37-3-4		ND		ND				ND		ND		ND
RI-SB-38-5		ND		ND				ND		ND		ND
RI-SB-39-3		ND		ND				ND		ND		ND
RI-SB-40-4-5		ND		ND				ND		ND		ND
RI-SB-41-5		ND		ND				ND		ND		ND
RI-SB-42-3		ND		ND				ND		ND		ND
RI-SB-4-4-5		ND		ND				ND		ND		ND
RI-SB-5-5		ND		ND				ND		ND		ND

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CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SB-6-3		ND		ND				ND		ND		ND
RI-SB-7-2.5		ND		ND				ND		ND		ND
RI-SB-8-3		ND		ND				ND		ND		ND
RI-SB-9-5		ND		ND				ND		ND		ND
RISF-10-11-12		ND		ND				ND		ND		ND
RISF-10-5-6		ND		ND				ND		ND		ND
RISF-11-1-2		ND		ND				ND		ND		ND
RISF-11-8-9		ND		ND				ND		ND		ND
RISF-12-4-5		ND		ND				ND		ND		ND
RISF-12-8		ND		ND				ND		ND		ND
RISF-13-1-2		ND		ND				ND		ND		ND
RISF-13-9-10		ND		ND				ND		ND		ND
RISF-14-10-11		ND		ND				ND		ND		ND
RISF-14-21-22		ND		ND				ND		ND		ND
RISF-14-7-8		ND		ND				ND		ND		ND
RI-SF15-4		ND		ND		ND		ND		ND		ND
RI-SF16-11		ND		ND		ND		ND		ND		ND
RI-SF16-17		ND		ND		ND		ND		ND		ND
RI-SF16-6		ND		ND		ND		ND		ND		ND
RI-SF17-12		ND		ND		ND		ND		ND		ND
RI-SF17-6		ND		ND		ND		ND		ND		ND
RI-SF18-10		ND		ND		ND		ND		ND		ND
RI-SF18-6		ND		ND		ND		ND		ND		ND
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND				ND		ND		ND
RISF-2-14-15		ND		ND				ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND		ND
RI-SF22-9		ND		ND		ND		ND		ND		ND
RI-SF23-17		ND		ND		ND		ND		ND		ND
RI-SF23-3		ND		ND		ND		ND		ND		ND
RISF-3-10-11		ND		ND				ND		ND		ND
RISF-3-4-5		ND		ND				ND		ND		ND
RISF-4-1-2		ND		ND				ND		ND		ND
RISF-4-8-9		ND		ND				ND		ND		ND
RISF-5-16		ND		ND				ND		ND		ND
RISF-5-4		ND		ND				ND		ND		ND
RISF-6-5-6		ND		ND				ND		ND		ND
RISF-6-9-10		ND		ND				ND		ND		ND
RISF-8-15-16		ND		ND				ND		ND		ND
RISF-8-5-6		ND		ND				ND		ND		ND
RI-SI1-2		ND		ND				ND		ND		ND
RI-SI1-6		ND		ND				ND		ND		ND
RI-SI2-10		ND		ND				ND		ND		ND
RI-SI2-13		ND		ND				ND		ND		ND
RI-SI22-22		ND		ND				ND		ND		ND
RI-SI22-27		ND		ND				ND		ND		ND

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CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SI2-3		ND		ND				ND		ND		ND
RI-SI23-10		ND		ND				ND		ND		ND
RI-SI23-6		ND		ND				ND		ND		ND
RI-SI24-10		ND		ND				ND		ND		ND
RI-SI24-19		ND		ND				ND		ND		ND
RI-SI25-1		ND		ND				ND		ND		ND
RI-SI25-12		ND		ND				ND		ND		ND
RI-SI25-6		ND		ND				ND		ND		ND
RI-SI2-6		ND		ND				ND		ND		ND
RI-SI26-18		ND		ND				ND		ND		ND
RI-SI26-8		ND		ND				ND		ND		ND
RI-SI27-10		ND		ND				ND		ND		ND
RI-SI27-6		ND		ND				ND		ND		ND
RI-SI29-6		ND		ND				ND		ND		ND
RI-SI29-9		ND		ND				ND		ND		ND
RI-SI30-11		ND	1.38	J				ND		ND		ND
RI-SI30-16	2.24		19					ND	1.12	J		ND
RI-SI30-6		ND		ND				ND		ND		ND
RI-SI31-12		ND		ND				ND		ND		ND
RI-SI31-21		ND		ND				ND		ND		ND
RI-SI32-15		ND		ND				ND		ND		ND
RI-SI32-8		ND		ND				ND		ND		ND
RI-SI3-3		ND		ND				ND		ND		ND
RI-SI33-12		ND		ND				ND		ND		ND
RI-SI33-8		ND		ND				ND		ND		ND

ND - Non detect
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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SI34-16		ND		ND				ND		ND		ND
RI-SI34-20		ND		ND				ND		ND		ND
RI-SI34-6		ND		ND				ND		ND		ND
RI-SI35-12		ND		ND				ND		ND		ND
RI-SI35-17		ND		ND				ND		ND		ND
RI-SI35-6		ND		ND				ND		ND		ND
RI-SI35-9	253		371				185			ND		ND
RI-SI36-18		ND		ND				ND		ND		ND
RI-SI36-8		ND		ND				ND		ND		ND
RI-SI37-10.5		ND		ND				ND		ND		ND
RI-SI37-3.5-8.5		ND		ND				ND		ND		ND
RI-SI3-8.5		ND		ND				ND		ND		ND
RI-SI38-12		ND		ND				ND		ND		ND
RI-SI38-23		ND		ND				ND		ND		ND
RI-SI38-26		ND		ND				ND		ND		ND
RI-SI38-29		ND		ND				ND		ND		ND
RI-SI39-6		ND		ND				ND		ND		ND
RI-SI39-8		ND		ND				ND		ND		ND
RI-SI4 JO-6		ND		ND				ND		ND		ND
RI-SI40-19		ND		ND				ND		ND		ND
RI-SI40-7		ND		ND				ND		ND		ND
RI-SI41-2		ND		ND				ND		ND		ND
RI-SI41-6		ND	7020	J				ND		ND		ND
RI-SI42-12		ND		ND				ND		ND		ND
RI-SI42-7		ND		ND				ND		ND		ND

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ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SI43-12	2.96		3.88					ND	1.43	J		ND
RI-SI43-4		ND		ND				ND		ND		ND
RI-SI43-8		ND	2.06					ND		ND		ND
RI-SI7-10		ND		ND				ND		ND		ND
RI-SI7-6		ND		ND				ND		ND		ND
RI-SL01-11		ND		ND		ND		ND		ND		ND
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND	290			ND		ND		ND
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND	14			ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND		ND
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND	430			ND		ND		ND
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND		ND
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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Springfield, Missouri

CLIENT_ID	n-Butylbenzene		n-Propylbenzene		o-Xylene		p-Isopropyltoluene		sec-Butylbenzene		Styrene	
CALM Scenario C	No Listing		No Listing		418,000 ug/kg		No Listing		No Listing		1,500,000 ug/kg	
CALM C Leach	No Listing		No Listing		16,000 ug/kg		No Listing		No Listing		9,400 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND		ND	2.8	Ja		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
AP-1-10		ND		ND		ND		ND		ND		ND
AP-1-14		ND		ND		ND		ND		ND	0.8	J
AP-1-6		ND		ND		ND		ND		ND		ND
AP-2-8		ND		ND		ND		ND		ND		ND
AP-3-10		ND		ND		ND		ND		ND		ND
AP-3-6		ND		ND		ND		ND		ND		ND
AP-4-12		ND		ND		ND	1.9			ND		ND
AP-4-16		ND		ND		ND	3.1			ND		ND
AP-4-8		ND		ND		ND	1.3			ND		ND
AP-5-5		ND		ND		ND		ND		ND	61.5	
GT-01-6-7.5		ND		ND		ND		ND		ND		ND
GT-03-8.5-10		ND		ND		ND		ND		ND		ND
GT-05-3.5-5		ND		ND		ND		ND		ND		ND
GT-20-6-7.5		ND		ND		M		ND		ND	**41000**	
GT-27-3.5-5		ND		ND		ND		ND		ND		ND
GT-29-10-11.5		ND		ND		ND		ND		ND		ND
GT-30-3.5-5		ND		ND		ND		ND		ND		ND
R1-SB43-3		ND		ND		ND		ND		ND		ND
R1-SB44-3		ND		ND		ND		ND		ND		ND
R1-SB45-3		ND		ND		ND		ND		ND		ND
R1-SB46-3		ND		ND		ND		ND		ND	69.5	
R1-SB47-3-4		ND		ND	1	J		ND		ND		ND
R1-SB49-4-5		ND		ND		ND		ND		ND	1.3	
R1-SB50-5		ND		ND		ND		ND		ND		ND
R1-SB51-3		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
R1-SB52-3-4		ND		ND		ND		ND		ND		ND
R1-SB53-5-6		ND		ND		ND		ND		ND		ND
R1-SB54-6-7		ND		ND		ND		ND		ND		ND
R1-SB55-3-4		ND		ND		ND		ND		ND	**110**	
R1-SB56-3-4		ND		ND		ND		ND		ND		ND
RI-AB04-11		ND		ND		ND		ND		ND		ND
RI-AB04-6.5		ND		ND		ND		ND		ND	6.2	
RI-AB13-8		ND		ND		ND		ND		ND	4.5	
RI-AB14-5		ND		ND		ND		ND		ND		ND
RI-AB2-6		ND		ND		ND		ND		ND		ND
RI-AB28-10.5		ND		ND		ND		ND		ND		ND
RI-AB45-7		ND		ND		ND		ND		ND		ND
RI-NP01-3		ND		ND		ND		ND		ND	**3500**	
RI-NP01-7		ND		ND		ND		ND		ND	**1200**	
RI-NP02-7.5		ND		ND		ND		ND		ND	22	
RI-NP03-6		ND		ND		ND		ND		ND	15	
RI-NP05-7		ND		ND		ND		ND		ND	**73000**	
RI-NP06-6		ND		ND		ND		ND		ND	**430**	
RI-NP06-8		ND		ND		ND		ND		ND	**9800**	
RI-NP07-10		ND		ND		ND		ND		ND	5.8	
RI-NP07-16		ND		ND		ND		ND		ND	**12000**	
RI-NP08-17		ND		ND		ND		ND		ND	**21000**	
RI-NP08-2		ND		ND		ND		ND		ND	**100**	
RI-NP4-11		ND		ND		ND		ND		ND	**14000**	
RI-NP4-2.5		ND		ND		ND		ND		ND	**2000**	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-OP01-10		ND		ND		ND		ND		ND	**99000**	
RI-OP01-11.5		ND		ND		ND		ND		ND	**110000**	
RI-OP02-14		ND		ND	110			ND		ND	**120000**	
RI-OP02-8		ND		ND	120			ND		ND	**110000**	
RI-OP03-2.5		ND		ND		ND		ND		ND	**4100**	
RI-OP03-5.5		ND		ND		ND		ND		ND	**1300**	
RI-OP04-10		ND		ND		ND		ND		ND	**46000**	
RI-OP04-12		ND		ND		ND		ND		ND	**65000**	
RI-OP10-13		ND	**150**			ND		ND		ND	**75000**	
RI-OP10-6		ND		ND		ND		ND		ND	**650**	
RI-OP11-4.5		ND		ND		ND		ND		ND		ND
RI-OP12-14		ND		ND		ND		ND		ND	**240**	
RI-OP12-9		ND		ND		ND		ND		ND	35	
RI-OP13-10.5		ND		ND		ND		ND		ND	**2000**	
RI-OP13-6		ND		ND		ND		ND		ND	**1900**	
RI-OP14-3		ND		ND		ND		ND		ND	11	
RI-OP14-8		ND		ND		ND		ND		ND	**1500**	
RI-OP15-10		ND		ND		ND		ND		ND	**7700**	
RI-OP15-7.5		ND		ND		ND		ND		ND	**2000**	
RI-OP16-12		ND		ND		ND		ND		ND	**670**	
RI-OP16-4		ND		ND		ND		ND		ND		ND
RI-OP17-12		ND		ND		ND		ND		ND	**1000**	
RI-OP17-4		ND		ND		ND		ND		ND	16	
RI-OP18-15		ND		ND		ND		ND		ND	**12000**	
RI-OP18-5.5		ND		ND		ND		ND		ND	**600**	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-OP19-14		ND		ND		ND		ND		ND	**220000**	
RI-OP19-6		ND		ND		ND		ND		ND		ND
RI-OP20-13		ND		ND		ND		ND		ND	**29000**	
RI-OP20-4		ND		ND		ND		ND		ND	**4800**	
RI-OP21-16		ND		ND		ND		ND		ND	**120000**	
RI-OP21-4		ND			290			ND		ND	**510000**	
RI-OP22-17		ND		ND		ND		ND		ND	**2300**	
RI-OP22-5		ND		ND		ND		ND		ND		ND
RI-OP23-3		ND		ND		ND		ND		ND	98	
RI-OP23-5		ND		ND		ND		ND		ND	**4800**	
RI-OP24-14.5		ND		ND		ND	39			ND	**190**	
RI-OP24-16		ND	38		39		220			ND	**980**	
RI-OP24-3		ND		ND		ND		ND		ND	10	
RI-OP25-11		ND		ND		ND		ND		ND	56	
RI-OP25-4		ND		ND		ND		ND		ND	16	
RI-OP26-1		ND		ND		ND		ND		ND	**7800**	
RI-OP26-10.5		ND		ND		ND		ND		ND	**220000**	
RI-OP26-6.5		ND		ND		ND		ND		ND	**7000000**	
RI-OP27-14.5		ND		ND		ND		ND		ND	**4300**	
RI-OP27-7.5		ND		ND		ND		ND		ND	81	
RI-OP28-14		ND		ND		ND		ND		ND	**130000**	
RI-OP28-3.5		ND		ND		ND		ND		ND	**450**	
RI-OP29-10		ND		ND		ND		ND		ND	**52000**	
RI-OP29-4		ND	**290**			ND		ND		ND	**23000**	
RI-OP30-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-OP30-3		ND		ND		ND		ND		ND		ND
RI-OP5-15		ND		ND		ND		ND		ND	49	
RI-OP5-4.5		ND		ND		ND		ND		ND		ND
RI-OP6-1.5		ND		ND		ND		ND		ND		ND
RI-OP6-12		ND		ND		ND		ND		ND	87	
RI-OP7-2.5		ND		ND		ND		ND		ND		ND
RI-OP7-9		ND		ND		ND		ND		ND	22	
RI-OP8-12		ND		ND		ND	5.2	Ja		ND	**370**	
RI-OP8-4		ND		ND		ND		ND		ND		ND
RI-OP9-15		ND		ND		ND		ND		ND	**5900**	
RI-OP9-8		ND	**140**			ND		ND		ND	**1500**	
RI-PL03-11		ND		ND		ND		ND		ND	**790**	
RI-PL04-1		ND		ND		ND		ND		ND		ND
RI-PL04-14		ND		ND		ND		ND		ND	**1300**	
RI-PL05-31		ND		ND		ND		ND		ND	**7800**	
RI-PL05-9		ND		ND		ND		ND		ND	**15000**	
RI-PL06-2		ND		ND		ND		ND		ND	**980**	A
RI-PL06-9		ND		ND		ND		ND		ND	**5500**	
RI-PL07-1		ND		ND		ND		ND		ND	17	
RI-PL07-10		ND		ND		ND		ND		ND	**13000**	
RI-PL08-1		ND		ND		ND		ND		ND		ND
RI-PL08-14		ND		ND		ND		ND		ND	**140000**	
RI-PL09-5		ND		ND		ND		ND		ND	**110**	
RI-PL10-1		ND		ND		ND		ND		ND	**130**	
RI-PL10-10		ND		ND		ND		ND		ND	**1400**	

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Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-PL11-13		ND		ND		ND		ND		ND	14	
RI-PL11-2		ND		ND		ND		ND		ND	5	
RI-PL1-15		ND		ND		ND		ND		ND	**350**	
RI-PL1-18		ND		ND		ND		ND		ND	**7800**	
RI-PL12-11		ND		ND		ND		ND		ND	9.2	
RI-PL12-3		ND		ND		ND		ND		ND	7.6	
RI-PL13-1		ND		ND		ND		ND		ND		ND
RI-PL13-10		ND		ND		ND		ND		ND	23	
RI-PL2-14		ND		ND		ND		ND		ND	**5100**	
RI-PL2-7		ND		ND		ND		ND		ND	**140**	
RI-PL3-22		ND		ND		ND		ND		ND	**190**	
RI-PT84-1		ND		ND		ND		ND		ND	**2700**	
RI-PT97-1		ND		ND		ND		ND		ND	**1700**	
RI-SB-10-6		ND		ND		ND		ND		ND		ND
RI-SB-11-3		ND		ND		ND		ND		ND		ND
RI-SB-12-4		ND		ND		ND		ND		ND		ND
RI-SB-13-4		ND		ND		ND		ND		ND		ND
RI-SB-1-4		ND		ND		ND		ND		ND		ND
RI-SB-14-3		ND		ND		ND		ND		ND		ND
RI-SB-15-3		ND		ND		ND		ND		ND		ND
RI-SB-16-5		ND		ND		ND		ND		ND	0.7	J
RI-SB-17-3		ND		ND		ND		ND		ND	2.5	
RI-SB-18-7		ND		ND		ND		ND		ND	8.3	
RI-SB-19-5		ND		ND	0.9	J	3.2			ND	**3760**	
RI-SB-20-2		ND		ND		ND		ND		ND		ND

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M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SB-21-3		ND		ND		ND		ND		ND		ND
RI-SB-22-6		ND		ND		ND		ND		ND	46.7	
RI-SB-23-4		ND		ND		ND		ND		ND		ND
RI-SB-24-3		ND		ND		ND		ND		ND		ND
RI-SB-2-5		ND		ND		ND		ND		ND		ND
RI-SB-25-3		ND		ND		ND		ND		ND		ND
RI-SB-26-3		ND		ND		ND		ND		ND		ND
RI-SB-27-3		ND		ND		ND		ND		ND		ND
RI-SB-28-4.5		ND		ND		ND		ND		ND		ND
RI-SB-29-2.5		ND		ND		ND		ND		ND	44.3	
RI-SB-30-1		ND		ND		ND		ND		ND	23.1	
RI-SB-31-5		ND		ND		ND		ND		ND	18.7	
RI-SB-32-5.5-6.5		ND		ND		ND		ND		ND		ND
RI-SB-3-3		ND		ND		ND		ND		ND		ND
RI-SB-34-5		ND		ND		ND		ND		ND	46.5	
RI-SB-35-5		ND		ND		ND		ND		ND	1.4	
RI-SB-36-7		ND		ND		ND		ND		ND	**147**	
RI-SB-37-3-4		ND		ND		ND		ND		ND	34.4	
RI-SB-38-5		ND		ND		ND		ND		ND	32.7	
RI-SB-39-3		ND		ND		ND		ND		ND		ND
RI-SB-40-4-5		ND		ND		ND		ND		ND		ND
RI-SB-41-5		ND		ND		ND		ND		ND		ND
RI-SB-42-3		ND		ND		ND		ND		ND		ND
RI-SB-4-4-5		ND		ND		ND		ND		ND	8.2	
RI-SB-5-5		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SB-6-3		ND		ND		ND		ND		ND		ND
RI-SB-7-2.5		ND		ND		ND		ND		ND		ND
RI-SB-8-3		ND		ND		ND		ND		ND		ND
RI-SB-9-5		ND		ND		ND		ND		ND		ND
RISF-10-11-12		ND		ND		ND		ND		ND		ND
RISF-10-5-6		ND		ND		ND		ND		ND		ND
RISF-11-1-2		ND		ND		ND		ND		ND	55.8	
RISF-11-8-9		ND		ND		ND		ND		ND	25.9	
RISF-12-4-5		ND		ND		ND		ND		ND		ND
RISF-12-8		ND		ND		ND		ND		ND		ND
RISF-13-1-2		ND		ND		ND		ND		ND	13.8	
RISF-13-9-10		ND		ND		ND		ND		ND	9.3	
RISF-14-10-11		ND	12.5		19.8		35			ND	**119000**	
RISF-14-21-22		ND	8.5		10.9		125			ND	**63300**	
RISF-14-7-8		ND	4.4		9.5		6.1			ND	**57100**	
RI-SF15-4		ND		ND		ND		ND		ND	**250**	
RI-SF16-11		ND		ND		ND		ND		ND	**120000**	
RI-SF16-17		ND		ND		ND	420			ND	**1300**	
RI-SF16-6		ND		ND		ND		ND		ND	**21000**	
RI-SF17-12		ND		ND		ND		ND		ND	**4900**	
RI-SF17-6		ND		ND		ND		ND		ND	**1700**	
RI-SF18-10		ND		ND		ND		ND		ND	**28000**	
RI-SF18-6		ND		ND		ND		ND		ND	**6200**	
RI-SF19-3		ND		ND		ND		ND		ND		ND
RI-SF19-9		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SF20-1		ND		ND		ND		ND		ND		ND
RI-SF21-0.5		ND		ND		ND		ND		ND		ND
RISF-2-1-2		ND		ND		ND		ND		ND		ND
RISF-2-14-15		ND		ND		J		ND		ND		ND
RI-SF21-7.5		ND		ND		ND		ND		ND		ND
RI-SF22-13		ND		ND		ND		ND		ND	**20000**	
RI-SF22-9		ND		ND		ND		ND		ND	**4900**	
RI-SF23-17		ND		ND		ND		ND		ND	**9400**	
RI-SF23-3		ND		ND		ND		ND		ND	6	
RISF-3-10-11		ND		ND		ND		ND		ND		ND
RISF-3-4-5		ND		ND		ND		ND		ND		ND
RISF-4-1-2		ND		ND		ND		ND		ND	52.3	
RISF-4-8-9		ND		ND		ND		ND		ND	35.9	
RISF-5-16		ND		ND		ND	25.5			ND	**573**	
RISF-5-4		ND		ND		ND		ND		ND	9.3	
RISF-6-5-6		ND		ND		ND		ND		ND		ND
RISF-6-9-10		ND		ND		ND		ND		ND		ND
RISF-8-15-16		ND		ND		ND		ND		ND		ND
RISF-8-5-6		ND		ND		ND		ND		ND	1.1	J
RI-SI1-2		ND		ND		ND		ND		ND		ND
RI-SI1-6		ND		ND		ND		ND		ND		ND
RI-SI2-10		ND		ND		ND		ND		ND		ND
RI-SI2-13		ND		ND		ND		ND		ND		ND
RI-SI22-22		ND		ND		ND	2			ND	**3770**	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SI22-27		ND		ND		ND	1	J		ND	**2380**	
RI-SI2-3		ND		ND		ND		ND		ND		ND
RI-SI23-10		ND		ND		ND		ND		ND	**382**	
RI-SI23-6		ND		ND		ND		ND		ND	60.7	
RI-SI24-10		ND		ND		ND		ND		ND	**376**	
RI-SI24-19		ND	1.9			ND		ND		ND	**229**	
RI-SI25-1		ND		ND		ND		ND		ND	**1170**	
RI-SI25-12		ND		ND		ND		ND		ND	**105**	
RI-SI25-6		ND		ND		ND		ND		ND	7.7	
RI-SI2-6		ND		ND		ND		ND		ND		ND
RI-SI26-18		ND	1.3	J	0.8	J		ND		ND	**208**	
RI-SI26-8		ND		ND		ND		ND		ND	48.4	
RI-SI27-10		ND	1.6	J		ND		ND		ND	**189**	
RI-SI27-6		ND		ND		ND		ND		ND	70.3	
RI-SI29-6		ND		ND		ND		ND		ND	5.6	
RI-SI29-9		ND		ND		ND		ND		ND	27.8	
RI-SI30-11		ND	1.9	J	89.4		17			ND	**44800**	B
RI-SI30-16		ND	11.9		151		11.1			ND	**72100**	B
RI-SI30-6		ND		ND	4.5		1.7	J		ND	**4950**	B
RI-SI31-12		ND		ND		ND		ND		ND	14.1	
RI-SI31-21		ND		ND		ND		ND		ND	**1270**	
RI-SI32-15		ND		ND		ND		ND		ND	**185**	
RI-SI32-8		ND		ND		ND		ND		ND	3.4	
RI-SI3-3		ND		ND		ND		ND		ND	3.6	
RI-SI33-12		ND		ND		ND		ND		ND	2.9	
RI-SI33-8		ND		ND		ND		ND		ND	1.7	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SI34-16		ND		ND		ND		ND		ND	4.7	
RI-SI34-20		ND		ND		ND	2			ND	99.7	
RI-SI34-6		ND		ND		ND		ND		ND	5.8	
RI-SI35-12		ND		ND	74.3		47.3	J		ND	**175000**	
RI-SI35-17		ND		ND		ND	115			ND	**1140**	
RI-SI35-6		ND		ND		ND		ND		ND	29.5	
RI-SI35-9		ND		ND	498		337			ND	**2130**	
RI-SI36-18		ND		ND		ND		ND		ND		ND
RI-SI36-8		ND		ND		ND		ND		ND	3.1	
RI-SI37-10.5		ND		ND	2.2	J		ND		ND	**503**	B
RI-SI37-3.5-8.5		ND		ND		ND		ND		ND	12.2	
RI-SI3-8.5		ND		ND	1.7	J		ND		ND	8.6	
RI-SI38-12		ND	3.9			ND		ND		ND	**3100**	B
RI-SI38-23		ND		ND		ND		ND		ND	**41800**	B
RI-SI38-26		ND		ND		ND		ND		ND	**62800**	B
RI-SI38-29		ND		ND		ND		ND		ND	**80700**	B
RI-SI39-6		ND	0.9	J		ND		ND		ND	**586**	
RI-SI39-8		ND	1.7			ND		ND		ND	**1070**	
RI-SI4 JO-6		ND		ND		ND		ND		ND	0.8	J
RI-SI40-19		ND	11.3		2.7		0.6	J		ND	**13200**	
RI-SI40-7		ND	1.7		0.7	J		ND		ND	**3480**	
RI-SI41-2		ND	28		1	J		ND		ND	**44000**	B
RI-SI41-6	8440	J	**59800**		**77300**			ND		ND	**1.16E+08**	B
RI-SI42-12		ND		ND		ND		ND		ND	**10700**	
RI-SI42-7		ND		ND		ND		ND		ND	**248**	

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SI43-12		ND	4.3		6.7		132			ND	**61200**	B
RI-SI43-4		ND	0.7	J		ND	2.1			ND	**8560**	B
RI-SI43-8		ND	2.9		6			ND		ND	**22500**	B
RI-SI7-10		ND		ND		ND		ND		ND	17.7	
RI-SI7-6		ND		ND		ND		ND		ND	0.9	J
RI-SL01-11		ND		ND		ND		ND		ND	3.7	Ja
RI-SL01-5		ND		ND		ND		ND		ND		ND
RI-SL02-5		ND		ND		ND		ND		ND		ND
RI-SL02-9		ND		ND		ND		ND		ND	**860**	
RI-SL03-5		ND		ND		ND		ND		ND		ND
RI-SL03-9		ND		ND				ND		ND		ND
RI-SL04-15		ND		ND		ND		ND		ND	17	
RI-SL04-9		ND		ND		ND		ND		ND		ND
RI-SL05-9		ND		ND		ND		ND		ND	**1300**	
RI-SL06-12		ND		ND		ND		ND		ND		ND
RI-SL06-8		ND		ND		ND		ND		ND		ND
RI-SL08-10		ND		ND		ND		ND		ND		ND
RI-SL08-5		ND		ND		ND		ND		ND		ND
RI-SL09-15		ND		ND		ND		ND		ND	43	
RI-SL09-5		ND		ND		ND		ND		ND		ND
RI-SL10-5		ND		ND		ND		ND		ND		ND
RI-SL10-6		ND		ND		ND		ND		ND		ND
RI-SL11-6		ND		ND		ND		ND		ND		ND
RI-SL11-9		ND		ND		ND		ND		ND		ND
RI-SL12-12		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene	
CALM Scenario C	No Listing		120,000 ug/kg		650,000 ug/kg		No Listing		No Listing		89,000 ug/kg	
CALM C Leach	No Listing		100 ug/kg		3,700 ug/kg		No Listing		No Listing		100 ug/kg	
RI-SL12-6.5		ND		ND		ND		ND		ND		ND
RI-SL13-10		ND		ND		ND		ND		ND		ND
RI-SL13-3		ND		ND		ND		ND		ND		ND
RI-SL14-10		ND		ND	3.3	Ja		ND		ND		ND
RI-SL14-6		ND		ND		ND		ND		ND		ND

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
AP-1-10		ND		ND		ND			
AP-1-14		ND		ND		ND			
AP-1-6		ND		ND		ND			
AP-2-8		ND		ND		ND			
AP-3-10		ND		ND		ND			
AP-3-6		ND		ND		ND			
AP-4-12		ND	18.8			ND			
AP-4-16		ND	**25.3**			ND			
AP-4-8		ND	18.1			ND			
AP-5-5		ND		ND		ND			
GT-01-6-7.5		ND		ND					
GT-03-8.5-10		ND		ND					
GT-05-3.5-5		ND		ND					
GT-20-6-7.5		ND		ND					
GT-27-3.5-5		ND		ND					
GT-29-10-11.5		ND		ND					
GT-30-3.5-5		ND		ND					
R1-SB43-3		ND		ND		ND			
R1-SB44-3		ND		ND		ND			
R1-SB45-3		ND		ND		ND			
R1-SB46-3		ND		ND		ND			
R1-SB47-3-4		ND		ND		ND			
R1-SB49-4-5		ND		ND		ND			
R1-SB50-5		ND		ND		ND			
R1-SB51-3		ND		ND		ND			

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
R1-SB52-3-4		ND		ND		ND			
R1-SB53-5-6		ND		ND		ND			
R1-SB54-6-7		ND		ND		ND			
R1-SB55-3-4		ND		ND		ND			
R1-SB56-3-4		ND		ND		ND			
RI-AB04-11		ND	**87**						
RI-AB04-6.5		ND	**38**						
RI-AB13-8		ND		ND					
RI-AB14-5		ND		ND					
RI-AB2-6		ND		ND					
RI-AB28-10.5		ND		ND					
RI-AB45-7		ND	8.5						
RI-NP01-3		ND		ND					
RI-NP01-7		ND		ND					
RI-NP02-7.5		ND		ND					
RI-NP03-6		ND		ND					
RI-NP05-7		ND		ND					
RI-NP06-6		ND		ND					
RI-NP06-8		ND		ND					
RI-NP07-10		ND		ND					
RI-NP07-16		ND		ND					
RI-NP08-17		ND		ND					
RI-NP08-2		ND		ND					
RI-NP4-11		ND		ND					
RI-NP4-2.5		ND		ND					

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-OP01-10		ND		ND					
RI-OP01-11.5		ND		ND					
RI-OP02-14		ND		ND					
RI-OP02-8		ND		ND					
RI-OP03-2.5		ND		ND					
RI-OP03-5.5		ND		ND					
RI-OP04-10		ND		ND					
RI-OP04-12		ND		ND					
RI-OP10-13		ND		ND					
RI-OP10-6		ND		ND					
RI-OP11-4.5		ND		ND					
RI-OP12-14		ND		ND					
RI-OP12-9		ND		ND					
RI-OP13-10.5		ND		ND					
RI-OP13-6		ND		ND					
RI-OP14-3		ND		ND					
RI-OP14-8		ND		ND					
RI-OP15-10		ND		ND					
RI-OP15-7.5		ND		ND					
RI-OP16-12		ND		ND					
RI-OP16-4		ND		ND					
RI-OP17-12		ND		ND					
RI-OP17-4		ND		ND					
RI-OP18-15		ND		ND					
RI-OP18-5.5		ND		ND					

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-OP19-14		ND		ND					
RI-OP19-6		ND		ND					
RI-OP20-13		ND		ND					
RI-OP20-4		ND		ND					
RI-OP21-16		ND		ND					
RI-OP21-4		ND		ND					
RI-OP22-17		ND		ND					
RI-OP22-5		ND		ND					
RI-OP23-3		ND		ND					
RI-OP23-5		ND		ND					
RI-OP24-14.5		ND		ND					
RI-OP24-16		ND		ND					
RI-OP24-3		ND		ND					
RI-OP25-11		ND		ND					
RI-OP25-4		ND		ND					
RI-OP26-1		ND		ND					
RI-OP26-10.5		ND		ND					
RI-OP26-6.5		ND		ND					
RI-OP27-14.5		ND		ND					
RI-OP27-7.5		ND		ND					
RI-OP28-14		ND		ND					
RI-OP28-3.5		ND		ND					
RI-OP29-10		ND		ND					
RI-OP29-4		ND		ND					
RI-OP30-12		ND		ND					

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-OP30-3		ND		ND					
RI-OP5-15		ND		ND					
RI-OP5-4.5		ND		ND					
RI-OP6-1.5		ND		ND					
RI-OP6-12		ND		ND					
RI-OP7-2.5		ND		ND					
RI-OP7-9		ND		ND					
RI-OP8-12		ND		ND					
RI-OP8-4		ND		ND					
RI-OP9-15		ND		ND					
RI-OP9-8		ND		ND					
RI-PL03-11		ND		ND					
RI-PL04-1		ND		ND					
RI-PL04-14		ND	**24**						
RI-PL05-31		ND		ND					
RI-PL05-9		ND	**91**						
RI-PL06-2		ND		ND					
RI-PL06-9		ND		ND					
RI-PL07-1		ND		ND					
RI-PL07-10		ND		ND					
RI-PL08-1		ND		ND					
RI-PL08-14		ND	**780**						
RI-PL09-5		ND		ND					
RI-PL10-1		ND		ND					
RI-PL10-10		ND		ND					

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-PL11-13		ND		ND					
RI-PL11-2		ND		ND					
RI-PL1-15		ND	**110**						
RI-PL1-18		ND	**1600**						
RI-PL12-11		ND		ND					
RI-PL12-3		ND		ND					
RI-PL13-1		ND		ND					
RI-PL13-10		ND		ND					
RI-PL2-14		ND		ND					
RI-PL2-7		ND	3.9	Ja					
RI-PL3-22		ND		ND					
RI-PT84-1		ND		ND					
RI-PT97-1		ND		ND					
RI-SB-10-6		ND		ND		ND			
RI-SB-11-3		ND		ND		ND			
RI-SB-12-4		ND		ND		ND			
RI-SB-13-4		ND		ND		ND			
RI-SB-1-4		ND		ND		ND			
RI-SB-14-3		ND		ND		ND			
RI-SB-15-3		ND		ND		ND			
RI-SB-16-5		ND		ND		ND			
RI-SB-17-3		ND		ND		ND			
RI-SB-18-7		ND		ND		ND			
RI-SB-19-5		ND	**119**			ND			
RI-SB-20-2		ND		ND		ND			

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
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M - Manually Itegrated Compound

Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SB-21-3		ND		ND		ND			
RI-SB-22-6		ND		ND		ND			
RI-SB-23-4		ND		ND		ND			
RI-SB-24-3		ND	2.4			ND			
RI-SB-2-5		ND		ND		ND			
RI-SB-25-3		ND		ND		ND			
RI-SB-26-3		ND		ND		ND			
RI-SB-27-3		ND		ND		ND			
RI-SB-28-4.5		ND		ND		ND			
RI-SB-29-2.5		ND		ND		ND			
RI-SB-30-1		ND		ND		ND			
RI-SB-31-5		ND		ND		ND			
RI-SB-32-5.5-6.5		ND		ND		ND			
RI-SB-3-3		ND		ND		ND			
RI-SB-34-5		ND		ND		ND			
RI-SB-35-5		ND		ND		ND			
RI-SB-36-7		ND		ND		ND			
RI-SB-37-3-4		ND		ND		ND			
RI-SB-38-5		ND		ND		ND			
RI-SB-39-3		ND		ND		ND			
RI-SB-40-4-5		ND		ND		ND			
RI-SB-41-5		ND		ND		ND			
RI-SB-42-3		ND		ND		ND			
RI-SB-4-4-5		ND		ND		ND			
RI-SB-5-5		ND		ND		ND			

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A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
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H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SB-6-3		ND		ND		ND			
RI-SB-7-2.5		ND		ND		ND			
RI-SB-8-3		ND		ND		ND			
RI-SB-9-5		ND		ND		ND			
RISF-10-11-12		ND		ND		ND			
RISF-10-5-6		ND		ND		ND			
RISF-11-1-2		ND		ND		ND			
RISF-11-8-9		ND		ND		ND			
RISF-12-4-5		ND		ND		ND			
RISF-12-8		ND		ND		ND			
RISF-13-1-2		ND		ND		ND			
RISF-13-9-10		ND		ND		ND			
RISF-14-10-11		ND	**34.5**		6.8				
RISF-14-21-22		ND	**1700**		10.3				
RISF-14-7-8		ND	2.4	J	4				
RI-SF15-4		ND		ND					
RI-SF16-11		ND		ND					
RI-SF16-17		ND	**2500**						
RI-SF16-6		ND		ND					
RI-SF17-12		ND	**200**						
RI-SF17-6		ND		ND					
RI-SF18-10		ND	**480**						
RI-SF18-6		ND		ND					
RI-SF19-3		ND		ND					
RI-SF19-9		ND		ND					

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SF20-1		ND		ND					
RI-SF21-0.5		ND		ND					
RISF-2-1-2		ND		ND		ND			
RISF-2-14-15		ND		ND		ND			
RI-SF21-7.5		ND		ND					
RI-SF22-13		ND		ND					
RI-SF22-9		ND		ND					
RI-SF23-17		ND		ND					
RI-SF23-3		ND		ND					
RISF-3-10-11		ND		ND		ND			
RISF-3-4-5		ND		ND		ND			
RISF-4-1-2		ND		ND		ND			
RISF-4-8-9		ND		ND		ND			
RISF-5-16		ND	**296**			ND			
RISF-5-4		ND		ND		ND			
RISF-6-5-6		ND		ND		ND			
RISF-6-9-10		ND		ND		ND			
RISF-8-15-16		ND		ND		ND			
RISF-8-5-6		ND		ND		ND			
RI-SI1-2		ND		ND		ND			
RI-SI1-6		ND		ND		ND			
RI-SI2-10		ND		ND		ND			
RI-SI2-13		ND		ND		ND			
RI-SI22-22		ND		ND		ND			
RI-SI22-27		ND		ND		ND			

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SI2-3		ND		ND		ND			
RI-SI23-10		ND		ND		ND			
RI-SI23-6		ND		ND		ND			
RI-SI24-10		ND		ND		ND			
RI-SI24-19		ND	2			ND			
RI-SI25-1		ND		ND		ND			
RI-SI25-12		ND		ND		ND			
RI-SI25-6		ND		ND		ND			
RI-SI2-6		ND		ND		ND			
RI-SI26-18		ND		ND		ND			
RI-SI26-8		ND		ND		ND			
RI-SI27-10		ND		ND		ND			
RI-SI27-6		ND		ND		ND			
RI-SI29-6		ND		ND		ND			
RI-SI29-9		ND		ND		ND			
RI-SI30-11		ND	3.4		20.8				
RI-SI30-16		ND	2.4		105				
RI-SI30-6		ND		ND		ND			
RI-SI31-12		ND		ND		ND			
RI-SI31-21		ND		ND		ND			
RI-SI32-15		ND		ND		ND			
RI-SI32-8		ND		ND		ND			
RI-SI3-3		ND		ND		ND			
RI-SI33-12		ND		ND		ND			
RI-SI33-8		ND		ND		ND			

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a - Concentration is below method Reporting Limit
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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SI34-16		ND		ND		ND			
RI-SI34-20		ND	1.8			ND			
RI-SI34-6		ND		ND		ND			
RI-SI35-12		ND		ND	6930				
RI-SI35-17		ND	**1530**		272				
RI-SI35-6		ND		ND		ND			
RI-SI35-9		ND		ND	**45800**				
RI-SI36-18		ND	1.2	J		ND			
RI-SI36-8		ND		ND		ND			
RI-SI37-10.5		ND		ND		ND			
RI-SI37-3.5-8.5		ND		ND		ND			
RI-SI3-8.5		ND		ND		ND			
RI-SI38-12		ND		ND		ND			
RI-SI38-23		ND		ND		ND			
RI-SI38-26		ND		ND		ND			
RI-SI38-29		ND		ND		ND			
RI-SI39-6		ND		ND		ND			
RI-SI39-8		ND		ND		ND			
RI-SI4 JO-6		ND		ND		ND			
RI-SI40-19		ND		ND	2.5				
RI-SI40-7		ND		ND		ND			
RI-SI41-2		ND		ND		ND			
RI-SI41-6		ND		ND	**71700**				
RI-SI42-12		ND		ND		ND			
RI-SI42-7		ND		ND		ND			

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SI43-12		ND	11.7		13.5				
RI-SI43-4		ND		ND		ND			
RI-SI43-8		ND	8.6		10.4				
RI-SI7-10		ND		ND		ND			
RI-SI7-6		ND		ND		ND			
RI-SL01-11		ND		ND					
RI-SL01-5		ND		ND					
RI-SL02-5		ND		ND					
RI-SL02-9		ND		ND					
RI-SL03-5		ND		ND					
RI-SL03-9		ND		ND					
RI-SL04-15		ND		ND					
RI-SL04-9		ND		ND					
RI-SL05-9		ND		ND					
RI-SL06-12		ND		ND					
RI-SL06-8		ND		ND					
RI-SL08-10		ND		ND					
RI-SL08-5		ND		ND					
RI-SL09-15		ND		ND					
RI-SL09-5		ND		ND					
RI-SL10-5		ND		ND					
RI-SL10-6		ND		ND					
RI-SL11-6		ND		ND					
RI-SL11-9		ND		ND					
RI-SL12-12		ND		ND					

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Table 3
Key Sample Summary for Soils - Organics
ITD Remedial Investigation - Phase I and II
Springfield, Missouri

CLIENT_ID	Trichlorofluoromethane		Vinyl chloride		Xylenes (Total)				
CALM Scenario C	1,400,000 ug/kg		600 ug/kg		418,000 ug/kg				
CALM C Leach	No GTARC		20 ug/kg		16,000 ug/kg				
RI-SL12-6.5		ND		ND					
RI-SL13-10		ND		ND					
RI-SL13-3		ND		ND					
RI-SL14-10		ND		ND					
RI-SL14-6		ND		ND					

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A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,Dissolved		Barium		Barium,Dissolved	
GTARC	50 ug/L		50 ug/L		2,000 ug/L		2,000 ug/L	
APD-1(600)								
IW-1 (1370)								
IW-1(1390)								
IW-1(900)								
MW115		ND		ND	100		28	
RI-GWAPMW-10		ND		ND	60		52	
RI-GWAPMW-15		ND		ND	360		190	
RI-GWAPMW-16		ND		ND	170		120	
RI-GWAPMW-20	68	B		ND	1100		69	
RI-GWAPMW-22		ND		ND	120		110	
RI-GWAPMW-22B	43	B		ND	460		79	
RI-GWAPMW-23	43			ND	480		100	
RI-GWMW-01		ND		ND	120		100	
RI-GWMW-05		ND		ND	42		17	
RI-GWMW-101		ND		ND	64		49	
RI-GWMW-103		ND		ND	91		79	
RI-GWMW-104R		ND		ND	140		84	
RI-GWMW-105	8.4	B		ND	190		150	
RI-GWMW-106		ND		ND	76		70	
RI-GWMW-107A		ND		ND	160		76	
RI-GWMW-109	11			ND	240		54	
RI-GWMW-11	12			ND	220		84	
RI-GWMW-111	9.8	B		ND	300		130	
RI-GWMW-112		ND		ND	130		52	
RI-GWMW-113		ND		ND	410		370	
RI-GWMW-114	33	B		ND	640		71	
RI-GWMW-115		ND		ND	210		22	
RI-GWMW-116		ND		ND	80		46	
RI-GWMW-117		ND		ND	16		15	

ND - Non detect
A - Concentration exceeds instrument calibration
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H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Arsenic		Arsenic,Dissolved		Barium		Barium,Dissolved	
GTARC	50 ug/L		50 ug/L		2,000 ug/L		2,000 ug/L	
RI-GWMW-118		ND		ND	59		44	
RI-GWMW-119		ND		ND	71		9.9	B
RI-GWMW-12		ND		ND	230		110	
RI-GWMW-16		ND		ND	45		37	
RI-GWMW-17	9.9	B		ND	250		39	
RI-GWMW-18		ND		ND	82		52	
RI-GWMW-19D		ND		ND	1400		26	
RI-GWMW-19S	32	B		ND	710		76	
RI-GWMW-20D		ND		ND	77		73	
RI-GWMW-3	9.7	B		ND	1200		1200	
RI-GWMW-4	5.6	B		ND	190		120	
RI-GWRW-02		ND		ND	41		37	
RI-GWRW-03		ND		ND	48		45	
RI-GWRW-05		ND		ND	18		15	
RI-GWRW06		ND		ND	38		37	
RI-GWRW-07		ND		ND	38		32	
RI-GWRW-1		ND		ND	40		30	
RI-GWRW-10		ND		ND	40		40	
RI-GWRW-101		ND		ND	50		50	
RI-GWRW-102		ND		ND	70		70	
RI-GWRW-4		ND		ND	50		40	
RI-GWRW-9		ND		ND	70		60	

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B - Compound was found in blank and sample
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H - Alternate peak selection upon review
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M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,Dissolved		Chromium		Chromium,Dissolved	
GTARC	5 ug/L		5 ug/L		100 ug/L		100 ug/L	
APD-1(600)								
IW-1 (1370)								
IW-1(1390)								
IW-1(900)								
MW115		ND		ND	20		5.8	B
RI-GWAPMW-10		ND		ND	3.6	B		ND
RI-GWAPMW-15		ND		ND	26			ND
RI-GWAPMW-16	2.2			ND	9	B		ND
RI-GWAPMW-20	14	B		ND	290			ND
RI-GWAPMW-22		ND		ND		ND		ND
RI-GWAPMW-22B	32			ND	130			ND
RI-GWAPMW-23	3.4			ND	180			ND
RI-GWMW-01	0.49	B		ND	9	B		ND
RI-GWMW-05	5.6		2.8		18		2.2	B
RI-GWMW-101	6.1		6.6		17		4	B
RI-GWMW-103	0.67	B		ND	2.6	B		ND
RI-GWMW-104R		ND		ND	8.5	B	2.9	B
RI-GWMW-105	0.89	B	0.61	B	4700		1.6	B
RI-GWMW-106	1.9	B	1.7	B		ND		ND
RI-GWMW-107A	0.75	B	0.62	B	32		2.5	B
RI-GWMW-109	0.46	B		ND	100			ND
RI-GWMW-11	2.6		2.2		40			ND
RI-GWMW-111	1.2	B		ND	43			ND
RI-GWMW-112	0.55	B		ND	16			ND
RI-GWMW-113		ND		ND	71		60	
RI-GWMW-114	4.4	B		ND	360			ND
RI-GWMW-115	1.2	B		ND	48		7.5	B
RI-GWMW-116		ND		ND	13		2.4	B
RI-GWMW-117		ND		ND	1.8	B		ND

ND - Non detect
A - Concentration exceeds instrument calibration
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H - Alternate peak selection upon review
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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Cadmium		Cadmium,Dissolved		Chromium		Chromium,Dissolved	
GTARC	5 ug/L		5 ug/L		100 ug/L		100 ug/L	
RI-GWMW-118		ND		ND		ND		ND
RI-GWMW-119		ND		ND	27		11	
RI-GWMW-12		ND		ND	19			ND
RI-GWMW-16	91		87		13		6.2	B
RI-GWMW-17		ND		ND	41			ND
RI-GWMW-18	0.77	B	0.71	B	5.3	B		ND
RI-GWMW-19D	3.9	B		ND	87			ND
RI-GWMW-19S	9.7	B		ND	180			ND
RI-GWMW-20D		ND		ND		ND		ND
RI-GWMW-3	5.2		5.7		29		3.3	B
RI-GWMW-4	9.8		9		75		2	B
RI-GWRW-02	1	B	1.5	B	3.7	B		ND
RI-GWRW-03		ND	0.47	B	23			ND
RI-GWRW-05	2		1.3	B	260		21	
RI-GWRW06	41		44		17		5.8	B
RI-GWRW-07	0.91	B	1.3	B		ND		ND
RI-GWRW-1	1.3	B	1.2	B	50			ND
RI-GWRW-10	3.6		3.3		30		2.8	B
RI-GWRW-101	4.9		4.8		3.8	B	3.6	B
RI-GWRW-102		ND		ND	4.3	B	3.8	B
RI-GWRW-4	3.2		2.8		6.7	B	1.6	B
RI-GWRW-9	2.5		2.6		2.6	B	1.7	B

ND - Non detect
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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Copper		Copper,Dissolved		Lead		Lead,Dissolved	
GTARC	1,300 ug/L		1,300 ug/L		15 ug/L		15 ug/L	
APD-1(600)								
IW-1 (1370)								
IW-1(1390)								
IW-1(900)								
MW115	8	B		ND	9.4			ND
RI-GWAPMW-10	9.7	B		ND	6.5		3.3	B
RI-GWAPMW-15	30		2.2	B	15			ND
RI-GWAPMW-16	22			ND	42		13	
RI-GWAPMW-20	170			ND	220		3.2	B
RI-GWAPMW-22	16			ND	2.9	B		ND
RI-GWAPMW-22B	70		2	B	160		5.1	
RI-GWAPMW-23	92			ND	160		2.9	B
RI-GWMW-01	6.6	B		ND	7.1			ND
RI-GWMW-05	14		3.9	B	11			ND
RI-GWMW-101	9100		7200		21		3.1	B
RI-GWMW-103	2.9	B		ND		ND		ND
RI-GWMW-104R	6.8	B		ND	3.4	B		ND
RI-GWMW-105	64		27		4.6	B		ND
RI-GWMW-106	3.2	B	1.6	B		ND		ND
RI-GWMW-107A	33		7.8	B	12			ND
RI-GWMW-109	48			ND	30			ND
RI-GWMW-11	40			ND	33			ND
RI-GWMW-111	24			ND	27			ND
RI-GWMW-112	5	B		ND	8.1			ND
RI-GWMW-113	11		9	B	4.1	B		ND
RI-GWMW-114	110			ND	96			ND
RI-GWMW-115	20		6.8	B	17			ND
RI-GWMW-116	5.3	B	6.4	B	3.1	B		ND
RI-GWMW-117	2.4	B		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Copper		Copper,Dissolved		Lead		Lead,Dissolved	
GTARC	1,300 ug/L		1,300 ug/L		15 ug/L		15 ug/L	
RI-GWMW-118	2	B	12		3.6	B		ND
RI-GWMW-119	9.2	B		ND	6.7			ND
RI-GWMW-12	23		1.7	B	15			ND
RI-GWMW-16	3800		3600		8.6			ND
RI-GWMW-17	36		3.5	B	30			ND
RI-GWMW-18	5.4	B		ND	3	B		ND
RI-GWMW-19D	140			ND	110			ND
RI-GWMW-19S	110			ND	150			ND
RI-GWMW-20D	4.3	B		ND		ND		ND
RI-GWMW-3	170000		110000		61		9.8	
RI-GWMW-4	3600		970		530			ND
RI-GWRW-02	11		6.1	B		ND		ND
RI-GWRW-03	12		4.2	B		ND		ND
RI-GWRW-05	3200		2600			ND		ND
RI-GWRW06	27000		23000		12			ND
RI-GWRW-07	22		7.6	B	3	B		ND
RI-GWRW-1	100		30		5			ND
RI-GWRW-10	410		340		4.8	B		ND
RI-GWRW-101	1900		2100		3.7	B	6.2	
RI-GWRW-102	40		40			ND		ND
RI-GWRW-4	220		150		3.1	B		ND
RI-GWRW-9	110		70		2.9	B		ND

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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Site Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,Dissolved		Nickel		Nickel,Dissolved	
GTARC	2 ug/L		2 ug/L		100 ug/L		100 ug/L	
APD-1(600)								
IW-1 (1370)								
IW-1(1390)								
IW-1(900)								
MW115		ND		ND	21			ND
RI-GWAPMW-10		ND		ND	2.5	B		ND
RI-GWAPMW-15		ND		ND	12			ND
RI-GWAPMW-16		ND		ND	15		6.7	B
RI-GWAPMW-20	0.9			ND	230		3.1	B
RI-GWAPMW-22		ND		ND		ND		ND
RI-GWAPMW-22B	0.69			ND	130		13	
RI-GWAPMW-23	0.72			ND	99		2.5	B
RI-GWMW-01		ND		ND	9	B	3.1	B
RI-GWMW-05	0.11	B		ND	230		220	
RI-GWMW-101	2.3		0.88		1600		1700	
RI-GWMW-103		ND		ND	16		8.5	B
RI-GWMW-104R		ND		ND	12		9.9	B
RI-GWMW-105		ND		ND	330		200	
RI-GWMW-106		ND		ND	12		12	
RI-GWMW-107A	0.13	B		ND	39		20	
RI-GWMW-109	0.1	B		ND	76		5.4	B
RI-GWMW-11	0.13	B		ND	42		14	
RI-GWMW-111	0.21			ND	47		19	
RI-GWMW-112		ND		ND	16		2.1	B
RI-GWMW-113		ND		ND	7.1	B		ND
RI-GWMW-114	0.54			ND	190		31	
RI-GWMW-115		ND		ND	53			ND
RI-GWMW-116		ND		ND	7.6	B		ND
RI-GWMW-117		ND		ND		ND		ND

ND - Non detect
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a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Site Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Mercury		Mercury,Dissolved		Nickel		Nickel,Dissolved	
GTARC	2 ug/L		2 ug/L		100 ug/L		100 ug/L	
RI-GWMW-118		ND		ND	2.8	B		ND
RI-GWMW-119		ND		ND	14			ND
RI-GWMW-12		ND		ND	22		12	
RI-GWMW-16	18		7.8		1600		1500	
RI-GWMW-17	0.24			ND	39		20	
RI-GWMW-18		ND		ND	33		28	
RI-GWMW-19D	1			ND	170		29	
RI-GWMW-19S	0.99			ND	130		4.5	B
RI-GWMW-20D		ND		ND	4.4	B	3.2	B
RI-GWMW-3	0.93			ND	150		140	
RI-GWMW-4	0.062	B		ND	260		220	
RI-GWRW-02		ND		ND	33		36	
RI-GWRW-03		ND		ND	48		35	
RI-GWRW-05	0.19	B	0.16	B	210		120	
RI-GWRW06	2.5		1.7		3300		3400	
RI-GWRW-07		ND		ND	28		29	
RI-GWRW-1		ND	0.07	B	60		30	
RI-GWRW-10	0.07	B		ND	190		160	
RI-GWRW-101	0.32		0.15	B	1300		1200	
RI-GWRW-102		ND	0.06	B	40		40	
RI-GWRW-4	0.06	B	0.06	B	120		100	
RI-GWRW-9		ND	0.13	B	80		80	

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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,Dissolved		Silver		Silver,Dissolved	
GTARC	50 ug/L		50 ug/L		100 ug/L		100 ug/L	
APD-1(600)								
IW-1 (1370)								
IW-1(1390)								
IW-1(900)								
MW115		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND
RI-GWAPMW-15	5	B		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND
RI-GWAPMW-23	7.5	B		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND
RI-GWMW-101	7.8	B	15			ND		ND
RI-GWMW-103		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND
RI-GWMW-106		ND	6.3	B		ND		ND
RI-GWMW-107A		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND
RI-GWMW-11	6.4	B		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND
RI-GWMW-114		ND	5.2	B		ND		ND
RI-GWMW-115	6.2	B		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND
RI-GWMW-117		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Inorganics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Selenium		Selenium,Dissolved		Silver		Silver,Dissolved	
GTARC	50 ug/L		50 ug/L		100 ug/L		100 ug/L	
RI-GWMW-118		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND
RI-GWMW-16	18			ND	5.4		3.6	B
RI-GWMW-17	7.5	B	6.6	B		ND		ND
RI-GWMW-18		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND
RI-GWMW-19S		ND	6	B		ND		ND
RI-GWMW-20D		ND		ND		ND		ND
RI-GWMW-3	7.6	B	8.4	B		ND		ND
RI-GWMW-4	7	B	5.1	B		ND		ND
RI-GWRW-02		ND		ND		ND		ND
RI-GWRW-03		ND	7.6	B		ND		ND
RI-GWRW-05		ND		ND		ND		ND
RI-GWRW06	15			ND	6.2		3.3	B
RI-GWRW-07		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
GTARC		70 ug/L		200 ug/L		0.3 ug/L		5 ug/L		No Listing		7 ug/L
APD-1(600)		ND		ND		ND		ND		ND	2.8	J
IW-1 (1370)		ND		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND	0.68	J
RI-GWAPMW-10		ND		ND		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND		ND		ND
RI-GWAPMW-23		ND		ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND		ND
RI-GWMW-05		ND	6.6			ND		ND	14		26	
RI-GWMW-101		ND	43000			ND	560	J		ND	6200	
RI-GWMW-103		ND		ND		ND		ND		ND		ND
RI-GWMW-104R		ND	0.94	J		ND		ND	4.1		1.3	
RI-GWMW-105		ND	2.5			ND		ND	1.3		4.9	
RI-GWMW-106		ND		ND		ND		ND	1.9		3.7	
RI-GWMW-107A		ND	2.1			ND		ND	2.9		6.2	
RI-GWMW-109		ND		ND		ND		ND		ND	75	
RI-GWMW-11		ND		ND		ND		ND	3.2		1.3	
RI-GWMW-111		ND	49			ND		ND	9.7		28	
RI-GWMW-112		ND		ND		ND		ND		ND	1.6	
RI-GWMW-113		ND	330			ND		ND	26		490	
RI-GWMW-114		ND	42			ND	1.2	J	5.7		51	
RI-GWMW-115		ND		ND		ND		ND	0.64	Ja		ND
RI-GWMW-116		ND	2			ND		ND		ND	2.3	

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
GTARC		70 ug/L		200 ug/L		0.3 ug/L		5 ug/L		No Listing		7 ug/L
RI-GWMW-117		ND		ND		ND		ND		ND		ND
RI-GWMW-118		ND	0.87	Ja		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND		ND
RI-GWMW-16	43		120000		45		760	M	480	M	40000	H
RI-GWMW-17		ND	42			ND		ND	5.6		44	
RI-GWMW-18		ND	320			ND		ND		ND	370	
RI-GWMW-19D		ND	120			ND		ND		ND	200	
RI-GWMW-19S		ND	53			ND		ND	6.7	J	76	
RI-GWMW-20D		ND	100			ND		ND		ND	120	
RI-GWMW-3		ND		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-02		ND	380			ND		ND		ND	420	
RI-GWRW-03		ND	3600			ND	51	J	81	J	3000	
RI-GWRW-05		ND	11000			ND		ND	85	JH	1500	
RI-GWRW06		ND	155600			ND	1652		1528		17800	
RI-GWRW-07		ND	1500			ND	13	JM	44		770	
RI-GWRW-1		ND	390			ND	10		13		410	
RI-GWRW-10		ND	7000			ND		ND		ND	620	
RI-GWRW-101		ND	20000		200	H	240		250		4600	
RI-GWRW-102		ND	9.5			ND	1		1.6		5.8	
RI-GWRW-4		ND	4200			ND		ND		ND	2000	
RI-GWRW-9		ND	700			ND	5		8.2		59	
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene	
GTARC		70 ug/L		200 ug/L		0.3 ug/L		5 ug/L		No Listing		7 ug/L
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND	1.6			ND		ND	2		4.6	
RI-GWIW-1 (593)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND	0.84	Ja

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M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane
GTARC	No Listing	No Listing	40 ug/L	70 ug/L	No GTARC	0.2 ug/L
APD-1(600)	ND	ND	ND	ND	ND	ND
IW-1 (1370)	ND	ND	ND	ND	ND	ND
IW-1(1390)	ND	ND	ND	ND	ND	ND
IW-1(900)	ND	ND	ND	ND	ND	ND
MW115	ND	ND	ND	ND	ND	ND
RI-GWAPMW-10	ND	ND	ND	ND	ND	ND
RI-GWAPMW-15	ND	ND	ND	ND	ND	ND
RI-GWAPMW-16	ND	ND	ND	ND	140	ND
RI-GWAPMW-20	ND	ND	ND	ND	ND	ND
RI-GWAPMW-22	ND	ND	ND	ND	ND	ND
RI-GWAPMW-22B	ND	ND	ND	ND	850	ND
RI-GWAPMW-23	ND	ND	ND	ND	ND	ND
RI-GWMW-01	ND	ND	ND	ND	ND	ND
RI-GWMW05	ND	ND	ND	ND	ND	ND
RI-GWMW-05	ND	ND	ND	ND	ND	ND
RI-GWMW-101	ND	580 J	ND	ND	ND	ND
RI-GWMW-103	ND	ND	ND	ND	ND	ND
RI-GWMW-104R	ND	ND	ND	ND	ND	ND
RI-GWMW-105	ND	ND	ND	ND	ND	ND
RI-GWMW-106	ND	ND	ND	ND	ND	ND
RI-GWMW-107A	ND	ND	ND	ND	ND	ND
RI-GWMW-109	ND	ND	ND	ND	ND	ND
RI-GWMW-11	ND	ND	ND	ND	ND	ND
RI-GWMW-111	ND	ND	ND	ND	ND	ND
RI-GWMW-112	ND	ND	ND	ND	ND	ND
RI-GWMW-113	ND	ND	ND	ND	ND	ND
RI-GWMW-114	ND	ND	ND	ND	ND	ND
RI-GWMW-115	ND	ND	ND	ND	ND	ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene		1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane	
GTARC	No Listing		No Listing		40 ug/L		70 ug/L		No GTARC		0.2 ug/L	
RI-GWMW-116		ND		ND		ND		ND		ND		ND
RI-GWMW-117		ND		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND		ND
RI-GWMW-16		ND		ND		ND		ND		ND		ND
RI-GWMW-17		ND		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND		ND		ND
RI-GWMW-4		ND	17	J		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND		ND
RI-GWRW03		ND		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
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J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
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M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane
GTARC	No Listing	No Listing	40 ug/L	70 ug/L	No GTARC	0.2 ug/L
RI-GWAPD-2 (550)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (1050)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (1390)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (387)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (402)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (556)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (593)	ND	ND	ND	ND	ND	ND
RI-GWIW-1 (650)	ND	ND	ND	ND	ND	ND
RI-GWMWO-1 (1050)	ND	ND	ND	ND	ND	ND
RI-GWMWO-1 (1410)	ND	ND	ND	ND	ND	ND
RI-GWMWO-1 (270)	ND	ND	ND	ND	ND	ND
RI-GWMWO-1 (650)	ND	ND	ND	ND	ND	ND
RI-GWMWO-2 (1050)	ND	ND	ND	ND	ND	ND
RI-GWMWO-2 (1450)	ND	ND	ND	ND	ND	ND
RI-GWMWO-2 (250)	ND	ND	ND	ND	ND	ND
RI-GWMWO-2 (650)	ND	ND	ND	ND	ND	ND
RI-GWMWO-3 (1050)	ND	ND	ND	ND	ND	ND
RI-GWMWO-3 (1450)	ND	ND	ND	ND	ND	ND
RI-GWMWO-3 (260)	ND	ND	ND	ND	ND	ND
RI-GWMWO-3 (650)	ND	ND	ND	ND	ND	ND
RI-GWMWO-4 (250)	ND	ND	ND	ND	ND	ND
RI-GWMWO-4 (650)	ND	ND	ND	ND	ND	ND
RI-GWMWO-4 (900)	ND	ND	ND	ND	ND	ND
APDW-1/1200FT	ND	ND	ND	ND	ND	ND
APDW-1/900FT	ND	ND	ND	ND	ND	ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
GTARC	No Listing		600 ug/L		5 ug/L		5 ug/L		No GTARC	
APD-1(600)		ND		ND		ND	38			ND
IW-1 (1370)		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND	5.4			ND
MW115		ND		ND		ND	2.8			ND
RI-GWAPMW-10		ND		ND		ND	1	ND		ND
RI-GWAPMW-15		ND		ND		ND	1	ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND	1	ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND	380	
RI-GWAPMW-23		ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND	4.8	H		ND
RI-GWMW-05		ND		ND		ND	11			ND
RI-GWMW-101		ND		ND		ND	530	J		ND
RI-GWMW-103		ND		ND		ND	150			ND
RI-GWMW-104R		ND		ND		ND	14			ND
RI-GWMW-105		ND		ND		ND	20			ND
RI-GWMW-106		ND		ND		ND	7.1			ND
RI-GWMW-107A		ND		ND		ND	5.2			ND
RI-GWMW-109		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND	3.9			ND
RI-GWMW-111		ND		ND		ND	3.5			ND
RI-GWMW-112		ND		ND		ND	1.1			ND
RI-GWMW-113		ND		ND		ND	110			ND
RI-GWMW-114		ND		ND		ND	5.3			ND
RI-GWMW-115		ND		ND		ND	3.2			ND
RI-GWMW-116		ND		ND		ND	3.5			ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
GTARC	No Listing		600 ug/L		5 ug/L		5 ug/L		No GTARC	
RI-GWMW-117		ND		ND		ND	1.2			ND
RI-GWMW-118		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND
RI-GWMW-16		ND		ND	120		33			ND
RI-GWMW-17		ND		ND		ND	20			ND
RI-GWMW-18		ND		ND		ND	50			ND
RI-GWMW-19D		ND		ND		ND	160			ND
RI-GWMW-19S		ND		ND		ND	57			ND
RI-GWMW-20D		ND		ND		ND	33			ND
RI-GWMW-3		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND	81			ND
RI-GWRW-03		ND		ND		ND	74	J		ND
RI-GWRW-05		ND		ND		ND	220	H		ND
RI-GWRW06		ND		ND	1082		2470			ND
RI-GWRW-07		ND		ND		ND	56			ND
RI-GWRW-1		ND		ND		ND	87			ND
RI-GWRW-10		ND		ND		ND	70			ND
RI-GWRW-101		ND		ND		ND	270			ND
RI-GWRW-102		ND		ND		ND	23			ND
RI-GWRW-4		ND		ND		ND	75			ND
RI-GWRW-9		ND		ND		ND	16			ND
RI-GWAPD-1 (300)		ND		ND		ND	7			ND
RI-GWAPD-1 (650)		ND		ND		ND	32			ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,2-Dibromoethane (EDB)		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane		1,3,5-Trimethylbenzene	
GTARC	No Listing		600 ug/L		5 ug/L		5 ug/L		No GTARC	
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND	5.3			ND
RI-GWIW-1 (402)		ND		ND		ND	7.1			ND
RI-GWIW-1 (556)		ND		ND	0.58	J	77	J		ND
RI-GWIW-1 (593)		ND		ND		ND	98			ND
RI-GWIW-1 (650)		ND		ND		ND	90			ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND	5.4			ND
APDW-1/900FT		ND		ND		ND	10			ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
GTARC	No Listing		No Listing		75 ug/L		No Listing		No GTARC	
APD-1(600)		ND		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND		ND
RI-GWAPMW-23		ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND		ND
RI-GWMW-101		ND		ND		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
GTARC	No Listing		No Listing		75 ug/L		No Listing		No GTARC	
RI-GWMW-117		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND
RI-GWMW-16		ND		ND		ND		ND		ND
RI-GWMW-17		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND	450	J
RI-GWRW-07		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND

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A - Concentration exceeds instrument calibration
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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		2,2-Dichloropropane		2-Butanone (MEK)	
GTARC	No Listing		No Listing		75 ug/L		No Listing		No GTARC	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND

ND - Non detect
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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone (MIBK)		Acetone	
GTARC	No Listing		No Listing		No Listing		No Listing		No GTARC	
APD-1(600)		ND		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND	5.8	
IW-1(900)		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND		ND
RI-GWAPMW-23		ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND		ND
RI-GWMW-101		ND		ND		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND		ND

ND - Non detect
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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone (MIBK)		Acetone	
GTARC	No Listing		No Listing		No Listing		No Listing		No GTARC	
RI-GWMW-117		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND	8.2	
RI-GWMW-16		ND		ND		ND		ND		ND
RI-GWMW-17		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND	3450	
RI-GWRW07		ND		ND		ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND	8.7	
RI-GWRW-4		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND	17	*

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	2-Chlorotoluene		2-Hexanone		4-Chlorotoluene		4-Methyl-2-pentanone (MIBK)		Acetone	
GTARC	No Listing		No Listing		No Listing		No Listing		No GTARC	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND	6.1	*
RI-GWIW-1 (402)		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND	4.2	J*
RI-GWMWO-1 (1410)		ND		ND		ND		ND	3	J*
RI-GWMWO-1 (270)		ND		ND		ND		ND	3.5	J*
RI-GWMWO-1 (650)		ND		ND		ND		ND	2.5	J*
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND	12	*
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND	3.8	J*
RI-GWMWO-3 (260)		ND		ND		ND		ND	20	*
RI-GWMWO-3 (650)		ND		ND		ND		ND	4.2	J*
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloro methane		Bromodichloro methane		Bromoform		Bromomethane	
GTARC	5 ug/L		No Listing		No Listing		80 ug/L		80 ug/L		No Listing	
APD-1(600)		ND		ND		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22B	590			ND		ND		ND		ND		ND
RI-GWAPMW-23	300			ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND		ND		ND
RI-GWMW-101		ND		ND		ND		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloro methane		Bromodichloro methane		Bromoform		Bromomethane	
GTARC	5 ug/L		No Listing		No Listing		80 ug/L		80 ug/L		No Listing	
RI-GWMW-117		ND		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND		ND
RI-GWMW-16		ND		ND		ND	17	Ja		ND		ND
RI-GWMW-17		ND		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND	180			ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND		ND
RI-GWRW-102	3.4			ND		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)	1.4		1	ND	1	ND	1	ND	1	U*	1	ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		U*		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Benzene		Bromobenzene		Bromochloro methane		Bromodichloro methane		Bromoform		Bromomethane	
GTARC	5 ug/L		No Listing		No Listing		80 ug/L		80 ug/L		No Listing	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (556)	0.54	J		ND		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroethane	
GTARC	No GTARC		5 ug/L		100 ug/L		No Listing	
APD-1(600)		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND
MW115		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND
RI-GWAPMW-23		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND
RI-GWMW-101		ND		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND
RI-GWMW-117		ND		ND		ND		ND

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Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroethane	
GTARC	No GTARC		5 ug/L		100 ug/L		No Listing	
RI-GWMW-118		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND
RI-GWMW-16		ND		ND	55			ND
RI-GWMW-17		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Carbon disulfide		Carbon tetrachloride		Chlorobenzene		Chloroethane	
GTARC	No GTARC		5 ug/L		100 ug/L		No Listing	
RI-GWIW-1 (1050)		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND
RI-GWIW-1 (556)		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane	
GTARC	80 ug/L		No Listing		70 ug/L		No Listing		80 ug/L		No Listing	
APD-1(600)		ND		ND	170			ND		ND		ND
IW-1 (1370)		ND		ND	3.5			ND		ND		ND
IW-1(1390)		ND		ND	2.9			ND		ND		ND
IW-1(900)		ND		ND	18			ND		ND		ND
MW115		ND		ND	4.1			ND		ND		ND
RI-GWAPMW-10		ND		ND		ND		ND		ND		ND
RI-GWAPMW-15		ND		ND	1.7			ND		ND		ND
RI-GWAPMW-16		ND		ND		ND		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND		ND		ND		ND		ND		ND
RI-GWAPMW-23		ND		ND	20			ND		ND		ND
RI-GWMW-01		ND		ND	71			ND		ND		ND
RI-GWMW-05		ND		ND	130			ND		ND		ND
RI-GWMW-101		ND		ND	7900			ND		ND		ND
RI-GWMW-103		ND		ND	660			ND		ND		ND
RI-GWMW-104R		ND		ND	17			ND		ND		ND
RI-GWMW-105		ND		ND	780			ND		ND		ND
RI-GWMW-106		ND		ND	40			ND		ND		ND
RI-GWMW-107A		ND		ND	220			ND		ND		ND
RI-GWMW-109		ND		ND	1300			ND		ND		ND
RI-GWMW-11		ND		ND	9.5			ND		ND		ND
RI-GWMW-111		ND		ND	75			ND		ND		ND
RI-GWMW-112		ND		ND	19			ND		ND		ND
RI-GWMW-113		ND		ND	230			ND		ND		ND
RI-GWMW-114		ND		ND	430			ND		ND		ND
RI-GWMW-115		ND		ND	4.5			ND		ND		ND
RI-GWMW-116		ND		ND	22			ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
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H - Alternate peak selection upon review
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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane	
GTARC	80 ug/L		No Listing		70 ug/L		No Listing		80 ug/L		No Listing	
RI-GWMW-117		ND		ND	1			ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND	3.4			ND		ND		ND
RI-GWMW-16	180	M		ND	11000	H		ND		ND		ND
RI-GWMW-17		ND		ND	42			ND		ND		ND
RI-GWMW-18		ND		ND	95			ND		ND		ND
RI-GWMW-19D		ND		ND	220			ND		ND		ND
RI-GWMW-19S		ND		ND	78			ND		ND		ND
RI-GWMW-20D		ND		ND	58			ND		ND		ND
RI-GWMW20S		ND		ND	2.2			ND		ND		ND
RI-GWMW-3		ND	7.4	JH*		ND		ND		ND		ND
RI-GWMW-4		ND		ND	14	J		ND		ND		ND
RI-GWRW-02		ND		ND	190			ND		ND		ND
RI-GWRW-03		ND		ND	1800			ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND		ND
RI-GWRW06	245			ND		ND		ND		ND		ND
RI-GWRW-07		ND		ND	1100			ND		ND		ND
RI-GWRW-1		ND		ND	170			ND		ND		ND
RI-GWRW-10		ND		ND	330			ND		ND		ND
RI-GWRW-101		ND		ND	8000			ND		ND		ND
RI-GWRW-102		ND		ND	32			ND		ND		ND
RI-GWRW-4		ND		ND	240			ND		ND		ND
RI-GWRW-9		ND		ND	160			ND		ND		ND
RI-GWAPD-1 (300)		ND		ND	28			ND		ND		ND
RI-GWAPD-1 (650)		ND		ND	130			ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Dibromochloromethane		Dibromomethane	
GTARC	80 ug/L		No Listing		70 ug/L		No Listing		80 ug/L		No Listing	
RI-GWIW-1 (1050)		ND		ND	4.5			ND		ND		ND
RI-GWIW-1 (1390)		ND		ND	4.9			ND		ND		ND
RI-GWIW-1 (387)		ND		ND	19			ND		ND		ND
RI-GWIW-1 (402)		ND		ND	30			ND		ND		ND
RI-GWIW-1 (556)	1.1			ND	220			ND		ND		ND
RI-GWIW-1 (593)		ND		ND	280			ND		ND		ND
RI-GWIW-1 (650)		ND		ND	250			ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND	26			ND		ND		ND
APDW-1/900FT		ND		ND	51			ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Dichlorodifluoromethane		Ethylbenzene		Hexachlorobutadiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride	
GTARC	No Listing		700 ug/L		1 ug/L		No GTARC		No Listing		5 ug/L	
APD-1(600)		ND		ND		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND		ND	1.6			ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND	45			ND	20	J		ND		ND
RI-GWAPMW-20		ND	5.2	J		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND	650			ND	62		1900			ND
RI-GWAPMW-23		ND	15			ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND		ND	0.51	J
RI-GWMW-101		ND		ND		ND		ND		ND	18000	
RI-GWMW-103		ND		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND	1.2	
RI-GWMW-105	3.2			ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND		ND		ND
RI-GWMW-116	2.9			ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Dichlorodifluoro methane		Ethylbenzene		Hexachlorobut adiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride	
GTARC	No Listing		700 ug/L		1 ug/L		No GTARC		No Listing		5 ug/L	
RI-GWMW-117		ND		ND		ND		ND		ND		ND
RI-GWMW-118	3.6			ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND		ND
RI-GWMW-16	150	H	19	Ja		ND		ND	48		28000	H
RI-GWMW-17		ND		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND	15	J
RI-GWMW-19D		ND		ND		ND		ND		ND	28	
RI-GWMW-19S		ND		ND		ND		ND		ND	5.3	J
RI-GWMW-20D		ND		ND		ND		ND		ND	11	
RI-GWMW-3		ND		ND		ND		ND		ND	1800	
RI-GWMW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND	300	H
RI-GWRW06	271			ND		ND		ND		ND	57200	
RI-GWRW-07		ND		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND	6000	
RI-GWRW-102		ND		ND		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Dichlorodifluoro methane		Ethylbenzene		Hexachlorobut adiene		Isopropylbenzene		m&p-Xylenes		Methylene chloride	
GTARC	No Listing		700 ug/L		1 ug/L		No GTARC		No Listing		5 ug/L	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Methyl-tert-butyl-ether (MTBE)		Naphthalene		n-Butylbenzene		n-Propylbenzene		o-Xylene	
GTARC	20 ug/L		100 ug/L		No Listing		No GTARC		320 ug/L	
APD-1(600)		ND		ND		ND		ND		ND
IW-1 (1370)		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND		ND	1.8		1.7			ND
RI-GWAPMW-15		ND		ND		ND		ND		ND
RI-GWAPMW-16		ND	120		18	J	25	J		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND
RI-GWAPMW-22B		ND	180		98		190		900	
RI-GWAPMW-23		ND	3.4	J*		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND
RI-GWMW-05		ND	1.5			ND		ND		ND
RI-GWMW-101		ND	1600	*		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND		ND
RI-GWMW-115		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Methyl-tert-butyl-ether (MTBE)		Naphthalene		n-Butylbenzene		n-Propylbenzene		o-Xylene	
GTARC	20 ug/L		100 ug/L		No Listing		No GTARC		320 ug/L	
RI-GWMW-116		ND		ND		ND		ND		ND
RI-GWMW-117		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND
RI-GWMW-119		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND
RI-GWMW-16		ND	36			ND		ND	18	Ja
RI-GWMW-17		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND
RI-GWMW-3		ND	8.9	J*		ND		ND		ND
RI-GWMW-4		ND	99	*		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND
RI-GWRW-102	3.1			ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND

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Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Methyl-tert-butyl-ether (MTBE)		Naphthalene		n-Butylbenzene		n-Propylbenzene		o-Xylene	
GTARC	20 ug/L		100 ug/L		No Listing		No GTARC		320 ug/L	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND	0.54	J		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND

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Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	p-Isopropyltoluene		sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene	
GTARC	No Listing		No Listing		100 ug/L		No Listing		5 ug/L	
IW-1 (1370)		ND		ND		ND		ND		ND
IW-1(1390)		ND		ND		ND		ND		ND
IW-1(900)		ND		ND		ND		ND		ND
MW115		ND		ND		ND		ND		ND
RI-GWAPMW-10		ND	3.3			ND		ND		ND
RI-GWAPMW-15		ND		ND		ND		ND		ND
RI-GWAPMW-16	16	J	16	J		ND		ND		ND
RI-GWAPMW-20		ND		ND		ND		ND		ND
RI-GWAPMW-22		ND		ND		ND		ND		ND
RI-GWAPMW-22B	44			ND	37			ND		ND
RI-GWAPMW-23		ND		ND		ND		ND		ND
RI-GWMW-01		ND		ND		ND		ND		ND
RI-GWMW-05		ND		ND		ND		ND		ND
RI-GWMW-101		ND		ND		ND		ND		ND
RI-GWMW-103		ND		ND		ND		ND		ND
RI-GWMW-104R		ND		ND		ND		ND		ND
RI-GWMW-105		ND		ND		ND		ND		ND
RI-GWMW-106		ND		ND		ND		ND		ND
RI-GWMW-107A		ND		ND		ND		ND		ND
RI-GWMW-109		ND		ND		ND		ND		ND
RI-GWMW-11		ND		ND		ND		ND		ND
RI-GWMW-111		ND		ND		ND		ND		ND
RI-GWMW-112		ND		ND		ND		ND		ND
RI-GWMW-113		ND		ND		ND		ND		ND
RI-GWMW-114		ND		ND		ND		ND	2	J
RI-GWMW-115		ND		ND		ND		ND		ND
RI-GWMW-116		ND		ND		ND		ND		ND
RI-GWMW-117		ND		ND		ND		ND		ND
RI-GWMW-118		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	p-Isopropyltoluene		sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene	
GTARC	No Listing		No Listing		100 ug/L		No Listing		5 ug/L	
RI-GWMW-119		ND		ND		ND		ND		ND
RI-GWMW-12		ND		ND		ND		ND		ND
RI-GWMW-16		ND		ND		ND		ND	590	
RI-GWMW-17		ND		ND		ND		ND		ND
RI-GWMW-18		ND		ND		ND		ND		ND
RI-GWMW-19D		ND		ND		ND		ND		ND
RI-GWMW-19S		ND		ND		ND		ND		ND
RI-GWMW-20D		ND		ND		ND		ND		ND
RI-GWMW-3		ND		ND		ND		ND		ND
RI-GWMW-4		ND		ND		ND		ND		ND
RI-GWRW-02		ND		ND		ND		ND		ND
RI-GWRW-03		ND		ND		ND		ND		ND
RI-GWRW-05		ND		ND		ND		ND		ND
RI-GWRW06		ND		ND		ND		ND		ND
RI-GWRW-07		ND		ND		ND		ND		ND
RI-GWRW-1		ND		ND		ND		ND		ND
RI-GWRW-10		ND		ND		ND		ND		ND
RI-GWRW-101		ND		ND		ND		ND		ND
RI-GWRW-102		ND		ND		ND		ND		ND
RI-GWRW-4		ND		ND		ND		ND		ND
RI-GWRW-9		ND		ND		ND		ND		ND
RI-GWAPD-1 (300)		ND		ND		ND		ND		ND
RI-GWAPD-1 (650)		ND		ND		ND		ND		ND
RI-GWAPD-2 (290)		ND		ND		ND		ND		ND
RI-GWAPD-2 (550)		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	p-Isopropyltoluene		sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene	
GTARC	No Listing		No Listing		100 ug/L		No Listing		5 ug/L	
RI-GWIW-1 (1050)		ND		ND		ND		ND		ND
RI-GWIW-1 (1390)		ND		ND		ND		ND		ND
RI-GWIW-1 (387)		ND		ND		ND		ND		ND
RI-GWIW-1 (402)		ND		ND		ND		ND		ND
RI-GWIW-1 (556)		ND		ND		ND		ND		ND
RI-GWIW-1 (593)		ND		ND		ND		ND		ND
RI-GWIW-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)		ND		ND		ND		ND		ND
RI-GWMWO-1 (270)		ND		ND		ND		ND		ND
RI-GWMWO-1 (650)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-2 (250)		ND		ND		ND		ND		ND
RI-GWMWO-2 (650)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)		ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)		ND		ND		ND		ND		ND
RI-GWMWO-3 (260)		ND		ND		ND		ND		ND
RI-GWMWO-3 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (250)		ND		ND		ND		ND		ND
RI-GWMWO-4 (650)		ND		ND		ND		ND		ND
RI-GWMWO-4 (900)		ND		ND		ND		ND		ND
APDW-1/1200FT		ND		ND		ND		ND		ND
APDW-1/900FT		ND		ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	TOC Average Duplicates		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene		Trichlorofluoromethane	
GTARC	No Listing		150 ug/L		100 ug/L		No Listing		5 ug/L		No GTARC	
APD-1(600)				ND		ND		ND	480			ND
IW-1 (1370)				ND		ND		ND	6.8			ND
IW-1(1390)				ND		ND		ND	5.6			ND
IW-1(900)				ND		ND		ND	97			ND
MW115				ND		ND		ND	8.5			ND
RI-GWAPMW-10	2.8			ND		ND		ND		ND		ND
RI-GWAPMW-15	1.8			ND		ND		ND	1.7			ND
RI-GWAPMW-16	5			ND		ND		ND		ND		ND
RI-GWAPMW-20	4.3			ND		ND		ND		ND		ND
RI-GWAPMW-22	2.3			ND		ND		ND		ND		ND
RI-GWAPMW-22B	6.5		1000			ND		ND		ND		ND
RI-GWAPMW-23	6.1			ND		ND		ND	14			ND
RI-GWMW-01	2			ND		ND		ND	92			ND
RI-GWMW-05	4.4			ND	4.3			ND	12			ND
RI-GWMW-101				ND		ND		ND	180000			ND
RI-GWMW-103	1.2			ND		ND		ND	1500			ND
RI-GWMW-104R	1.1			ND	0.51	J		ND	18			ND
RI-GWMW-105	1.4			ND	5.4			ND	470			ND
RI-GWMW-106	1.8			ND		ND		ND	87			ND
RI-GWMW-107A	1.3			ND	3.6			ND	520			ND
RI-GWMW-109	0.92	B		ND		ND		ND	10000			ND
RI-GWMW-11	1.6			ND		ND		ND	6.3			ND
RI-GWMW-111	1.2			ND		ND		ND	680			ND
RI-GWMW-112	0.6	B		ND		ND		ND	110			ND
RI-GWMW-113	5			ND		ND		ND	2800			ND
RI-GWMW-114	2			ND	6.9			ND	540			ND
RI-GWMW-115	1			ND		ND		ND	7.6			ND
RI-GWMW-116	0.69	B		ND		ND		ND	320			ND

ND - Non detect
A - Concentration exceeds instrument calibration
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J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	TOC Average Duplicates		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene		Trichlorofluoromethane	
GTARC	No Listing		150 ug/L		100 ug/L		No Listing		5 ug/L		No GTARC	
RI-GWMW-117	0.38	B	1.3			ND		ND	3.1			ND
RI-GWMW-118	1.7		1.5			ND		ND	2.4			ND
RI-GWMW-119	0.66	B		ND		ND		ND		ND		ND
RI-GWMW-12	2.2			ND		ND		ND		ND		ND
RI-GWMW-16	31		180		170	M		ND	330000			ND
RI-GWMW-17	1.6			ND		ND		ND	520			ND
RI-GWMW-18	1.6			ND		ND		ND	2300			ND
RI-GWMW-19D	3.5			ND		ND		ND	1800			ND
RI-GWMW-19S	2.8			ND		ND		ND	780			ND
RI-GWMW-20D	1.9			ND		ND		ND	880			ND
RI-GWMW-3	18			ND		ND		ND		ND		ND
RI-GWMW-4	9			ND		ND		ND		ND		ND
RI-GWRW-02				ND		ND		ND	3300			ND
RI-GWRW-03				ND		ND		ND	19000			ND
RI-GWRW-05				ND		ND		ND	77000			ND
RI-GWRW06				ND		ND		ND	554000			ND
RI-GWRW-07				ND	17	J		ND	5000			ND
RI-GWRW-1				ND		ND		ND	2700			ND
RI-GWRW-10				ND	560	*		ND	9900			ND
RI-GWRW-101				ND		ND		ND	95000			ND
RI-GWRW-102				ND		ND		ND	160			ND
RI-GWRW-4				ND		ND		ND	29000			ND
RI-GWRW-9				ND		ND		ND	1100			ND
RI-GWAPD-1 (300)				ND		ND		ND	50			ND
RI-GWAPD-1 (650)			3.1	J		ND		ND	470			ND
RI-GWAPD-2 (290)			1.2			ND		ND		ND		ND
RI-GWAPD-2 (550)			2.1			ND		ND		ND		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	TOC Average Duplicates		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		Trichloroethene		Trichlorofluoromethane	
GTARC	No Listing		150 ug/L		100 ug/L		No Listing		5 ug/L		No GTARC	
RI-GWIW-1 (1050)				ND		ND		ND	23			ND
RI-GWIW-1 (1390)				ND		ND		ND	13			ND
RI-GWIW-1 (387)				ND		ND		ND	96			ND
RI-GWIW-1 (402)				ND		ND		ND	130			ND
RI-GWIW-1 (556)				ND		ND		ND	1500			ND
RI-GWIW-1 (593)				ND		ND		ND	1700			ND
RI-GWIW-1 (650)				ND		ND		ND	1600			ND
RI-GWMWO-1 (1050)				ND		ND		ND		ND		ND
RI-GWMWO-1 (1410)				ND		ND		ND		ND		ND
RI-GWMWO-1 (270)				ND		ND		ND		ND		ND
RI-GWMWO-1 (650)				ND		ND		ND		ND		ND
RI-GWMWO-2 (1050)				ND		ND		ND		ND		ND
RI-GWMWO-2 (1450)				ND		ND		ND		ND		ND
RI-GWMWO-2 (250)			0.72	J		ND		ND		ND		ND
RI-GWMWO-2 (650)				ND		ND		ND		ND		ND
RI-GWMWO-3 (1050)				ND		ND		ND		ND		ND
RI-GWMWO-3 (1450)				ND		ND		ND		ND		ND
RI-GWMWO-3 (260)				ND		ND		ND		ND		ND
RI-GWMWO-3 (650)				ND		ND		ND		ND		ND
RI-GWMWO-4 (250)			1.2			ND		ND		ND		ND
RI-GWMWO-4 (650)				ND		ND		ND		ND		ND
RI-GWMWO-4 (900)				ND		ND		ND		ND		ND
APDW-1/1200FT			3.6			ND		ND	94			ND
APDW-1/900FT				ND		ND		ND	170			ND

ND - Non detect
A - Concentration exceeds instrument calibration
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J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Vinyl chloride	
GTARC	2 ug/L	
APD-1(600)		ND
IW-1 (1370)		ND
IW-1(1390)		ND
IW-1(900)		ND
MW115		ND
RI-GWAPMW-10		ND
RI-GWAPMW-15		ND
RI-GWAPMW-16		ND
RI-GWAPMW-20	13	
RI-GWAPMW-22		ND
RI-GWAPMW-22B		ND
RI-GWAPMW-23		ND
RI-GWMW-01		ND
RI-GWMW-05	30	
RI-GWMW-101		ND
RI-GWMW-103		ND
RI-GWMW-104R		ND
RI-GWMW-105	4.3	
RI-GWMW-106	1.9	
RI-GWMW-107A	17	
RI-GWMW-109	62	
RI-GWMW-11	1.4	
RI-GWMW-111	5.3	
RI-GWMW-112		ND
RI-GWMW-113		ND
RI-GWMW-114		ND
RI-GWMW-115		ND
RI-GWMW-116		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Vinyl chloride	
GTARC	2 ug/L	
RI-GWMW-117		ND
RI-GWMW-118		ND
RI-GWMW-119		ND
RI-GWMW-12		ND
RI-GWMW-16		ND
RI-GWMW-17		ND
RI-GWMW-18		ND
RI-GWMW-19D		ND
RI-GWMW-19S		ND
RI-GWMW-20D		ND
RI-GWMW-3		ND
RI-GWMW-4		ND
RI-GWRW-02		ND
RI-GWRW-03		ND
RI-GWRW-05		ND
RI-GWRW06		ND
RI-GWRW-07		ND
RI-GWRW-1		ND
RI-GWRW-10		ND
RI-GWRW-101		ND
RI-GWRW-102		ND
RI-GWRW-4		ND
RI-GWRW-9	11	
RI-GWAPD-1 (300)		ND
RI-GWAPD-1 (650)		ND
RI-GWAPD-2 (290)		ND
RI-GWAPD-2 (550)		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

Table 4
Key Sample Summary for Groundwater - Organics
ITD Remedial Investigation - Phase II
Springfield, Missouri

CLIENT_ID	Vinyl chloride	
GTARC	2 ug/L	
RI-GWIW-1 (1050)		ND
RI-GWIW-1 (1390)		ND
RI-GWIW-1 (387)		ND
RI-GWIW-1 (402)		ND
RI-GWIW-1 (556)	1.2	
RI-GWIW-1 (593)		ND
RI-GWIW-1 (650)		ND
RI-GWMWO-1 (1050)		ND
RI-GWMWO-1 (1410)		ND
RI-GWMWO-1 (270)		ND
RI-GWMWO-1 (650)		ND
RI-GWMWO-2 (1050)		ND
RI-GWMWO-2 (1450)		ND
RI-GWMWO-2 (250)		ND
RI-GWMWO-2 (650)		ND
RI-GWMWO-3 (1050)		ND
RI-GWMWO-3 (1450)		ND
RI-GWMWO-3 (260)		ND
RI-GWMWO-3 (650)		ND
RI-GWMWO-4 (250)		ND
RI-GWMWO-4 (650)		ND
RI-GWMWO-4 (900)		ND
APDW-1/1200FT		ND
APDW-1/900FT		ND

ND - Non detect
A - Concentration exceeds instrument calibration
B - Compound was found in blank and sample
J - Result is estimated value below reporting limit
H - Alternate peak selection upon review
a - Concentration is below method Reporting Limit
* - Batch QC exceeds the upper or lower control limits
M - Manually Itegrated Compound

PLANT SUBFLOOR

DECORATIVE POND

AREA NEAR SB-19

PERCOLATION TERRACE

FORMER "NEW" ACID PIT

FORMER "C" LAGOON

FORMER "A/B" LAGOON

SANITARY LAGOON

FORMER SLUDGE PIT

FORMER "ORIGINAL" ACID PIT

SITE BOUNDARY

SINKHOLE

SINKHOLE

SITE BOUNDARY

LEGEND:

- GT BORING / PHASE II
- AB BORING / PHASE II
- OP BORING / PHASE II
- PT BORING / PHASE II
- SL BORING / PHASE II
- NP BORING / PHASE II
- PL BORING / PHASE II
- SF BORING / PHASE II
- SF BORING / PHASE I
- SB BORING / PHASE I
- SI BORING / PHASE I
- APB BORING / PHASE I

AREA OF CONCERN

ITD PROPERTY BOUNDARY

0 50 100 150 200
SCALE IN FEET

N

DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	

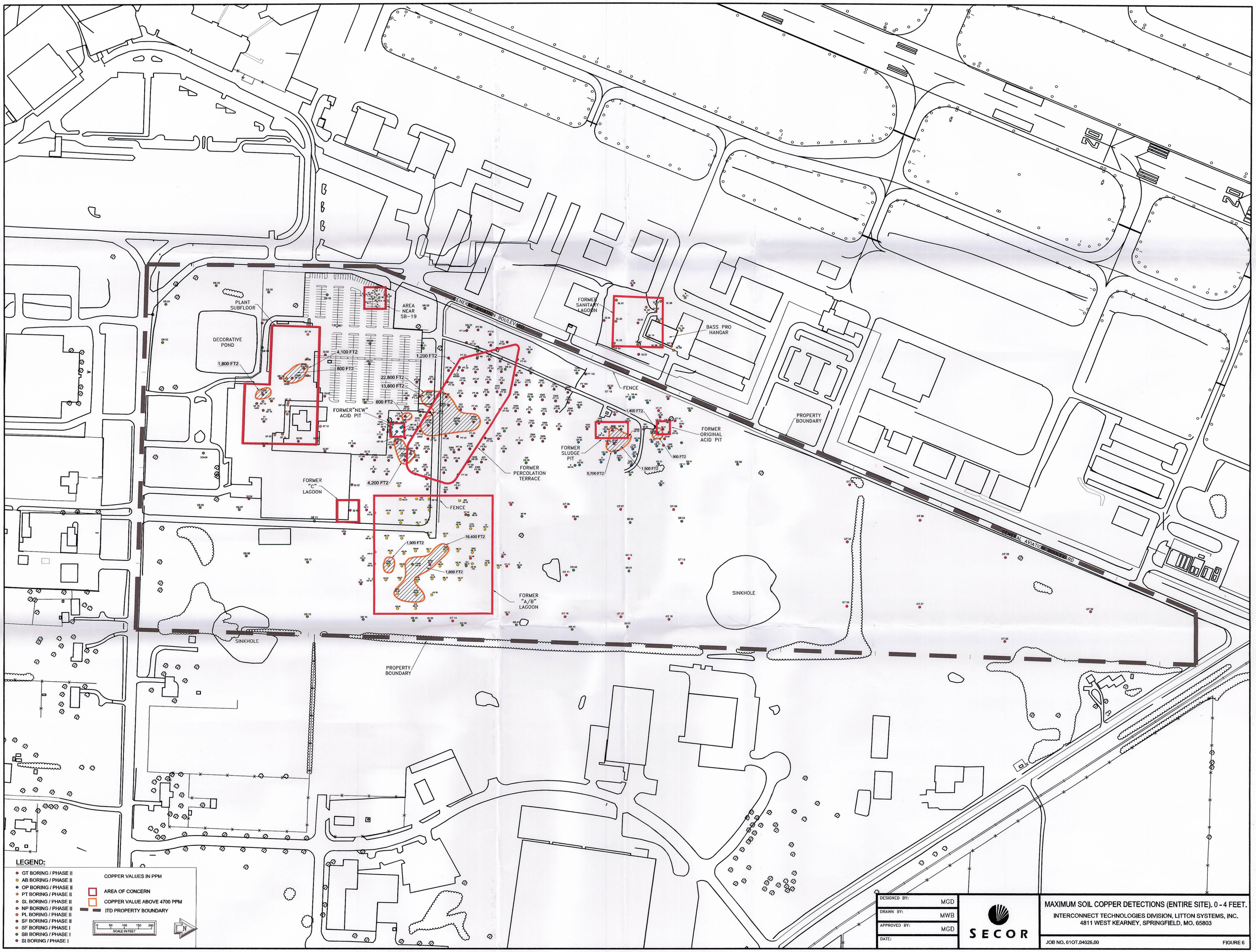
SECOR

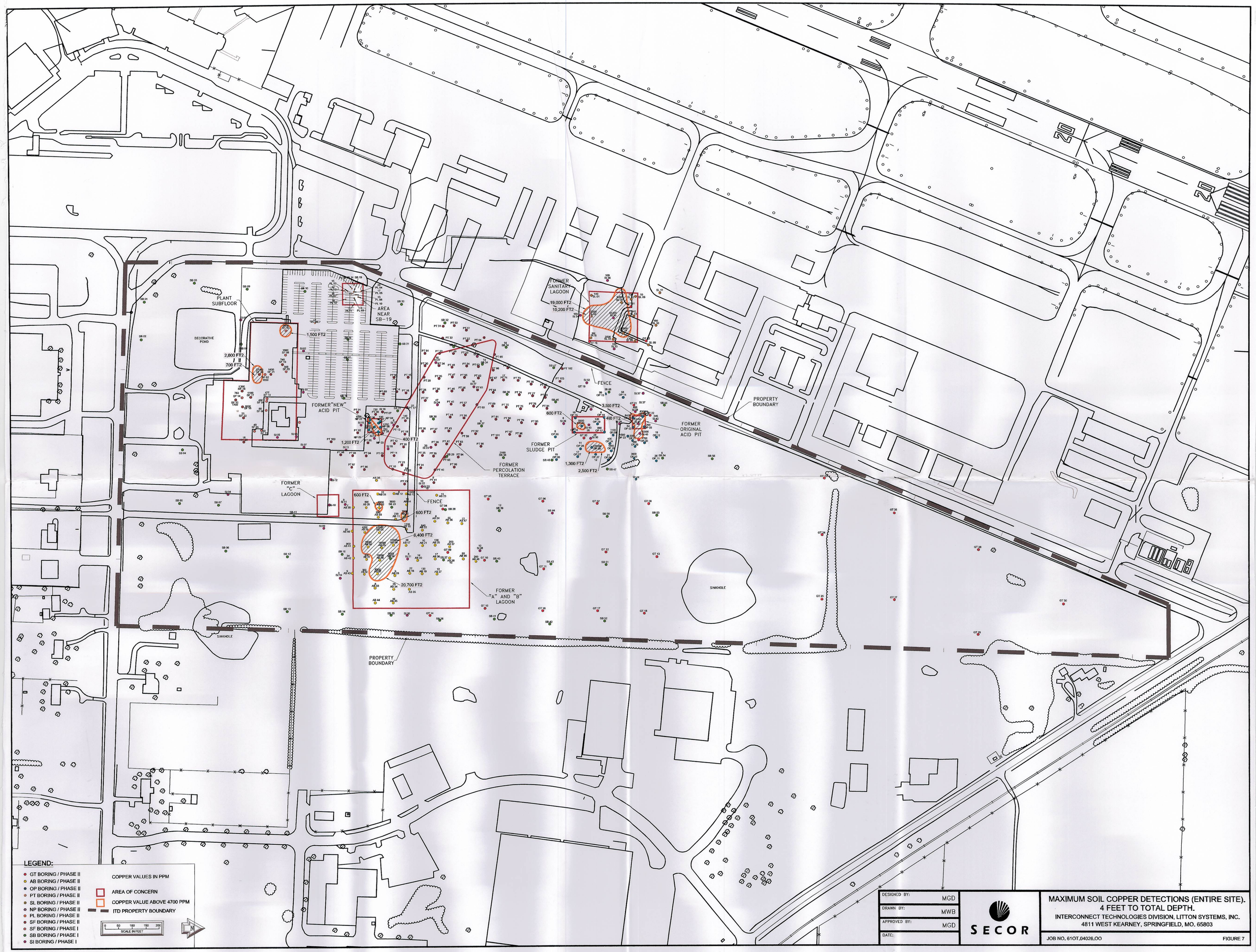
SOIL BORING LOCATIONS

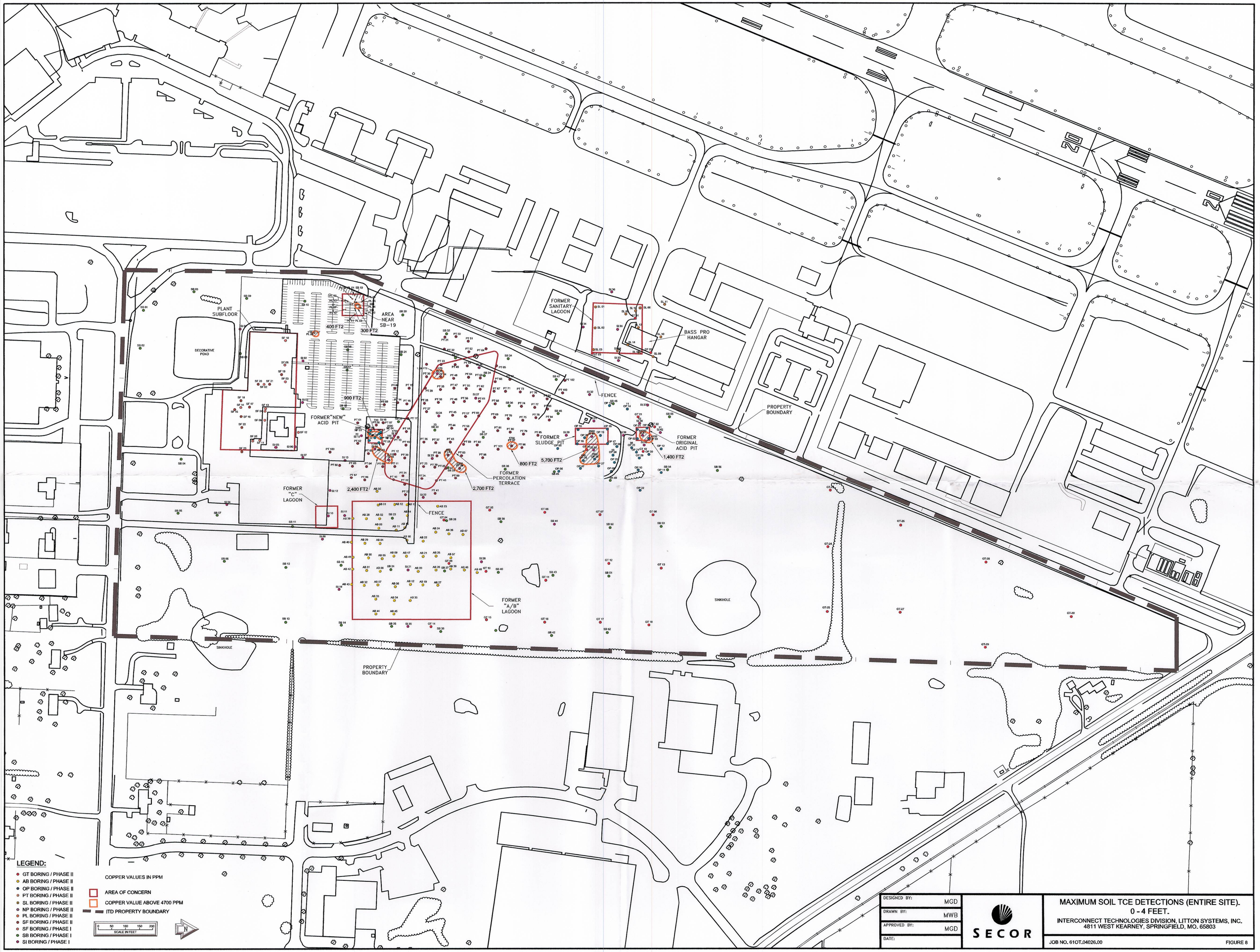
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO 65803

JOB NO. 61OT.04026.00

FIGURE 3


PLANT SUBFLOOR
DECORATIVE POND
1,800 FT2
4,100 FT2
800 FT2
AREA NEAR SB-19
1,200 FT2
22,800 FT2
13,800 FT2
800 FT2
FORMER "NEW" ACID PIT
FORMER "C" LAGOON
4,200 FT2
FENCE
1,900 FT2
16,400 FT2
1,600 FT2
FORMER "A/B" LAGOON
SINKHOLE
PROPERTY BOUNDARY
FORMER PERCOLATION TERRACE
FORMER SANITARY LAGOON
BASS PRO HANGAR
FENCE
1,400 FT2
FORMER SLUDGE PIT
5,700 FT2
FORMER ORIGINAL ACID PIT
900 FT2
1,500 FT2
PROPERTY BOUNDARY
SINKHOLE
GENERAL AVIATION BOULEVARD
LEGEND:
GT BORING / PHASE II
AB BORING / PHASE II
OP BORING / PHASE II
PT BORING / PHASE II
SL BORING / PHASE II
NP BORING / PHASE II
PL BORING / PHASE II
SF BORING / PHASE II
SF BORING / PHASE I
SB BORING / PHASE I
SI BORING / PHASE I
COPPER VALUES IN PPM
AREA OF CONCERN
COPPER VALUE ABOVE 4700 PPM
ITD PROPERTY BOUNDARY
0 50 100 150 200
SCALE IN FEET
N
DESIGNED BY: MGD
DRAWN BY: MWB
APPROVED BY: MGD
DATE:
SECOR
MAXIMUM SOIL COPPER DETECTIONS (ENTIRE SITE). 0 - 4 FEET.
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO. 65803
JOB NO. 61OT.04026.00
FIGURE 6


PLANT SUBFLOOR
DECORATIVE POND
AREA NEAR SB-19
1,500 FT2
2,000 FT2
700 FT2
FORMER "NEW" ACID PIT
1,200 FT2
400 FT2
FORMER SANITARY LAGOON
19,000 FT2
10,200 FT2
FENCE
3,500 FT2
600 FT2
490 FT2
FORMER ORIGINAL ACID PIT
FORMER SLUDGE PIT
1,300 FT2
2,500 FT2
FORMER PERCOLATION TERRACE
PROPERTY BOUNDARY
FORMER "C" LAGOON
600 FT2
FENCE
600 FT2
6,400 FT2
20,700 FT2
FORMER "A" AND "B" LAGOON
SINKHOLE
SINKHOLE
PROPERTY BOUNDARY
LEGEND:
GT BORING / PHASE II
AB BORING / PHASE II
OP BORING / PHASE II
PT BORING / PHASE II
SL BORING / PHASE II
NP BORING / PHASE II
PL BORING / PHASE II
SF BORING / PHASE II
SF BORING / PHASE I
SB BORING / PHASE I
SI BORING / PHASE I
COPPER VALUES IN PPM
AREA OF CONCERN
COPPER VALUE ABOVE 4700 PPM
ITD PROPERTY BOUNDARY
0 50 100 150 200
SCALE IN FEET
N
DESIGNED BY: MGD
DRAWN BY: MWB
APPROVED BY: MGD
DATE:
SECOR
MAXIMUM SOIL COPPER DETECTIONS (ENTIRE SITE).
4 FEET TO TOTAL DEPTH.
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO. 65803
JOB NO. 61OT.04026.OO
FIGURE 7


PLANT SUBFLOOR
DECORATIVE POND
AREA NEAR SB-19
400 FT2
300 FT2
900 FT2
FORMER "NEW" ACID PIT
FORMER "C" LAGOON
2,400 FT2
FENCE
FORMER "A/B" LAGOON
SINKHOLE
PROPERTY BOUNDARY
FORMER SANITARY LAGOON
BASS PRO HANGAR
FENCE
FORMER SLUDGE PIT
5,700 FT2
800 FT2
FORMER PERCOLATION TERRACE
2,700 FT2
FORMER ORIGINAL ACID PIT
1,400 FT2
PROPERTY BOUNDARY
SINKHOLE
LEGEND:
GT BORING / PHASE II
AB BORING / PHASE II
OP BORING / PHASE II
PT BORING / PHASE II
SL BORING / PHASE II
NP BORING / PHASE II
PL BORING / PHASE II
SF BORING / PHASE II
SF BORING / PHASE I
SB BORING / PHASE I
SI BORING / PHASE I
COPPER VALUES IN PPM
AREA OF CONCERN
COPPER VALUE ABOVE 4700 PPM
ITD PROPERTY BOUNDARY
0 50 100 150 200
SCALE IN FEET
N
DESIGNED BY: MGD
DRAWN BY: MWB
APPROVED BY: MGD
DATE:
SECOR
MAXIMUM SOIL TCE DETECTIONS (ENTIRE SITE).
0 - 4 FEET.
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO. 65803
JOB NO. 61OT.04026.00
FIGURE 8

DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	

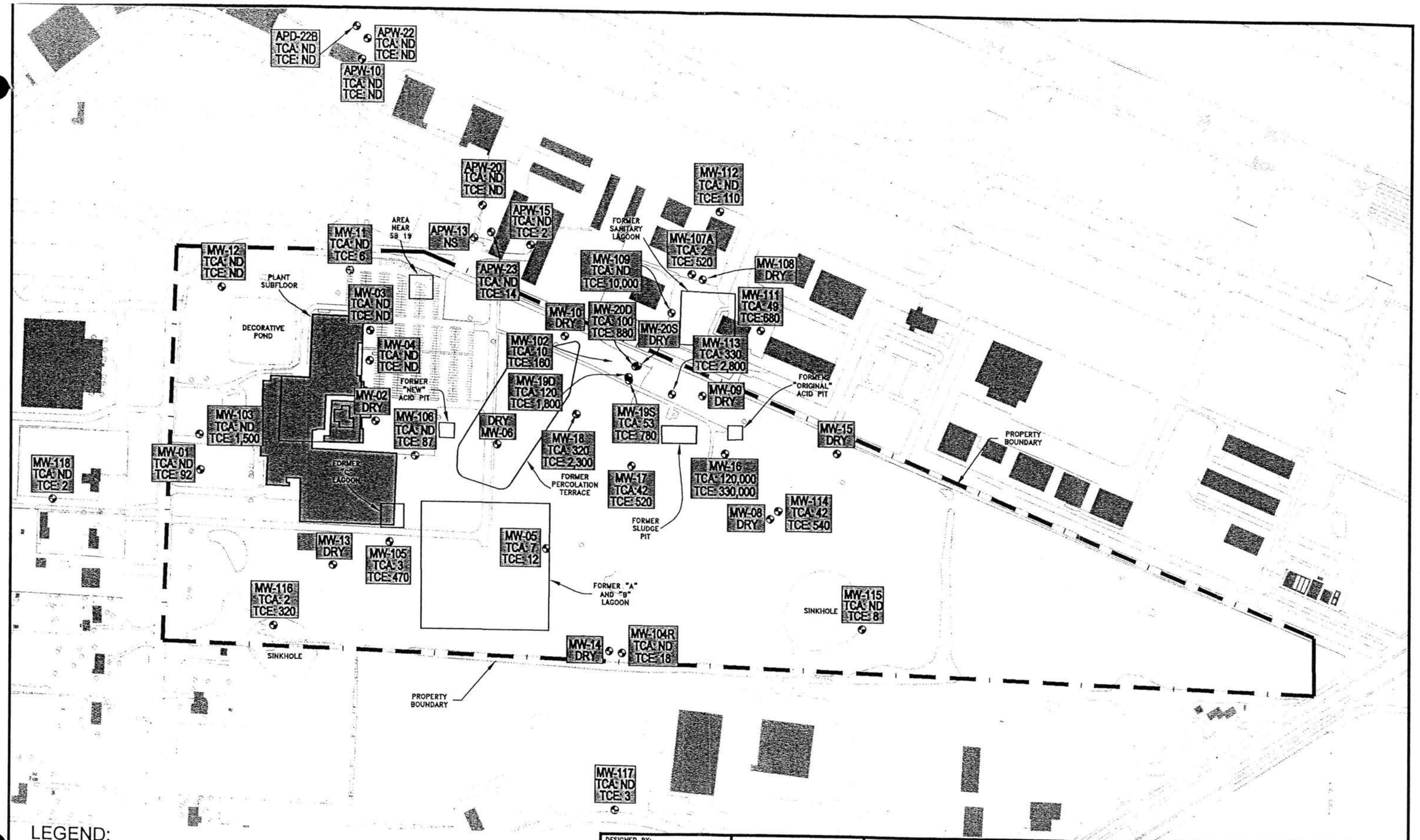
SECOR

MAXIMUM SOIL TCE DETECTIONS (ENTIRE SITE).
4 FEET TO TOTAL DEPTH..

INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO.. 65803

JOB NO. 61OT.04026.00

FIGURE 9



LEGEND:

⊗ MONITORING WELL

ALL CONCENTRATIONS IN PPB, FROM THE 9/04 SAMPLING EVENT

0 100 200 300 400
SCALE IN FEET

N

DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	

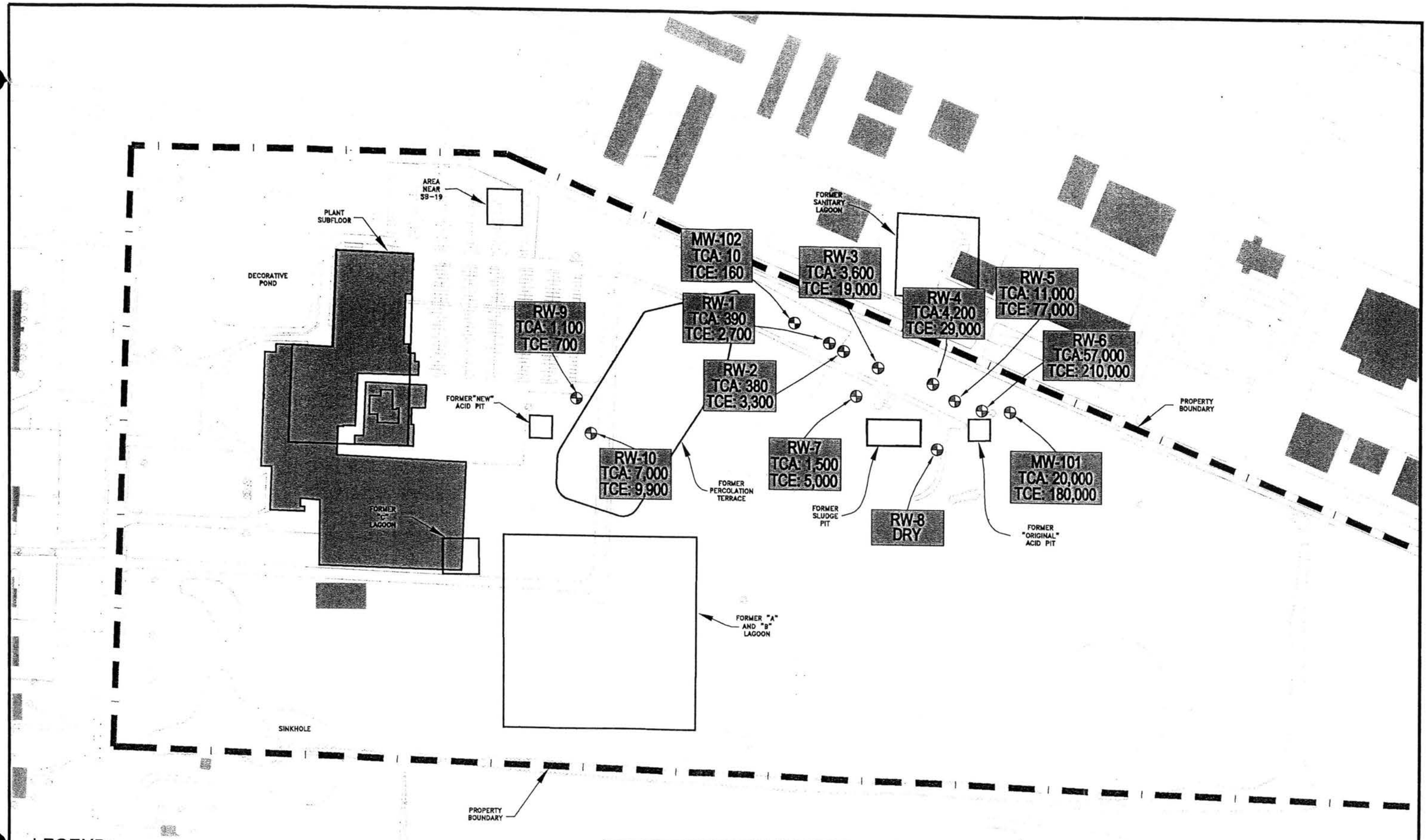
SECOR

MAP OF MONITORING WELLS SCREENED IN SPRINGFIELD PLATEAU AQUIFER SHOWING SELECT CONTAMINANTS

INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.

4811 WEST KEARNEY, SPRINGFIELD, MO. 65803

FIGURE 38



LEGEND:

⊕ RECOVERY WELL

ALL CONCENTRATIONS IN PPB, FROM THE 9/04 SAMPLING EVENT

0 100 200 300 400
SCALE IN FEET

DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	

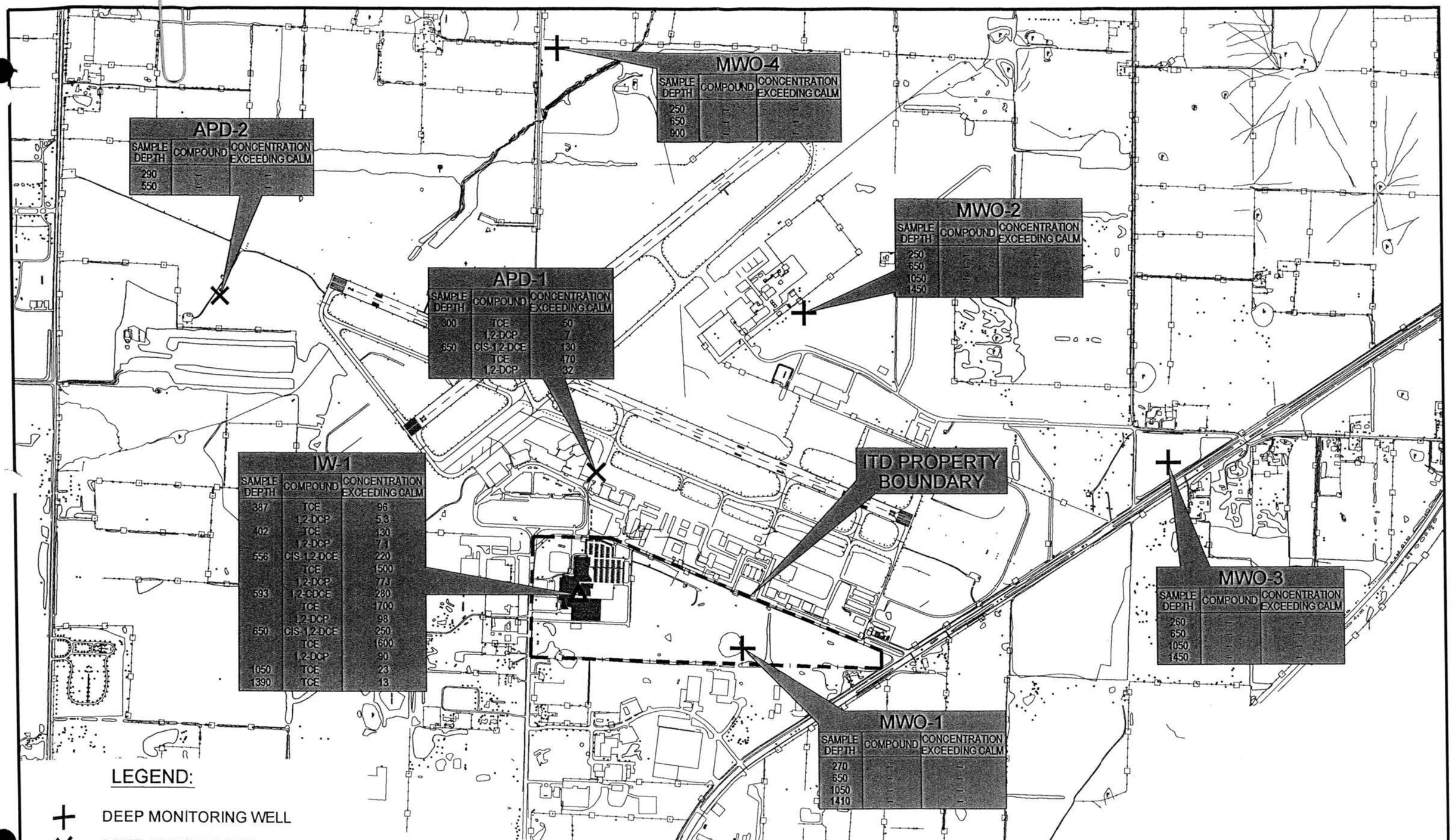
SECOR

MAP OF RECOVERY WELLS SCREENED IN SPRINGFIELD PLATEAU AQUIFER SHOWING SELECT CONTAMINANTS

INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.

4811 WEST KEARNEY, SPRINGFIELD, MO. 65803

FIGURE 39



DESIGNED BY:	MGD
DRAWN BY:	MWB
APPROVED BY:	MGD
DATE:	

SECOR

MAP OF OZARK AQUIFER SAMPLING LOCATIONS
SHOWING VOLITILE ORGANIC COMPOUND EXCEEDENCES
INTERCONNECT TECHNOLOGIES DIVISION, LITTON SYSTEMS, INC.
4811 WEST KEARNEY, SPRINGFIELD, MO. 65803

FIGURE 42

APPENDIX D: ANALYTICAL DATA TABLES

Table D-1 – Litton Systems Inc. Site, Greene County, Missouri
SR Spring Water Sample Collection Data

Sample Number	Date Collected	Time Collected	Location Collected/Description	Distance From Site (miles)	Direction from site
0417553	4/5/04	------	Trip blank.	NA	NA
0417554	4/5/04	1342	Duplicate of 0417561.	3.45	NE
0417556	4/5/04	1045	Emergence of Fantastic Caverns Spring.	3.45	NE
0417558	4/5/04	1150	Underground river inside caverns between pit and tour turnaround point.	3.45	NE
0417561	4/5/04	1342	Emergence of Ritter Park Spring.	3.45	NE
0417563	4/5/04	1450	Emergence of Ritter West Spring.	2.85	NE
0417565	4/5/04	1515	Emergence of Ritter East Spring.	3.0	NE
0417567	4/5/04	1610	Emergence of Williams Spring.	3.5	NE
0417569	4/5/04	1720	Emergence of Bunge Spring.	3.75	NE
0417571	4/5/04	1851	Emergence of Bob Lovitt Spring.	14.0	E
0429535	6/17/04	1340	Water grab SP-01 taken from Bob Lovitt spring where spring emerges from ground.		
0429504	6/18/04	0930	Water grab SP-03 taken from Ritter Spring Park at emergence of Ritter Spring.		
0429505	6/18/04	0930	Duplicate of 0429504.		
0429515	6/18/04	0800	Water grab SP-02 taken from Vich Spring located behind the house on the corner of West and Woodlawn Streets.		
043559	10/18/04	1355	Surface water grab SW-01, Robert's Spring from mouth of cave.		

TABLE D-2: SELECTED ANALYTICAL RESULTS FOR SPRING WATER SAMPLES
LITTON SYSTEMS INC SITE SR, GREENE COUNTY, MISSOURI

- All values listed in parts per billion (ug/l) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- NA denotes not analyzed

- Sample results in bold are significantly[1] above background concentrations
- Sample results in shaded cells exceed the lowest SCDM benchmark value
- Circled sample results exceed the MCL

Sample ID	Trip Blank	Ritter Pk Sp Duplicate	Fantastic Caverns Sp	Fantastic Caverns Cave Sp	Ritter Pk Sp	Ritter West Sp	Ritter East Sp	Williams Sp	Bunge Sp	Lovett's Sp Bkgrd	Ritter Pk Sp	Ritter Pk Sp Duplicate	Vich Sp	Lovett's Sp Bkgd	Roberts Sp Bkgd	Trip Blank	SCDM[2]				MO WQS[3]			
Date Sample Collected	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	6/18/04	6/18/04	6/18/04	6/17/04	10/18/04	10/18/04								
Laboratory Number	0417553	0417554	0417556	0417558	0417561	0417563	0417565	0417567	0417569	0417571	0429504	0429505	0429515	0429535	043559	043561	MCL	Ref. Dose	Cancer Risk	AWQC/ AALAC	DW / GW	Aq. Life	Fish Consmp	Irr. / Lvstock
Water Quality Indicators																								
pH	NA	NA	7.87	8.58	8.18	8.39	8.2	8.43	8.09	8.2	7.01	NA	6.84	7.11	NA	NA	NL	NL	NL	NL	NL	NL	NL	NL
Specific Conductivity, umhos/cm	NA	NA	525.0	487.0	590.0	562.0	680.0	476.0	508.0	398.0	579.0	NA	763.0	386.0	NA	NA	NL	NL	NL	NL	NL	NL	NL	NL
Temperature, 0C	NA	NA	13.7	14.2	13.3	14.3	14.0	14.1	13.5	13.6	13.6	NA	14.6	13.9	NA	NA	NL	NL	NL	NL	NL	NL	NL	NL
Metals																								
Arsenic	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14.4(e)	NA	10	11	0.057	190	50	20	NL	100
Arsenic, dissolved	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	NA	10	11	0.057	190	50	20	NL	100
Chromium, total	NA	.74 (e)	.56 (e)	.51 (e)	.41 (e)	.48 (e)	.59 (e)	1.04	.58 (e)	.67 (e)	.28 (e)	<.25	<.25	.33 (e)	1.22(e)	NA	100	110	NL	11	100	42	NL	100
Chromium, total, dissolved	NA	.68 (e)	.67 (e)	.62 (e)	.59 (e)	.67 (e)	.63 (e)	.57 (e)	.58 (e)	.73 (e)	.76 (e)	.79 (e)	.72 (e)	NA	1.07(e)	NA	100	180	NL	11	100	42	NL	100
Copper	NA	**1.69**	.84 (e)	.94 (e)	.34 (e)	**1.59**	**1.03**	**5.03**	.97 (e)	.33 (e)	**6.41**	<.25	<.25	<.25	<5.0	NA	1300	NL	NL	12	1300	19	NL	500
Copper, dissolved	NA	<.25	.64 (e)	.69 (e)	.29 (e)	**1.17**	.46 (e)	**2.15**	.42 (e)	.32 (e)	1.05	.82 (e)	.87 (e)	NA	<5.0	NA	1300	NL	NL	12	1300	19	NL	500
Lead	NA	**.45 (e)**	<.25	<.25	<.25	<.25	.25 (e)	<.25	<.25	<.25	<.25	<.25	1.5	.61 (e)	<0.25	NA	15	NL	NL	3.2	15	9	NL	NL
Lead, dissolved	NA	<.25	<.25	<.25	<.25	<.25	<.25	<.25	<.25	<.25	<.25	<.25	.25 (e)	NA	<1.0	NA	15	NL	NL	3.2	15	9	NL	NL
Nickel	NA	1.86	1.69	1.48	1.8	1.99	2.5	1.97	1.7	1.37	.77 (e)	<.25	<.25	.29 (e)	2.6	NA	NL	730	NL	160	100	360	NL	NL
Nickel, dissolved	NA	2.08	2.23	1.96	2.26	2.37	2.83	2.13	2.2	1.65	1.59	1.63	2.18	NA	<1.0	NA	NL	730	NL	160	100	360	NL	NL
Zinc	NA	3.34	1.55	1.66	1.37	3.45	3.11	2.24	1.35	4.39	4.85	1.61	9.42	4.77	6.97	NA	NL	11000	NL	110	5000	241	NL	NL
Zinc, dissolved	NA	.95 (e)	1.45	1.75	1.54	3.16	2.65	1.92	1.38	4.47	2.38	2.16	11.2	NA	7.41	NA	NL	11000	NL	110	5000	241	NL	NL
Volatile Organic Compounds (VOCs)																								
1,1,1-Trichloroethane	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**2.14**	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	200	NL	NL	NL	200	NL	NL	NL
1,1-Dichloroethene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**1.18**	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7	1800	NL	NL	7	NL	3.2	NL
Chloroform	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**.46 (e)**	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NL	370	NL	NL	100	NL	NL	NL
cis-1,2-dichloroethene	<0.25	<0.25	<0.25	<0.25	<0.25	**1.15**	<0.25	**3.46**	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	70	370	NL	NL	70	NL	NL	NL
Tetrachloroethene (PCE)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**1.23**	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5	360	1.6	NL	5	NL	9	NL
Trichloroethene (TCE)	<0.25	<0.25	**.48 (e)**	**.82 (e)**	<0.25	**6.81**	<0.25	**12.5**	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5	NL	7.7	NL	5	NL	80	NL
Semi-Volatile Organic Compounds (SVOCs)																								
bis(2-Ethylhexyl) phthalate (DEHP)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**100.0**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6	730	6.1	NL	6	NL	5.9	NL

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix, maximum contaminant level (MCL), reference dose and cancer risk benchmarks for groundwater pathway, and ambient water quality criteria/ambient aquatic life advisory concentrations (AWQC/AALAC), June 1996. The MCLs are updated using January 2004 data.

[3] MO WQS - Missouri Water Quality Standards, benchmarks for drinking water, groundwater, protection of aquatic life, fish consumption, and irrigation/livestock watering use categories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

e - Estimated value, detected below PQL

Table D-3 – Litton Systems Inc. Site, Greene County, Missouri
SR Sediment Sample Collection Data

Sample Number	Date Collected	Time Collected	Location Collected/Description
0417555	4/5/04	1350	Replicate of 0417562.
0417557	4/5/04	1050	Emergence of Fantastic Caverns Spring.
0417559	4/5/04	1155	Underground river inside caverns between pit and tour turnaround point.
0417562	4/5/04	1350	Emergence of Ritter Park Spring.
0417564	4/5/04	1500	Emergence of Ritter West Spring.
0417566	4/5/04	1520	Emergence of Ritter East Spring.
0417568	4/5/04	1615	Emergence of Williams Spring.
0417570	4/5/04	1725	Emergence of Bunge Spring.
0417572	4/5/04	1900	Emergence of Bob Lovitt Spring.
0429534	6/17/04	1350	SD-01 taken from Lovitt spring approximately 150 feet downstream from the spring emergence. The sediment was a rocky silt.
0422824	6/18/04	0810	SD-02 taken from Vich Spring next to culvert behind house on the corner of West and Woodlawn Streets. The sediment was a reddish- brown silty clay.
0429506	6/18/04	0935	SD-03 taken from spring at Ritter Spring Park. The sediment was a silty gravel.
0429507	6/18/04	09335	Replicate of 0429506.
043560	10/18/04	1420	Sediment grab SD-01 from Robert's Spring, near bank, 15 feet north of cave opening.

TABLE D-4: SELECTED ANALYTICAL RESULTS FOR SEDIMENT SAMPLES
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- All values listed in parts per million (mg/kg) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- Sample results in bold are significantly[1] above background concentrations
- Sample results in shaded cells exceed the PEC benchmark
- Circled sample results exceed the ECOTOX benchmark

Sample ID	Ritter Pk Sp Repl.	Fantastic Caverns Sp	Fantastic Caverns Cave Sp	Ritter Pk Sp	Ritter West Sp	Ritter East Sp	Williams Sp	Bunge Sp	Ritter Pk Sp	Ritter Pk Sp Repl.	Vich Sp	Lovett's Sp Bkg	Lovett's Sp Bkg	Robert's Sp Bkg	Sediment Quality Guidelines		
Date Collected	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	4/5/04	6/18/04	6/18/04	6/18/04	4/5/04	6/17/04	10/18/04	USGS TEC [2]	USGS PEC [2]	EPA EcoTox [3]
Laboratory Number	0417555	0417557	0417559	0417562	0417564	0417566	0417568	0417570	0429506	0429507	0422824	0417572	0429534	043560			
Metals																	
Arsenic	4.03	5.21	3.18	2.94	4.13	5.33	5.09	3.86	3.30	3.5	4.82	3.61	.813(e, h)	10.3	9.79	33	8.2
Chromium, total	16.3	29.8	22.0	18.5	31.8	29.5	30.3	22.6	42.5	29.3	26.7	24.0	34.8	121	43.4	111	81
Copper	39.3	73.4	64.2	43.9	**122.0**	25.7	**205.0**	12.6	5.13	3.92	11.8	22.0	6.06	5.43	31.6	149	34
Lead	45.7	35.8	22.7	22.3	36.9	42.8	36.0	27.8	20.5	24.5	19.2	47.8	13.3	53.0	35.8	149	47
Nickel	20.0	26.3	18.0	14.3	32.6	31.0	34.4	21.4	10.4	11.4	26.6	18.5	10.3	27.4	22.7	48.6	21
Zinc	49.6	62.0	54.8	51.0	84.7	101.0	108.0	67.8	39.1	33.2	128.0	192.0	58.3	41.7	121	459	150
Volatile Organic Compounds (VOCs)																	
Methyl tertiary-butyl ether (MTBE)	<.001	<.001	<.001	<.001	<.001	**.00121** (e	<.001	<.001	<.0025	<.0025	<.0025	<.001	<.0025	<.0025	NL	NL	NL
Tetrachloroethene (PCE)	<.001	<.001	<.001	<.001	<.001	**.00876**	<.001	<.001	<.0025	<.0025	<.0025	<.001	<.0025	<.0025	NL	NL	0.53
Trichloroethene (TCE)	<.001	<.001	<.001	<.001	**.00281** (e	<.001	**.00513**	<.001	<.0025	<.0025	<.0025	<.001	<.0025	<.0025	NL	NL	1.6
Semi-Volatile Organic Compounds (SVOCs)																	
2-Methylnaphthalene	**.588**	<.08 (i)	<.08 (i)	<.08 (i)	<.08 (i)	<.08 (i)	<.08 (i)	<.08 (i)	<.02	<.02	<.02	<.08 (i)	<.02	<.02	NL	NL	NL
Acenaphthene	**.122**	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	NL	NL	0.62
Acenaphthylene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**1.28**	<.02	<.02	<.02	NL	NL	NL
Anthracene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**2.42**	<.02	<.02	<.02	57.2	845	4
Benzo(a)anthracene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**9.67**	<.02	<.02	<.02	108	1050	4
Benzo(a)pyrene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**13.1**	<.02	<.02	<.02	150	1450	0.43
Benzo(b)fluoranthene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**6.79**	<.02	<.02	<.02	NL	NL	0
Benzo(ghi)perylene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**2.22**	<.02	<.02	<.02	NL	NL	NL
Benzo(k)fluoranthene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**10.9**	<.02	<.02	<.02	NL	NL	4
Chrysene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**11.5**	<.02	<.02	<.02	166	1290	4
Dibenz(a,h)anthracene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**2.85**	<.02	<.02	<.02	33	1050	4
Fluoranthene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**8.45**	<.02	<.02	<.02	423	2230	2.9
Fluorene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**.477**	<.02	<.02	<.02	77.4	536	0.54
Indeno(1,2,3-cd)pyrene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**4.06**	<.02	<.02	<.02	NL	NL	4
Naphthalene	.794	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	NL	NL	0.48
Pentachlorophenol	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**.333**	<.02	NL	NL	NL
Phenanthrene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**1.61**	<.02	<.02	<.02	204	1170	0.85
Pyrene	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	**13.2**	<.02	<.02	<.02	195	1520	0.66

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.
used average of Lovett and Robert spring results as background concentration

[2] TEC and PEC - Threshold Effects and Probable Effects Concentration (TEC and PEC), U.S. Geological Survey Consensus-Based Sediment Quality Guidelines, June 2000

[3] EcoTox - Ecotox Thresholds, EPA Bulletin, EPA/540/F-95/038, January, 1996

[4] TCLP - Toxicity Leaching Procedure regulatory limit, 40 CFR Part 261, Subpart C.

(e) Estimated value, detected below the PQL
(i) PQL elevated due to sample dilution
(h) Analyte present in method blank at >1/2 reported value

Table D-5 – Private Residential Well Sample Collection Data
Litton Systems, Inc. SR, Greene County, Missouri

Sample Number	Date Collected	Time Collected	Location Collected/Description*
0429564	6/17/04	1805	Water grab DW-22 taken from 5283 FR 125, Cary and Kim Moore residence.
0429501	6/17/04	1820	Water grab DW-23 taken from 5392 FR 125, M. Koeneman residence.
0429502	6/17/04	1845	Water grab DW-24 taken from 4073 FR 125, Mark Johnson residence.
0429560	6/17/04	1705	Water grab DW-19 taken from 5157 FR 125, James McCurdy residence.
0429561	6/1704	1710	Water grab DW-19 taken from 5157 FR 125, James McCurdy residence.
0429562	6/17/04	1725	Water grab DW-20 taken from 5186 FR 125, Michelle Bunge residence.
0429563	6/17/04	1750	Water grab DW-21 taken from 5227 FR 125, Simons residence.
0429556	6/17/04	-----	Trip Blank.
0429557	6/17/04	1605	Water grab DW-16 taken from 4964 FR 125, Vevegge residence.
0429558	6/17/04	1615	Water grab DW-17 taken from 5086 FR 125, David and Carol Thomas residence.
0429595	6/17/04	1630	Water grab DW-18 taken from 5135 North Lissa Lane, Randy Lea Sr. residence.
0429552	6/17/04	1440	Water grab DW-12 taken from 4630 FR 82, James Anderson residence.
0429553	6/17/04	1450	Water grab DW-13 taken from 4517 FR 82, Phillip E. Ware residence.
0429554	6/17/04	1530	Water grab DW-14 taken from 4887 FR 125, Valorie and Joe Webb residence.
0429555	6/17/04	1545	Water grab DW-15 taken from 4907 FR 125, Max Graves residence.
0429540	6/17/04	0950	Water grab DW-01 taken from 5011 north FR 129, Vernon Williams residence.
0429541	6/17/04	1010	Water grab DW-02 taken from 4426 north FR 125, Lowell property.
0429542	6/17/04	1040	Water grab DW-03 taken from 4036 west FR 94, Charles Huff residence.
0429543	6/17/04	1105	Water grab DW-04 taken from 3821 FR 92, Don and Frances Anstine residence.
0429544	6/17/04	1130	Water grab DW-05 taken from 4765 FR 129, M. Johnson residence.
042945	6/17/04	1150	Water grab DW-06 taken from 4641 north FR 129, F. Price residence. 5 homes on well.
042946	6/17/04	1205	Water grab DW-07 taken from 4547 FR 129, C. Vahldick property.
042957	6/17/04	1320	Water grab DW-08 taken from 4281 FR 125, R. Wilkins residence.
0429548	6/17/04	1340	Water grab DW-09 taken from 5179 north FR 125, Cora Potts residence.
0429549	6/17/04	1355	Water grab DW-10 taken from 4706 west FR 82, Paul and Cathy Lea residence.
0429550	6/17/04	1400	Water grab DW-10 taken from 4706 west FR 82, Paul and Cathy Lea residence.
0429551	6/17/04	1420	Water grab DW-11 taken from 4677 west FR 82, Bob Ware Sr. residence.
0429565	6/17/04	0810	Water grab taken from 4475 west FR 94, Larson residence.
0429566	6/17/04	0840	Water grab taken from 4823 Blue Jay Lane, Willet residence.
0429567	6/17/04	0900	Water grab taken from 4188 north FR 115, Wilson residence.
0429568	6/17/04	0945	Water grab taken from 4307 west FR 94, Perry residence.
0429569	6/17/04	1010	Water grab taken from 4635 west Stickhorse Ln., Burrell residence, pre-treatment.
0429570	6/17/04	1030	Water grab taken from 4635 west Stickhorse Ln., Burrell residence, post-treatment.
0429571	6/17/04	1045	Water grab taken from 4774 west FR 94, Conn residence.
0429572	6/17/04	1105	Water grab taken from 5022 west FR 94, Stublefield residence.
0429573	6/17/04	1130	Water grab taken from 4936 west FR 94, Johnson residence.

Table D-5 – Private Residential Well Sample Collection Data
Litton Systems, Inc. SR, Greene County, Missouri

Sample Number	Date Collected	Time Collected	Location Collected/Description*
0429574	6/17/04	1145	Water grab taken from 4643 west FR 94, Stephens residence.
0429575	6/17/04	1155	Water grab taken from 4643 west FR 94, Stephens well behind trailer northeast of the house.
0429576	6/17/04	1310	Water grab taken from 4623 west FR 94, Hennessy residence.
0429577	6/17/04	1315	Duplicate of 0429576.
0429578	6/17/04	1330	Water grab taken from 4335 west FR 94, Cook residence.
0429579	6/17/04	1350	Water grab taken from 5230 west Baldwin Lane, Baldwin residence.
0429580	6/717/04	1405	Water grab taken from 5235 west Baldwin Lane, Kate Simpson residence.
0429581	6/17/04	1420	Water grab taken from 4130 north FR 115, Tolson residence.
0429582	6/17/04	1445	Water grab taken from 3627 north FR 115, Bookout residence.
0429583	6/17/04	1500	Water grab taken from 3610 north FR 115, Smith residence.
0429584	6/17/04	1500	Water grab taken from 3746 north FR 115, Boots residence.
0429585	6/17/04	1540	Water grab taken from 3768 north FR 115, Lutz residence.
0429586	6/17/04	1555	Water grab taken from 3779 north FR 115, I. Bookout residence.
0429587	6/17/04	1610	Water grab taken from 3828 north FR 115, G. Smith residence.
0429588	6/17/04	1635	Water grab taken from 3720 north FR 115, Quinn residence.
0429589	6/17/04	1655	Duplicate of 0429588.
0429513	6/17/04	-----	Trip blank.
0429590	6/17/04	1800	Water grab taken from 4203 north FR115, Chappell residence.
0429510	6/17/04	1815	Water grab taken from 4005 north FR 115, Gilbert residence.
0429503	6/17/04	1845	Water grab taken from 3760 west FR 92, S. Leven residence.
0429514	6/18/04	0900	Water grab DW-105 taken from 4133 FR 125, Jimmy Bolin residence.
0429516	6/17/04	1859	Water grab DW-58 taken from north FR 123, Chappell residence.
0429517	6/17/04	1847	Water grab DW-57 taken from north FR 123, Charleen Pitman residence.
0429518	6/17/04	1830	Water grab DW-56 taken from 4098 west FR 94, Goodrum residence.
0429519	6/17/04	1813	Duplicate of 0429520.
0429520	6/17/04	1813	Water grab DW-55 taken from 4231 Maple Lane, Gary Swadley residence.
0429521	6/17/04	1748	Water grab DW-54 taken from 3409 Sac Valley Road, Brenda Bolin residence.
0429522	6/17/04	1732	Water grab DW-53 taken from 4246 FR 125, Billy Moore residence.
0429523	6/17/04	1721	Water grab DW-52 taken from 4237 FR 125, Merl Friend residence.
0429524	6/17/04	1703	Water grab DW-51 taken from 4212 north FR 125, Joe Doza residence.
042925	6/17/04	1650	Water grab DW-50 taken from 4484 north FR 125, Hanzlick residence.
0429526	6/17/04	1633	Water grab DW-49 taken from north FR 125, Spaiger residence.
0429528	6/17/04	1508	Water grab DW-47 taken from 4031 FR 125, Bret Earl residence.
0429529	6/17/04	1553	Water grab DW-46 taken from 4454 north FR 125, Meyerkord residence.
0429530	6/17/04	1539	Duplicate of 0429531.
0429531	6/17/04	1539	Water grab DW-45 taken from 4373 FR 125, Kirk Hansen residence.
0429532	6/17/04	1525	Water grab DW-44 taken from 4581 FR 125, Ron and Debbie Olsen residence.
0429533	6/17/04	1511	Water grab DW-43 taken from 4578 FR 125, Herbert Rice residence.

Table D-5 – Private Residential Well Sample Collection Data
Litton Systems, Inc. SR, Greene County, Missouri

Sample Number	Date Collected	Time Collected	Location Collected/Description*
0429535	6/17/04	1340	Water grab SP-01 taken from Bob Levitt spring where spring emerges from ground.
0429536	6/17/04	------	Trip blank.
0429537	6/17/04	0918	Water grab DW-42 taken from 4388 FR 125, DeVine residence.
0429538	6/17/04	0832	Water grab DW-41 taken from 5391 north FR 125, Dan Carroll residence.
0429539	6/17/04	0805	Water grab DW40 taken from 4352 north FR 125, Gail Hinshaw residence.
0429504	6/18/04	0930	Water grab SP-03 taken from Ritter Spring State Park at emergence of Ritter Spring.
0429505	6/18/04	0930	Duplicate 0429504.
0429515	6/18/04	0800	Water grab SP-02 taken from Vitch spring located behind the house on the corner of West and Woodlawn Streets.

*Unless otherwise noted all water samples were clear, colorless, and odorless.

TABLE D-6 (1 OF 4): SELECTED ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM PRIVATE RESIDENTIAL WELLS
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- All values listed in parts per billion (ug/l) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- Sample results in bold are significantly[1] above background concentrations
- Sample results in shaded cells exceed the lowest of the SCDM benchmark values

Sample ID	DW-18	DW-19	DW-19 Dup	DW-20	DW-21	DW-22	DW-80	DW-81	DW-82	DW-83	DW-84	DW-84 After	DW-85	DW-86	DW-87	DW-88	DW-89	DW-90	DW-90 Dup	DW-91	DW-92	DW-93	DW-94	MW-01 Bcked	MW-02 Bcked	MW-02 Dup	SCDM[2]		MRBCA[3] RBTL	EPA PRG[4]	MO WQS[5]
Date Sampled	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	10/18/04	10/18/04	10/18/04					
Laboratory Number	0429559	0429560	0429561	0429562	0429563	0429564	0429565	0429566	0429567	0429568	0429569	0429570	0429571	0429572	0429573	0429574	0429575	0429576	0429577	0429578	0429579	0429580	0429581	043558	043562	043563	MCL	SL			
Metals																															
Arsenic	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	3.79 (h)	2.08 (h)	2.36 (h)	1.09 (h)	3.16 (h)	<1.0 (h)	1.46 (h)	5.73 (h)	1.76 (h)	<1.0 (h)	2.78 (h)	5.34 (h)	3.08 (h)	2.09 (h)	5.01 (h)	<1.0 (h)	<1.0 (h)	1.73 (h)	<1.0 (h)	<1.0	2.67	2.88	10	0.057	50	0.045	50
Chromium, total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	3.59	4.24	100	110	100	NL	100
Copper	<1.0	15.3	8.76	4.23	6.25	1.87	1.33	5.27	1.57	13.2	2.14	<1.0	<1.0	5.36	17.9	2.27	1.15	9.84	3.06	3.22	1.8	2.21	1.54	<10.0	<10.0	<10.0	1300	NL	1300	1500	1300
Lead	<1.0	1.63	1.08	<1.0	<1.0	<1.0	<1.0	2.46	2.13	3.85	<1.0	<1.0	<1.0	1.66	2.8	<1.0	<1.0	3.37	1.26	<1.0	<1.0	<1.0	<1.0	<1.0	208	219	15	NL	15	NL	15
Nickel	<1.0	1.56	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.23	6.45	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.57	<1.0	<1.0	1.99	<5.0	5.0	5.32	NL	730	100	730	100
Zinc	5.85	52.0	50.4	67.3	7.16	13.8	118.0	1,140.0	247.0	350.0	39.0	8.07	236.0	845.0	324.0	14.8	14.2	74.2	72.8	32.4	11.1	21.9	2,050.0	125	5900	6030	NL	11000	2000	11000	5000
Volatile Organic Compounds (VOCs)																															
1,1,1-Trichloroethane	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.27 (e)	.25 (e)	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	200	NL	200	3200	200
1,2,4-Trichlorobenzene	<.2	<.2	.37 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	70	360	70	7.2	70
Chloroethane (Ethyl chloride)	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NL	NL	NL	4.6	NL
Chloroform	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	80	360	80	0.17	100
cis-1,2-Dichloroethene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	70	360	70	61	70
Dichlorodifluoromethane	<.5	<.5	<.5	.73 (e)	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.5	<0.5	<0.5	NL	NL	NL	390	NL
n-Butylbenzene	<.2	<.2	.23 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	NL	NL	NL	240	NL
Toluene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	1000	7300	150	720	1000
Trichloroethene (TCE)	<.2	.26 (e)	.37 (e)	**.67**	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	**2.01**	**2.04**	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	5	7.7	5	0.028	5

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix January 2004, Maximum Contaminant Level (MCL) for drinking water, and lowest of reference dose and cancer risk screening levels (SL) for groundwater/surface water pathway drinking water.

[3] MRBCA RBTL - Missouri Risk-Based Corrective Action Risk-Based Target Level for domestic water use, June 2006.

[4] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, tap water

[5] MO WQS - Missouri Water Quality Standards, groundwater/drinking water use catagories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

(h) Analyte present in method blank at > 1/2 reported value

(e) Estimated value, detected below PQL

TABLE D-6 (2 OF 4): SELECTED ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM PRIVATE RESIDENTIAL WELLS
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- *All values listed in parts per billion (ug/l) unless otherwise noted.*
- NL denotes benchmark value not listed in reference source.
- NA denotes not analyzed

- Sample results in bold are significantly[1] above background concentrations
- Sample results in shaded cells exceed the lowest of the SCDM benchmark values
- Circled sample results exceed the MCL

Sample ID	Trip Blank	DW-42	DW-41	DW-40	DW-01	DW-02	DW-03	DW-04	DW-05	DW-06	DW-07	DW-08	DW-09	DW-10	DW-10 Dup	DW-11	DW-12	DW-13	DW-14	DW-15	Trip Blank	DW-16	DW-17	MW-01 Bckgd	MW-02 Bckgd	MW-02 Dup	SCDM[2]		MRBCA[3] RBTL	EPA PRG[4]	MO WQS[5]
Date Sampled	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	10/18/04	10/18/04	10/18/04					
Laboratory Number	0429536	0429537	0429538	0429539	0429540	0429541	0429542	0429543	0429544	0429545	0429546	0429547	0429548	0429549	0429550	0429551	0429552	0429553	0429554	0429555	0429556	0429557	0429558	043558	043562	043563	MCL	SL			
Metals																															
Arsenic	NA	4.21 (h)	<1.0 (h)	7.12 (h)	<1.0 (h)	<1.0 (h)	4.23 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	2.98 (h)	<1.0 (h)	<1.0 (h)	2.54 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	2.16 (h)	<1.0 (h)	<1.0 (h)	NA	<1.0 (h)	1.39 (h)	<1.0	2.67	2.88	10	0.057	50	0.045	50
Chromium, total	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	1.25	<1.0	<2.5	3.59	4.24	100	110	100	NL	100
Copper	NA	2.75	1.09	12.2	11.2	7.66	12.8	3.57	32.4	66.5	2.81	4.04	<1.0	4.13	<1.0	4.65	3.29	2.53	6.69	11.7	NA	29.3	23.9	<10.0	<10.0	<10.0	1300	NL	1300	1500	1300
Lead	NA	<1.0	<1.0	<1.0	3.52	<1.0	<1.0	<1.0	2.34	4.14	<1.0	1.73	1.53	<1.0	<1.0	<1.0	1.16	<1.0	<1.0	2.35	NA	5.22	<1.0	<1.0	208	219	15	NL	15	NL	15
Nickel	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.03	<1.0	1.87	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.11	NA	<1.0	<1.0	<5.0	5.0	5.32	NL	730	100	730	100
Zinc	NA	2,110.0	1.69	80.2	33.8	22.7	7.11	353.0	17.2	121.0	108.0	1,460.0	41.9	6.07	8.56	9.55	3.54	3.66	58.2	14.4	NA	18.6	4.96	125	5900	6030	NL	11000	2000	11000	5000
Volatile Organic Compounds (VOCs)																															
1,1,1-Trichloroethane	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.31 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	200	NL	200	3200	200
1,2,4-Trichlorobenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.27 (e)	<.2	<.2	<.2	<.2	.36 (e)	<.2	<.2	<.2	<0.2	<0.2	<0.2	70	360	70	7.2	70
Chloroethane (Ethyl chloride)	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NL	NL	NL	4.6	NL
Chloroform	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.24 (e)	<.2	<0.2	<0.2	<0.2	80	360	80	0.17	100
cis-1,2-Dichloroethene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	**1.38**	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.29 (e)	<.2	<0.2	<0.2	<0.2	70	360	70	61	70
Dichlorodifluoromethane	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.5	<0.5	<0.5	NL	NL	NL	390	NL
n-Butylbenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.2 (e)	<.2	<.2	<.2	<0.2	<0.2	<0.2	NL	NL	NL	240	NL
Toluene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.34 (e)	<0.2	<0.2	<0.2	1000	7300	150	720	1000
Trichloroethene (TCE)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	**.85**	<.2	**11.6**	**.63**	<.2	<.2	<.2	<.2	<.2	<.2	.41 (e)	<.2	**.96**	<.2	<0.2	<0.2	<0.2	5	7.7	5	0.028	5

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix January 2004, Maximum Contaminant Level (MCL) for drinking water, and lowest of reference dose and cancer risk screening levels (SL) for groundwater/surface water pathway drinking water.

[3] MRBCA RBTL - Missouri Risk-Based Corrective Action Risk-Based Target Level for domestic water use, June 2006.

[4] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, tap water

[5] MO WQS - Missouri Water Quality Standards, groundwater/drinking water use catagories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

(h) Analyte present in method blank at > 1/2 reported value

(e) Estimated value, detected below PQL

TABLE D-6 (3 OF 4): SELECTED ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM PRIVATE RESIDENTIAL WELLS
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- All values listed in parts per billion (ug/l) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- NA denotes not analyzed
- Sample results in shaded cells exceed the lowest of the SCDM benchmark values

Sample ID	DW-95	DW-96	DW-97	DW-98	DW-99	DW-100	DW-101	DW-101 Dup	DW-102	DW-02	DW-03	DW-03 Dup	DW-04	Trip Blank	DW-01	MW-01 Bckgd	MW-02 Bckgd	MW-02 Dup	SCDM[2]		MRBCA[3] RBTL	EPA PRG[4]	MO WQS[5]
Date Sampled	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	8/04/04	8/04/04	8/04/04	8/04/04	10/18/04	10/18/04	10/18/04	10/18/04	10/18/04					
Laboratory Number	0429582	0429583	0429584	0429585	0429586	0429587	0429588	0429589	0429590	0434851	0434852	0434853	0434854	043561	043564	043558	043562	043563	MCL	SL			
Metals																							
Arsenic	1.64 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	1.35 (h)	5.21 (h)	<1.0 (h)	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	2.67	2.88	10	0.057	50	0.045	50
Chromium, total	<1.0	<1.0	<1.0	<1.0	1.39	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<2.5	<2.5	3.59	4.24	100	110	100	NL	100
Copper	2.03	13.1	5.51	4.21	14.1	5.22	1.4	<1.0	50.4	1.06	<1.0	<1.0	43.5	NA	<10.0	<10.0	<10.0	<10.0	1300	NL	1300	1500	1300
Lead	<1.0	5.24	<1.0	<1.0	3.04	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.64	NA	<1.0	<1.0	208	219	15	NL	15	NL	15
Nickel	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.31	2.55	2.97	NA	<5.0	<5.0	5.0	5.32	NL	730	100	730	100
Zinc	380.0	105.0	24.1	119.0	523.0	32.0	41.2	48.6	61.0	9.49	19.8	42.0	458	NA	9.7	125	5900	6030	NL	11000	2000	11000	5000
Volatile Organic Compounds (VOCs)																							
1,1,1-Trichloroethane	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	200	NL	200	3200	200
1,2,4-Trichlorobenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.26 (e)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	70	360	70	7.2	70
Chloroethane (Ethyl chloride)	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NL	NL	NL	4.6	NL
Chloroform	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	80	360	80	0.17	100
cis-1,2-Dichloroethene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	70	360	70	61	70
Dichlorodifluoromethane	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NL	NL	NL	390	NL
n-Butylbenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.2 (e)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	NL	NL	NL	240	NL
Toluene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1000	7300	150	720	1000
Trichloroethene (TCE)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5	7.7	5	0.028	5

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix January 2004, Maximum Contaminant Level (MCL) for drinking water, and lowest of reference dose and cancer risk screening levels (SL) for groundwater/surface water pathway drinking water.

[3] MRBCA RBTL - Missouri Risk-Based Corrective Action Risk-Based Target Level for domestic water use, June 2006.

[4] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, tap water

[5] MO WQS - Missouri Water Quality Standards, groundwater/drinking water use catagories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

(h) Analyte present in method blank at > 1/2 reported value

(e) Estimated value, detected below PQL

TABLE D-6 (4 OF 4): SELECTED ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM PRIVATE RESIDENTIAL WELLS
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- All values listed in parts per billion (ug/l) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- Sample results in bold are significantly[1] above background concentrations
- Sample results in shaded cells exceed the lowest of the SCDM benchmark values

Sample ID	DW-23	DW-24	DW-104	DW-103	Trip Blank	DW-105	DW-58	DW-57	DW-56	DW-55 Dup	DW-55	DW-54	DW-53	DW-52	DW-51	DW-50	DW-49	DW-47	DW-46	DW-45 Dup	DW-45	DW-44	DW-43	MW-01 Bckgd	MW-02 Bckgd	MW-02 Dup	SCDM[2]		MRBCA[3] RBTL	EPA PRG[4]	MO WQS[5]
Date Sampled	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/18/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	6/17/04	10/18/04	10/18/04	10/18/04					
Laboratory Number	0429501	0429502	0429503	0429510	0429513	0429514	0429516	0429517	0429518	0429519	0429520	0429521	0429522	0429523	0429524	0429525	0429526	0429528	0429529	0429530	0429531	0429532	0429533	043558	043562	043563	MCL	SL			
Metals																															
Arsenic	6.64 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	NA	<1.0 (h)	1.18 (h)	2.35 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	4.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0 (h)	<1.0	2.67	2.88	10	0.057	50	0.045	50
Chromium, total	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	3.59	4.24	100	110	100	NL	100
Copper	<1.0	1.79	20.4	<1.0	NA	6.06	<1.0	320.0	29.6	8.12	1.93	1.14	5.97	1.67	11.6	1.11	10.8	<1.0	2.19	8.25	10.4	<1.0	1.92	<10.0	<10.0	<10.0	1300	NL	1300	1500	1300
Lead	<1.0	1.61	5.97	<1.0	NA	<1.0	<1.0	9.12	2.33	<1.0	<1.0	1.07	<1.0	1.38	<1.0	<1.0	<1.0	1.61	1.66	<1.0	<1.0	1.77	<1.0	<1.0	208	219	15	NL	15	NL	15
Nickel	<1.0	<1.0	2.57	<1.0	NA	<1.0	<1.0	1.33	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	5.0	5.32	NL	730	730	730	100
Zinc	22.5	636.0	86.2	31.8	NA	9.85	27.2	47.2	3.61	62.4	51.6	11.3	149.0	12.8	20.6	7.86	55.7	11.7	148.0	3.75	3.37	129.0	364.0	125	5900	6030	NL	11000	2000	11000	5000
Volatile Organic Compounds (VOCs)																															
1,1,1-Trichloroethane	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	200	NL	200	3200	200
1,2,4-Trichlorobenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.23 (e)	.28 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	70	360	70	7.2	70
Chloroethane (Ethyl chloride)	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.22 (e)	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.68 (e)	<2.5	<2.5	<2.5	<2.5	NL	NL	NL	4.6	NL
Chloroform	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	80	360	80	0.17	100
cis-1,2-Dichloroethene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.45 (e)	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	70	360	70	61	70
Dichlorodifluoromethane	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.5	<0.5	<0.5	NL	NL	NL	390	NL
n-Butylbenzene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.22 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	NL	NL	NL	240	NL
Toluene	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<0.2	<0.2	<0.2	1000	7300	150	720	1000
Trichloroethene (TCE)	<.2	<.2	.29 (e)	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.4 (e)	<.2	**1.42**	<.2	<.2	<.2	**.85**	.21 (e)	<.2	<.2	<.2	<0.2	<0.2	<0.2	5	7.7	5	0.028	5

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix January 2004, Maximum Contaminant Level (MCL) for drinking water, and lowest of reference dose and cancer risk screening levels (SL) for groundwater/surface water pathway drinking water.

[3] MRBCA RBTL - Missouri Risk-Based Corrective Action Risk-Based Target Level for domestic water use, June 2006.

[4] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, tap water

[5] MO WQS - Missouri Water Quality Standards, groundwater/drinking water use catagories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

(h) Analyte present in method blank at > 1/2 reported value

(e) Estimated value, detected below PQL

Table D-7: Summary Table of Private Water Well Analytical Data
Litton Systems, Inc., SR, Greene County, Missouri
(From Secor International Inc., October 28, 2005)

SUMMARY TABLE OF PRIVATE WATER WELL ANALYTICAL DATA

Date: 10/13/05

Parameter (Organics)	Reg. Limit ug/L	Report Level (ug/L)	DW-06 - Price				DW-08 - Wilkens				DW-09 - Potts			
			6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	11/30/2004	5/24/2005		6/17-18/2004	12/14/2004	5/23/2005	9/13/2005
Benzene	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Bromobenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Bromochloromethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Bromodichloromethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Bromoform	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Bromomethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
n-Butylbenzene	-	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	<0.2	<1.0	<0.5*/<0.5**		<0.2	<0.5	<0.5	<0.5
sec-Butylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
tert-Butylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Carbon Tetrachloride	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Chlorobenzene	100	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Chloroethane	-	0.5	<2.5	<0.5	<0.5	<0.5/<0.5+	<2.5	<1.0	<0.5*/<0.5**		<2.5	<0.5	<0.5	<0.5
Chloroform	-	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	<0.2	<1.0	<0.5*/<0.5**		<0.2	<0.5	<0.5	<0.5
Chloromethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
2-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
4-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Dibromochloromethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)	-	0.2		<0.2	<0.2	<0.2/<0.2+		<1.0	<0.2*/<0.2**			<0.2	<0.2	<0.2
1,2-Dibromoethane (EDB)	-	0.2		<0.2	<0.2	<0.2/<0.2+		<1.0	<0.2*/<0.2**			<0.2	<0.2	<0.2
Dibromomethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2-Dichlorobenzene	600	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,3-Dichlorobenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,4-Dichlorobenzene	75	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Dichlorodifluoromethane	-	0.5	<0.5	<0.5	<0.5	<0.5/<0.5+	<0.5	<1.0	<0.5*/<0.5**		<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2-Dichloroethane	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,1-Dichloroethylene	7	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	70	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	1.38	1.9	1.5*/<0.5**		<0.2	<0.5	<0.5	<0.5
trans-1,2-Dichloroethylene	100	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Dichloromethane	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2-Dichloropropane	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,3-Dichloropropane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
2,2-Dichloropropane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,1-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
trans-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Ethylbenzene	700	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Hexachlorbutadiene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Isopropylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
4-Isopropyltoluene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Methyl-t-butyl ether (MTBE)	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Naphthalene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
n-Propylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Styrene	100	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Tetrachloroethylene	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Toluene	1000	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	<0.2	<1.0	<0.5*/<0.5**		<0.2	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	70	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	<0.2	<1.0	<0.5*/<0.5**		<0.2	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	200	0.5	<0.2	<0.5	<0.5	<0.5/<0.5+	0.31 (e)	<1.0	0.6*/<0.5**		<0.2	<0.5	<0.5	<0.5
Trichloroethylene	5	0.5	0.85	0.6	0.6	0.6/0.7+	11.6	14*/0.49**	13*/<0.5**		0.63	<0.5	<0.5	<0.5
Trichlorofluoromethane	5	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2,3-Trichloropropane	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Vinyl Chloride	2	0.2		<0.2	<0.2	<0.2/<0.2+		<1.0	<0.2*/<0.2**			<0.2	<0.2	<0.2
1,2-Xylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,3-Xylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
1,4-Xylene	-	0.5		<0.5	<0.5	<0.5/<0.5+		<1.0	<0.5*/<0.5**			<0.5	<0.5	<0.5
Xylenes, Total	10000	0.5		ND	<0.5	<0.5/<0.5+		ND	<0.5*/<0.5**			ND	<0.5	<0.5
Parameter (Inorganics)														
Arsenic	10 ug/L		<1.0 (h)		<2.0 ug/L	<2.0/2.0+ ug/L	<1.0 (h)	N	<2.0*/<2.0** ug/L		<1.0 (h)		<2.0 ug/L	<2.0 ug/L
Barium	2000 ug/L	2 ug/L		42 ug/L	48 ug/L	48/49+ ug/L		O	57*/7** ug/L			46 ug/L	47 ug/L	46 ug/L
Calcium	-	0.1 mg/L		73 mg/L	64 mg/L	55/55+ mg/L		T	71*/0.27** mg/L			99 mg/L	100 mg/L	100 mg/L
Chromium (total)	100 ug/L		<1.0		12 ug/L	7.1/6.8+ ug/L	<1.0		23*/30** ug/L		<1.0		23 ug/L	1.1 ug/L
Copper	1300 ug/L	1 ug/L	66.5	3.3 ug/L	3.4 ug/L	1.3/1.7+ ug/L	4.04	S	49*/1.9** ug/L		<1.0	<1.0 ug/L	7.9 ug/L	<1.0 ug/L
Iron	0.3 mg/L	0.02 mg/L		<0.2 mg/L	<0.02 mg/L	<0.2/<0.2+ mg/L		A	0.025*/1.3** mg/L			<0.02 mg/L	<0.02 mg/L	<0.02 mg/L
Lead	15 ug/L		4.14		<1.0 ug/L	<1.0/<1.0 ug/L	1.73	M	12*/<1.0** ug/L		1.53		1.2 ug/L	<1.0 ug/L
Magnesium	5 mg/L	0.1 mg/L		26 mg/L	30 mg/L	28/28+ mg/L		P	35*/<0.1** mg/L			13 mg/L	13 mg/L	13 mg/L
Manganese	50 ug/L	2 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0/<2.0 ug/L		L	5.0*/7.6** ug/L			<2.0 ug/L	<2.0 ug/L	<2.0 ug/L
Nickel	NL		1.87		14 ug/L	9.6/8.9+ ug/L	1.4	E	18*/<1.0** ug/L		<1.0		22 ug/L	13 ug/L
Potassium	-	0.2 mg/L		2 mg/L	2.0 mg/L	2.2/2.2+ mg/L		D	1.5*/<0.2** mg/L			0.78 mg/L	0.72 mg/L	0.70 mg/L
Sodium	20 mg/L	0.1 mg/L		2.6 mg/L	2.0 Mg/L	1.8/1.9+ mg/L			2.1*/130** mg/L			4.8 mg/L	4.6 mg/L	5.0 mg/L
Strontium	2 ug/L	2 ug/L		200 ug/L	210 ug/L	230/230+ ug/L			78*/<2.9** ug/L			63 ug/L	68 ug/L	70 ug/L
Zinc	NL		121		89 ug/L	65/65+ ug/L	1460		1900*/73** ug/L		41.9		51 ug/L	33 ug/L

Parameter (Organics)	DW-15 - Graves				DW-16 - Vieregge				DW19 - McCurdy				DW-20 - Bunge			
	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/13/2005
Benzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromochloromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromodichloromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromoform		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromomethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Butylbenzene	<0.2(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.23(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
sec-Butylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
tert-Butylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Carbon Tetrachloride		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chlorobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chloroethane	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5
Chloroform	<0.2	<0.5	<0.5	<0.5	<0.24(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Chloromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2-Chlorotoluene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Chlorotoluene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dibromochloromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Dibromoethane (EDB)		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
Dibromomethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichlorobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichlorobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Dichlorobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.73(e)	<0.5	<0.5	<0.5
1,1-Dichloroethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloroethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloroethylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	<0.2	<0.5	<0.5	<0.5	<0.29(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
trans-1,2-Dichloroethylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichloromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloropropane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichloropropane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2,2-Dichloropropane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloropropylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
trans-1,3-Dichloropropylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Ethylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Hexachlorbutadiene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Isopropylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Isopropyltoluene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Methyl-t-butyl ether (MTBE)		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Naphthalene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Propylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Styrene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Tetrachloroethylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Toluene	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	0.36 (e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	0.37 (e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Trichloroethylene	0.41 (e)	<0.5	<0.5	<0.5	0.96	<0.5	0.5	1.1	0.37 (e)	<0.5	<0.5	<0.5	0.67	<0.5	0.6	0.6
Trichlorofluoromethane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,3-Trichloropropane		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Vinyl Chloride		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Xylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Xylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Xylene		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Xylenes, Total		ND	<0.5	<0.5		ND	<0.5	<0.5		ND	<0.5	<0.5		ND	<0.5	<0.5
Parameter (Inorganics)																
Arsenic		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L		<2.5 ug/L	<2.0 ug/L	<2.0 ug/L			<2.0 ug/L	<2.0 ug/L			<2.0 ug/L	<2.0 ug/L
Barium	66 ug/L	58 ug/L	57 ug/L		87 ug/L	84 ug/L	72 ug/L			19 ug/L	20 ug/L	20 ug/L		36 ug/L	38 ug/L	37 ug/L
Calcium	130 mg/L	110 mg/L	85 mg/L		110 mg/L	120 mg/L	110 mg/L			47 mg/L	48 mg/L	47 mg/L		76 mg/L	79 mg/L	78 mg/L
Chromium (total)		10 ug/L	8.0 ug/L	1.25		2.9 ug/L	8.2 ug/L		<1.0		7.2 ug/L	7.2 ug/L	<1.0		12 ug/L	11 ug/L
Copper	2.6 ug/L	5.8 ug/L	4.8 ug/L	29.3	4.4 ug/L	4.8 ug/L	2.2 ug/L		15.3	3.7 ug/L	3.6 ug/L	2.8 ug/L	4.23	7.1 ug/L	6.7 ug/L	9.1 ug/L
Iron	0.024 mg/L	0.027 mg/L	<0.02 mg/l		0.086 mg/L	3.9 mg/L	0.42 mg/L			<0.02 mg/L	<0.02 mg/L	<0.02 mg/L		<0.02 mg/L	<0.02 mg/L	<0.02 mg/L
Lead	2.35	1.3 ug/L	1.1 ug/L	5.22		11 ug/L	<1.0 ug/L	1.63			<1.0 ug/L	<1.0 ug/L	<1.0		1.1 ug/L	<1.0 ug/L
Magnesium	13 mg/L	12 mg/L	13 mg/L		5.4 mg/L	12 mg/L	12 mg/L			27 mg/L	28 mg/L	27 mg/L		21 mg/L	21 mg/L	21 mg/L
Manganese	8.3 ug/L	13 ug/L	5.8 ug/L		2.2 ug/L	100 ug/L	7.0 ug/L			2.8 ug/L	2.1 ug/L	<2.0 ug/L		<2.0 ug/L	<2.0 ug/ l	<2.0 ug/L
Nickel		26 ug/L	17 ug/L	<1.0		24 ug/L	16 ug/L	1.56			9.7 ug/L	6.7 ug/L	<1.0		15 ug/L	9.8 ug/L
Potassium	2.5 mg/L	1.9 ug/L	2.3 mg/L		2.8 mg/L	2.4 mg/L	2.8 mg/L			1 mg/L	0.90 mg/L	0.97 mg/L		0.86 mg/L	0.78 mg/L	0.84 mg/L
Sodium	9.9 mg/L	13 mg/L	29 mg/L		24 mg/L	22 mg/L	34 mg/L			1.6 mg/L	1.7 mg/L	1.7 mg/L		3.3 mg/L	3.4 mg/L	3.5 mg/L
Strontium	110 ug/L	90 ug/L	79 ug/L		65 ug/L	-------	73 ug/L			76 ug/L	80 ug/L	85 ug/L		69 ug/L	71 ug/L	76 ug/L
Zinc	14.4	11 ug/L	24 ug/L	18.6		51 ug/L	22 ug/L	52			23 ug/L	18 ug/L	67.3		18 ug/L	20 ug/L

* Pre-Treated Analytical Information
** Post Treated Analytical Information
(h) Analyte present in blank at >1/2 reported value
(e) Estimated value, detected below PQL

\+ Duplicate Sample Results

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Table D-7: Summary Table of Private Water Well Analytical Data
Litton Systems, Inc., SR, Greene County, Missouri
(From Secor International Inc., October 28, 2005)

SUMMARY TABLE OF PRIVATE WATER WELL ANALYTICAL DATA

	Reg. Limit ug/L	Report Level (ug/L)	DW-45 - Hansen				DW-46				DW-51 - Doza			
Parameter (Organics)			6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	11/30/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005
Benzene	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromochloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromodichloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromoform	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromomethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Butylbenzene	-	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
sec-Butylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
tert-Butylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Carbon Tetrachloride	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chlorobenzene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chloroethane	-	0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5
Chloroform	-	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	0.8	<0.5
Chloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dibromochloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)	-	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Dibromoethane (EDB)	-	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
Dibromomethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichlorobenzene	600	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichlorobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Dichlorobenzene	75	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichlorodifluoromethane	-	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloroethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloroethylene	7	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	70	0.5	<0.2	<0.5	<0.5	<0.5	0.45(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
trans-1,2-Dichloroethylene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichloromethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloropropane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2,2-Dichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
trans-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Ethylbenzene	700	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Hexachlorbutadiene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Isopropylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Isopropyltoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Methyl-t-butyl ether (MTBE)	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Naphthalene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Propylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Styrene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Tetrachloroethylene	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Toluene	1000	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	70	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	200	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Trichloroethylene	5	0.5	0.21(e)	<0.5	<0.5	<0.5	0.85	<0.5	<0.5	0.5	1.42	1.1	0.5	0.5
Trichlorofluoromethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,3-Trichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Vinyl Chloride	2	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Xylenes, Total	10000	0.5		ND	<0.5	<0.5		ND	<0.5	<0.5		ND	<0.5	<0.5
Parameter (Inorganics)														
Arsenic	10 ug/L		<1.0 (h)		<2.0 ug/L	<2.0 ug/L	<1.0 (h)		<2.0 ug/L	<2.0 ug/L	<1.0 (h)		<2.0 ug/L	<2.0 ug/L
Barium	2000 ug/L	2 ug/L		53 ug/L	54 ug/L	58 ug/L		70 ug/L	94 ug/L	130 ug/L		58 ug/L	66 ug/L	65 ug/L
Calcium	-	0.1 mg/L		74 mg/L	75 mg/L	71 mg/L		71 mg/L	65 mg/L	53 mg/L		120 mg/L	90 mg/L	69 mg/L
Chromium (total)	100 ug/L		<1.0		20 ug/L	6.6 ug/L	<1.0		17 ug/L	8.4 ug/L	<1.0		8.5 ug/L	8.5 ug/L
Copper	1300 ug/L	1 ug/L	10.4	10 ug/L	6.6 ug/L	8.2 ug/L	2.19	2.1 ug/L	7.0 ug/L	2.0 ug/L	11.8	13 ug/L	9.7 ug/L	9.2 ug/L
Iron	0.3 mg/L	0.02 mg/L		<0.02 mg/L	<0.02 mg/L	<0.2 mg/L		0.041 mg/L	<0.02 mg/L	<0.02 mg/L		<0.02 mg/L	<0.02 mg/L	<0.02 mg/L
Lead	15 ug/L		<1.0		<1.0 ug/L	<1.0 ug/L	1.66		1.6 ug/L	<1.0 ug/L	<1.0		1.2 ug/L	1.9 ug/L
Magnesium	5 mg/L	0.1 mg/L		38 mg/L	39 mg/L	37 mg/L		31 mg/L	28 mg/L	23 mg/L		18 mg/L	23 mg/L	26 mg/L
Manganese	50 ug/L	2 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L
Nickel	NL		<1.0		14 ug/L	9.4 ug/L	<1.0		17 ug/L	7.7 ug/L	<1.0		16 ug/L	8.5 ug/L
Potassium	-	0.2 mg/L		1.5 mg/L	1.4 mg/L	1.5 mg/L		2.5 mg/L	2.3 mg/L	2.3 mg/L		1.1 mg/L	1.1 mg/L	1.2 mg/L
Sodium	20 mg/L	0.1 mg/L		3.5 mg/L	3.5 mg/L	3.3 mg/L		2 mg/L	2.2 mg/L	2.8 mg/L		4.7 mg/L	4.6 mg/L	2.6 mg/L
Strontium	2 ug/L	2 ug/L		92 ug/L	94 ug/L	100 ug/L		200 ug/L	190 ug/L	180 ug/L		68 ug/L	66 ug/L	65 ug/L
Zinc	NL		3.75		<5.0 ug/L	7.9 ug/L	148		330 ug/L	120 ug/L	20.6		23 ug/L	29 ug/L

	Reg. Limit ug/L	Report Level (ug/L)	DW-53 - Moore				DW-90 - Hennessey				DW-104 - Levin			
Parameter (Organics)			6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005	6/17-18/2004	12/14/2004	5/24/2005	9/14/2005
Benzene	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromochloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromodichloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromoform	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Bromomethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Butylbenzene	-	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
sec-Butylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
tert-Butylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Carbon Tetrachloride	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chlorobenzene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Chloroethane	-	0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5
Chloroform	-	0.5	<0.2	2.8	1.1	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Chloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Chlorotoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dibromochloromethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)	-	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Dibromoethane (EDB)	-	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
Dibromomethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichlorobenzene	600	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichlorobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Dichlorobenzene	75	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichlorodifluoromethane	-	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloroethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloroethylene	7	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	70	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
trans-1,2-Dichloroethylene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Dichloromethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2-Dichloropropane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Dichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
2,2-Dichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
trans-1,3-Dichloropropylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Ethylbenzene	700	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Hexachlorbutadiene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Isopropylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
4-Isopropyltoluene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Methyl-t-butyl ether (MTBE)	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Naphthalene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
n-Propylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Styrene	100	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Tetrachloroethylene	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Toluene	1000	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	70	0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	200	0.5	<0.2	<0.5	<0.5	<0.5	0.27(e)	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Trichloroethylene	5	0.5	0.4 (e)	0.6	<0.5	0.5	2.04	<0.5	2.4	1.8	0.29 (e)	<0.5	<0.5	0.5
Trichlorofluoromethane	5	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,3-Trichloropropane	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Vinyl Chloride	2	0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2		<0.2	<0.2	<0.2
1,2-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,3-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
1,4-Xylene	-	0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
Xylenes, Total	10000	0.5		ND	<0.5	<0.5		ND	<0.5	<0.5		ND	<0.5	<0.5
Parameter (Inorganics)														
Arsenic	10 ug/L		<1.0 (h)		<2.0 ug/L	<2.0 ug/L	<5.01 (h)		<2.0 ug/L	<2.0 ug/L	<1.0 (h)		<2.0 ug/L	<2.0 ug/L
Barium	2000 ug/L	2 ug/L		76 ug/L	90 ug/L	110 ug/L		63 ug/L	97 ug/L	82 ug/L		100 ug/L	100 ug/L	110 ug/L
Calcium	-	0.1 mg/L		81 mg/L	82 mg/L	91 mg/L		55 mg/L	82 mg/L	110 mg/L		74 mg/L	120 mg/L	76 mg/L
Chromium (total)	100 ug/L		<1.0		11 ug/L	10 ug/L	<1.0		12 ug/L	8.4 ug/L	<1.0		9.7 ug/L	7.8 ug/L
Copper	1300 ug/L	1 ug/L	5.97	18 ug/L	9.4 ug/L	5.7 ug/L	9.84	17 ug/L	5.3 ug/L	3.6 ug/L	20.4	11 ug/L	9.0 ug/L	7.1 ug/L
Iron	0.3 mg/L	0.02 mg/L		0.14 mg/L	0.026 mg/L	<0.02 mg/L		0.1 mg/L	<0.02 mg/L	0.035 mg/L		<0.02 mg/L	<0.02 mg/L	<0.02 mg/L
Lead	15 ug/L		<1.0		1.1 ug/L	<1.0 ug/L	3.37		<1.0 ug/L	<1.0 ug/L	5.97		5.5 ug/L	4.3 ug/L
Magnesium	5 mg/L	0.1 mg/L		24 mg/L	27 mg/L	35 mg/L		26 mg/L	27mg/L	44 mg/L		29 mg/L	56 mg/L	31 mg/L
Manganese	50 ug/L	2 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L		4.8 ug/L	<2.0 ug/L	3.3 ug/L		<2.0 ug/L	<2.0 ug/L	<2.0 ug/L
Nickel	NL		<1.0		16 ug/L	12 ug/L	<1.0		17 ug/L	18 ug/L	2.57		30 ug/L	11 ug/L
Potassium	-	0.2 mg/L		1.4 mg/L	1.4 mg/L	1.7 mg/L		1.6 mg/L	1.7 mg/L	1.8 mg/L		1.6 mg/L	1.9 mg/L	1.6 mg/L
Sodium	20 mg/L	0.1 mg/L		5.6 mg/L	4.5 mg/L	3.6 mg/L		2.3 mg/L	7.5 mg/L	4.6 mg/L		3.4 mg/L	3.1 mg/L	3.4 mg/L
Strontium	2 ug/L	2 ug/L		70 ug/L	84 ug/L	100 ug/L		63 ug/L	77 ug/L	99 ug/L		86 ug/L	130 ug/L	96 ug/L
Zinc	NL		149		140 ug/L	84 ug/L	74.2		80 ug/L	87 ug/L	86.2		120 ug/L	63 ug/L

(h) Analyte present in blank at >1/2 reported value.
(e) Estimated value, detected below PQL

TABLE D-8: SELECTED ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM OZARK AQUIFER WELLS
LITTON SYSTEMS INC. SR, GREENE COUNTY, MISSOURI

- All values listed in parts per billion (ug/l) unless otherwise noted.
- NL denotes benchmark value not listed in reference source.
- NA denotes not analyzed

Sample ID	Trip Blank	DW-1 Ritter Spring Pk Well	DW-2 Evergreen Church Well	DW-3 Country Squire Village Well	DW-4 Airport Salvage Well	DW-5 Fantastic Caverns Well	Duplicate of 0504679	DW-6 Players Softball Complex Well	SCDM[2]		CALM[3]	EPA PRG[4]	MO WQS[5]
Date Sampled	6/28/05	6/28/05	6/28/05	6/28/05	6/28/05	6/28/05	6/28/05	6/28/05					
Laboratory Number	0504674	0504675	0504676	0504677	0504678	0504679	0504680	0504681	MCL	SL			
Water Quality Indicators													
Field Temperature	NA	16.7	17.3	17.9	25.2	19.6	NA	17.9					
pH	NA	7.8	7.79	7.72	7.75	7.24	NA	7.27	NL	NL	NL	NL	NL
Specific Conductivity, umhos/cm	NA	345.0	316.0	339.0	357.0	658.0	NA	554.0	NL	NL	NL	NL	NL
Metals													
Chromium, total	NA	1.25	1.3	1.45	1.26	.93 (e)	1.0	.46 (e)	100	110	100	NL	NL
Copper	NA	.86 (e)	.45 (e)	.96 (e)	7.31	4.59	4.55	.25 (e)	1300	NL	1300	1500	NL
Lead	NA	<.25	<.25	<.25	3.34	.81 (e)	.85 (e)	<.25	15	NL	15	NL	NL
Nickel	NA	1.12	1.12	1.05	1.15	5.98	5.96	2.64	NL	730	100	730	NL
Zinc	NA	73.9	5.77	40.3	283.0	397.0	403.0	9.08	NL	11000	2000	11000	NL
Volatile Organic Compounds (VOCs)													
carbon disulfide	<.5	<.5	<.5	<.5	<.5	<.5	.68 (e)	<.5	NL	3700	NL	1000	NL
Chloroform	<.5	<.5	<.5	<.5	<.5	<.5	.61 (e)	<.5	80	360	80	0.17	NL
Methylmethacrylate	.86 (e)	<.5	<.5	<.5	<.5	<.5	<.5	<.5	NL	NL	NL	1400	NL

[1] Above the PQL when background concentration is < PQL, or three times the background concentration when contaminant is detected in background sample.

[2] SCDM - Superfund Chemical Data Matrix January 2004, Maximum Contaminant Level (MCL) for drinking water, and lowest of reference dose and cancer risk screening levels (SL) for groundwater/surface water pathway drinking water.

[3] CALM - Cleanup Levels for Missouri, September 2001, Groundwater Target Concentrations (GTARC)

[4] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, tap water

[5] MO WQS - Missouri Water Quality Standards, groundwater/drinking water use catagories, Missouri Code of State Regulations, 10 CSR 20-7.031, October 31, 1999.

e - Estimated value, detected below PQL

Table D-9 – Litton Systems Inc. Site, Greene County, Missouri
SR Air Sample Collection Data

Sample Number	Date Collected	Initial/Final Time Collected	Location Collected/Description	Initial canister pressure (psi)	Final canister pressure (psi)
0417560	4/5/04	1620/1303	Emergence of Williams Spring.	29.5	8.0
0417573	4/5/04	1140/1055	Under bridge overpass inside Fantastic Caverns between pit and tour turnaround point.	28.0	3.0
0502635	2/24/05	1110/1102	Inside Fantastic Caverns under bridge overpass near underground stream where previous air sample collected.	28.0	10.0
0502636	2/24/05	1115/1104	Back of Fantastic Cavern, at designated tour bus turn-around area, on a ledge at approximate breathing height.	29.0	8.0
0504171	11/2/05	1533 /1438	Inside Fantastic Caverns, under bridge overpass near underground stream where air samples collected previously.	27.5	3.0
0504172	11/2/05	1540 /1442	Back of Fantastic Cavern, at designated tour bus turn-around area, on a ledge at approximate breathing height, where air sample collected previously.	27.5	9.0

TABLE D-10: SELECTED ANALYTICAL RESULTS FOR AIR SAMPLES COLLECTED APRIL 4, 2004, FEBRUARY 24, 2005 AND NOVEMBER 2, 2005 LITTON SYSTEMS INC. SITE REASSESSMENT, GREENE COUNTY, MISSOURI

- All values listed in ug/m^3 unless otherwise noted.
- Sample results in shaded cells exceed the lowest of the SCDM benchmark values.
- NL denotes benchmark value not listed in reference source.
- Circled sample results exceed EPA Region 9 PRG.

Sample ID	Williams Spring	Fantastic Caverns (under bridge)	Fantastic Caverns (under bridge)	Fantastic Caverns (at turnaround)	Fantastic Caverns (under bridge)	Fantastic Caverns (at turnaround)	Fantastic Caverns (at turnaround)	SCDM[1]	EPA PRG[2]
Date Sample Collected	4/4/2004	4/4/2004	2/24/2005	2/24/2005	11/2/2005	11/2/2005	11/2/2005		
Laboratory Number	417560	417573	502635	502636	504171	504172	0504172Dup		
TO-15	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Freon 12 (dichlorodifluoromethane)	<4.4	15	5.8	7	<3.8	<4.8	<4.8	NL	210
Freon 11 (trichlorofluoromethane)	<5.0	6.4	<5.8	<5.8	<4.8	<5.5	<5.5	NL	730
1,1-Dichloroethene	27	<3.1	<4.1	<4.1	<3.0	<3.9	<3.9	0.0071	210
2-Butanone	<10	<9.1	4.8	<3.0	<2.2	<2.9	<2.9	5200	5100
Carbon disulfide	<11	<9.6	<3.2	4	<2.4	<3.0	<3.0	730	730
cis-1,2-Dichloroethene	44	6.7	<4.1	<4.1	<3.0	<3.9	<3.9	NL	37
1,1,1-Trichloroethane	70	53	<5.6	<5.6	12	<5.3	<5.3	2300	2300
Trichloroethene	300	150	<5.5	<5.5	53	<5.3	<5.3	NL	0.017
Toluene	6.6	17	<3.9	<3.9	<2.9	<3.7	<3.7	420	400
Tetrachloroethene	14	<5.2	<7.0	<7.0	<5.9	<6.6	<6.6	NL	0.67
Acetone	9.3	9.2	13	<9.8	<7.2	<9.3	<9.3	NL	3700
Ethanol	13	<5.8	<7.8	<7.8	<5.7	<7.4	<7.4	NL	NL

[1] SCDM - Superfund Chemical Data Matrix January 2004, lowest of reference dose and cancer risk benchmarks for air pathway.

[2] EPA PRG - EPA Region 9 Preliminary Remedial Goals, October 2004, ambient air benchmarks

TABLE D-11: CALCULATION OF SAMPLE/SAMPLE REPLICATE RELATIVE PERCENT DIFFERENCE (RPD) SEDIMENT SAMPLES COLLECTED JUNE 18, 2004 LITTON SYSTEMS, INC., SR, GREENE COUNTY, MISSOURI

All results are in mg/kg unless otherwise noted

Sample ID	Ritter Park Sp	Ritter Park Sp Replicate	RPD
Laboratory Number	0429506	0429507	
Metals			
Arsenic	3.31	3.55	7.0
Chromium, total	42.5	29.3	36.8
Copper	5.13	3.92	26.7
Lead	20.5	24.5	17.8
Nickel	10.4	11.4	9.2
Zinc	39.1	33.2	16.3

TABLE D-12: CALCULATION OF SAMPLE/SAMPLE DUPLICATE RELATIVE PERCENT DIFFERENCE (RPD) SPRING SAMPLES COLLECTED JUNE 18, 2004 LITTON SYSTEMS, INC., SR, GREENE COUNTY, MISSOURI

All results are in ug/l unless otherwise noted

Sample ID	Ritter Park Sp	Ritter Park Sp Duplicate	RPD
Laboratory Number	0429504	0429505	
Metals			
Chromium, total, dissolved	.76 (e)	.79 (e)	3.9
Copper, dissolved	1.05	.82 (e)	24.6
Nickel, dissolved	1.59	1.63	2.5
Zinc	4.85	1.61	100.3
Zinc, dissolved	2.38	2.16	9.7

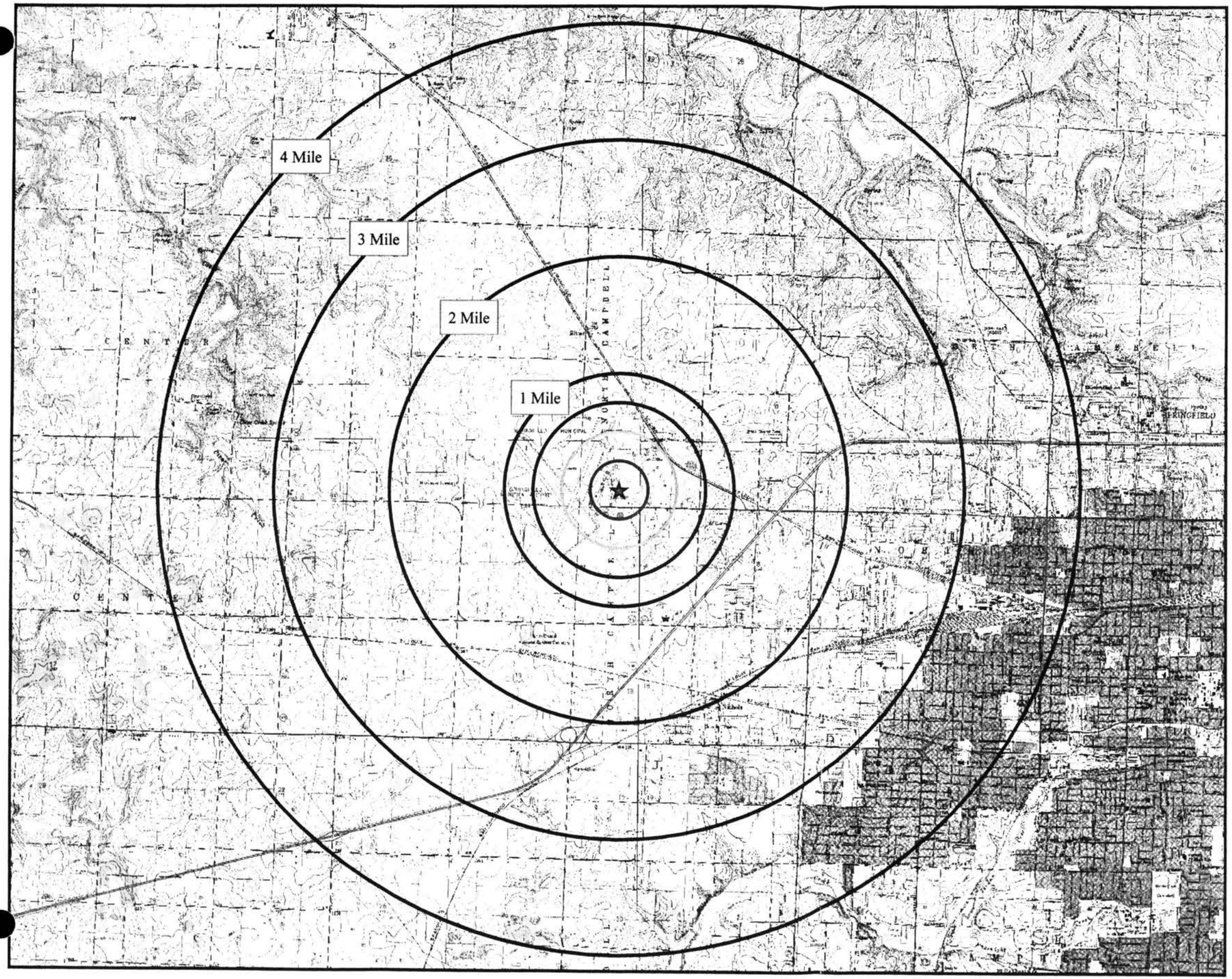
TABLE D-13: CALCULATION OF SAMPLE/SAMPLE DUPLICATE RELATIVE PERCENT DIFFERENCE (RPD) PRIVATE RESIDENTIAL WELL SAMPLES LITTON SYSTEMS, INC., SR, GREENE COUNTY, MISSOURI

All results are in ug/l unless otherwise noted — **NA - No RPD value Calculated** — **Values in bold exceed 25% RPD Criterion**

Sample ID	**DW-19**	**DW-19 Dup**	**RPD**	**DW-90**	**DW-90 Dup**	**RPD**	**MW-02 Bckgd Spfld Aq**	**MW-02 Dup**	**RPD**	**DW-10**	**DW-10 Dup**	**RPD**	**DW-101**	**DW-101 Dup**	**RPD**	**DW-03**	**DW-03 Dup**	**RPD**	**DW-55 Dup**	**DW-55**	**RPD**	**DW-45 Dup**	**DW-45**	**RPD**
Date Collected	**6/17/04**	**6/17/04**		**6/17/04**	**6/17/04**		**10/18/04**	**10/18/04**		**6/17/04**	**6/17/04**		**6/17/04**	**6/17/04**		**8/04/04**	**8/04/04**		**6/17/04**	**6/17/04**		**6/17/04**	**6/17/04**	
Laboratory Number	**0429560**	**0429561**		**0429576**	**0429577**		**043562**	**043563**		**0429549**	**0429550**		**0429588**	**0429589**		**0434852**	**0434853**		**0429519**	**0429520**		**0429530**	**0429531**	
Metals																								
Arsenic	NA	NA	NA	NA	NA	NA	2.67	2.88	7.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, total	NA	NA	NA	NA	NA	NA	3.59	4.24	16.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	15.3	8.76	**54.4**	9.84	3.06	**105.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.12	1.93	123.2	8.25	10.4	23.1
Lead	1.63	1.08	**40.6**	3.37	1.26	**91.1**	208	219	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	5.0	5.32	6.2	NA	NA	NA	NA	NA	NA	1.31	2.55	**64.2**	NA	NA	NA	NA	NA	NA
Zinc	52.0	50.4	3.1	74.2	72.8	1.9	5900	6030	2.2	6.07	8.56	**34.0**	41.2	48.6	16.5	19.8	42.0	**71.8**	62.4	51.6	18.9	3.75	3.37	10.7
Volatile Organic Compounds (VOCs)																								
Trichloroethene (TCE)	NA	NA	NA	2.01	2.04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Reference 3
Four Mile Radius Map
Litton Systems Inc Site
4811 West Kearney Street
Springfield, Greene County, MO

Litton Systems Inc. Site
Site Reassessment
Reference # 3



Legend

★ **Litton Systems Inc, Center of Operations**

Radius (in miles)	Population
0 - 0.25	0
0.25 - 0.50	0
0.50 - 0.75	1,081
0.75 - 1	0
1 - 2	1,712
2 - 3	8,176
3 - 4	15,880
Total	26,849

Created on: September 26, 2006
by Rebecca Wells-Albers

Base Map: USGS Brookline Digital Orthophoto Quad (DOQQ). Flight date March 20, 1997. USGS topographic maps, 7.5 minute series. Digital Raster Graphic, 1: 24,000.

Data Sources: US Census 2000

Although all data sets used to create this map have been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

Missouri Department of Natural Resources
Division of Environmental Quality
Hazardous Waste Program

Locational Data Collection Sh
Department of Natural Resource

Litton Systems Inc. Site
Site Reassessment
Reference # 4

11. Collection Site Feature (Mark the feature where the locational data was collected. If needed, use **12. Descriptive Comments** to provide more detail. Provide enough information so someone could return to the collection site feature.)

Collection Site Feature	Code			
Air Sample	AM		Railroad	RR
Air Release/Stack	AS		Road	RD
Building	BL		Surface Impoundment	SI
Buried Waste/Waste Pit Area	BW		Sediment Sample	SD
Center of Operations	CO		Seep Area/Spring	SP
Described by Descriptive Comment Field	DC		Soil Boring	SB
Drinking Water Well	DW		Soil Sample	SS
Drums	DM		Tank	TK
Groundwater Sample	GS		Surface Water Sample	WS
Impacted Groundwater	IG		Waste Pile	PL
Impacted/Contaminated Soil/Spill	IS		**AREA FEATURES**	**Code**
Landfill	LF		Boundary of Operations	BO
Main Office/Admin Building	MA		Buried Waste/Waste Pit Area	BW
Main Access/Entrance/Gate	MG		Boundary of Institutional Control Area (use Comments below)	IC
Missouri Land Survey Monument	MM		Boundary of Impacted Groundwater	IG
Monitoring Well	MW		Boundary of Impacted/Contaminated Soil/Spill Area	IS
Outfall	OP		Boundary of Landfill	LF
Production/Industrial Well	PW		Boundary of Pile	PL
Radioactive Source	RA		Boundary of Surface Impoundment	SI
			Other (use Collection Site Descriptive Comments below)	OT

12. Collection Site Descriptive Comments (If needed, further describe the feature represented by the **Collection Site Feature**. For example, an outfall at the east end of pipe 12; or started at the NW corner, went clockwise around the site, recorded 27 points and ended back at the starting point.)

Point collected at percolation terrace located on the north side of the building in the field

13. Source of Locational Data

Description	Code						
		NERO	D5	TAP	N5	EPA Headquarters	HQ
Citizen	CT	SLRO	D6	WPCP	N6	Private Sector	PV
Contractor	CR	APCP	D7	DEQ/Adm	N7	Regulated Entity	RE
Dun & Bradstreet	DB	ESP	D8	Kansas City Local Agency	L1	Tribe	TR
EPA, Region 7	R7	HWP	D9	Springfield Local Agency	L2	Unknown	UN
JCRO	D1	LRP	N1	St. Louis City Local Agency	L3		
SERO	D2	PDWP	N2	St. Louis County Local Agency	L4		
SWRO	D3	SWCP	N3				
KCRO	D4	SWMP	N4			Other_____	

14. Source Scale Used to Determine the Latitude and Longitude (if applicable)

Scale: 1:24,000; 1:100,000; Other _____; or Unknown

15. Your Name (Please Print)	Rebecca Wells-Albers	**Date Collected**	8/4/2004

Locational Data Collection Sheet

Department of Natural Resources

ALPD – Hazardous Waste Program

This sheet is used to record required locational data. Attach the ***Optional Locational Data Collection Sheet*** if you need to record additional inform

1. Key Identifier	(Leave Blank)
2. Facility ID, Permit Number or Other Identifier	MOD007152903
3. Facility or Site (Name and Physical Address)	Litton Systems Inc, 4811 West Kearney St, Springfield, MO 65803

4. Entity Type	(1) **FF** - Federal Facility	(2) **Gen** - Generator	(3) **TSD** - Treatment Storage and/or Disposal	(4) **SF** – Superfund	(5) **VCP** - Voluntary Clean-up	(6) **RR** – Resource Recovery	(7) **PST** - Petroleum Storage Tank

5. Unit of Measurement	Degrees/Minutes/Seconds	Decimal Degrees	UTM (Round to nearest Meter)

Latitude		Longitude		Time of Reading	

Latitude/Longitude conversion to decimal degrees:

Easting	466520.555	Northing	4122141.674	Zone	15 or 16

6. Method of Determining Location (Indicate the method used to determine the locational data.)

Address Matching (Geocoding)	**Code**		Differential Post Processing	G3
Block/Group	A2		Precise Positioning Service	G4
Digitization	A6		Signal Averaging	G5
Nearest Street Intersection	A4		Real Time Differential Processing	G6
Other Address Matching	AO		**Interpolation**	
Primary Street Name	A5		Aerial Photograph	I2
Street Centerline	A3		Topographic Map	I1
Zip Code Centroid (Center)	Z1		Satellite Imagery	I3
Census – 1990			Other Interpolation	IO
Block Centroid (Center)	C1		**Other**	
Block/Group Centroid	C2		Classic Survey	S1
Block/Track Centroid	C3		Land Survey	P1
Other Centroid	CO		Loran C Code	L1
Global Positioning System			Quarter Section Description	S2
Static Mode	G1		Unknown	UN
Kinematic Mode (Dynamic)	G2			

7. Make & Model of GPS Receiver (If Applicable)	MARCH II GARMIN 12XL OTHER If other, specify:Trimble Geoexplorer XT	**8a. PDOP**	4.8

8b. Locational Data Accuracy	.5 +/- meters or +/- feet
9. Type of Locational Data Represented	Point Line Area

10. Horizontal Datum (Indicate the horizontal datum used to locate the collection site feature.)

(1) NAD27 (2) NAD83 (3) WGS84 (U) Unknown Other:

Updated January 2004

Litton Systems Inc. Site
Site Reassessment
Reference # 7

REMEDIAL INVESTIGATION SUMMARY REPORT – PHASE II

INTERCONNECT TECHNOLOGIES
DIVISION OF LITTON SYSTEMS, INC.

4811 West Kearney
Springfield, Missouri

April 8, 2005

Submitted by:

SECOR

SECOR International Incorporated
400 Bruns Lane
Springfield, IL 62702

PHASE II REMEDIAL INVESTIGATION
SUMMARY REPORT
INTERCONNECT TECHNOLOGIES
DIVISION OF LITTON SYSTEMS, INC.
SPRINGFIELD, MISSOURI

SECOR International Incorporated (SECOR) is submitting this Phase II Remedial Investigation (RI) Summary Report (Report) on behalf of Interconnect Technologies Division of Litton Systems Inc. (Litton-ITD). This Report was prepared to present the findings of Phase II of the RI conducted at the Litton-ITD facility located at 4811 West Kearney Street, Springfield, Missouri. If you have any questions or comments concerning this Report, please contact me at 217-698-7247.

Respectfully submitted,

Mr. Mark G. Densmore, R.G.
SECOR - Project Coordinator
Missouri RG 2002002480

EXECUTIVE SUMMARY

INTRODUCTION

This Summary Report has been prepared to highlight the findings of the second phase of a comprehensive Remedial Investigation (RI) conducted by the Interconnect Technologies Division (Litton-ITD) of Litton Systems, Inc. at their Springfield, Missouri facility (Facility).

This Phase II RI Summary Report is being presented in accordance with the Phase II RI Work Plan submitted to the Missouri Department of Natural Resources (MDNR) on April 2, 2004, and the letter from Northrop Grumman Component Technologies to MDNR dated March 6, 2003, describing a proposed concept of phased activities to help delineate and address soil and groundwater impacts associated with historical activities at the Facility.

BACKGROUND INFORMATION

The Facility is currently active and produces printed circuit boards. The total area of the Facility is approximately 77 acres. The Facility building occupies approximately 207,000 square feet and is located in the southern part of the Facility property and consists of administrative offices, warehouse, and production areas. An asphalt parking lot is located north of the building. A butyl-rubber-lined pond designed to contain water for emergency fire fighting is located southwest of the Facility building. The remaining property is undeveloped. The Facility has operated since the mid-1960's. The term "Site", when used in this report, refers to the current Facility property and the adjacent portion of the Springfield-Branson Regional Airport (Airport) property which contains the Former Sanitary Lagoon.

Waste historically generated from the Facility process operations included chlorinated solvents and metals. These wastes were deposited in several waste management units which are no longer in operation and are considered potential Areas of Concern (AOC). These units include: the Former Percolation Terrace, the Former "A" and "B" Lagoon, the Former "Original" Acid Pit, the Former Sludge Pit, the Former "New" Acid Pit, the Former "C" Lagoon, and the Former Sanitary Lagoon (on Airport property). Also included as potential AOCs are portions of the Facility building complex.

The Facility is located in the Sac River drainage basin. There are no known perennial waterways or contiguous wetlands within one mile of the Facility. The topography is gently rolling with occasional topographic depressions caused by sinkholes.

Two major aquifer systems, separated by a confining unit, are present in the Springfield area. From stratigraphically youngest to oldest there are: the Springfield Plateau Aquifer, the Ozark Confining Unit (Northview Formation), and the Ozark Aquifer. The Springfield Plateau Aquifer is composed of cherty limestones and dolomites of Mississippian age, stratigraphically above the Northview Formation (confining unit). Aquifer testing conducted during a 1994 investigation indicates that groundwater in the unconsolidated overburden material and in the bedrock above the confining unit behave hydraulically as one aquifer at the Facility. The upper part of the aquifer consisting of the cherty clay overburden material varies from approximately 10 to 65 feet below ground surface (bgs). The unconsolidated interval in itself is not considered to be a significant aquifer in the region due to small water yields from wells producing from that interval.

The Mississippian age limestones, which make up the Springfield Plateau Aquifer at the Facility, include the Burlington-Keokuk Limestone, the Elsey Formation, and the Pierson Limestone. The near surface rocks of the aquifer contain numerous channels created by the dissolution of the carbonate rock along faces of joints, fractures, and bedding planes. The majority of the large-scale karst features is formed in the Burlington-Keokuk Limestone formation and can be cavernous. Much of the area at and surrounding the Site is characterized by sinkholes. The potentiometric maps created with data from on-site wells screened in the Springfield Plateau Aquifer indicate that the general groundwater flow direction for the aquifer (in relation to a majority of the AOCs) is predominantly toward the north-northwest at the Facility; however, the shallow groundwater flow appears to mirror topography, with radial flow away from the Facility building, and there is an eastern flow component present along the eastern portion of the Facility property.

The Northview Formation is composed of siltstones and shale which appear to impede the downward flow of water. The Ozark Aquifer is composed of limestones, dolomites, sandstones, and siltstones. The primary water producing formations in the Ozark Aquifer in the vicinity of the Site are the Roubidoux Formation and the Gunter Sandstone.

Previous investigations identified chlorinated solvents and metals contamination in the soil and groundwater (Springfield Plateau Aquifer) consisting of: arsenic (As), chromium (Cr), copper (Cu), lead (Pb), cyanide (CN), mercury (Hg), cadmium (Cd), 1,2-Dichloropropane (1,2-DCP), 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane (1,1,1-TCA), 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane (1,1,2-TCA), 1,1-Dichloroethene (1,1-DCE), 1,2-Dichloroethane (1,2-DCA), 1,3,5-Trimethylbenzene, cis-1,2 Dichloroethylene (cis-1,2-DCE), methylene chloride (DCM), tetrachloroethene (PERC), toluene, trichloroethene (TCE), vinyl chloride (VC), and xylene.

Groundwater samples collected from the Facility Industrial Well (IW-1) during the 1994 RI were impacted with TCE, 1,2 DCP, and cis-1,2-DCE above the Cleanup Levels for Missouri (CALM) groundwater objectives in the Ozark Aquifer.

Nine extraction wells were initially installed in 1994 as part of the Interim Remedial Measures (IRM) system. The extraction wells were located near the area of the Former "New" Acid Pit, near the area of the Former "Original" Acid and Former Sludge Pit, and adjacent to the west property boundary. The system was installed to inhibit off-site migration of impacted shallow groundwater. Three additional recovery wells were subsequently installed. There are currently 12 wells in the IRM system.

A pilot soil vapor extraction (SVE) system was installed and operated at the Facility in the vicinity of the Former "New" Acid Pit from 1998 until its shutdown in 2001. The SVE system was shut down due to poor performance standards, and modified for the installation and operation of a high vacuum (HVE) system. The installation and operation of the HVE system was delayed because of the need to obtain access agreements (to obtain electrical power from the Airport) and several technical, equipment, and logistical problems. MDNR has indicated its support allowing Litton-ITD to discontinue the pilot HVE system at the former "New" Acid Pit due to unfavorable geologic conditions (which will impact overall performance) and the possibility of metals impacts at that location.

REMEDIAL INVESTIGATION ACTIVITIES

RI activities consisted of Global Positioning System (GPS) data collection of sample points and site features, soil and groundwater sampling, and laboratory analysis for the presence of volatile organic compounds (VOCs) and metals. Phase II RI soil borings were advanced in the

following AOCs: Former "Original" Acid Pit and Former Sludge Pit, Former "New" Acid Pit, Former "A" and "B" Lagoon, Former Percolation Terrace, Sub-Floor of the Facility Building, Area near Soil Boring No. 19, and the Former Sanitary Lagoon (on Airport Property). Geotechnical borings were advance in select locations to provide additional information concerning soil properties at the Site. Groundwater samples were collected from the Facility monitoring wells, recovery wells, and select Airport monitoring wells screened in the Springfield Plateau Aquifer. Groundwater samples were also collected from seven deep wells open to the Ozark Aquifer.

Soils were screened with a Photo-ionization detector (PID) for VOCs and an X-ray fluorescence device (XRF) for metals. Samples were collected on the basis of the screening data and analyzed for metals and VOCs. Groundwater samples from the Springfield Plateau Aquifer were collected and analyzed for VOCs and metals. Samples collected from the Ozark Aquifer were analyzed for VOCs.

Ten monitoring wells were installed in the Springfield Plateau Aquifer and sampled. Four wells were installed and screened on the Facility property and four wells were installed on the Airport property. Two wells were installed on city-right-of ways. Four wells were completed in the Ozark Aquifer.

REMEDIAL INVESTIGATION RESULTS

Soil results from the Phase I and Phase II RI activities indicated the following inorganic compounds above CALM C_{LEACH} values: copper, lead, chromium, arsenic, mercury and silver. There are exceedences of CALM C_{LEACH} objectives for chromium and arsenic in the soil. Most of the chromium and likely all of the arsenic results appear to be due to naturally elevated levels in the soil for this area. Hexavalent chromium analysis was conducted on select samples (including the most elevated chromium result, which was collected from the Former Sanitary Lagoon). The results from the analysis were non-detect for hexavalent chromium. Copper was the most widespread inorganic contaminant found in the soil at the Site. Copper was detected above the CALM soil objectives in (or near) the following AOCs: Former Sanitary Lagoon, Former "Original" Acid Pit, Former Sludge Pit, Former Percolation Terrace, and the Facility Sub-floor Area. Lead was detected in soil samples above CALM soil objectives (in association with samples that contained elevated copper results) in (or near) the following AOCs: Former Sanitary Lagoon, Former "Original" Acid Pit, Former Sludge Pit, and the Former Percolation

Terrace. Mercury was detected in soil samples above CALM objectives in (or near) the following AOCs: Former Sanitary Lagoon, Former "Original" Acid Pit, and the Former Percolation Terrace. Silver was detected in soil samples above CALM soil objectives in the Former Sanitary Lagoon.

Soil results indicated the following VOC's above CALM C_{LEACH} values: 1,1,2-TCA, 1,1-DCE, 1,2-DCP, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,1,1-TCA, 1,1-DCE, 1,2-DCA , 1,3,5-Trimethylbenzene, cis-1,2-DCE, DCM, PERC, toluene, VC, and xylene. TCE was the most widespread VOC contaminant found in the Facility soils. TCE was detected above the CALM soil objectives in (or near) the following AOCs: Former Sanitary Lagoon, Former "Original" Acid Pit, Former Sludge Pit, Former Percolation Terrace, Former "New" Acid Pit, Former "A" & "B" Lagoon, Former "C" Lagoon, Facility Sub-floor Area and Surrounding Areas (vicinity of SB-19).

Groundwater results indicated the following inorganic contaminants above CALM groundwater (GW) objectives in the Springfield Plateau Aquifer: copper, cadmium, mercury, and lead. The copper impacts were in the vicinity of the northwest corner of the Facility building and the Former "Original" Acid Pit. The mercury impacts were in the vicinity of the northwest corner of the Facility building, and the Former "Original" Acid Pit. The cadmium impacts were in the vicinity of the northwest corner of the Facility building, Former "Original" Acid Pit, and in one well on the Airport property.

Groundwater results indicated the following VOC's above CALM GW objectives in the Springfield Plateau Aquifer: TCE, 1,1,1-TCA, cis-1,2-DCE, 1,1-DCE, DCM, trans-1,2 DCE, 1,1,2-DCA, PERC,1,1,2,2-Tetrachloroethane, 1,2 DCA, 1,2-DCP, toluene, VC, and benzene. TCE was the most widespread VOC groundwater contaminant found. The highest groundwater VOC concentrations were found in wells screened in the Springfield Plateau Aquifer located near the Former "Original" Acid Pit and the Former Sludge Pit; however, VOCs above CALM GW objectives were detected in (or around) the following AOCs: Former Sanitary Lagoon, Former Percolation Terrace, Former "New" Acid Pit, Former "A" & "B" Lagoon, Former "C" Lagoon, and the Facility building area.

During Phase II RI activities, groundwater samples from Ozark Aquifer well IW-1 had detections of TCE, cis-1,2 DCE, and 1,2-DCP above CALM objectives. The samples were collected from

discrete depth intervals. The most significant VOC exceedences in IW-1 were found in the depth range from 500-900 feet bgs. The VOC impacts were slightly above CALM groundwater objectives near the bottom of IW-1. The deep well on the Airport property (APD-1), located west of the Facility, was impacted with TCE, cis-1,2 DCE, and 1,2-DCP above CALM GW objectives. The most significant chlorinated solvent exceedences in APD-1 were found from the sample at the depth of 650 feet bgs. Groundwater samples from the remaining five Ozark Aquifer wells, located north, northwest and west and east of the Facility, tested non-detect for chlorinated hydrocarbons.

Borehole geophysics were conducted on select Ozark Aquifer wells. IW-1 was logged with sonic bond log (to assess potential void space in the annular region around the casing), gamma-ray neutron (for lithologic correlation), and acoustic televiewer (for detection of fractures) tools. Ozark Aquifer monitoring wells MWO-1 through MWO-4 were logged with gamma-ray neutron (for lithologic correlation) and acoustic televiewer (for detection of fractures).

DISCUSSION

VOC and/or metals impacts to soils above CALM objectives were detected in (or near) the following AOCs: Former Sanitary Lagoon, Former "Original" Acid Pit, Former Sludge Pit, Former Percolation Terrace, Former "New" Acid Pit, Former "A" & "B" Lagoon, Former "C" Lagoon, Facility Sub-floor Area, and the Area near SB-19 (located in the northwest portion of the north parking lot). It appears that copper and TCE represent the contaminants of concern that will ultimately determine remedial activities. The AOCs were delineated sufficiently to proceed with a Feasibility Study (FS) to address impacted soils at the site.

VOC and metals impacts to the Springfield Plateau Aquifer appear to be located in, or down-gradient, from AOCs with identified VOC or metals soil impacts. The contaminant transport also appears to be affected by the highly variable bedrock topography, fractures, and associated dissolution along the fractures. Groundwater flow in the shallow aquifer is essentially radial from the Facility building. Benzene, ethyl-benzene, toluene, xylene, and lead impacts in select Airport wells are consistent with Airport fuel sources. The extent of chlorinated hydrocarbons have not been fully delineated at this time, exceedences were detected in wells on the north, northwest, northeast and southeast of the Site. Initial (limited) aquifer testing of the IRM system

indicates that the IRM system does not appear to be achieving complete hydraulic and/or contaminant capture at this time.

The groundwater flow direction in the Ozark Aquifer at the Site is toward the west. The Facility deep well IW-1 and Airport deep well APD-1 are the only two Ozark Aquifer wells in the vicinity of the Site with detections of chlorinated hydrocarbons. The sonic bond log from the Facility deep well IW-1 did not indicate void space around the casing below the Northview Formation, decreasing the likelihood that contaminants have migrated down the annulus of the well along of the casing.

SUMMARY

The Phase II RI goal, to gather sufficient data to complete a FS to address source areas (notably soils) at the Site, has been achieved. Litton-ITD recognizes that impacts (most notably groundwater) are not limited to the Facility property boundaries and that there are considerations beyond the Site boundaries that will need to be addressed.

The extent of groundwater contamination in the Springfield Plateau Aquifer in the area and the pathways of groundwater contamination to the Ozark Aquifer at the Site and on the Airport property at APD-1, require further delineation. Further evaluation of the IRM system is necessary to determine if it can be made more efficient in the removal of impacted water from the Site. Specific items for addressing groundwater capture and impacts to the Springfield Plateau Aquifer and the Ozark Aquifer are presented below.

The lateral extent of contamination in the Springfield Plateau Aquifer attributable to the Site has not yet been fully delineated. TCE has been detected above CALM objectives in perimeter wells: MW-111, MW-112, MW-114, MW-115 (only 3 ppb above CALM objective), and MW-116.

The vertical extent of contamination in the Springfield Plateau Aquifer has been determined in one portion of the Site (MW-113). The vertical extent of contamination in the Springfield Plateau Aquifer may require further delineation.

The initial aquifer testing of the IRM system indicated that the system is not as efficient as originally proposed, and consequently does not provide complete groundwater capture for the

following AOCs that it was originally intended: Former "Original" Acid Pit, Former Sludge Pit, Former "New" Acid Pit, and the Former Percolation Terrace. The IRM system also does not appear to encompass or affect source areas in the southern portion of the Site such as the Facility Building Sub-floor. Additional aquifer testing, the installation of additional recovery wells and monitoring locations (which can be used to monitor deeper intervals within the Springfield Plateau Aquifer) may be necessary to improve system performance and help address groundwater impacts.

Additional monitoring locations and further studies of the Springfield Plateau Aquifer are most likely necessary to determine the Site's contribution, if any, to off-site impacts and/or determine the ultimate plume extent.

Ozark Aquifer wells IW-1, and the Airport deep well APD-1, are both impacted with VOC's above CALM GW objectives. Both wells are open hole below the Northview Formation in the Ozark Aquifer. The source of contamination in the deep aquifer and the pathway for contaminant migration into the deep aquifer are unknown at this time. Determining the exact source and pathway of contamination to the Ozark Aquifer wells might prove difficult, if not impossible, using current technology. Addressing the source areas at the Site, remediating groundwater near source areas, and continued monitoring of down-gradient monitoring wells/receptors may prove to be the most practical and effective way to address the Ozark Aquifer impacts.

Well MWO-4 west of APD-1 is obstructed at a depth of approximately 920 feet bgs. Although analytical testing down to a depth of 900 feet bgs showed no detections of chlorinated hydrocarbons, the lower portion of the well could not be sampled during Phase II activities. Efforts to clear this obstruction will be made during the Phase III RI activities.

Additional monitoring and further studies of for the Ozark Aquifer may be necessary to determine the Site's contribution, if any, to off-site impacts and/or determine the ultimate plume extent.

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Litton Systems Inc. Site
Site Reassessment
Reference # 8

HAZARDOUS WASTE SITE INSPECTION REPORT
Litton Industries - Advanced Circuitry Division
Springfield, Missouri

RECEIVED
DEC 30 1988
WASTE MANAGEMENT
PROGRAM

December 23, 1988

Prepared by
Charles L. Kroeger
Springfield Regional Office
Department of Natural Resources

I. EXECUTIVE SUMMARY

The Site Inspection was performed on the former irrigation area at the Litton Facility. This area was initially for disposal of the waste rinsewater generated at the electroplating facility to eliminate the discharge off of the property. The flow of wastewater had previously been entering a sinkhole to the northwest of the plant.

As the facility expanded and the amount of wastewater increased, the two acre terraced irrigation field became inadequate for disposing of all of the water. A lagoon was constructed to provide storage and reduce flow by loss of water through evaporation and percolation. The plant also made some internal changes to reduce the amount of water generated.

The irrigation area, as well as the lagoon, were designed upon the ion exchange capacity of the clay soils. The intent was to reduce the metal content of the wastewater by land applying it and allowing the soils to trap the metal ions. The water would then filter on through or be taken up in the root systems of the plants. The problem with the system appeared to be the large volume of water generated by the facility because periodic discharges of wastewater occurred.

The samples taken of the water which was generated at the rate of 150,000 -200,000 gallons per day but later reduced to 34,000 gallons per day showed the levels of metals to be as high as 13 ppm copper, 2 ppm lead, 1.2 ppm chromium, 0.75 zinc, and 0.75 for cadmium. Some of these levels were reduced with the installation of control equipment in the plant.

The irrigation site was used from 1971 to 1982 at which time the connection was made to the municipal sewerage system. At that time the lagoons were eliminated and the sludge from them was hauled to a hazardous waste disposal facility. This was done with overview by the Department of Natural Resources.

In 1981, following a complaint by a disgruntled Litton employee that the plant was dumping industrial solvents into their lagoon, samples of the lagoon were taken which indicated levels of volatile organics exceeding 100 ug/l. Because of these high levels and the fact that the lagoon lies in an area of karst topography, there was considerable concern about the quality of the groundwater in the area northeast of the site. Included in this concern was the spring which flowed through the cave at Fantastic Caverns.

In June, 1981, 14 private wells and springs were sampled in the area and tested for volatile organics. Volatile organics were detected in each of the springs and in one of the private wells, however, the amount in the private well was less than what was considered a safe level. The conclusion of the report was that any dumping of solvents which had taken place had apparently had little immediate effect on the quality of the groundwater in the area.

Because of the other industries in the northern area of Springfield and the complexities of the karst topography of the area, it is difficult to determine the effects of any one site on the groundwater in north central Greene County. Area wells have been determined to be shallow cased and many are old wells that are less than the recommended depth. Those wells that are deep may be serving as conduits for contaminants because of improper construction or inadequate casing.

Additional dye traces are planned for the sinkholes in the area. An extremely dry summer hampered the implementation of these studies at any earlier date. It is not known for certain whether the north sinkhole on the Litton site is in the recharge area for Ritter Spring West which is located about 2.8 miles to the northeast or in the recharge area for the northern springs which are about 3.2 miles from the site. Any wells in the area between the site and the springs could potentially be contaminated if migration of contaminants offsite is occurring. Private well sampling has not demonstrated the offsite migration of contaminants but the spring sediment sample at Ritter Spring West shows higher than background chromium and copper levels and the water from the spring contained Trichloroethylene which was found in high concentrations at the Litton Site. As was stated in a report in the files, however, Litton is not the only industry in northern Springfield that has used Trichloroethylene as a solvent.

II. BACKGROUND

A. Location of Site

The site is located at 4811 West Kearney Street in Springfield, Missouri, about 3 3/4 miles west of the intersection of Kearney and Kansas Streets. The legal description of the site is SE 1/4, SW 1/4, Sec 6, T. 29 N., R. 22 W., Brookline Quadrangle, Greene County. (Ref 1 & 2).

B. Site Layout

The facility sets north of Kearney Street and east of the Springfield Municipal Airport. The area which was used for land application of the rinse water lies north and northeast of the parking lot which is on the north side of the building. The land application area was somewhat barren of vegetation at the time of the sampling. Even though the sampling was performed in January there was little evidence that the soils supported plant growth except in some of the upper areas near the parking lot.

C. Site Ownership History

Litton Industries purchased the site as three different parcels. The first parcel was purchased from the Industrial Development Corporation in 1963 after it had been leased first. The second parcel was purchased from the city of Springfield and the third parcel was purchased from Mr. and Mrs. Roscoe Prescott in 1964.

D. Site Use History

The first building was built on the site by Litton Industries in 1967-68. Until that time the property was either agricultural or vacant land. Several additions have been built since the initial building was constructed.

E. Permit and Regulatory History

In 1972 Litton received an Operating Permit from the Clean Water Commission for the operation of the waste water lagoon. In 1974 an NPDES Permit was issued but was terminated in 1975 when the discharge was thought to have been eliminated. In 1975 Litton received a Letter of Approval for the construction and subsequently the operation of a no discharge system which included land application of the waste water. A Consent Order was issued in September, 1980, which called for the company to cease the discharge of rinsewater from their property.

F. Remedial Actions to Date

No action has been taken by the company or the Department recently in regards to the leach field. The original purpose of the irrigation system was to provide an ion exchange system for the rinse water pumped from the lagoon in an effort to reduce the metal ion content of the water and to eliminate the discharge of wastewater from the facility.

In 1982 the lagoon was eliminated as was the irrigation system when the company began discharging their waste water to the municipal sewerage system. The solid material from the lagoon was removed and disposed of at a hazardous waste facility and the lagoon was dozed in and leveled. Two monitoring wells were to be kept in place to be sampled periodically for obtaining information on the migration of contaminants from the lagoon site, however one of the wells was destroyed during the process of filling the lagoon and the other dried up.

There was at one time a sludge pit and an acid pit on the site. These were both cleaned up in the late 70's with overview of the project performed by Waste Management personnel from Jefferson City and Water Pollution Control personnel from the Springfield Regional Office. After the sludge was removed from the pits the soil below them was sampled to demonstrate that all contaminants had been removed.

G. Summary Trip Report

In preparation for the sampling a visit was made to the area to contact area residents for the purpose of gathering well information and obtaining permission to sample the private wells. Company officials at Litton were also notified of the upcoming sampling.

On January 27, 1988, samples were collected from the leach fields on the Litton property and from area wells and springs. Information regarding the site use and ownership was obtained at a later date.

III. ENVIRONMENTAL SETTING

A. Topography

The Litton Industries Site is located in a relatively gently sloping area surrounded pretty much on all sides by sinkholes. The areas to the north northwest, east, and south contain sinks that exceed forty acres in size with some having a relief of more than fifty feet. (Ref 4).

Runoff from the site flows to the north then west to a sink on the Springfield Municipal Airport property. Sinks in the area have been shown to recharge Ritter Spring, Williams Spring and Fantastic Cavern Spring. (Ref. 6).

The average slope of the Litton Site is estimated to be 2-3% with the slope in the irrigation area to the north. The area east of the irrigation site is where the lagoon was located before it was eliminated in 19 (Ref 6 & 8).

The headwaters area of Spring Branch which discharges into the Little Sac River is located about one mile from the site to the east. Though no surface water from the site would reach these headwaters, there may be some groundwater connection. The headwater area of the Clear Creek Basin is located within one mile of the site to the west. Again there is no surface water connection due to the sinkholes surrounding the site. (Ref 6 & 8).

B. Surface Waters

Except for a small area due west of the site, the surface water flow is restricted to wet weather flows into sinkholes with most flow appearing to travel less than one mile before entering the eye of a sinkhole. The area to the west recharges Clear Creek and a portion of the area northeast of the site, about 1 1/2 miles away, enters Spring Branch. For the most part, all of the surface water within 1 1/2 miles of the site enters a sinkhole if it does not enter groundwater through a losing stream before getting there. Surface water is discussed further on page 6 of the Geologist's Report for the site. (Ref 6 & 8).

C. Soils

The Geologist report indicates the soils at the site to be of the Pembroke-Eldon-Creldon association. These are described in detail in the report which included an excerpt from the Soil Survey of Greene and Lawrence Counties, Missouri; USDA, SCS, 1982, but will be summarized here briefly.

The upland soil developed as a residuum from the weathering of the underlying cherty limestone. The soluble carbonate portion of the limestone was altered to residual soil and the more resistant chert was left floating in the soil. This accounts for the chert in the clay and the cherty layers in the soil. The mantles can be expected to range from red colored clay to layers of chert gravel and boulders.

The Pembroke, Eldon, and Creldon soils all appear to be formed by the weathering of cherty limestone. The Soil Survey indicates that the the subsoil beneath these soils is typically red to reddish brown cherty silty clay. This appears to be what was observed on the surface of the irrigation field which was noted to be, for the most part, void of vegetation. The geologist noted that the soils at the site are very permeable as is the bedrock. This would be expected in areas of karst topography as found at the site. (Ref 6)

D. Groundwater

The groundwater at the site is somewhat what one would expect in a karst setting however it is also complex with springs functioning differently depending on the weather conditions. The geohydrologic information from the DGLS report follows.

"The Litton site is within a 4 - 5 square mile internally drained area northwest of the Springfield City limits (See map included as reference 3). Within this sinkhole plain, all precipitation enters the groundwater system in one way or another. Much of the precipitation enters sinkholes, which funnel water like a storm-sewer system to spring outlets to the north and east. A significant amount of precipitation percolates through the permeable residual soil to the top of the pinnacled bedrock. These laterally discontinuous perched water zones provide base flow to the area springs by slowly releasing the groundwater to solution-enlarged conduits. A minor amount of the precipitation that falls on the area, possibly an insignificant amount, bypasses the karst drainage system and recharges the regional Mississippian Aquifer below the vadose zone."

"When heavy and/or prolonged precipitation occurs at the Litton site, surface flow drains predominantly to a sinkhole in the northeast corner of the Springfield Municipal Airport. An artificial drainage channel has been constructed along the eastern side of the airport, which empties into the broad, shallow "Airport Sink". This was done to prevent ponding of water around the northeast runway. The southeast part of the Litton site is drained by a sinkhole on the other side of the company's east property line. Fluorescein dye was injected into the Airport Sink after a heavy rain and the dye was recovered at the Williams, Fantastic Caverns, and Bunge Springs to the north-northeast (see reference 3 of the Geologist's report). During low flow conditions, these springs function independently of each other, as shown by the results of other dye injections during dry weather, but in high flow, they appear to overflow and co-mingle with each other."

"Properly cased water wells downgradient of the site should be unaffected by the contaminants originating there. Even poorly cased wells (those that are open to at least part of the vadose zone) are marginally susceptible to being contaminated from the Litton site because the chances of intercepting a solution-enlarged conduit are relatively small. Wells completed in the Ordovican aquifer and cased below the Northview confining unit are in no danger of being contaminated from the Litton Site."

The Geologist goes on in his report to describe the two aquifers of concern.
"There are two aquifers of concern here. The upper aquifer is composed of all bedrock units above the Northview aquitard, predominantly limestone and cherty limestone. This aquifer is highly susceptible to contamination due to its proximity to the surface and the high degree of solution weathering it has been subjected to. The yield from this aquifer is highly variable (1-50 gpm), depending on depth of penetration of the aquifer and the amount of secondary permeability features intercepted by the wellbore. The lower, or major aquifer, is separated from the upper aquifer by the 25-30' thick Northview Formation, which is mainly shale with minor siltstone. This thick aquifer is composed of dolomite and sandstone, and is recharged almost entirely from the precipitation falling on its outcrop area to the east of the Salem Plateau. A minor amount of recharge from the overlying upper aquifer does occur because of the head differential between the two aquifers. Wells open to the entire sequence are capable of producing 1000-2000 gpm. The major aquifer is not susceptible to contamination from local sources unless poorly cased water wells are present that provide an avenue of contaminant transport. (Reference 1)."

Additional dye tracing studies are planned for the future in the area. The Geologist's report includes a map showing the connection between the sinkholes near the site and the springs to the northeast of the site. (Ref 6).

E. Climate and Meteorology

Meteorological Data for this region is as follows:

Temperatures -

Average summer	76 degrees F
Average winter	36 degrees F
Low record	-29 degrees F
High record	113 degrees F

Precipitation -

Average Annual Rainfall	41	inches
Average Annual Evaporation	42	inches
One Year 24-Hour Rainfall	3.2	inches
Average Annual Snowfall	16.9	inches

Winds -
Prevail form the southwest

Solar Index -
Summer 70%
Winter 50%

F. Land Use

Different uses of the land surrounding the site include pasturing of dairy cattle, manufacturing, light industry, a municipal airport, and businesses associated with the airport. The site sets in an industrial complex that is still developing. Much of the land was used as pasture until the past few years when businesses began to become more numerous.

Much of the area within three miles of the site, except for that to the southeast and that within one mile to the west and within 1/4 mile to the south and east, is still predominantly pastureland with some scattered rural residences not associated with agricultural activities. Much of the land is also wooded or grown up in brush after being left idle for years.

The area within one mile to the west is primarily airport property and that within 1/4 mile to the south and east is industrial or business property.

G. Population Distribution

The population within one mile of the site is estimated to be 140 persons. This number was derived at by counting the number of residences on a topography map and multiplying the number by 3.8. There does not appear to have been a major increase in the residential population within one mile of the site recently, probably due to the fact that the airport occupies about half of the area within one mile and the industrial park occupies a large part of the rest of the land.

The population within two miles of the site is estimated to be about 2350 persons. The area between one and two miles of the site is relatively sparsely populated compared to other sections of Greene

County which adjoin Springfield. Besides the fact that the airport and industrial park are closeby, the northwest part of town has been slower to develop and the outlying areas are still made up mostly of farms with pastureland or rural residences with large tracts of undeveloped land. Much of the area is plagued with sinkholes and is undesirable for the development of residential subdivisions.

The estimated population within three miles of the site is 16,000. This was derived at by estimating the number of rural residences and multiplying by 3.8 then adding this number to an estimate of the number of people living inside the city limits of Springfield and within the three mile radius. The latter number was obtained by figuring the average density per square mile of the city of Springfield and multiplying this number by the number of square miles of city within three miles of the site.

H. Water Supply

Water in the immediate area of the site is provided by a public water supply, i.e. the City of Springfield. The outlying areas to the north, northeast, and west primarily are served by private water wells or small non-community systems. There are also several private water supply wells serving residences and businesses within one mile of the site.

A survey of several wells in the area shows a range in depth of 85 feet to 480 feet. The casing depth in these wells varies from 21 feet to 110 feet but the casing depth on most of the wells was not known by the property owners surveyed. (Ref. 9)

I. Critical Environments

Mr. Dan F. Dickniete, Environmental Administrator for the Missouri Department of Conservation, indicates the Royal catchfly (Silene regia) occurs within 1.0 mile of the site. This plant is watchlisted in Missouri and is a federal candidate for listing as a threatened or endangered species. The record is from 1984. The Black-tailed jackrabbit occurs within 1.0 miles of the site. This animal is rare in Missouri. The record is from 1987.

There is also some concern for the well being of the blind cave fish which is found in the Fantastic Caverns stream. Dye studies have shown a direct link between the airport sink and Fantastic Caverns as well as with Williams and Bunge Springs to the north-northeast.

IV. WASTE TYPES AND QUANTITIES

The Department of Natural Resources files indicate that Litton began irrigating rinsewater from the plating operations onto the channelized irrigation field in August, 1971. The wastewater first flowed through the lagoon system and what did not percolate or leak out was irrigated. The initial wastewater flow was estimated at 150,000 to 200,000 gpd. After an ion exchange and recirculation system was installed the volume was reduced to about 40,000 gpd.

Analysis on this water showed the levels of metal to range from .35 mg/l on Cadmium to 13 mg/l for copper. Lead values were detected at up to 2.0 and chromium up to 1.2 mg/l.

This water was irrigated onto the 2 acre site from August, 1971 to mid 1982 at which time the company connected the wastewater discharge to the municipal sewerage system which had recently become available.

Samples collected by MDNR Lab Services Personnel in January, 1988, contained metals levels well above background levels detected in the area. A summary sheet for the sample results is attached. The results showed the soil in the upper leach field to contain total chromium at a 390 ~~ug/l~~ mg/kg, total lead at 290 ~~ug/l~~ mg/kg, and total copper at 4500 ~~ug/l~~ mg/kg. Nickel, cadmium, barium and silver were detected at levels above background but did not appear as significant as the others listed above. Arsenic was detected at a level of 33 ~~ug/l~~ mg/kg, about ten times the background level.

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The sample from the lower leach field had above background levels for chromium, copper, and lead as well as for barium, nickel, and arsenic but the levels were not as significant as those in the soil from the upper leach field.

1,1,1-Trichloroethane was found in concentrations exceeding 1 mg/l in the soils of the upper leach field and Trichloroethylene was found in concentrations exceeding 28 ~~mg/l~~ mg/kg in the soil samples from ~~both~~ the upper ~~and the lower~~ leach fields. Trichloroethylene was also found in a private well and in Ritter Spring, however a direct connection between the site and these two water sources has not yet been confirmed.

At the present time there are no known hazardous wastes stored at the site which are not regulated under RCRA. The amount of soil which is contaminated with metals has not been determined but it could be a large part of the 2 acres which were used for the land application of the waste water.

V. LABORATORY DATA

A copy of the Laboratory Services Report on Investigation is attached as is a summary sheet of the sample results for the soils and nearby wells and springs. The results indicate elevated levels of copper, chromium, arsenic and lead in some of the samples. Copper, nickel, and solder (lead) were noted to have been used by the company in their plating operations and the chromium is also often present in plating waste apparently from a variety of proprietary chemicals used in plating operations.

The chlorinated solvents detected in the samples were probably from the adhesive removal operation or the board preparation operation prior to the plating.

VI. TOXICOLOGICAL DATA/CHEMICAL CHARACTERISTICS

The toxicological data will be provided for the metals and solvents detected in the irrigation field at levels felt to be substantially above background levels. 1,2-Dichloroethylene and carbon disulfide were found in two of the wells sampled but there is no reason to believe these chemicals originated from the Litton Site.

Copper - Although copper is not a hazardous waste itself, it has been shown to have adverse effects on health and the environment. Certain copper compounds can be irritants to the skin and upper respiratory tract while others, when ingested, can cause vomiting, gastric pains, dizziness, exhaustion, anemia, cramps, convulsions, shock, coma, and death. Damage to the kidneys and the nervous system have also been recorded due to the ingestion of copper. The recommended maximum level for copper listed in the Public Drinking Water Regulations is 1 mg/l.

> The toxicity of copper compounds varies greatly from toxic effects detected at 120 ug/kg for the ingestion of the copper metal and an LD50 of 470 mg/kg for copper oxide to lethal doses of some copper compounds as low as 10 mg/kg. It appears that the main consideration in determining the toxicity of copper compounds is the toxicity of the other constituents of the compound rather than the copper itself.

Chromium - Chromium compounds have been shown to be have adverse effects on the skin. The characteristic lesion is a deep, penetrating ulcer which is slow to heal. Little information was available on the effects of ingestion of the compounds on humans however the Public Drinking Water Regulation lists the maximum contaminant level for chromium at 0.05 mg/l. Volume 3 of Drinking Water and Health states that concentrations of 50 ug per gram of diet have been associated with growth depression and liver and kidney damage in laboratory animals but symptoms of excess dietary intake of chromium in humans are unknown. Rats have tolerated the ingestion of 25 ppm of hexavalent chromium for a year with no apparent effects however larger doses are said to be highly toxic and may cause death.

Lead -

The EPA standard for lead in drinking water is 50 ug/l. The Registry of Toxic Effects of Chemical Substances list the following:

orl-wmn TDLo:450 mg/kg/6yr
orl-pgn LDLo:160 mg/kg

The Dangerous Properties of Industrial Materials book states that lead is believed to be a carcinogen of the kidneys and lungs however the Drinking Water and Health, volume four, states that there is no evidence that lead is carcinogenic or teratogenic in humans and that there is not sufficient information available from which to calculate a SNARL. It does indicated that lead can induce biochemical and functional disorders with adverse effects on reproduction.

1,1,1-Trichloroethane -

LD50 oral-rat: 10,3000 mg/kg
inh-man TCLo: 350 ppm TFX:PSY
ivn-dog LDLo: 95 mg/kg

SNARLs are listed as 490 mg/l for 24 hour exposure and 70 mg/l for 7 day exposure.

Trichloroethylene -

orl-hmn LDLo:7 gm/kg
LD50 orl-rat: 4920 mg/kg

One day and ten day SNARLS are listed as 2 mg/l and 0.2 mg/l respectively.

Information on toxicity was obtained from the Registry of Toxic Effects of Chemical Substances and from Dangerous Properties of Industrial Materials. SNARLs information came from Office of Drinking Water, US EPA.

VII. SUMMARY AND RECOMMENDATIONS

The study showed elevated levels of lead, copper, chromium, and two solvents used in plating operations to be present in the upper leach field. These were also shown to be present in the lower leach field but were in lesser concentrations. Arsenic, silver and nickel were also present in the soil samples at above background levels.

Groundwater samples also showed the presence of solvents with one well having Methylene chloride and another containing Trichloroethylene. The well containing the Trichloroethylene has been resampled but the analytical results were not yet available at the time of this writing.

It appears that the leach field may have been effective in capturing the copper ions as it was designed to do. It apparently also concentrated the other metal as they were higher in the upper leach field than in the lower. The question that remains is whether or not the metals and solvents have migrated from the leach fields into the groundwater system and if they have, how widespread is the contamination. It would most likely require the installation of groundwater monitoring wells and a more extensive sampling of wells and springs in the area along with further dye studies to complete the evaluation of the site.

Information obtained late in the course of the investigation indicates that there was an acid pit and a sludge pit at the facility. The acid pit was located at the upper end of the irrigation field and the sludge pit was north of it. Water Pollution Control Personnel in the Springfield Regional Office indicate that the sludge was removed from both of the pits and properly disposed of with overview of the project by Waste Management personnel from Jefferson City. After the sludge was removed the soils were sampled to demonstrate adequate cleanup so these units should pose no health or environmental problems.

Without monitoring wells or some other method of determining migration that may be ongoing, it is difficult to determine whether or not removal of the contaminated soil would be beneficial in preventing further migration of contaminants into the groundwater system.

The study showed the presence of metal and solvent contamination at the site but it is difficult to evaluate the potential threat the site may be on health and the environment.

REFERENCES AND ATTACHMENTS

1. EPA Form 2070-13(7-81) Site Inspection Report Form
2. Preliminary Assessment Report
3. Greene County Highway Map
4. USGS Topography Maps composed of corners of 4 quads
5. Site Layout Map
6. DNR - DGLS Geologic Report
7. MDNR Laboratory Services Report of Sampling Analysis
8. MDNR Files
9. Well Information Survey
10. Drinking Water and Health, 1977
11. Dangerous Properties of Industrial Materials, Fifth Edition, 1979
12. Registry of Toxic Effects, 1979

Litton SI

Respectfully Submitted by:

Charles L. Kroeger
Environmental Specialist

Approved by:

John R. Nixon, P.E.
Regional Administrator

cc: Mr. Tom Bokel, Litton Industries

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Litton Industries	4811 West Kearney

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Springfield	MO	65803	Greene	077	7

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
37 1 4 3 7.	93 2 2 4 0.	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
01 / 27 88 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1969 / present (BEGINNING YEAR / ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Charles Kroeger	Environmental Specialist	MO DNR	(417) 883-4033

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
			( )
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Mr. Tom Bokel		Litton Industries 4811 West Kearney, Spfd.MO	(417 862-0751
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	1 p.m.	Sunny and cool.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
June Sullens	MO Department of Natural Resources Waste Management Program	(314 751-3176

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Charles L. Kroeger	MDNR	SRO	417 887-1346	12 / 20 / 88 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [ ] A. SOLID
- [ ] B. POWDER, FINES
- [ ] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS unknown
CUBIC YARDS unknown
NO. OF DRUMS unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Trichloroethylene	79-01-6	uncertain		
SOL	1,1,1-Trichloroethane		possible land application		
MES	Nickel	7442-02-0	land application		
	Arsenic				
MES	Copper Compounds		land application		
MES	Lead		land application		
MES	Chromium		land application		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Nickel	7442-02-0	FDS	Arsenic	7440-38-2
FDS	Lead	1335-25-7	FDS		
FDS	Chromium	7440-47-3	FDS		
FDS	Copper		FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

DNR files/LSP report

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 150 — 04 NARRATIVE DESCRIPTION
Private wells in area north and northeast of site could potentially be contaminated with metals and solvents migrating from site.

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE:) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

01 [ ] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE:) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE 1-27-88) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: 2 ACRES — 04 NARRATIVE DESCRIPTION
Area that was used as land application for wastewater.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 150 — 04 NARRATIVE DESCRIPTION
Persons on private wells north and northeast of site could potentially be effected by migration of contaminants.

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE:) — [ ] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED — 04 NARRATIVE DESCRIPTION

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE:) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED — 04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES *(Spills, Runoff, Standing liquids, Leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Potential contamination of spring branch in Fantastic Caverns.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 150

IV. COMMENTS

Migration of contaminants off site could effect shallow groundwater in area. By design the soils would tie up the metal ions and minimize migration of these contaminants. Both pits have apparently been cleaned out.

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

MNDR files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☒ A. NPDES	MO-0026557	12/1974	1/17/75	terminated when discharge eliminated.
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☒ E. RCRA INTERIM STATUS	MOD007152903			
☐ F. SPCC PLAN				
☒ G. STATE (Specify)		1972		CWC operating permit
☐ H. LOCAL (Specify)				
☒ I. OTHER (Specify)	LA-376-6 LA-419-6	1976		Letter of Approval for cons. and operation of no discharge system.
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☒ I. OTHER (Specify) land application	75,000	gal/day

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☒ H. OTHER (Specify) ion exchange/soil

05 OTHER
- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE: 100 (Acres)

07 COMMENTS

An estimated 100,000 gal/day wastewater was generated. 25,000 of this was discharged in a losing stream setting 75,000 gallons of rinsewater was land applied.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

No containers of waste abandoned at site.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

Land application area is enclosed in fence.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Site visit and DNR files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. >3 mi. (mi)

B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER <1000

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.5 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
75 - 100 (ft)	North & northeast	5 - 20 (ft)	72,000 (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including usage, depth, and location relative to population and buildings)

85 - 320 feet deep - casing depth varies from 21 feet to 110 - several well owners had no casing information.

10 RECHARGE AREA

☒ YES ☐ NO

COMMENTS Primarily to Karst conduits in vadose zone, with minor recharge to saturated Mississippian aquifer below.

11 DISCHARGE AREA

☐ YES ☒ NO

COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☒ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
None in area	☐	(mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 140 NO OF PERSONS	B. 2,350 NO OF PERSONS	C. 16,000 NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION 0.1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 780

04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The population within three miles of the site is basically rural in nature with numerous small subdivisions except for the area to the southeast that is greater than one mile from the site. This area becomes more densely populated and beyond 1½ miles becomes basically an urban setting.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☒ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☒ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
5 - 20 (ft)	unknown (ft)	-

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
41 (in)	3.2 (in)	1 - 5 %	varies in every direction	2 - 3 %

09 FLOOD POTENTIAL	10
SITE IS IN N/A YEAR FLOODPLAIN	☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)		12 DISTANCE TO CRITICAL HABITAT (of endangered species)
ESTUARINE	OTHER	- (mi)
A. NA (mi)	B. (mi)	ENDANGERED SPECIES:

13 LAND USE IN VICINITY

DISTANCE TO COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0.1 (mi)	B. 1.2 (mi)	C. (mi)	D. 1.0 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is within an internally-drained sinkhole plain. Slopes are generally gentle in the area. The topography becomes rugged along the Little Sac River to the north-northwest. Southwest of the site is gently rolling hills with pasture and crop land.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site visit, Geology and Land Survey Report, Topographic maps (Brookline, Willard, Ebenezeer and Springfield Quads).

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4	MDNR LSP	attached
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	3	MDNR LSP	attached
VEGETATION			
OTHER Sediment	1	MDNR LSP	attached

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF _____ (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS attached

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Site drawing (attached)
Information on private wells in area (attached)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Litton Advanced Circuitry	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
4811 West Kearney	

05 CITY	06 STATE	07 ZIP CODE
Springfield	MO	65803-0847

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER
Litton Industries, Inc.	

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
360 North Cresent	

12 CITY	13 STATE	14 ZIP CODE
Beverly Hills	CA	90210

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Industrial Development Grp.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE
Springfield	MO	

01 NAME	02 D+B NUMBER
City of Springfield	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
800 N. Boonville	

05 CITY	06 STATE	07 ZIP CODE
Springfield	MO	

01 NAME	02 D+B NUMBER
Mr. & Mrs. Roscoe Prescott	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
None given	

05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Missouri Department of Natural Resources files.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME Litton Industries -ACD		02 D+B NUMBER	10 NAME Litton Industries, Inc.		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 4811 West Kearney		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.) 360 N. Cresent		13 SIC CODE
05 CITY Springfield	06 STATE MO	07 ZIP CODE 65803	14 CITY Beverly Hills	15 STATE CA	16 ZIP CODE 90210
08 YEARS OF OPERATION 19	09 NAME OF OWNER Litton Industries				

III. PREVIOUS OPERATOR(S) (List most recent first, provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME None		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Litton Advanced Circuitry	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
4811 West Kearney	

05 CITY	06 STATE	07 ZIP CODE
Springfield	MO	65803-0847

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
None			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Superior Solvents			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Springfield	MO				

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Missouri Department of Natural Resources files

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☒ E. CONTAMINATED SOIL REMOVED — 02 DATE late 1970's — 03 AGENCY MDNR
04 DESCRIPTION
Contaminated soil from lagoon and pit areas removed.

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☒ G. WASTE DISPOSED ELSEWHERE — 02 DATE late 1970's — 03 AGENCY MDNR
04 DESCRIPTION
Hazardous waste (sludge) removed from lagoon & pits and transported to disposal facility.

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Missouri Department of Natural Resources and personnel.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ENFORCEMENT INFORMATION

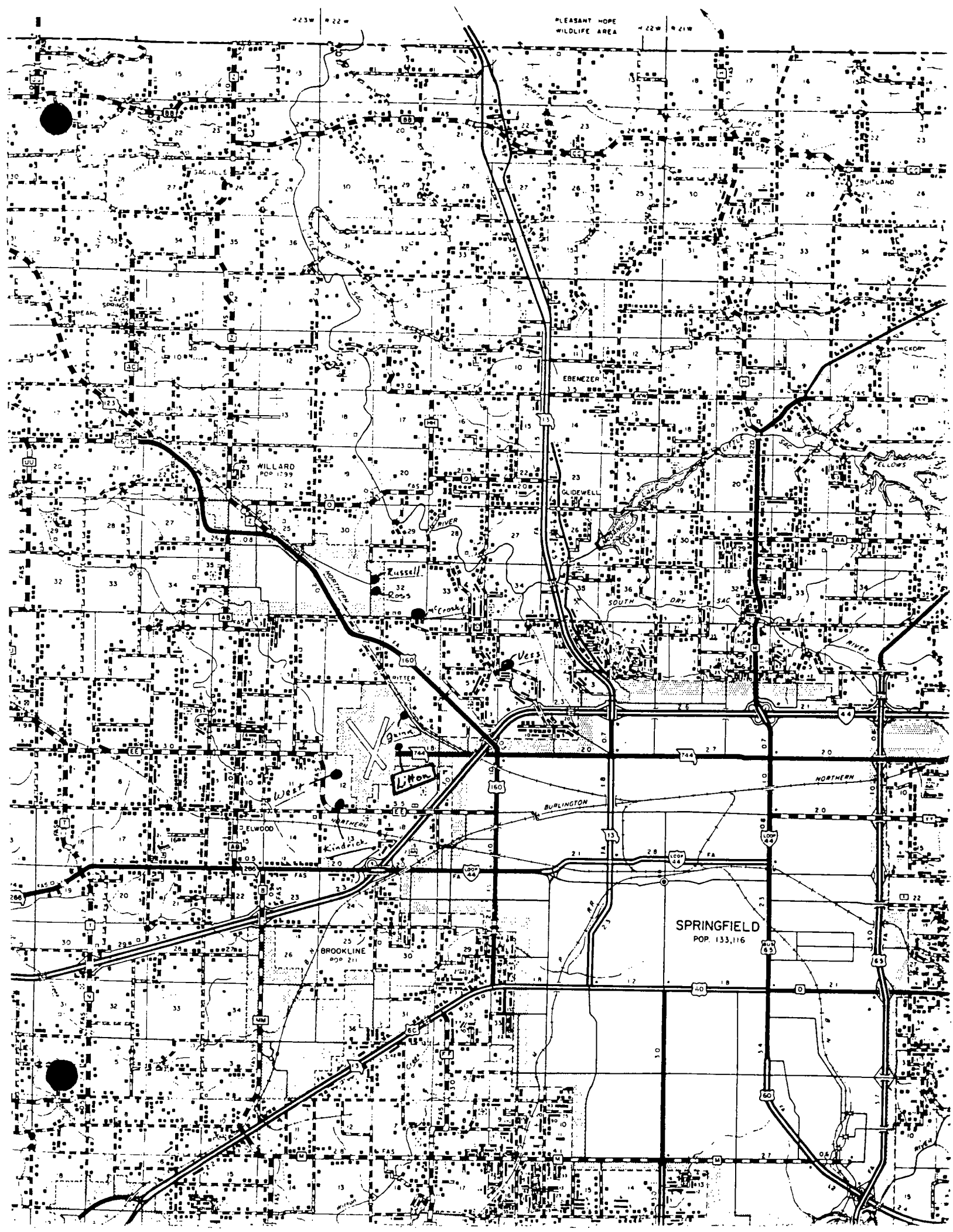
01 PAST REGULATORY/ENFORCEMENT ACTION [ ] YES [ ] NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Consent Order issued September 1980 included cease discharge of rinsewater.

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Missouri Department of Natural Resources files.


PLEASANT HOPE
WILDLIFE AREA
SACVILLE
FRUITLAND
CAVE SPRINGS
PEARL
EBENEZER
HICKORY
WILLARD
POP 1799
GLIDEWELL
FELLOWS
Russell
Ross
McCrosky
Vess
RITTER
Quinn
Litton
West
Kindrick
ELWOOD
BROOKLINE
POP 211
SPRINGFIELD
POP. 133,116
NORTHERN
BURLINGTON
SOUTH
DRY
SAC
RIVER
LITTLE
SAC
FAS
FA
LOOP 44
44
13
60
65
160
744

RECEIVED
APR 9 1985

POTENTIAL HAZARDOUS WASTE SITE

Preliminary Assessment
Litton Industries

Litton Systems Inc. Site
Site Reassessment
Reference # 9

Litton Industries (Advanced Circuitry Division) is [illegible] to the Springfield Regional Airport on Highway 00 (Kearney Street) 1.6 miles west of the Junction of Highway 160 and Kearney Street (Highway 744). The legal description is SW 1/4, SE 1/4, SW 1/4, Section 6, T29N, R22W.

The Litton site is owned by: Litton Industries, Inc.
360 North Cresent
Beverly Hills, CA 90210

Litton began operation at the site in about 1969, manufacturing printed circuit boards. Processes included in the operation are plating with copper pyrophosphate, tin nickel, rhodium, gold, and tin.

Litton initially disposed of wastewater by irrigation and by discharging to a sinkhole on the Litton property. This was discontinued after ponds were constructed for storage and settling. Wastewater and sludges were also discharged through a series of terraces into a pit. The soils were determined to have an ion attraction to the copper as the wastewater percolated through it. What didn't soak into the soils flowed into the pit. The entire area around the site is laddened with sinkholes and has been determined to be a recharge area for springs to the north, east and west. In about 1975 the sludges were removed from the pits, drummed up, and disposed of at an approved facility. Wastewater from the plant was then discharged to a lagoon system which also was later abandoned, cleaned out and dozed in. The sludges from the lagoon were hauled to an approved waste disposal site. The company has connected to the Springfield municipal sewerage system and installed a pretreatment system for removal of plating wastes.

Copper is thought to be the predominant waste at the site however, there may also be some solvents such as TCE. Quantities and concentrations are not known. The sludge has been removed but soils where land application was done through overland flow and irrigation may have high concentrations of copper and/or solvents.

Some copper compounds are toxic and TCE is a carcinogen. The specific copper compounds found on the Litton site are not known at this time.

Because of the karst topography of the area there is a potential of groundwater contamination. There is no surface water runoff in the site area. Contaminants would be limited to those leached from the soils on the gently rolling site.

The area surrounding the site is zoned industrial with some pasturing of beef and dairy cattle. There is very little residential

Development within one mile of the site however substantial residential development continues to take place one mile and more to the southeast. Ritter Springs Park and Fantastic Caverns are approximately three miles from the site to the northeast.

There are 9-10 wells within one mile of the site that are capable of receiving migrating wastes. The nearest well is about 1/2 mile to the north. The other wells are to the north, northwest and northeast.

The Burlington aquifer is only about 20-40 feet below the surface and because of the karst topography contaminants would be expected to move rapid from the surface into it. Wells in the area would serve as channels to introduce contaminants to depths up to 300 feet. This could effect as many as 800 people who are on private or non-state approved public wells within three miles of the site.

Soil at the site consists of a thin layer of wind-blown silty clay surface soil overlying thick layers of Burlington residuum which consists of clay, gravelly clay, and chert boulders and is highly permeable.

Precipitation and evaporation in the area are about equal and the one year, 24-hour rainfall is 3.25 inches.

Conclusions and Recommendations:

There is no evidence that waste sludge or other hazardous wastes are still buried on site. Of some concern is the potential leaching of toxic compounds from the terraced area formerly used in the disposal of the plating wastes. If the soil has not trapped the ions there could be long term leaching of the waste materials into the shallow groundwater. This could be determined by soil samples taken from the terraces and/or by water samples from springs recharged by the sinkholes at the site and nearby wells.

APPENDIX A

PRELIMINARY ASSESSMENT FORM

EPA FORM 2070-12

RECEIVED
APR 9 1985
WASTE MANAGEMENT PROGRAM

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE: 29
02 SITE NUMBER:

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): Litton	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: 4811 West Kearney
03 CITY: Springfield	04 STATE: MO; 05 ZIP CODE: 65803; 06 COUNTY: Greene; 07 COUNTY CODE: 077; 08 CONG DIST: 7
09 COORDINATES LATITUDE: 37 14 35 LONGITUDE: 93 22 40	

10 DIRECTIONS TO SITE (Starting from nearest public road): Hwy 00 (Kearney Street) west of Interstate 44, near the Springfield Regional Airport.

III. RESPONSIBLE PARTIES

01 OWNER (if known): Litton Industries, Inc.	02 STREET (Business, mailing, residential): 360 North Cresent
03 CITY: Beverly Hills	04 STATE: CA; 05 ZIP CODE: 90210; 06 TELEPHONE NUMBER: ( )
07 OPERATOR (if known and different from owner): Litton Advanced Circuity Division	08 STREET (Business, mailing, residential): 4811 West Kearney
09 CITY: Springfield	10 STATE: MO; 11 ZIP CODE: 65803; 12 TELEPHONE NUMBER: (417) 862-0751

13 TYPE OF OWNERSHIP (Check one)
X A. PRIVATE B. FEDERAL (Agency name) C. STATE D. COUNTY E. MUNICIPAL
F. OTHER (Specify) G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
X A. RCRA 3001 DATE RECEIVED (Month, Day, Year) B. UNCONTROLLED WASTE SITE (CERCLA 103c) DATE RECEIVED (Month, Day, Year) C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
X YES DATE (Month, Day, Year)
NO

BY (Check all that apply)
A. EPA B. EPA CONTRACTOR C. STATE D. OTHER CONTRACTOR
E. LOCAL HEALTH OFFICIAL F. OTHER (Specify)
CONTRACTOR NAME(S)

02 SITE STATUS (Check one)
X A. ACTIVE B. INACTIVE C. UNKNOWN

03 YEARS OF OPERATION
BEGINNING YEAR ENDING YEAR UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Plating wastes and solvents (Copper, tin, rhodium, and TCE)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Possible leaching into groundwater.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
A. HIGH (Inspection required promptly) X B. MEDIUM (Inspection required) C. LOW (Inspection time available) D. NONE (No further action needed, complete current disposition)

VI. INFORMATION AVAILABLE FROM

01 CONTACT: Joe Rowe	02 OF (Agency/Organization): DNR, DEQ, Hazardous Waste Management			03 TELEPHONE NUMBER: (314) 751-3241
04 PERSON RESPONSIBLE FOR ASSESSMENT: Charles L. Kroeger	05 AGENCY: DNR	06 ORGANIZATION: DEQ, SRO	07 TELEPHONE NUMBER: (417) 883-4033	08 DATE: 4/2/85

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE: 29 | 02 SITE NUMBER:

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): Litton	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER: 4811 West Kearney
03 CITY: Springfield	04 STATE: MO; 05 ZIP CODE: 65803; 06 COUNTY: Greene; 07 COUNTY CODE: 077; 08 CONG. DIST.: 7
09 COORDINATES LATITUDE: 37 14 35 ; LONGITUDE: 93 22 40	

10 DIRECTIONS TO SITE (Starting from nearest public road):
Hwy 00 (Kearney Street) west of Interstate 44, near the Springfield Regional Airport.

III. RESPONSIBLE PARTIES

01 OWNER (if known): Litton Industries, Inc.	02 STREET (Business, mailing, residential): 360 North Cresent
03 CITY: Beverly Hills	04 STATE: CA; 05 ZIP CODE: 90210; 06 TELEPHONE NUMBER: ( )
07 OPERATOR (if known and different from owner): Litton Advanced Circuity Division	08 STREET (Business, mailing, residential): 4811 West Kearney
09 CITY: Springfield	10 STATE: MO; 11 ZIP CODE: 65803; 12 TELEPHONE NUMBER: (417) 862-0751

13 TYPE OF OWNERSHIP (Check one):
X A. PRIVATE ☐ B. FEDERAL _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply):
X A. RCRA 3001 DATE RECEIVED ___/___/___ (Month Day Year) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED ___/___/___ (Month Day Year) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☐ YES DATE ___/___/___ (Month Day Year)
X NO

BY (Check all that apply):
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one):
X A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
_____ (Beginning Year) | _____ (Ending Year) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Plating wastes and solvents (Copper, tin, rhodium, and TCE)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Possible leaching into groundwater.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents):
☐ A. HIGH (Inspection required promptly) X B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT: Joe Rowe	02 OF (Agency/Organization): DNR, DEQ, Hazardous Waste Management			03 TELEPHONE NUMBER: (314) 751-3241
04 PERSON RESPONSIBLE FOR ASSESSMENT: Charles L. Kroeger	05 AGENCY: DNR	06 ORGANIZATION: DEQ, SRO	07 TELEPHONE NUMBER: (417) 883-4033	08 DATE: 4/2/85 (Month Day Year)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
29	

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A SOLID
- B POWDER FINES
- C SLUDGE
- D OTHER (Specify) Contaminated Soil
- E SLURRY
- F LIQUID
- G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS ?

CUBIC YARDS ?

NO OF DRUMS None

03 WASTE CHARACTERISTICS (Check all that apply)

- X A TOXIC
- B CORROSIVE
- C RADIOACTIVE
- D PERSISTENT
- E SOLUBLE
- F INFECTIOUS
- G FLAMMABLE
- H IGNITABLE
- I HIGHLY VOLATILE
- J EXPLOSIVE
- K REACTIVE
- L INCOMPATIBLE
- M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		Possibly soils contaminated with TC
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		Possibly contaminated soils.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Copper pyrophosphate		land application	unknown	
MES	Zinc		land application	unknown	
MES	Nickel		land application	unknown	
SOL	Trycloroethylene	79-01-6	land application	unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Nickel	7440-02-0	FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

DNR files.

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POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE 29	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED 30
02 OBSERVED (DATE _____) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

Karst topography and shallow groundwater could allow migration of contaminants in Burlington aquifer.

01 B SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

01 C CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

01 D FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

01 E DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

01 X F CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED 2-3 acres
02 OBSERVED (DATE _____) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

Previous disposal method utilizing land application through series of terraces could have contaminated area soils.

01 X G DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED 30
02 OBSERVED (DATE _____) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

Groundwater contamination could affect nearby shallow or improperly cased wells.

01 H WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

01 I POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED
02 OBSERVED (DATE _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

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POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE 29	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

Contamination of groundwater could damage animals in springs and caves of the area such as cavefishes, crawfish and minnows.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, runoff, standing liquids, leaking drums) — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Contamination of groundwater and subsequently area springs would cause damage to off site property.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 30

IV. COMMENTS

Contamination of shallow groundwater with metals and/or solvents could spread to shallow cased wells and be introduced into deeper waters with the wells serving as conduits.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

DNR files and DGLS.

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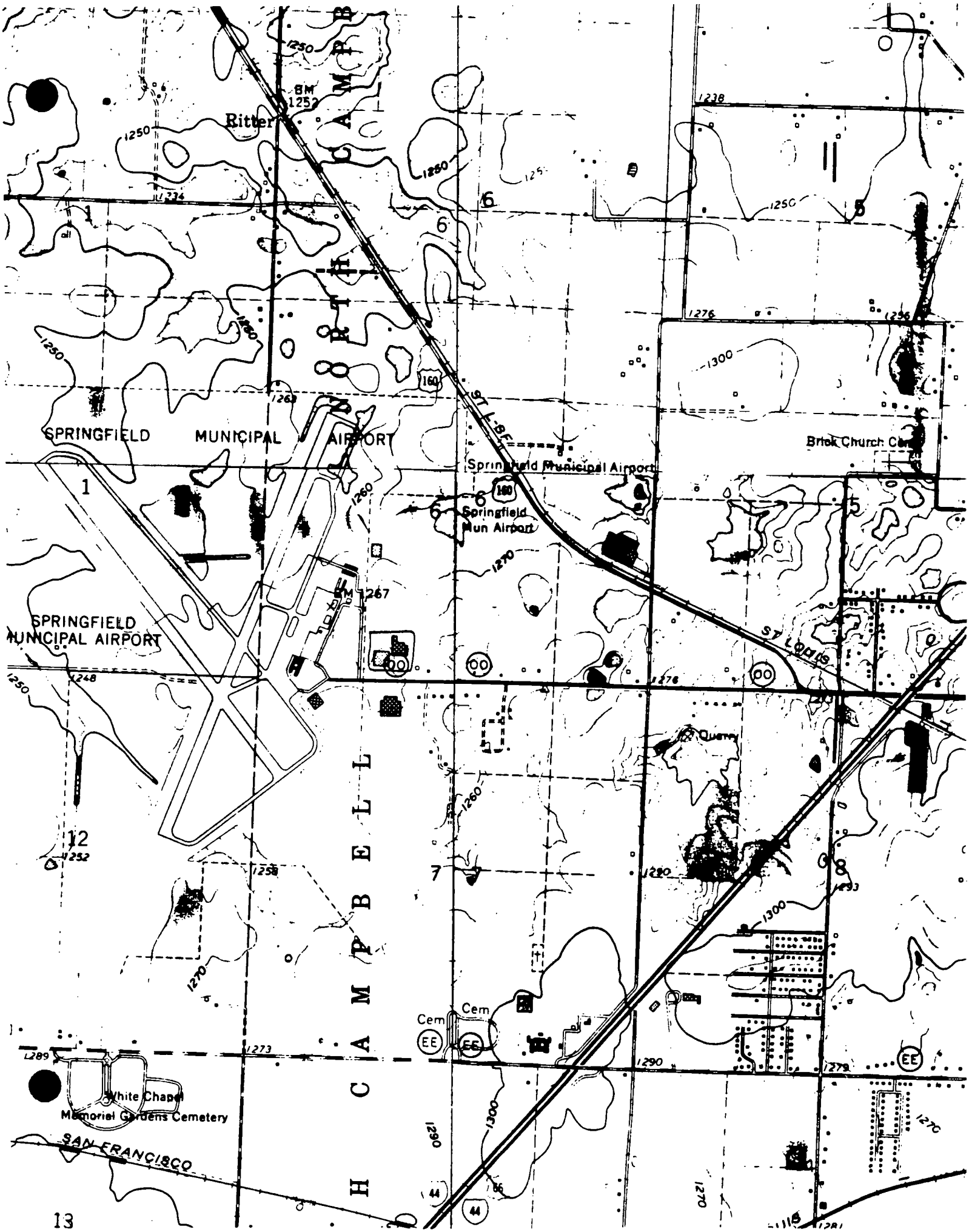

Ritter
BM 1252
SPRINGFIELD MUNICIPAL AIRPORT
Springfield Municipal Airport
Springfield Mun Airport
Brick Church Cem
BM 1267
SPRINGFIELD MUNICIPAL AIRPORT
ST L-SF
ST LOUIS
Quarry
Cem
Cem
White Chapel
Memorial Gardens Cemetery
SAN FRANCISCO

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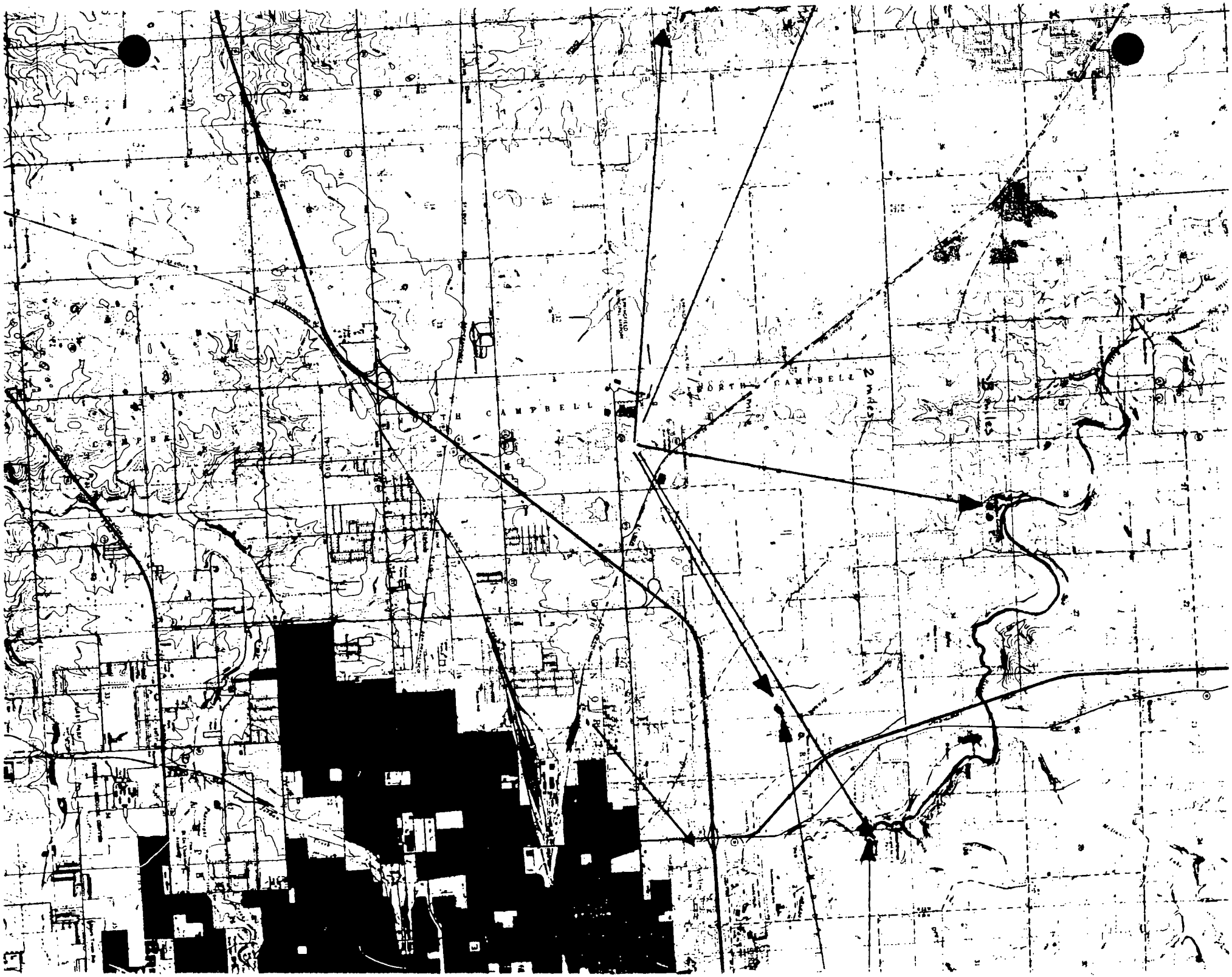
PROGRAM


NORTH CAMPBELL
NORTH CAMPBELL
2 miles

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WASTE MANAGEMENT
PROGRAM

Litton ADVANCED CIRCUITRY

P. O. Box 2847, Commercial Station, Springfield, Mo. 65803 417 862-0751

Litton Systems Inc. Site
Site Reassessment
Reference # 10

November 3, 1976

Mr. R. W. Pappenfort
Environmental Engineer
Solid Waste Management Program
Missouri Department of Natural Resources
P. O. Box 1368
Jefferson City, MO 65101

Dear Mr. Pappenfort:

Enclosed please find our Solid Waste Management Survey Form. My apologies for the delay, but the gathering of this amount of information required the efforts of many people in our organization.

You should understand that the numbers listed are in many cases estimates. This is necessary because of the great diversity of material entering the plant, and because our production level has fluctuated over more than a 2:1 ratio in the past year. This fluctuation is not seasonal nor is it predictable. The numbers I have shown correlate to a given typical production level as nearly as I can determine.

I hope the information fills your needs. If you have any questions, please call me.

Sincerely,

David L. Smith

David L. Smith
Plant Engineer

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Hazardous Wastes Project
P.O. Box 1368
Jefferson City, Missouri 65101

INDUSTRIAL AND HAZARDOUS WASTE SURVEY

Company	
Municipality	
County	
SIC Codes	
Interviewer	
Date	

I. IDENTIFICATION OF ESTABLISHMENT

1. Name and Location of Facility:

Name	Advanced Circuitry Division, Litton Systems Inc.				
Street	4811 W. Kearney				
City	Springfield	State	MO	Zip	65803

2. Mailing Address of Company Owning Facility if Different from #1:

Name	Same as Above				
Street					
City		State		Zip	

3. Person Interviewed:

Name	David L. Smith
Title	Plant Engineer
Phone Number	(417) 862-0751

4. Person Responsible for the Facility:

Name	Mr. William C. Guyette
Title	President, Advanced Circuitry Division
Phone Number	(417) 862-0751

5. Number of Employees:

Total Employees	574	Production Employees	355

6. Normal Operating Schedule:

Hours/Day	24	Days/Week	5	Days/Year	250

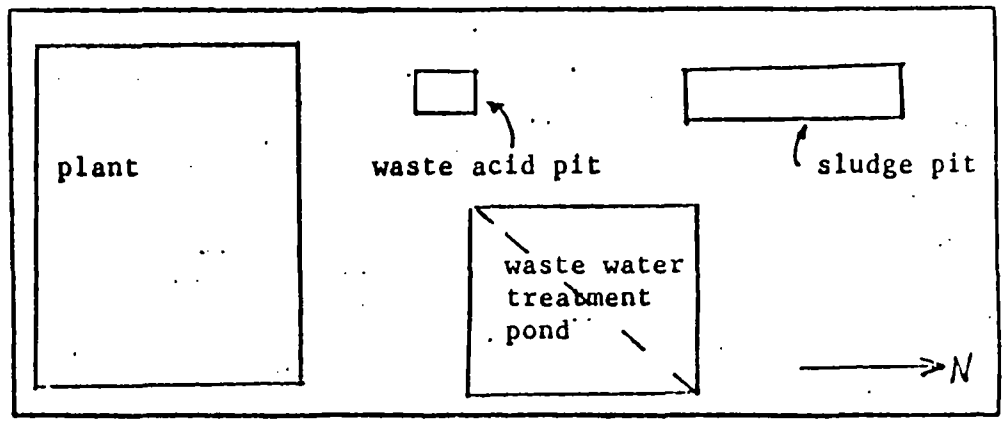
7. SIC Industrial Classification:

SIC #	Group Name	% of Production/$ Value
3679	Electronic Components	100%

8. Seasonal Variation: Percent Annual Production

1ST 1/4	25%	2ND 1/4	25%	3RD 1/4	25%	4TH 1/4	25%

9. Plot of On-site Process Waste, Storage, and Disposal Sites:

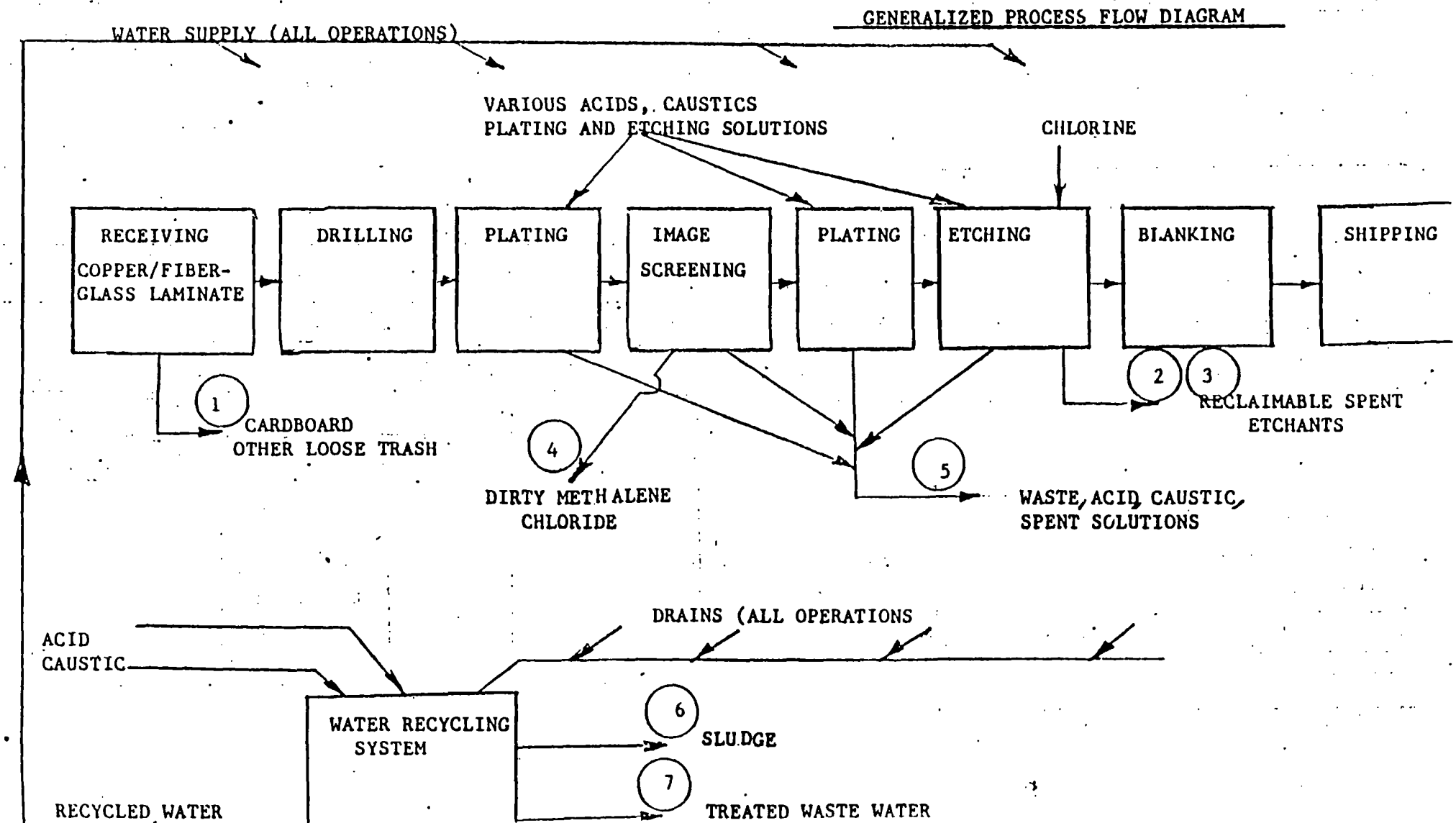


II. WASTES GENERATED AS A RESULT OF OPERATIONS

Base Year 1976

1. Description (Flow Diagram) of Processes Including Waste Flow Outputs:

GENERALIZED PROCESS FLOW DIAGRAM



Process Mass Balance

FEED STREAM Description (Constituents)	Qty./Yr. ( )	PRODUCT STREAM Description (Constituents)	Qty./Yr. ( )	WASTE STREAM Description (Constituents)	Qty./Yr. ( )	Classification % Solids	Physical	Hazardous Property
Circuit Board Matl	2170 tons	circuit boards	720 Tons	Loose trash	See Below			
Chlorine	48 tons	circuit boards		Excess cupric chloride	360 tons		liquid	toxic (to reclaim)
Hydrochloric Acid	318 tons							
Ammoniacial etchant	240 tons	circuit boards		Spent etchant	335 tons		liquid	toxic (to reclaim)
Methalene Chloride *	333 tons	circuit boards		dirty methalene chloride	83 tons	5%	liquid	toxic (to reclaim)
Trichlorethylene *	108 tons	circuit boards		dirty trichlor	18 tons	5%	liquid	toxic
Sulfuric Acid	60 tons							
Ammonium Persulphate	4 tons	circuit boards		various waste chemicals cleaners and plating baths	100 tons	1%	liquid	toxic
Misc. plating bath chemicals	55 tons							
Sulfuric Acid	28000 gal	recycled water	gallons 72,000,000	treated wastewater	gallons 7,200,000		liquid	to no-discharge treatment pond
Ammonium Hydroxide	67000 gal			sludge	100,000 gal	2%	liquid	copper content approx. 15% of sol
Waste Water	79205000 gal.							
Total		Total		Total				

* Subject to substantial evaporation

Conventional Solid Waste Generation

TYPE	QUANTITY/YR. ( )	COST/YEAR ($)
loose trash	2160 cu yd.	$2970
	approx. 1020 tons	

COLLECTOR: NAME Sun-Ray Sanitation

ADDRESS 2610 W. Mill, Springfield, MO

PHONE (417) 862-8006

III. STORAGE AND TRANSPORTATION OF WASTES

	Waste Process I. D.	Method of Storage	Quantity Stored	Frequency Collected	Location of Storage	Means of Collection	Type of Vehicle
1	Loose Trash	Compactor	40 Cu. Yd	Weekly	Plant	Contract Hauler	Truck
2	Cupric Chloride	Tank	7000 gal.	18 per year	Plant	Chemical Company	Tank Truck
3	Ammoniacial etchant	Tank	8000 gal.	17 per year	Plant	Chemical Company	Tank Truck
4	Dirty Methalene Chloride	Barrels	1000 gal.	15 per year	Plant	Chemical Company	Truck
5	Miscellaneous Waste Chemicals	Barrels	500 gal.	(Put in limestone--lined pit on plant site)			
6	Sludge	Pit on Plant Site	------	(Put in evaporation pit on plant site)			
		Total					

Collector:			
Process I. D.	2)	3)	4) Chemtech Industries
Name	Childress Chemical Co.	McDermid Corp.	2235 W. Battlefield
Address	Webb City, MO	1390 Kingsland Avenue St. Louis, MO	Springfield, MO
Phone	(417) 673-2708	314-862-5700	(417) 887-3663

IV. TREATMENT AND DISPOSAL

Waste Process I. D.	Treatment Methods Before Disposal	Waste Streams After Treatment	Quantity/Year ( )	Methods of Disposal
7	Neutralize, floc, clarify, then ion exchange in treatment pond.	6 and 7	7 7,200,000 gal.	To no-discharge wastewater Treatment Pond
		TOTAL		

Comments: No-discharge wastewater treatment pond is operated under a Letter of Approval from Missouri Department of Natural Resources, Clean Water Commission.

On-Site Land Disposal

Pond

1. Does disposal area include a liner? Yes

   What type? 6" Fine Lime Sand

2. Does the area have leachate collection capability? No

3. Does the area have groundwater monitoring wells? Yes Number 2

4. Depth of landfill, pond, dump, etc., and the distance from the surface to the water table?

   5' max. depth, water table depth unknown and variable--15' minimum

5. Methods used to identify and mark the location of hazardous wastes.

   None

6. Does the area provide for land site security (i.e. fences, warning signs, etc.)? No

7. Have you prepared any plans or procedures to be followed in the event of any emergency situations during storage and transportation of hazardous waste?

   Yes

Incinerator Data

Manufacturer NONE

Model Number

Rated Capacity

Dwell-Time Seconds

Temperature Range

Method of Residue Disposal

EMPTY CONTAINER DISPOSAL

TYPE OF CONTAINER	NO. DISPOSED PER YEAR	MATERIALS HELD IN CONTAINERS	METHOD OF STORAGE	METHOD OF DISPOSAL	FREQUENCY OF DISPOSAL	RECYCLED USES OF CONTAINERS
55 Gallon Drums	1500 (steel)	Various Chemicals	Outdoor	Sold as scrap	approx. monthly	scrap iron
	1000 (plastic)	Hydrachloric acid	Outdoor	Returned	approx. monthly	re-use
Drums Under 55 Gal.	500 (lined paper)	Various Chemicals	--	As loose trash	daily	
5 Gallon Cans or Bottles	1000	Sulfuric acid	Outdoor	Sold to employees	weekly	various priv.
Cans or Bottles Under 5 Gallon (Including Aerosols)	250	Paint, Lacquer	------	As loose trash	daily	----------
Paper (Size) ____ Bags (Size) ____						

V. EXPENDITURES AND RECEIPTS FOR WASTE MANAGEMENT

Base Year 1976

A. Expenditures

Final Disposal And Reduction Methods	Internal Capital Cost of Function		Internal Annual Expenditures		Annual Charges by External Solid Waste Handlers			Total Annual Cost of Function $/yr
	Initial Capital Investment Dollars	Est. Life Remaining Years	Labor Requirements Man-hours/Yr	Annual Operating Costs $/yr	Private Contractor $/Yr	Municipality $/Yr	County or Regional Authority $/Yr	
Processing	475,000	15	2000	36000	------			
Storage	8,000	10	200	3000	------			
Collection	---------				------			
Disposal	15,000	20	500		$2970			
Total	498,000	--	2700	39000				

B. Receipts

Do any of your wastes have resource potential? possibly

Waste	Amount Salvaged/Yr Volume	Amount Salvaged/Yr Weight	Method of Salvage	Frequency	Total Annual Return From Salvage
Spent Etchant	67,000 gal	640,000#	Copper Reclaim	---	*
Cupric Chloride	72,000 gal	720,000#	Copper Reclaim	---	* *
Methalene Chloride	15,000 gal	165,000#	Distillation	---	*
TOTAL					

* Return is allowed in pricing of fresh chemical
** Reclaim value pays freight costs

C. Future Plans

Do you use waste materials generated at another plant? Explain. No

Has research or experimentation been tried to increase the salvage potential of wastes? Explain. Contacted Conservation Chemical Co., Kansas City, MO, for possibility of reclaiming copper from sludge.

Would you participate in a waste exchange? Yes

SPF: Litton Systems Tech.

Announcement

Litton Systems Inc. Site
Site Reassessment
Reference # 11

November 3, 1999

At 3 p.m. today, we announced that our name is officially changed to

Litton
Interconnect Technologies

In the last five years, Advanced Circuitry grew to include Inter-Pak Electronics and Interconnection Products. We have five locations and plan to have at least two more within the next year. Not only was it difficult for us to manage these names, it was confusing to our customers.

You may share some of the same reluctance as I to leave the names Advanced Circuitry, Inter-Pak Electronic and Interconnection Products — they are names that have served us well. Each has been successful, and each is well known for the quality of its products. As we grow, it is important that we consider ourselves as one company, with one goal — and we cannot do that with three unique names.

A business name is very important — just as we are known by our reputation, we are known by our name, and we must ensure that our name is recognizable and clear to our customers.

Litton Interconnect Technologies allows us to provide a single, recognizable identity to the marketplace. Our identity, and our name, is serious business. I am asking that each of you make a special effort to use our new name, and to use it correctly. For at least the next several months, as we work to introduce our new name, we will not abbreviate our name.

You will be receiving additional information regarding the guidelines and practical use of our new name over the next week from Marketing and Public Relations.

Please join me in embracing Litton Interconnect Technologies and wishing us future successes like those that we've been blessed with in the past.

Regards,

Robert J. Schutz
President

#

CERTIFICATION OF RESOLUTIONS
OF THE BOARD OF DIRECTORS OF
LITTON SYSTEMS, INC.

I, the undersigned, ANA G. RODRIGUEZ, Assistant Secretary of LITTON SYSTEMS, INC., a corporation organized and existing under the laws of the State of Delaware, DO HEREBY CERTIFY that the following is a true and correct extract of a certain resolution duly adopted by the Board of Directors of said corporation on September 28, 1999, in accordance with the laws of Delaware and the By-laws of this corporation, and that said resolution is in full force and effect as of the date hereof:

> **RESOLVED,** that the change of name of the Advanced Circuitry Division to Interconnect Technologies Division be and hereby is authorized and approved.

IN WITNESS WHEREOF, I have here unto subscribed my name and affixed the seal of said corporation at Woodland Hills, California, this 13th day of October, 1999.

[SEAL]

Ana G. Rodriguez
Assistant Secretary

EC302-99

Business Unit Designations

Interconnect Technologies
Headquarters
4811 West Kearney
Springfield, MO

Interconnect Technologies
Printed Circuit Board (PCB)Operations (formerly Advanced Circuitry)

Interconnect Technologies
Assembly Operations (formerly Inter-Pak Electronics)
Springfield, Missouri

Interconnect Technologies
Assembly Operations (formerly Interconnection Products)
Glenrothes, Scotland

Interconnect Technologies
Assembly Operations (formerly Inter-Pak Electronics)
San Diego, California

Interconnect Technologies
Assembly Operations (formerly Inter-Pak Electronics)
North Andover, Massachusetts

Litton Systems Tech.

Litton Systems Inc. Site
Site Reassessment
Reference # 12

Via Certified Mail
#P-113-047-348

Litton
Corporate

Litton Industries, Inc
185 Ridgedale Avenue
Cedar Knolls, New Jersey
07927-1812

Tel 973 455-0606
Fax 973 455-0306

March 28, 2001

Missouri Department of Natural Resources
Division of Environmental Quality
P. O. Box 176
Jefferson City, MO 65102-0176

0 3 2001

Attention: Mr. R. Lance Livesay

Subject: INTERCONNECT TECHNOLOGY
Environmental Remediation
Springfield, MO
Project Order Number K-9039-U
ACQUISITION OF LITTON

Dear Lance:

As we discussed several weeks ago, Northrop-Grumman Corporation is acquiring Litton Industries, Inc. through the acquisition of a controlling portion of Litton's outstanding common stock. The acquisition is not expected to affect the ongoing site remediation activities being conducted in accordance with the Consent Agreement dated July 1993 between Litton Systems, Inc. and the Missouri Department of Natural Resources.

Litton Systems, Inc. is a wholly-owned subsidiary of Litton Industries, Inc., and is expect to continue to operate as Litton Systems, Inc. in the near term, under Northrop-Grumman Corporation. Title of the land subject to the Consent Agreement is not expected to be transferred in the near future in this situation.

Litton Systems, Inc., Interconnect Technology Division has, and will continue to responsibly address site impacts after the transaction. This includes the financial commitments necessary to conduct the required work.

If you have any questions on this matter, please cal me at (973) 455-0606.

Very truly yours,

LITTON

Mark D. Pettegrew
Manager, Environmental Affairs

MDP:had

cc: P. Hepner J. Luca (Northrop-Grumman Corp.) N. Schaffer R. Schutz

J:\Letters\LTR-306.doc

U.S. Environmental Protection Agency

Superfund Information Systems

Litton Systems Inc. Site
Site Reassessment
Reference # 13

Archived Sites

LITTON SYSTEMS INC

Site Information

Actions | Aliases | Contaminants | Actual Costs | Operable Units | Site Info | RODS
Site Narrative at Listing | NPL Fact Sheet | Five-Year Reviews | Area Map

Site Name: LITTON SYSTEMS INC
Street: 4811 W KEARNEY ST
City / State / ZIP: SPRINGFIELD, MO 65803

NPL Status: Not on the NPL
Non-NPL Status: NFRAP

EPA ID: MOD007152903
EPA Region: 07
County: GREENE

Federal Facility Flag: Not a Federal Facility
Incident Category: Other

Return to Search Results

Return to Search Archived Sites

OSWER Home | Superfund Home

EPA Home | Privacy and Security Notice | Contact Us

URL: http://cfpub.epa.gov/supercpad/arcsites/csitinfo.cfm
This page design was last updated on Wednesday, September 17, 2003
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U.S. Environmental Protection Agency

Superfund Information Systems

CERCLIS Database
Archived Sites
Record of Decision System (RODS)
Five-Year Reviews Online
Site Spill Identifier List (SPIL)
Superfund's Data Element Dictionary (DED)
Order Superfund Products
Customer Satisfaction Survey

Archived Sites

LITTON SYSTEMS INC

Actions

Actions | Aliases | Contaminants | Actual Costs | Operable Units | Site Info | RODS Site Narrative at Listing | NPL Fact Sheet | Five-Year Reviews | Area Map

OU	Action Name	Qualifier	Lead	Actual Start	Actual Completion
00	DISCOVERY		F		10/01/1979
00	PRELIMINARY ASSESSMENT	L	F	04/01/1981	04/01/1981
00	SITE INSPECTION	H	F	04/06/1981	04/06/1981
00	PRELIMINARY ASSESSMENT	L	S	04/09/1985	08/20/1985
00	SITE INSPECTION	N	S	01/27/1988	11/19/1991
00	ARCHIVE SITE		EP		09/29/1993

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URL: http://cfpub.epa.gov/supercpad/arcsites/cactinfo.cfm
This page design was last updated on Wednesday, September 17, 2003
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EPA

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION	SITE NUMBER (to be assigned by Hq)
VII	MO-0000100 6

NOTE: This form is completed for each potential hazardous waste site to help set prior
submitted on this form is based on available records and may be updated on subsequent
and on-site inspections.

Litton Systems Inc. Site
Site Reassessment
Reference # 14

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as p
Assessment). File this form in the Regional Hazardous Waste Log File and submit a cc
Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 40

I. SITE IDENTIFICATION

A. SITE NAME: Litton Systems, Inc.

B. STREET (or other identifier): 4811 Kearney St.

C. CITY: Springfield

D. STATE: Mo

E. ZIP CODE: 65803

F. COUNTY NAME: Greene

G. OWNER/OPERATOR (if known)
1. NAME: Same (Advanced Circuitry Division)
2. TELEPHONE NUMBER: (417) 862-0751

H. TYPE OF OWNERSHIP
☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION
Company manufactures printed circuit boards. Process includes electroplating. Sanitary lagoon + industrial lagoons leaking + contaminating ground water

J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.)
A number of citizen complaints

K. DATE IDENTIFIED (mo., day, & yr.): 9/22/80

L. PRINCIPAL STATE CONTACT
1. NAME: Jim Long - Mo. Dept. of Nat. Resources
2. TELEPHONE NUMBER: 314-751-3241

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM
☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION
☐ 1. NO ACTION NEEDED (no hazard)
☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:
☒ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY: SUAN/EPA
☐ 4. SITE INSPECTION NEEDED (low priority)

C. PREPARER INFORMATION
1. NAME: Kerry Herndon
2. TELEPHONE NUMBER: 8-758-6534
3. DATE (mo., day, & yr.): 11/5/80

III. SITE INFORMATION

A. SITE STATUS
☒ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)
☐ 2. INACTIVE (Those sites which no longer receive wastes.)
☐ 3. OTHER (specify): (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?
☐ 1. NO ☒ 2. YES (specify generator's four-digit SIC Code): 3679

C. AREA OF SITE (in acres): unknown

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES
1. LATITUDE (deg.-min.-sec.)
2. LONGITUDE (deg.-min.-sec.)

E. ARE THERE BUILDINGS ON THE SITE?
☐ 1. NO ☒ 2. YES (specify): manufacturing facilities

Continued From Front

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(*ies*) and details relating to each activity by marking 'X' in the appropriate boxes.

	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (*specify*):		6. OTHER (*specify*):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (*specify*):
					9. OTHER (*specify*):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

1. Overflows from the industrial waste lagoons are occuring and entering a sinkhole.
2. Contamination of groundwater is occurring through percolation as well. Contamination documented by monitoring.

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☒ 2. LIQUID ☐ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☒ 5. HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☐ 9. FLAMMABLE

☐ 10. OTHER (*specify*):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount(*specify unit of measure*) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT unknown	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY PHARMACEUT.
X (2) METALS * SLUDGES	(2) OTHER (*specify*):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (*specify*):	X (3) CAUSTICS *	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
(5) OTHER (*specify*):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (*specify*):
Cu			(6) CYANIDE	(6) OTHER (*specify*):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (*specify*)		
			* ammonia		

Continued From Page 2

V. WASTE RELATED INFORMATION *(continued)*

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE *(place in descending order of hazard)*.

Cu and ammonia have been detected in test wells

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD *(mark 'X')*	C. ALLEGED INCIDENT *(mark 'X')*	D. DATE OF INCIDENT *(mo., day, yr.)*	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH	X			
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY	X			
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER	X			
8. CONTAMINATION OF SURFACE WATER	X			
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL	X			
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER *(specify)*:				

 Continue On Reverse

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- [ ] 1. NPDES PERMIT
- [ ] 2. SPCC PLAN
- [ ] 3. STATE PERMIT (specify): _____
- [ ] 4. AIR PERMITS
- [ ] 5. LOCAL PERMIT
- [ ] 6. RCRA TRANSPORTER
- [ ] 7. RCRA STORER
- [ ] 8. RCRA TREATER
- [ ] 9. RCRA DISPOSER
- [ ] 10. OTHER (specify): no NPDES permit; company claims no discharge.

B. IN COMPLIANCE?

- [ ] 1. YES
- [ ] 2. NO
- [ ] 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- [x] A. NONE
- [ ] B. YES (summarize below)

IX. INSPECTION ACTIVITY (past or on-going)

- [ ] A. NONE
- [x] B. YES (complete items 1,2,3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
by State			

X. REMEDIAL ACTIVITY (past or on-going)

- [x] A. NONE
- [ ] B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

RECEIVED
DEC 9 1980
SOLID WASTE
MANAGEMENT PROGRAM

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
VII	MO-0000100063

Litton Systems Inc. Site
Site Reassessment
Reference # 15

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as comple tion on this form to develop a Tentative Disposition *(Section II)*. File this form in its entire File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of tection Agency; Site Tracking System; Hazardous Waste Enforcement Tack Force *(EN-335)*;

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET (or other identifi		
Litton Advanced Circuitry Div	4811 W Kearney		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Springfield	Mo.	65803	Greene

G. SITE OPERATOR INFORMATION

1. NAME		2. TELEPHONE NUMBER	
Litton Industries			
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
4811 W Kearney	Springfield	Mo	65803

H. REALTY OWNER INFORMATION *(if different from operator of site)*

1. NAME	2. TELEPHONE NUMBER	
3. CITY	**4. STATE**	**5. ZIP CODE**

I. SITE DESCRIPTION

Percolation lagoon accepting copper plating waste.

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION *(complete this section last)*

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
Unknown	☐ 1. HIGH ☐ 2. MEDIUM ☒ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Burt McCullough	(417) 883-4033	4-6-81

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Burt McCullough	Environmental Specialist II	
3. ORGANIZATION		**4. TELEPHONE NO. (area code & no.)**

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Burt McCullough	MDNR	(417) 883-4033
Ed Sears	MDNR	"

C. SITE REPRESENTATIVES INTERVIEWED *(corporate officials, workers, residents)*

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
James Dow	Facilities Mgr (417) 862-0751	4811 W. Kearney
George Copeland	(417) 862-0751	4811 W. Kearney

Continued From Front

III. INSPECTION INFORMATION *(continued)*

D. GENERATOR INFORMATION *(sources of waste)*

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Litton	417-862-0751	4811 W. Kearney	Cu Plating

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS

G. DATE OF INSPECTION *(mo., day, & yr.)*	H. TIME OF INSPECTION	I. ACCESS GAINED BY: *(credentials must be shown in all cases)*
3-17-81	1:30 PM	☒ 1. PERMISSION ☐ 2. WARRANT

J. WEATHER *(describe)*

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN *(mark 'X')*	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER	X	DNR Lab	?
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER *(specify)*			

B. FIELD MEASUREMENTS TAKEN *(e.g., radioactivity, explosivity, PH, etc.)*

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
None		

Continue On Page 3

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS

☐ a. GROUND ☐ b. AERIAL

2. PHOTOS IN CUSTODY OF: None

D. SITE MAPPED?

☒ YES. SPECIFY LOCATION OF MAPS: USGS Topo maps.

E. COORDINATES

1. LATITUDE (deg.-min.-sec.) SW ¼, NW ¼, Sec 7, R22W, T29N, Greene Co. Mo.

2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE (Those inductrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☐ 2. INACTIVE (Those sites which no longer receive wastes.)

☐ 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES (specify generator's four-digit SIC Code): _____

C. AREA OF SITE (in acres)

1 - 2

D. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☒ 2. YES (specify): Litton plant.

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

☐ 1. STORAGE ☐ 2. INCINERATION ☐ 3. LANDFILL ☐ 4. SURFACE IMPOUNDMENT ☐ 5. DEEP WELL

☐ 6. CHEM/BIO/PHYS TREATMENT ☐ 7. LANDFARM ☐ 8. OPEN DUMP ☐ 9. TRANSPORTER ☐ 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

☒ 1. LIQUID ☐ 2. SOLID ☐ 3. SLUDGE ☐ 4. GAS

B. WASTE CHARACTERISTICS

☐ 1. CORROSIVE ☐ 2. IGNITABLE ☐ 3. RADIOACTIVE ☐ 4. HIGHLY VOLATILE

☒ 5. TOXIC ☐ 6. REACTIVE ☐ 7. INERT ☐ 8. FLAMMABLE

☐ 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes NPDES records at the plant.

Continue On Reverse

VII. WASTE RELATED INFORMATION *(continued)*

2. Estimate the amount *(specify unit of measure)* of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT 40,000	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Gal/day	UNIT OF MEASURE	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER *(specify)*:	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER *(specify)*:	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
(5) OTHER *(specify)*:			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER *(specify)*:
			(6) CYANIDE	(6) OTHER *(specify)*:	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			X (11) OTHER *(specify)*: Copper Wastes		

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE *(place in descending order of hazard)*

1. SUBSTANCE	2. FORM *(mark 'X')*			3. TOXICITY *(mark 'X')*				4. CAS NUMBER	5. AMOUNT	6. UNIT
	a. SOLID	b. LIQ.	c. VAPOR	a. HIGH	b. MED.	c. LOW	d. NONE			
Copper plating waste		X			X				40,000	G/D

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

 Continue On Page 5

nued From Page 4

VIII. HAZARD DESCRIPTION *(continued)*

B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER

This lagoon is designed to be a percolation lagoon. It is situated atop a sink hole. It appears to operate well, since the ion exchange capacity is good.

☐ G. CONTAMINATION OF SURFACE WATER

Continued From Front

VIII. HAZARD DESCRIPTION *(continued)*

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☐ K. NOTICEABLE ODORS

☐ L. CONTAMINATION OF SOIL

☐ M. PROPERTY DAMAGE

 Continue On Page 7

inued From Page 6

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

 Continue On Reverse

VIII. HAZARD DESCRIPTION *(continued)*

☐ T. MIDNIGHT DUMPING

☐ U. OTHER *(specify)*:

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE *(specify units)*
1. IN RESIDENTIAL AREAS	300,000	0	0	10 mi
2. IN COMMERCIAL OR INDUSTRIAL AREAS	2,000	1,000	1	¼ mi
3. IN PUBLICLY TRAVELLED AREAS	1,000	0	0	¼ mi
4. PUBLIC USE AREAS *(parks, schools, etc.)*	0	0	0	> 10 mi

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER *(specify unit)*	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
0	Vertical	None
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY** *(specify unit of measure)*	**F. DIRECTION TO DRINKING WATER SUPPLY**
Unknown	> 10 mi	North

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS* ☒ 2. COMMUNITY *(specify town)*: Springfield > 15 CONNECTIONS

☐ 3. SURFACE WATER ☐ 4. WELL

Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA *(continued)*

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH *(specify unit)*	3. LOCATION *(proximity to population/buildings)*	4. NON-COMMUNITY *(mark 'X')*	5. COMMUNITY *(mark 'X')*
		None		

I. RECEIVING WATER

1. NAME: Groundwater

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER *(specify)*:

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☒ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK *(specify below)*	'X'	C. OTHER *(specify below)*
X	1. SAND				
X	2. CLAY				
X	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH *(100,000 to 1000 cm/sec.)* ☐ C. HIGH *(1000 to 10 cm/sec.)*

☐ D. MODERATE *(10 to .1 cm/sec.)* ☒ E. LOW *(.1 to .001 cm/sec.)* ☐ F. VERY LOW *(.001 to .00001 cm/sec.)*

G. RECHARGE AREA

☒ 1. YES ☐ 2. NO 3. COMMENTS: designed & Approved as a percolation lagoon

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 0

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

None

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (*e.g., RCRA, State, NPDES, etc.*)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (*mo., day, & yr.*)	E. EXPIRATION DATE (*mo., day, & yr.*)	F. IN COMPLIANCE (*mark 'X'*)		
					1. YES	2. NO	3. UNKNOWN
NPDES	MDNR						

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☒ YES (*summarize in this space*)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (*Section II*) information on the first page of this form.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
VII	

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (*Section II*). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: Litton - Advanced Circuitry Div
B. STREET (or other identifier): 4811 W. Kearney
C. CITY: Springfield
D. STATE: MO
E. ZIP CODE: 65803
F. COUNTY NAME: Greene

G. SITE OPERATOR INFORMATION
1. NAME: Litton Industries
2. TELEPHONE NUMBER: 417-862-0751
3. STREET: 4811 W. Kearney
4. CITY: Springfield
5. STATE: MO
6. ZIP CODE: 65803

H. REALTY OWNER INFORMATION (if different from operator of site)
1. NAME:
2. TELEPHONE NUMBER:
3. CITY:
4. STATE:
5. ZIP CODE:

I. SITE DESCRIPTION: percolation lagoon accepting copper plating waste

J. TYPE OF OWNERSHIP: [ ] 1. FEDERAL [ ] 2. STATE [ ] 3. COUNTY [ ] 4. MUNICIPAL [X] 5. PRIVATE

II. TENTATIVE DISPOSITION (*complete this section last*)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (*mo., day, & yr.*): unknown

B. APPARENT SERIOUSNESS OF PROBLEM: [ ] 1. HIGH [ ] 2. MEDIUM [X] 3. LOW [ ] 4. NONE

C. PREPARER INFORMATION
1. NAME: Burt McCullough
2. TELEPHONE NUMBER: 417-883-4033
3. DATE (*mo., day, & yr.*): 4-6-81

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION
1. NAME: Burt McCullough
2. TITLE: Environmental Specialist
3. ORGANIZATION: Missouri Dept. of Natural Resources
4. TELEPHONE NO. (*area code & no.*): 417-883-4033

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Burt McCullough	MDNR	883-4033
Ed Sears	MDNR	" "

C. SITE REPRESENTATIVES INTERVIEWED (*corporate officials, workers, residents*)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
James Dow	Facilities MGR 417-862-0751	4811 W. Kearney Springfield MO 65803
George Cepeland	417-862-0751	

III. INSPECTION INFORMATION *(continued)*

D. GENERATOR INFORMATION *(sources of waste)*

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Litton	417-862-0757	4811 W. Kearney	Cu Plating waste ALL

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS

G. DATE OF INSPECTION *(mo., day, & yr.)*	H. TIME OF INSPECTION	I. ACCESS GAINED BY: *(credentials must be shown in all cases)*
8-17-81	1:30 pm	[X] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER *(describe)*

clear, warm

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN *(mark 'X')*	3. SAMPLE SENT TO	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER	X	DNR LAB	?
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER *(specify)*			

B. FIELD MEASUREMENTS TAKEN *(e.g., radioactivity, explosivity, PH, etc.)*

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
NONE		

Continue On Page 3

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS
[ ] a. GROUND [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF
NONE

D. SITE MAPPED?
[X] YES. SPECIFY LOCATION OF MAPS. USGS Topo. maps

E. COORDINATES
~~1. LATITUDE (deg.-min.-sec.)~~ ~~2. LONGITUDE (deg.-min.-sec.)~~
SW¼, NW¼, Sec 7, R22W, T29N Greene Co., MO

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER (specify): (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?
[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code)

C. AREA OF SITE (in acres)
1-2

D. ARE THERE BUILDINGS ON THE SITE?
[ ] 1. NO [X] 2. YES (specify) Litton plant

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[ ] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [ ] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL
[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE
[X] 1. LIQUID [ ] 2. SOLID [ ] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS
[ ] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE
[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE
[ ] 9. OTHER (specify):

C. WASTE CATEGORIES
1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.
yes, NPDES records at the plant

VII. WASTE RELATED INFORMATION *(continued)*

2. Estimate the amount *(specify unit of measure)* of waste by category, mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT 40,000	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Gal/day	UNIT OF MEASURE	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER(specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER(specify):	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
(5) OTHER(specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER(specify):
			(6) CYANIDE	(6) OTHER(specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			X (11) OTHER(specify): plating wastes		

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE *(place in descending order of hazard)*

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
Cu plating waste		X			X				40,000	GPD

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

 Continue On Page 5

VIII. HAZARD DESCRIPTION (continued)

[ ] B. NON-WORKER INJURY/EXPOSURE

[ ] C. WORKER INJURY/EXPOSURE

[ ] D. CONTAMINATION OF WATER SUPPLY

[ ] E. CONTAMINATION OF FOOD CHAIN

[X] F. CONTAMINATION OF GROUND WATER

This lagoon is designed to be a percolation lagoon. It is situated atop a sink hole. It appears to operate well, since the ion exchange capacity is good.

[ ] G. CONTAMINATION OF SURFACE WATER

Continued From Front

VIII. HAZARD DESCRIPTION *(continued)*

[ ] H. DAMAGE TO FLORA/FAUNA

[ ] I. FISH KILL

[ ] J. CONTAMINATION OF AIR

[ ] K. NOTICEABLE ODORS

[ ] L. CONTAMINATION OF SOIL

[ ] M. PROPERTY DAMAGE

Continue On Page 7

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

Continue On Reverse

VIII. HAZARD DESCRIPTION *(continued)*

☐ T. MIDNIGHT DUMPING

☐ U. OTHER *(specify)*:

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE *(specify units)*
1. IN RESIDENTIAL AREAS	300,000	0	0	10 mi
2. IN COMMERCIAL OR INDUSTRIAL AREAS	2,000	1,000	1	1/4 mi
3. IN PUBLICLY TRAVELLED AREAS	1,000	0	0	1/4 mi
4. PUBLIC USE AREAS *(parks, schools, etc.)*	0	0	0	>10 mi.

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER *(specify unit)*	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
0	Vertical	None
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY** *(specify unit of measure)*	**F. DIRECTION TO DRINKING WATER SUPPLY**
unknown	>10 mi.	North

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY ≤ 15 CONNECTIONS* ☒ 2. COMMUNITY *(specify town)*: > 15 CONNECTIONS Spring Field

☐ 3. SURFACE WATER ☐ 4. WELL

 Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
		NONE		

I. RECEIVING WATER

1. NAME: groundwater

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☒ 5. OTHER (specify): groundwater

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☒ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND				
X	2. CLAY				
X	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☐ D. MODERATE (10 to .1 cm/sec.) ☒ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☒ 1. YES ☐ 2. NO 3. COMMENTS: designed & approved as a percolation lagoon

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 0

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: —

J. OTHER GEOLOGICAL DATA

NONE

 Continue On Reverse

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
NPDES	MDNR						

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☒ YES *(summarize in this space)*

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

JACOBS ENGINEERING GROUP INC.

10901 WEST 84th TERRACE, SUITE 210, LENEXA, KANSAS 66214
TELEPHONE (913) 492-9218 • FAX (913) 492-6198

RECEIVED
SEP 17 1993
SAFE SECTION

Litton Systems Inc. Site
Site Reassessment
Reference # 16

September 15, 1993

Ms. Anne Olberding
Site Assessment Manager
U.S. Environmental Protection Agency
Region VII Superfund Branch
726 Minnesota Avenue
Kansas City, Kansas 66101

Re: EPA Contract No. 68-W8-0122
Final ~~Draft~~ **Site Inspection Prioritization (SIP) Report**
for the Litton Systems, Inc.
Advanced Circuitry Division Site
A.O. 9-29-93 **Springfield, Missouri**
CERCLIS No. MOD007152903
EPA Work Assignment No. 53-7JZZ
Jacobs Project No. 12-D253-12

Dear Ms. Olberding:

Jacobs Engineering Group Inc. (Jacobs) was tasked by the U.S. Environmental Protection Agency (EPA) to evaluate the Litton Systems, Inc., Advanced Circuitry Division (Litton) site (CERCLIS No. MOD007152903) as a potential candidate for an Expanded Site Inspection (ESI) under the Site Inspection Prioritization (SIP) guidelines. The evaluation included a review of EPA and state file material, and a review of potential contaminant receptor information. The SIP Report is included as an attachment to this letter.

SITE BACKGROUND

The Litton site is located in the northwestern portion of the City of Springfield at 4811 Kearney Street, Greene County, Missouri. The site, which is approximately 50 acres in size, is currently owned by Litton Precision Products, Inc. and Litton Industries, Inc. who purchased the site property in three different parcels between 1963 and 1964 from the Industrial Development Corporation, the City of Springfield, and Mr. and Mrs. Roscoe Prescott. Until the time of purchase, the site property was either vacant or utilized for agricultural purposes. Litton has manufactured printed circuit boards on-site since approximately 1963. The circuit boards were plated with copper, nickel, pyrophosphate, rhodium, gold, and tin. Plating wastewater generated on-site was disposed in various pits, ponds, lagoons, and sinkholes in and around the site property. Estimates of the quantity of plating wastewater generated vary from 200,000 gallons per day (gpd) to 34,000 gpd after waste reduction methods were implemented. In 1982, Litton was connected to the City of Springfield sewer system and ceased on-site disposal of plating wastewater. An estimated total of 193,800,000 gallons of plating wastewater may have been disposed on-site. The site is currently active.

In 1972, Litton received an operating permit from the Missouri Clean Water Commission. Plating wastewater was originally disposed by irrigation onto a small portion of the site and discharged to an on-site sinkhole. Shortly after the site began operating, storage and settling ponds were constructed for plating wastewater to be discharged through a series of terraces into a pit. The Missouri Department of Natural Resources (MDNR) issued Litton a National Pollutant Discharge Elimination System (NPDES) permit in December 1974. The NPDES permit expired on January 17, 1975 when Litton received the MDNR's approval to construct and operate a new discharge system in which plating wastewater was discharged into a newly constructed lagoon and land-applied to a two-acre portion of the site. After the new discharge system was constructed, use of the storage and settling ponds was discontinued. Accumulated sludges were removed from the ponds and disposed at an approved facility. A sludge pit and an acid disposal pit were also cleaned up in the late 1970s.

The MDNR first conducted an inspection of Litton on September 25, 1979. MDNR discovered that plating wastewater, which was discharged to the lagoon system, was overflowing and releasing wastes into a nearby sinkhole. The following September, the MDNR issued Litton a Consent Order requiring the discharge of plating wastewater to cease. On March 24, 1981 the MDNR conducted a sampling investigation of the Litton site and collected six water samples. Four samples of standing water were collected from three on-site ponds designated as Ponds A, B, and C, and a sanitary lagoon. Two groundwater samples were collected from two monitoring wells located on-site. No information was available in the file material regarding the installation of these monitoring wells. The samples were analyzed for volatile organic compounds (VOC). Several VOCs were detected at high concentrations in all of the samples.

The MDNR conducted another sampling investigation at the Litton site on May 20, 1981 in order to determine the source of the VOCs detected in the March 24, 1981 sampling investigation and to evaluate the effect of the VOCs on local groundwater. Two groundwater samples were collected from the on-site monitoring wells, and ten surface water samples were collected: six from nearby springs; one from the Little Sac River; and three from Ponds A, C, and the sanitary lagoon. The samples collected were analyzed for VOCs. High concentrations of several VOCs were detected in all of the samples except for three spring samples, one of which was collected as a background sample.

On March 26, 1982, the MDNR issued an Emergency Directive to Litton requiring them to cease and correct the imminent hazard caused by the sludges and wastewater in Pond A. Pond A was closed later in 1982. On November 10, 1982 the EPA approved Litton's closure report for Pond A, and Resource Conservation and Recovery Act (RCRA) closure was granted. That same year the accumulated sludges in the lagoon (constructed in 1975) were removed and disposed at an approved facility. The lagoon was dozed in after the sludges were removed. The file material indicated that a pretreatment system was installed around this time which reduced the quantity of plating wastes generated at the site. Litton was connected to the Springfield municipal sewer system in 1982.

The MDNR conducted another sampling investigation of the Litton site on January 27, 1988. Three composite surface soil samples were collected from the site property (one of which was designated as a background sample); one sediment sample and one surface water sample were collected from Ritter Spring west; and three groundwater samples were collected from nearby private wells. All of the samples were analyzed for VOCs and metals. In addition, the water samples were analyzed for base/neutral/acid extractables (BNA). High concentrations of metals were detected in all of the soil samples except for the background sample. The levels of total lead detected in the site soils exceeded the Missouri Department of Health's (MDOH) recommended safe soil level of 238 parts per million (ppm). Two VOCs were also detected at high concentrations in two of the soil samples. Moderate levels of metals were detected in the water samples, and a few VOCs were detected in the water samples at high concentrations. The level of trichloroethylene (TCE) detected in the surface water sample collected from Ritter Spring exceeded the

MDOH's safe drinking water level of 5 µg/L and EPA's drinking water standards maximum contamination level of 0.005 mg/L.

The MDNR completed a Cleanup Assessment for the Litton site on December 14, 1989 based upon the results of the January 27, 1988 sampling investigation. Although the total lead content in the site soils was high, it did not fail the Toxicity Extraction Procedure (TEP) test, and it could not be characterized as a RCRA hazardous waste because it could not be identified as a constituent generated from a listed waste. In addition, the exact source of TCE contamination found in Ritter Spring West is inconclusive because several industries in the area utilize TCE. Therefore, the MDNR determined that conditions at the Litton site did not currently warrant its listing on the Missouri Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites (The Registry).

Litton hired SCS Engineers to conduct a sampling investigation of the site between January 21 and 26, 1991. SCS Engineers installed seven monitoring wells and collected 14 groundwater samples (seven from the newly installed monitoring wells and seven from pre-existing monitoring wells). No information was available in the file material indicating when the seven pre-existing monitoring wells were installed. Nine surface soil samples were also collected. The samples were analyzed for metals, VOCs, and BNAs. The soil samples contained low concentrations of metals and low concentrations of a few VOCs. The groundwater samples contained low concentrations of metals and high concentrations of various VOCs.

On August 3, 1993, the MDNR and Litton entered into a Consent Agreement with the following stipulations: Litton will investigate, develop, design, and implement a remedial and monitoring program; the MDNR will utilize a site-specific cleanup assessment provided by the MDOH to determine appropriate cleanup levels for the site; and if the remedial actions do not result in a satisfactory cleanup level, the MDNR will pursue listing of the site on The Registry.

GROUNDWATER PATHWAY

The Litton site is located within a four- to five-square mile, internally drained area characterized by karst geology. Nearly all precipitation that falls in the area enters the groundwater system. Numerous groundwater samples have been collected from on-site monitoring wells and nearby private wells. The sample results indicate that groundwater contamination has resulted from waste disposal activities associated with the site. Groundwater usage within a four-mile radius of the site is moderate.

The City of Springfield has three municipal wells, two of which are located within a four-mile radius of the site. All three of these wells are utilized as back-up wells and contribute an average of one percent of the total potable water supply for the City of Springfield. The other 99 percent is supplied by surface water intakes. The total population which receives drinking water from the City of Springfield is approximately 150,000, and an apportioned population of 500 receive drinking water from each of the municipal wells. A review of well logs indicated that a total of 86 private residential wells are located within a four-mile radius of the site, and the estimated population receiving drinking water from these private wells is 209. The estimated total population utilizing groundwater within four miles of the site is 1,709.

SURFACE WATER PATHWAY

Numerous surface water samples have been collected from standing water in pits, ponds, and lagoons on-site as well as from nearby surface water bodies. The sample results indicate that standing water on-site is contaminated, and some of the nearby surface water bodies contained similar contaminants; however, given the distance from the site to the nearest surface water, it is difficult to determine if off-site surface

water contamination is attributable to the Litton site. The nearest surface water body is the Little Sac River which is three miles north of the site.

There is no overland flow pathway from the site to surface water; however, wastewater disposed at the site and precipitation that falls in the area of the site enters sinkholes or percolates into the ground. The majority of the water is funneled to four spring outlets approximately three miles north of the site. These springs include Ritter Spring West, Williams Spring, Fantastic Caverns Spring, and Bunge Spring. All of these springs feed the nearby Little Sac River. The Little Sac River flows northwesterly from the springs for more than 15 miles. The City of Springfield receives 99 percent of its municipal water supply from four surface water intakes. One intake is located on the James River near Pearson Creek, one intake is located on McDaniel Lake near the dam, a third intake is located at Fulbright Spring, and one intake is located on Fellows Lake near the dam. There are no surface water intakes within 15 miles downstream of the point where the site's four spring outlets enter the Little Sac River. The Little Sac River supports many species of fish. Aquatic sensitive environments are also known to exist in the area of the site including the Ozark cavefish (Amblyopsis rosae) and the Missouri bladderpod (Lesquerella filiformis) which are both listed as federally threatened and state endangered species.

SOIL EXPOSURE PATHWAY

Extensive soil sampling has been conducted at the site. The sample results indicate that soil contamination has resulted from waste disposal activities at the site. The site is located in an industrial area on the outskirts of the City of Springfield. Although the area is primarily industrial, pasture lands as well as residential properties also exist in the vicinity of the site. There are no residences, schools, or day-care centers within 200 feet of the site, and the nearest resident is located approximately 1,500 feet south of the site. The approximate population within one mile of the site is 126.

AIR PATHWAY

Air sampling has not been performed at the site; however, a release of site contaminants into the air is not expected due to the nature of the wastes. The total population within a four-mile radius of the site is approximately 24,012. The Black-tailed jackrabbit (Lepus californicus), a state endangered and federally threatened species, is known to live in the vicinity of the site.

CONCLUSIONS

Sampling activities conducted at the site indicate that on-site soils and groundwater have become contaminated as a result of waste disposal activities at the facility. Since the nearest surface water is three miles from the site and several industrial facilities are located in the area, it will be difficult to determine if off-site surface water contamination is attributable to the site even if additional surface water samples are collected. Although air samples have not been collected at the site, air contamination is not expected to result from the site because of the nature of the waste sources. It is anticipated that additional site characterization activities would not affect the existing site assessment results because the Litton site has already been extensively investigated. The Litton Systems, Inc., Advanced Circuitry Division site has recently entered into a Consent Agreement with the MDNR which requires Litton to remediate the site to cleanup levels specified by MDNR.

If you have any questions regarding this report, please contact either of the undersigned at (913) 492-9218 for further clarification and/or discussion.

Sincerely,

Carolyn McManigal

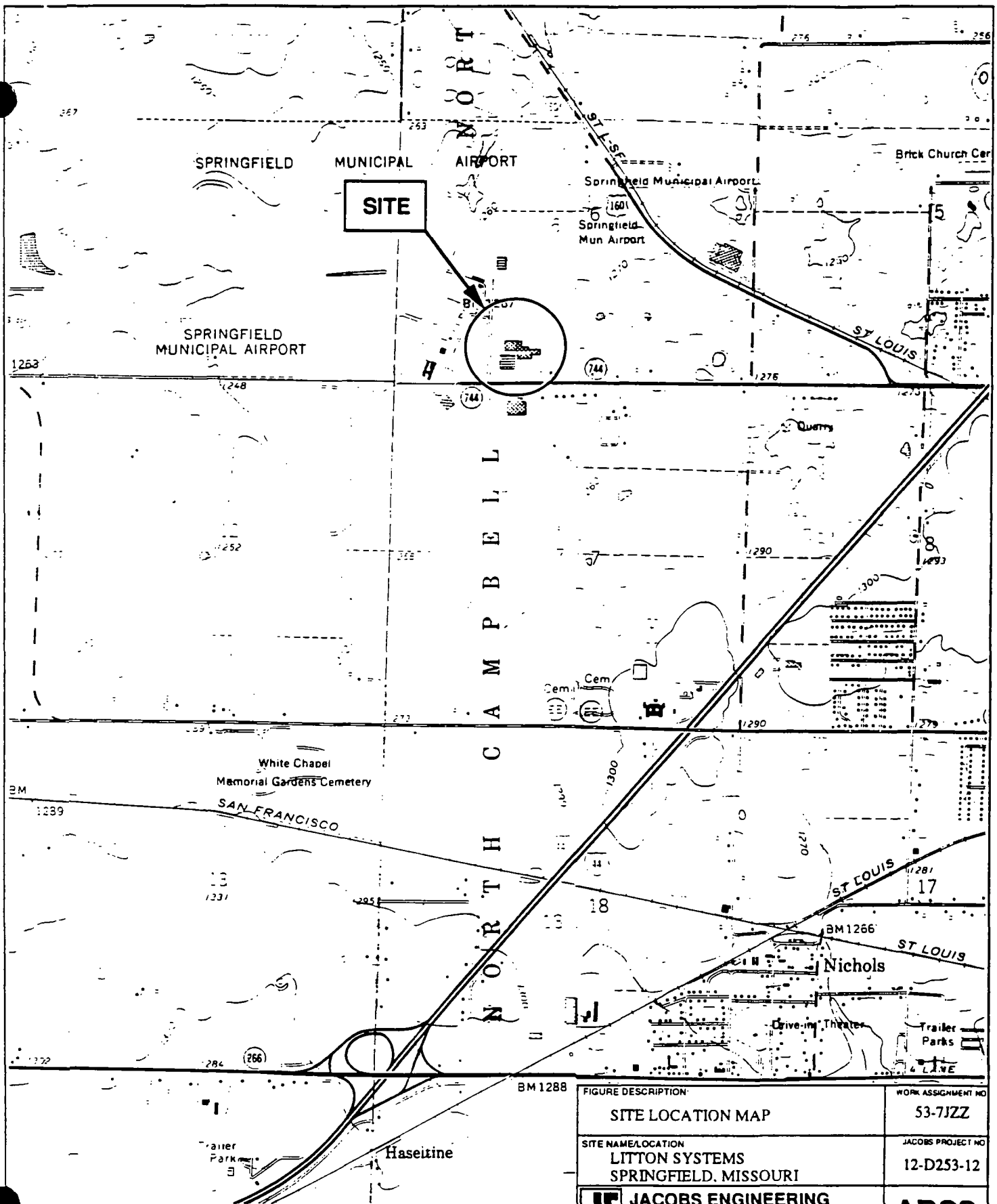
Carolyn McManigal
ARCS Site Manager

Fred D. Reynolds, P.E.
ARCS Program Manager

Attachments: SIP Report

cc: Pete Culver

FIGURES



Source: U.S.G.S. Topographic Map

0 .5 1
Approximate Scale in Miles

FIGURE DESCRIPTION: SITE LOCATION MAP	WORK ASSIGNMENT NO 53-7JZZ
SITE NAME/LOCATION LITTON SYSTEMS SPRINGFIELD, MISSOURI	JACOBS PROJECT NO 12-D253-12
JACOBS ENGINEERING GROUP INC.	ARCS
DRAWN BY: DJK DATE: 04/12/93	FIGURE NO. 1
CHECKED BY: JL DATE: 04/12/93	

D253-12-002

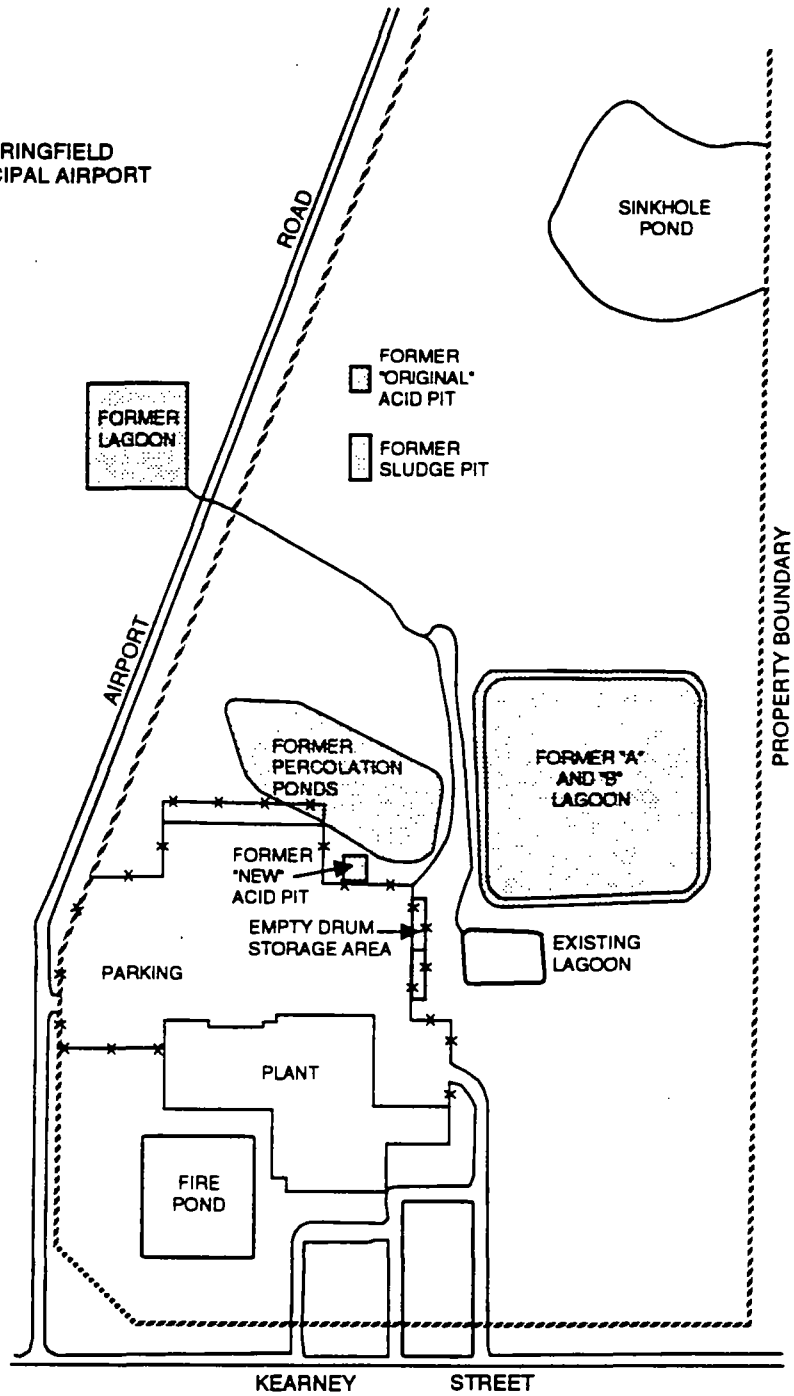
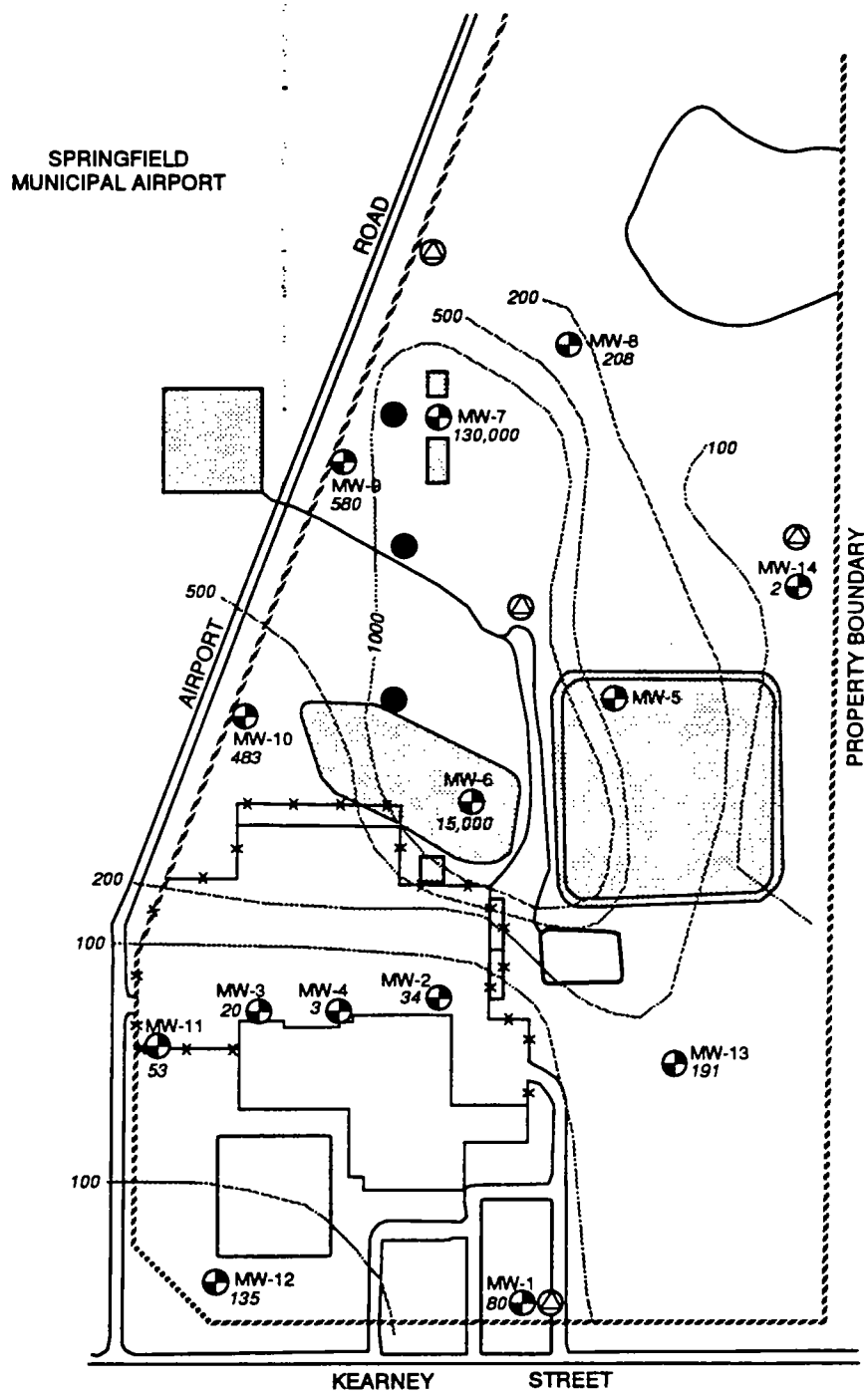


FIGURE DESCRIPTION: SITE MAP	WORK ASSIGNMENT NO: 53-7JZZ
SITE NAME/LOCATION: LITTON SYSTEMS SPRINGFIELD, MISSOURI	JACOBS PROJECT NO: 12-D253-12
JACOBS ENGINEERING GROUP INC.	ARCS
DRAWN BY: MD DATE: 03/23/93	FIGURE NO. 2
CHECKED BY: KS DATE: 03/23/93	

0 100
Approximate Scale in Feet

SOURCE: SCS ENGINEERS

D253-12-001



LEGEND

100 TCE ISOCHEMICAL CONTOUR IN µg/l

MW-1 580 MONITOR WELL LOCATION NUMBER, AND TCE CONCENTRATION

PROPOSED RECOVERY WELL

PROPOSED DEEP WELL

0 100
Approximate Scale in Feet

SOURCE: SCS ENGINEERS

FIGURE DESCRIPTION: PROPOSED RECOVERY AND DEEP MONITORING WELL LOCATIONS	WORK ASSIGNMENT NO. 53-7JZZ
SITE NAME/LOCATION LITTON SYSTEMS SPRINGFIELD, MISSOURI	JACOBS PROJECT NO. 12-D253-12
JACOBS ENGINEERING GROUP INC.	ARCS
DRAWN BY: MD DATE: 03/23/93	FIGURE NO. 3
CHECKED BY: KS DATE: 03/23/93	

D253-12-001

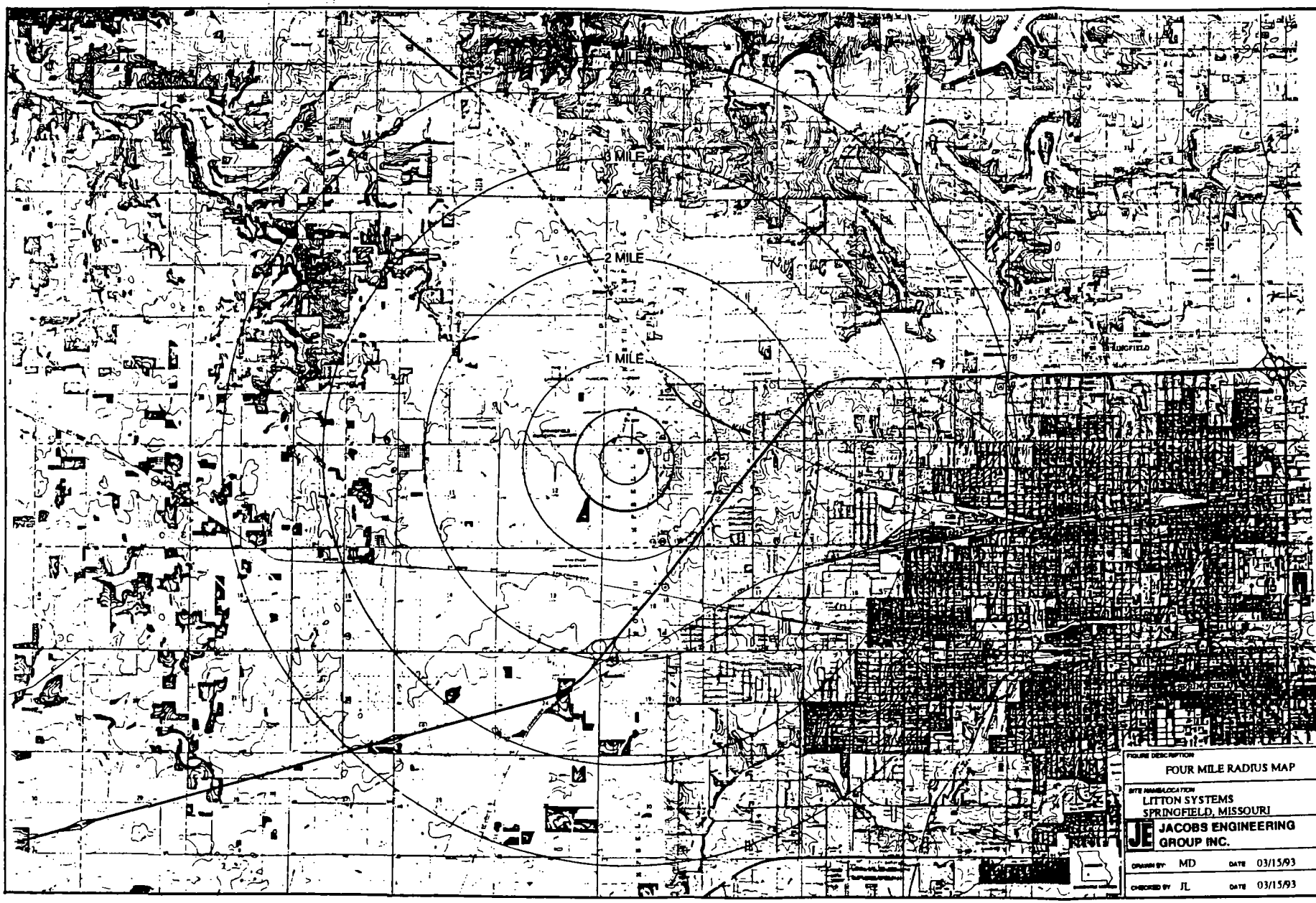


FIGURE DESCRIPTION: FOUR MILE RADIUS MAP	WORK ASSIGNMENT NO: 53-7ZZZ
SITE NAME/LOCATION: LITTON SYSTEMS SPRINGFIELD, MISSOURI	JACOBS PROJECT NO: 12-D253-12
JE JACOBS ENGINEERING GROUP INC.	ARCS
DRAWN BY: MD DATE: 03/15/93	FIGURE NO: 4
CHECKED BY: JL DATE: 03/15/93	

TABLES

TABLE 1
Litton Systems, Inc., Advanced Circuitry Division
Springfield, Missouri
CERCLIS No. MOD007152903
Sample Analysis Results of Groundwater and Surface Water Samples Collected by MDNR
March 24, 1981

	Sample Numbers					
Contaminant	**81-9619**	**81-9620**	**81-9621**	**81-9622**	**81-9623**	**81-9624**
Vinyl chloride	132	340	ND	ND	ND	ND
1,1-Dichloroethylene	8.1	11	ND	ND	ND	ND
1,1-Dichloroethane	176	181	ND	ND	ND	ND
trans-1,2-Dichloroethylene	335	250	ND	ND	ND	17
1,1,1-Trichloroethane	63	58	78	ND	ND	ND
1,2-Dichloropropane	79	54	80	236	392	2.4
Trichloroethylene	17	42	29	17	72	131
Methylene chloride	ND	ND	325	1,008	1,010	174
1,1,2-Trichloro-1,1,2-trifluoroethane	ND	ND	D	D	ND	ND
Chloromethane	ND	ND	ND	9.6	ND	ND

NOTE: All concentrations reported in µg/l.
ND The material was analyzed for, but was not detected.
D Compound was qualitatively identified; however, the quantitative value is less than the sample quantitation limit.

TABLE 2
Litton Systems, Inc., Advanced Circuitry Division
Springfield, Missouri
CERCLIS No. MOD007152903
Selected Sample Analysis Results of Groundwater and Surface Water Samples Collected by MDNR
May 20, 1981

	Sample Numbers								
Contaminant	**81-6230**	**81-6231**	**81-6232**	**81-6233**	**81-6234**	**81-6235**	**81-6236**	**81-6237**	**81-9638**
Trichloroethylene	200	7	4.9	20.8	233	ND	ND	106	30
1,2-Dichloropropane	11.4	ND	ND	ND	ND	4.1	4.3	119	105
1,1,1-Trichloroethane	12.6	ND	ND	3.7	ND	ND	3.2	67.9	47.2
trans-1,2-Dichloroethylene	27.8	ND	ND	ND	27.5	ND	ND	260	256
Chloroform	ND	ND	ND	ND	ND	ND	4.2	ND	ND
Bromodichloromethane	ND	ND	4.4	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	7.1	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	59.4	58.3
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	14.3	12.5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	112	132
1-Butene	ND	ND	ND	ND	ND	ND	15	ND	ND
Thiobismethane	ND	ND	ND	ND	ND	ND	45	ND	ND
2-Propane	ND	ND	ND	ND	ND	ND	75	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	35	ND	ND
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	16	ND	ND
1-Butanol	ND	ND	ND	ND	ND	ND	300	ND	ND

NOTE: All concentrations reported in µg/l.
ND The material was analyzed for, but was not detected.

TABLE 3
Litton Systems, Inc., Advanced Circuitry Division
Springfield, Missouri
CERCLIS No. MOD007152903
Selected Sample Analysis Results of Groundwater, Surface Water, Sediment, and Surface Soil Samples Collected by MDNR
January 27, 1988

	Sample Numbers							
Contaminant	**88-0186 µg/L**	**88-0187 µg/kg**	**88-0196 µg/L**	**88-0198 µg/kg**	**88-0220 µg/kg**	**88-0221 µg/kg**	**88-0222 µg/L**	**88-0223 µg/L**
(T)Silver	ND	600	ND	1,000	400	200	ND	ND
(T)Arsenic	ND	11,000	ND	33,000	3,800	3,200	ND	ND
(T)Barium	87	150,000	51	210,000	180,000	150,000	63	ND
(T)Cadmium	ND	1,200	ND	400	400	400	ND	ND
(T)Chromium	ND	39,000	ND	390,000	31,000	12,000	ND	ND
(T)Copper	40	620,000	40	4,500,000	580,000	7,200	40	30
(T)Mercury	ND	220	ND	400	220	220	ND	ND
(T)Nickel	80	190,000	ND	61,000	37,000	21,000	ND	ND
(T)Lead	ND	ND	ND	290,000	41,000	25,000	ND	ND
(T)Selenium	ND	ND	ND	260	420	ND	ND	ND
(TEP)Copper	ND	90	ND	140	50	ND	ND	ND
(TEP)Nickel	ND	640	ND	70	60	30	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	1,500	ND	ND	ND	ND
Trichloroethylene	68	ND	ND	29,000	2,200	ND	44	ND
Methylene chloride	ND	ND	24	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	7.7
1,2-Dichloroethylene	14	ND	ND	ND	ND	ND	ND	ND

T Total metals.
ND The material was analyzed for, but was not detected.
TEP Toxicity Extraction Procedure Metals.

TABLE 4
Litton Systems, Inc., Advanced Circuitry Division
Springfield, Missouri
CERCLIS No. MOD007152903
Selected Sample Analysis Results of Soil Samples Collected by SCS Engineers
January 1991

	Sample Numbers								
Contaminant	**B-B1-5.5**	**B-B1-10**	**B-B2-6**	**B-B3-5**	**B-B3-10**	**B-B3-15**	**B-B4-5**	**B-B4-7**	**B-B4-10**
Copper	10	12	830	5	6	9	47	9	25
Nickel	38	27	36	ND	12	11	13	ND	25
Zinc	50	56	61	20	29	39	24	20	50
1,2-Dichloropropane	14	ND	ND	ND	16	21	ND	B	ND
Trichloroethene	260	130	41	ND	11	13	ND	B	480
Ethanol	ND	ND	12	ND	73	200	ND	B	ND

NOTE: All copper, nickel, and zinc concentrations reported in mg/kg. All 1,2-dichloropropane, trichloroethene, and ethanol concentrations reported in µg/kg.
ND The material was analyzed for, but was not detected.
B The sample container broke before the analysis could be performed.

TABLE 5
Litton Systems, Inc., Advanced Circuitry Division
Springfield, Missouri
CERCLIS No. MOD007152903
Selected Sample Analysis Results of Groundwater Samples Collected by SCS Engineers
January 1991

	Sample Numbers													
Contaminant	**MW1**	**MW2**	**MW3**	**MW4**	**MW5**	**MW6**	**MW7**	**MW8**	**MW9**	**MW10**	**MW11**	**MW12**	**MW13**	**MW14**
Copper	ND	ND	691	7.8	0.2	0.4	5.4	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	0.6	ND	0.5	0.5	0.8	ND	ND	ND	ND	ND	ND	ND
Zinc	ND	ND	5.4	ND	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND
1,2-Dichloropropane	23	22	15	9	135	1,500	ND	ND	ND	172	40	50	50	ND
Trichloroethylene	80	34	20	3	490	15,000	130,000	208	580	483	53	135	191	2
Chloroform	ND	10	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethylene	ND	ND	70	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	5,000	ND	ND	90	73,000	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	20	ND	400	12,000	1,000	76	197	53	14	ND	17	ND
1,1-Dichloroethane	ND	ND	ND	ND	60	32	910	ND	12	ND	28	ND	17	ND
1,1-Dichloroethylene	ND	ND	ND	ND	134	1,200	29,300	ND	250	ND	10	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	10	2,500	5	7	18	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	43	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	30	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	480	ND	ND	ND	ND	ND	ND	ND

NOTE: All copper, nickel, zinc, and cyanide concentrations reported in mg/l. All other contaminant concentrations reported in µg/l.
ND The material was analyzed for, but was not detected.

File: Litton Systems - Registry

KK

STATE OF MISSOURI

Mel Carnahan, Governor • David A. Shorr, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

Litton Systems Inc. Site
Site Reassessment
Reference # 17

July 30, 1993

Ms. Kara Johnson
Assistant Attorney General
Attorney General's Office
Broadway Building
Jefferson City, MO 65102

RE: Litton Consent Agreement

Dear Kara:

Please find enclosed two copies of a fully executed Litton Consent Agreement. Please forward one copy to Litton. The original signed consent agreement has been placed in the Superfund Registry File with a copy also placed in the Hazardous Waste Management Commission file. Ms. Julie Warren is the Superfund Project Manager that will be overseeing the cleanup of this site.

Your assistance with this agreement was appreciated. Should you have any questions or need additional information, please contact me at 751-4187.

Sincerely,

HAZARDOUS WASTE PROGRAM

Kevin A. Kelly

Kevin A. Kelly
Environmental Specialist

KAK:sh

Enclosures

c: Ms. Julie Warren, Project Manager, Superfund Section, HWP (with copy of consent agreement)
Mr. Steve Sturgess, Chief, Project Management Unit, Superfund Section, HWP
Mr. Robert Brundage, Legal Counsel, Hazardous Waste Management Commission

File: Litton Systems - Registry File

KK

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

DATE: July 15, 1993

TO: John A. Young, Director
Division of Environmental Quality

FROM: Ed Sadler, Director
Hazardous Waste Program

Ed

SUBJECT: Litton Systems - Consent Agreement for Cleanup

Your signature is requested on the attached original Consent Agreement (CA) for cleanup of the Litton Systems site located in Springfield, Missouri. As you will note, both Litton and the Attorney General's Office (AGO) have signed the document. Please sign and return this document to the Hazardous Waste Program, Superfund Section for execution.

The site was proposed for the Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites in the fall of 1991 due to TCE contamination documented on-site in both the shallow groundwater and on-site soils. With the assistance of the AGO's staff, a CA for cleanup of the site has been negotiated with the owners. In a nutshell, the agreement states Litton will clean up the site to the state's satisfaction, and when the cleanup is completed the state will proceed to withdraw our proposed Registry Action against the property. The agreement includes both cleanup objective protocols, the avenue for interim corrective measures, long-term remedial action, and MDNR cost recovery for oversight costs. Upon execution of this agreement Litton will have 60 days to submit a Remedial Action Plan for review by the MDNR.

Please contact Mr. Kevin Kelly of the Hazardous Waste Program, Superfund Section at 751-4187 should you have any questions or need further information.

ES:kkh

Attachment

c: Julie Warren, Superfund Section, HWP

MISSOURI DEPARTMENT OF NATURAL RESOURCES
205 JEFFERSON STREET
P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102

IN THE MATTER OF	)	
	)	
LITTON SITE, SPRINGFIELD	)	
GREENE COUNTY, MISSOURI	)	CONSENT AGREEMENT
	)	MDNR APPEAL NOS. SF-91-7A
	)	AND SF-91-8A
	)	
Litton Systems, Inc., Advanced	)	
Circuitry Division	)	
APPELLANT	)	
	)	
	)	
PROCEEDING UNDER	)	
10 CSR 25-10.010(2)E OF THE	)	
MISSOURI HAZARDOUS WASTE	)	
MANAGEMENT REGULATIONS	)	

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CONSENT AGREEMENT

The parties hereto, the Litton Systems, Inc., Advanced Circuitry Division (Litton) and the Missouri Department of Natural Resources (MDNR), stipulate and agree as follows:

1. Litton has conducted environmental investigations of their property and determined elevated levels of volatile organics and metals are present in the groundwater and soil media at their facility located at 4811 West Kearney Street, Springfield, Missouri, Greene County. Litton is an active manufacturer of printed circuit boards, and has been in operation at the current location since approximately 1963. The exact source of contaminants on the Litton property has not yet been identified; however, over the years, several on-site disposal features were utilized by Litton. These included several former pits, ponds, and lagoons. Each of these are being investigated as potential sources of contamination. The quantity of material and date of release are also unknown; however, it is assumed the release has been a gradual occurrence over a period of years from one or a combination of any of the previously mentioned sources, or potentially another unidentified source on or off the property. The horizontal and vertical extent of groundwater contamination has yet to be determined.

2. On March 1, 1985, the Hazardous Waste Management Commission (HWMC) adopted regulation 10 CSR 25-10.010, Abandoned or Uncontrolled Hazardous Waste Disposal Sites, allowing a responsible party to commit in writing to investigate the Site and implement an approved remedial action by signing a consent agreement with the MDNR.

The MDNR and Litton, by their representatives, have agreed to the making of this Agreement, and MDNR and Litton further stipulate and agree as follows:

I. PARTIES

This Agreement shall apply to and be binding upon the MDNR, and Litton Systems, Inc., Advanced Circuitry Division and upon their officers, directors, agents, employees, contractors, successors and assigns, and upon all persons or firms acting under or for them.

II. DEFINITIONS

Certain terms used in this Agreement are defined as follows:

A. The "Site" means the area of property as defined pursuant to the legal description included as Exhibit A to this document known as 4811 West Kearney in Springfield, Greene County, Missouri. If it is determined on the basis of sampling and analysis that the impacted groundwater plume extends beyond the Litton property boundaries as defined in Exhibit A, and additional work is deemed necessary off-site, this Agreement may be modified or a new Agreement executed to assess the additional problem.

B. "MDNR" means the Missouri Department of Natural Resources.

C. "Remedial Action Plan" means the MDNR-approved procedures to be followed in implementation of any remedial action at the Site and all necessary related procedures including, but not limited to, safety, analysis, sampling, handling, packaging, storage, removal, transportation, labeling, registration, and Site security. Additional remedial actions may be necessary after completion of a remedial action dependent upon results of sample analysis or development of new information. Once approved, the remedial action plan shall be made a part of this Agreement; subject to the same stipulations contained herein.

D. "Waste Materials" means any hazardous waste, as defined in 42 U.S.C. §6903(5) and §260.360(10), RSMo; or hazardous substance as defined in 42 U.S.C. §9601(14) and §260.500(5), RSMo.

E. "Registry" means the Missouri Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites, §260.440.1 RSMo.

F. The "Work" means the implementation of the Remedial Action Plan as approved by the MDNR in order to achieve a classification of Five (5) pursuant to 10 CSR 25-10.010, and as the same may be modified from time to time pursuant to the provisions of this Agreement.

G. The "director" means the director of the Missouri Department of Natural Resources.

H. The "department" means the Missouri Department of Natural Resources.

III. GENERAL PROVISIONS

A. The Objectives of this Agreement

1. The objectives of the parties, through entry of this Agreement, are to protect the public health and the environment from releases or threatened releases of waste materials and their degradation products from the Site by investigation, development, design, and implementation of remedial and monitoring programs by Litton.

2. Remedial actions undertaken at the Site according to the terms of this Agreement must include all necessary actions to achieve a classification of Five (5) pursuant to §260.445.3, RSMo, in order for the MDNR not to pursue listing of the Site on the Registry.

3. The MDNR shall utilize a site-specific cleanup assessment provided by the Missouri Department of Health (MDOH) to determine appropriate cleanup levels for the site. Litton may offer comments on MDOH cleanup levels for consideration by MDNR and/or MDOH. If the MDNR determines that following the remedial action, appropriate cleanup levels have not been achieved, the site will be considered as not being properly closed with no evidence of present or potential adverse impact with no further action required pursuant to §260.445.3, RSMo, and the MDNR shall pursue listing of the Litton site property on the Registry. When the appropriate cleanup levels are achieved, the proposed Registry action shall be withdrawn as established in paragraph XIII of this agreement.

B. Commitment of the Parties

1. Litton shall undertake and assure the implementation of the objectives of this Agreement.

2. Litton shall submit a Remedial Action Plan to MDNR. The Remedial Action Plan will establish a schedule and specific responsibilities for completion of any site investigations and remedial action. The Remedial Action Plan shall include the cleanup criteria provided by the MDOH for soil and groundwater at the site and may include a plan to perform additional work to support MDNR determinations of appropriate cleanup levels. These cleanup criteria shall be incorporated into the proposed Remedial Action Plan. If other contaminants or degradation products are discovered during remedial action, they shall also be incorporated into the Remedial Action Plan.

3. Litton may implement MDNR approved interim corrective measures at the Site in a manner not inconsistent with long term remediation at the Site.

4. Litton shall obtain MDNR approval before implementation of any remedial action.

5. Litton shall complete the remedial action in accordance with the standards, specifications, and schedule of completion set forth in the Remedial Action Plan.

6. Beginning on the date of the remedial action and continuing until the Work is completed, Litton shall be responsible for any release or threat of release of hazardous substances from the Site resulting from its acts or omissions in the performance of the remedial action. Litton shall assume any and all liability arising from or relating to its acts or omissions in the performance or the implementation of the remedial action or its failure to perform fully or complete the responsibilities outlined in the Remedial Action Plan.

7. Litton shall provide a copy of this Agreement to any contractor or subcontractor retained to perform Work contemplated by this Agreement and shall condition any contract for such Work

on compliance with this Agreement.

8. Litton shall not sell, convey, or transfer title to the Site without MDNR's written approval while this Agreement is in effect. Requests for transfer of title must be submitted at least sixty (60) days prior to the planned date of transfer.

9. Litton shall not substantially change the manner in which the Site is used without MDNR's written approval while this Agreement is in effect.

a. Requests for approval for changes in use must be submitted in writing to the department at least sixty (60) days prior to any planned substantial change in use.

b. The request must include a detailed Site description, a detailed description of the change in use planned, and an analysis concerning whether the change in use might result in any of the criteria listed in 10 CSR 25-10.010(4)(A)4. Any plans, specifications, or designs prepared for the change in use should be submitted to the department with the request.

c. The department will evaluate the request to determine whether the change in use is substantial. If the change in use is not substantial, the department will notify Litton that departmental approval is not required.

d. If the department determines that the change in use is a substantial change, the request will be evaluated to determine whether the change in use may result in:

(1) A significant spread of contamination over additional portions of the site or off-site;

(2) A significant increase in human exposure to the hazardous materials;

(3) A significant increase in adverse environmental impacts; or

(4) A situation making potential remedial actions to correct problems at the Site substantially more difficult to undertake or complete.

C. Compliance with Applicable Laws and Regulations

1. The Work undertaken by Litton pursuant to this Agreement shall be in compliance with all applicable federal, state, and local laws and regulations promulgated thereunder. Litton shall obtain, or cause its contractors to obtain, all permits or approvals necessary under such laws. Litton agrees to submit applications and requests in accordance with all statutory and regulatory requirements, and recognizes that approval or denial of such applications or requests shall be subject solely to permit application and appeals processes established by applicable laws and regulations.

IV. REPORTING AND RECORDKEEPING: RETENTION AND AVAILABILITY OF INFORMATION

A. Litton shall provide written progress reports to the MDNR individual designated to receive such communications which describe the actions which have been taken during the previous month toward achieving compliance with this Agreement. Reports shall be submitted within ten (10) days after the first day of each month, beginning in the first full month following the execution of this Agreement. The reports shall include:

1. The date any task was completed;
2. An identification of any event which may cause a delay in completing any future tasks, and a summary of efforts made, if any, to mitigate the delay;
3. The progress made toward completing the Remedial Action Plan and the specific responsibilities outlined in it;
4. The activities scheduled for the next month; and
5. The submission of data resulting from the completion of any Site investigation and remedial action or any data as requested by MDNR. This would be submitted in accordance with an approved schedule, not necessarily monthly.

6. Litton shall notify MDNR of any change in the schedule described in the monthly progress report for the performance of any on-site activity, including, but not limited to, data collection and implementation of work plan, no later than seven (7) days prior to the activity.

B. Litton shall preserve for three years after completion of the Work all records, documents, and information relating to the performance of the Work at the Site and the removal of waste materials from the Site, including sampling, analysis, chain of custody records, manifests, contracts, trucking logs, bills of lading, receipts, records pertaining to traffic routing, destination of waste materials, and volume and chemical nature of such materials, correspondence and other documents produced during the Work. The period of record retention is extended automatically during the course of an unresolved enforcement action regarding the regulated activity or as requested by the MDNR. The MDNR shall have access to such records. Litton further agrees to make available to MDNR any employees with knowledge of relevant facts concerning the performance of the Work for purposes of investigation, information gathering, or testimony related to the Work.

C. Litton shall contact the MDNR thirty (30) days in advance of the proposed disposition of any records from the file developed for this Work. No files or documents concerning this Site shall be disposed of without notifying the MDNR in advance. Upon notification, the MDNR may require that the documents be retained by Litton for an additional specified period. Alternatively, MDNR may require that the documents be transferred to the MDNR for retention. MDNR may request reimbursement for the cost of retention for the additional period. Files may be retained in microform, if the documents are suitable for microform copying and if the microform may be reproduced as an accurate hard copy version of the original. Litton shall obtain MDNR approval of the process before copying or disposal of the original documents. Original documents shall be

retained for those types of documents which are not capable of being completely and accurately microformed (such as large documents, photographs, or blue prints.)

D. The MDNR may require split sampling, where appropriate, of any samples required in the Remedial Action Plan. Litton agrees to cooperate with representatives of the MDNR and to permit such representatives to take samples, including split samples, at all locations at the Site. Upon request, copies of the results of any such samples shall be provided to Litton. All sampling and analysis shall be done pursuant to U.S. Environmental Protection Agency (U.S. EPA) or MDNR protocols and chain of custody procedures, as applicable and approved by MDNR. MDNR shall have the right to request that any remaining portions of samples sent to any laboratory engaged by Litton to analyze samples be sent to MDNR.

E. Upon completion of the Work as provided in the Remedial Action Plan, Litton shall submit a certification post-cleanup report to MDNR which states that the Work has been completed in satisfaction of the requirements and objectives of this Agreement. MDNR shall review the Work included in the report, and within ninety (90) days of receipt of the certification, shall indicate to Litton its agreement or disagreement with the certification. If MDNR believes that the Work has not been completed in accordance with the standards and specifications set out in the Remedial Action Plan, MDNR shall notify Litton in writing as to what should be done to complete the Work, referencing the specific portion(s) of the Remedial Action Plan and proposing a schedule of completion.

F. If Litton fails to comply in a timely manner with any performance date or other requirement of this Agreement and such delay is caused by persons or events beyond the control of Litton, such delay shall not be considered a breach of this Agreement. When circumstances are occurring or have occurred which may delay the completion of any phase of Work, Litton shall notify the MDNR in writing of the reason(s) for and duration of such delay and the measures

taken and to be taken by Litton to prevent or minimize the delay and the timetable by which those measures will be implemented. Such notice shall be sent no later than the date of the monthly progress report next following the claimed occurrence.

G. If Litton and MDNR agree that a delay is or was beyond the control of Litton and upon the continuance of such delay, the parties shall modify the Remedial Action Plan to the extent necessary to enlarge the schedule for completion of the specific phase affected by such delay and any succeeding phase.

V. DISPUTE RESOLUTION

Any dispute which arises with respect to the meaning, application, interpretation, amendment, or modification of this Agreement and the MDNR-approved Remedial Action Plan and the approved Appendices thereto, their terms, any plan or report or action required hereunder, or with respect to any party's compliance herewith or any delay hereunder (including, but not limited to, disputes concerning the adequacy of reports or plans for implementing the Remedial Action Plan) shall in the first instance be the subject of informal negotiations. If MDNR and Litton cannot resolve the dispute within thirty (30) days, either party may request the HWMC to set the matter for a hearing to be handled as an appeal pursuant to §260.460, RSMo. The period for negotiations may be extended by mutual agreement between Litton and the MDNR. Alternatively, the dispute may be presented to the HWMC for appropriate resolution upon written notice by any party. Invoking dispute resolution will not stay suspension orders or other emergency corrective action order(s) mandated by the project manager or MDNR.

VI. SITE ACCESS

Litton must secure from the owner or operator of the Site access to the Site at all times as provided by law for authorized employees and representatives of the MDNR. Notice will either be to Litton or by presentation of appropriate credentials at the Site. Access to the Site will be for

the purposes of overseeing the implementation of the Remedial Action Plan, including sampling at the Site; conducting investigations relating to soil and groundwater contamination at, beneath, or near the Site; and observing and monitoring the progress of the Work. In conducting such activities, the MDNR shall avoid, to the extent possible, interference with performance of the Work by Litton and shall, to the extent possible, comply with all requirements of the Safety Plan promulgated pursuant to the Remedial Action Plan.

VII. RESPONSIBILITIES AND AUTHORITY OF PROJECT MANAGER

MDNR shall designate authorized employees and representatives of the MDNR to act as a Project Manager (PM) to observe and monitor the progress of the Work. The PM shall have the authority, subject to the provisions of paragraph V, to order the suspension of the Work as is reasonably necessary to protect human health or the environment or to prevent a release or threatened release of waste materials at or from the Site. If the PM requires suspension of the Work, the PM then shall have the authority to require Litton to perform the Work in a manner consistent with the MDNR-approved Remedial Action Plan, also in a manner to avoid or mitigate any threat which the PM believes may occur. Whenever feasible, the PM shall consult with Litton before ordering such suspension of the Work. In the event that the PM suspends the Work, the parties shall agree in writing to modifications of the Agreement to the extent necessary so as to enlarge the schedule for the suspended phase or any succeeding phase by a period of time not to exceed the actual length of the suspension.

Litton shall notify the MDNR immediately upon the occurrence of any event, which, in Litton's judgment, may threaten human health or the environment. The notice shall be followed by written notification from Litton within ten (10) days which explains the event, any action taken to eliminate the threat, and the precautions to avoid recurrence of a similar event.

VIII. REPORT AND PLAN REVIEW

All plans and reports submitted by Litton pursuant to this Agreement shall be subject to the written approval of the MDNR which approval shall be conditioned upon the receipt of necessary federal and state permits before any action is authorized.

The MDNR shall review the report or plan in a timely manner. If any plan or report is not approved, Litton shall resubmit a modified report to MDNR within thirty (30) days unless the parties agree upon a shorter or longer period. Litton shall submit five (5) copies of all plans, reports, and data requiring MDNR approval.

IX. REIMBURSEMENT OF RESPONSE AND OVERSIGHT COSTS

A. Litton shall reimburse the MDNR for all Response and Oversight Costs incurred by the MDNR. The MDNR will send Litton a bill requiring payment that includes a cost summary, which includes all direct and indirect costs incurred by MDNR and their contractors on a quarterly basis with the option to bill monthly. Litton shall make all payments within thirty (30) days of receipt of each bill requiring payment. Litton shall make all payments in the manner described in paragraph D of this Section.

B. Litton may contest payment of any Response and Oversight Costs under paragraph C if they determine that the MDNR has made an accounting error or if they allege that a cost item that is included represents costs that are inconsistent with the investigation or cleanup. Such objection shall be made in writing within thirty (30) days of receipt of the bill and must be sent to the MDNR. Any such objection shall specifically identify the contested Response and Oversight Costs and the basis for objection. In the event of an objection, Litton shall, within the thirty (30) day period, pay all uncontested Response and Oversight Costs to the MDNR in the manner described in paragraph D. Simultaneously, Litton shall establish an interest bearing escrow account in a bank duly chartered in the State of Missouri and remit to that escrow account funds

equivalent to the amount of the contested Response and Oversight Costs. Litton shall send to the MDNR a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Litton shall initiate the Dispute Resolution procedures. If the MDNR prevails in the dispute, within 5 days of the resolution of the dispute, Litton shall direct the escrow holder to remit the escrowed monies (with accrued interest) to the MDNR in the manner described in paragraph C. If Litton prevails concerning any aspect of the contested costs, Litton shall direct the escrow holder to remit payment for that portion of the costs (plus associated accrued interest) for which they did not prevail to the MDNR in the manner described in paragraph A. Litton shall be disbursed the balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Dispute Resolution shall be the exclusive mechanisms for resolving disputes regarding Litton's obligation to reimburse the MDNR for its Response and Oversight Costs.

C. In the event that the payments required by paragraph A of this section are not made within thirty (30) days of Litton's receipt of the bill, Litton shall pay interest on the unpaid balance at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607. Interest shall begin to accrue thirty (30) days after Litton's receipt of the bill. Payments made under this paragraph shall be in addition to such other remedies or sanctions available to MDNR by virtue of Litton's failure to make timely payments under this Section.

D. All payments may be made by check or Automated Clearing House (ACH) electronic fund transfer system. All checks should be made payable to the Missouri Department of Natural Resources. The check shall identify the name of the site and title of this agreement in the memo

portion of the check or on an attached document. Copies of the transmittal letter and check should be sent simultaneously to the MDNR project manager. Checks should be forwarded to:

Missouri Department of Natural Resources
Division of Administrative Support
Receipts and Reporting Program
P.O. Box 477
Jefferson City, MO 65102

E. Litton agrees to limit any disputes concerning costs to accounting errors and the inclusion of costs outside the scope of the Agreement. Litton shall identify any contested costs and the basis of its objection. All undisputed costs shall be remitted by Litton in accordance with the schedule set forth above. Disputed costs shall be paid by Litton into an interest bearing escrow account while the dispute is pending. Litton bears the burden of establishing a MDNR accounting error or the inclusion of costs outside the scope of this Consent Order.

X. NOTICES

Whenever, under the terms of this Agreement, notice is required to be given or a report or other document is required to be forwarded by one party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice in writing to the other parties or another individual designated to receive such communications. Notice to the individuals listed below may be provided by telecopy followed by mailing hard copies and shall constitute complete satisfaction of any notice requirement of the Agreement with respect to MDNR, the PM (on behalf of the MDNR), and Litton, respectively.

LITTON CORPORATE:

Patrick J. Hepner
Senior Environmental Project Manager
Litton Industries, Inc.
1 Gatehall Drive
Parsippany, NJ 07054-4514
TEL: (201) 455-0606
FAX: (201) 455-0306

MDNR:

Julie Warren, Project Manager
Project Management Unit
Superfund Section
Hazardous Waste Program
Missouri Department of Natural Resources
205 Jefferson Street
P.O. Box 176
Jefferson City, MO 65102
TEL: (314) 751-3176
FAX: (314) 751-7869

XI. MODIFICATION

No modification shall be made in this Agreement, including but not limited to, variance in the performance of the Work from the requirements set forth in the Remedial Action Plan, without written notification to and written approval of the MDNR and Litton.

XII. SCHEDULE

Litton agrees to submit the Remedial Action Plan to the MDNR for its review within sixty (60) days of execution of this Agreement. MDNR agrees to review and issue comments regarding the technical merit of the Remedial Action Plan in a timely manner. Litton agrees to resolve all comments on the plan to the satisfaction of MDNR within thirty (30) days of receipt of comments.

XIII. WITHDRAWAL OF LISTING

Upon successful completion of the Work that shall include all necessary actions to receive a classification of Five (5) pursuant to §260.445.3 RSMo, MDNR shall withdraw its proposed listing of the Site on the Missouri Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites. At such time, this Agreement shall terminate and the provisions hereof shall have no further force or effect.

XIV. SIGNATORIES

FOR LITTON SYSTEMS, INC., ADVANCED CIRCUITRY DIVISION:

Theodore F. Craver

Name Theodore F. Craver

Title Staff Vice President; Director of Trade Regulations and Environ. Affairs

July 9, 1993

Date

FOR THE MISSOURI DEPARTMENT OF NATURAL RESOURCES:

John A. Young

John A. Young, Director
Division of Environmental Quality

7/29/93

Date

FOR THE ATTORNEY GENERAL OF MISSOURI:

Kara L. Johnson

Name

Kara L. Johnson
Assistant Attorney General

7/12/93

Date

EXHIBIT A

LITTON INDUSTRIES, INC. LAND
Springfield, Missouri
4811 West Kearney Street

TRACT ONE

All of Lot One (1) of the Southwest Fractional Quarter of Section 6, Township 29, Range 22, in Greene County, Missouri, except

a. any part used for dedicated public roads;

b. that part deeded in Book 1308, at Page 453, described as follows: Commencing at the Southwest Corner of Lot One (1) of the Southwest Fractional Quarter of Section 6, Township 29, Range 22, in Greene County, Missouri; thence East 666.66 feet to an iron pin shown in a survey in the County Surveyor's Record Book 41, Page 71; thence due North to an iron pin set in the North boundary line of said Lot One (1) of the Southwest Fractional Quarter; thence West 668.25 feet to an iron pin; thence South to the place of beginning; and

c. that part described as follows:

Beginning at a point on the north line of the said Lot One, being 641.91 feet South 89° 54′ 30" West of the center of said Section 6; thence South 20° 00′ West 2029.10 feet to the West line of said Lot 1; thence North along said West Lot line 1250.50 feet; thence North 20° 00′ East 697.57 feet to the North line of Lot One; thence along the North line of Lot 1, East 455.41 feet to the point of beginning; except that part of the above described land described in a deed recorded in Book 1308, Page 453 of the Greene County land records.

TRACT TWO

All of that part of Lot 1 of the Northwest fractional one-quarter (1/4) of Section 6, Township 29, Range 22 in Greene County, Missouri, described as follows:

Beginning at the center of said Section 6; thence South 89° 54′ 30" West along the South line of said Lot 1, 641.91 feet; thence North 20° 00′ 00" East 1420.03 feet to the

North line of said Lot 1; thence North 89° 53′ 00" East along said North lot line 63.66 feet to the Westerly right of way of Highway 160; thence South 34° 58′ 00" East along said Highway right of way 161.40 feet to the East line of said Lot 1; thence South 00° 00′ 03" East along said East lot line 1201.23 feet to the point of beginning.

LAND OF LITTON SYSTEMS, INC.
in the County of Greene, in the State Missouri

Commencing at the Southwest Corner of Lot One (1) of the Southwest Fractional Quarter of Section 6, Township 29, Range 22, thence East 666.66 feet to an iron pin set shown in a survey in the Greene County Surveyor's Record Book 41 at Page 71; thence due North to an iron pin set with the North boundary line cf said Lot One (1) of said Southwest Fractional Quarter; thence West, along the North line of said Lot One (1), 429.42 feet to an iron pin set at a point 238.83 feet East of the Northwest Corner of said Lot One (1); thence South 20 degrees 00' West 697.57 feet to an iron pin set at a point on the West line of said Lot One (1), 657.00 feet South of the Northwest Corner of said Lot One (1), thence South, along the West line of said Lot One (1), to the Southwest Corner of said Lot One (1), being the place of beginning, all in Greene County, Missouri, except that part conveyed to the City of Springfield in Book 1605, Page 2035; Book 1605, Page 2939, and in Book 615, Page 827.

Litton Systems Inc. Site
Site Reassessment
Reference # 18

FILE Litton Industries PA/SI
Greene Co

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY AND LAND SURVEY
P.O. Box 250 111 Fairgrounds Rd Rolla, MO 65402-0250
(573) 368-2100

MEMORANDUM

DATE: February 4, 2004

TO: Nancy Priddy, Environmental Specialist
Hazardous Waste Program,
Air and Land Protection Division

FROM: Peter Bachle, Geologist
Geological Survey Program,
Geological Survey and Resource Assessment Division (GSRAD)

SUBJECT: Geohydrologic Summary of Litton Industries Site

LOCATION: SE ¼, SW ¼, Section 6, Township 29 North, Range 22 West, Brookline 7.5-Minute Quadrangle, Greene County, Missouri
37° 14' 34" North Latitude and 93° 22' 40" West Longitude

LOCATION AND PHYSIOGRAPHIC SETTING

The Litton Industries site is located on a broad upland area that lies on the northwestern side of the city of Springfield, Missouri. This site lies along the eastern edge of the Springfield-Branson Regional Airport. The site is located in the SE ¼, SW ¼, Section 6, Township 29 North, Range 22 West. Approximate coordinates for the site are 37° 14' 34" north latitude and 93° 22' 40" west longitude. Elevation at the site ranges from approximately 1,270 to 1,290 feet above mean sea level (USGS, 1960).

The Litton Industries site lies in the northeast edge of the Springfield Plateau of the Ozark Plateau sub-province of the Interior Highlands physiographic province in Missouri, which is characterized by rolling uplands with shallow dissected valleys (Fenneman, 1938).

GROUNDWATER PATHWAY

Mississippian-age cherty limestone lies beneath the site and constitutes the Springfield Plateau Aquifer that produces up to 30 gallons per minute. The Springfield Plateau Aquifer is known to provide water for 52 of the 412 wells within 4 miles of the site. This aquifer is roughly 235 feet thick beneath the site.

Immediately beneath this aquifer lies the 30-foot-thick Ozark Confining Unit. This confining unit forms a leaky aquitard that separates the Springfield Plateau and Ozark aquifers. The aquitard is leaky along the regional faults and the faults that lie approximately 2 to 4 miles from the site.

Ordovician- and Cambrian-age dolomite and sandstone beneath the site constitute the Ozark Aquifer (Imes and Smith, 1990). This aquifer is known to provide water for 285 of the 412 recorded wells and produces up to 900 gallons per minute within 4 miles of the site. The Ordovician- and Cambrian-age strata beneath the site are high in calcium and magnesium, but low in other mineral concentrations. The local wells do not draw water from greater than 1500 feet in depth. Cambrian-age rocks form the St. Francois Confining Unit at the bottom of the Ozark Aquifer.

Seventy-five wells lack enough information to determine which aquifer the water is drawn from. Therefore, these wells may draw water from one or both of the Springfield Plateau and Ozark aquifers.

Site specific files contain records of twenty-six monitoring wells located on site. The GSRAD databases contain records of 2 heat, 3 industrial, 46 non-community public, 13 community public, 1 municipal, 2 multi-family, 279 domestic, and 66 unknown-type wells within a 4-mile radius of the Litton Industries site. The domestic drinking water well on record nearest to the site is located approximately 0.75 mile southeast of the site. The nearest public well is roughly 0.4 mile west-northwest of the site. Figure 1 illustrates the approximate locations of the 412 known non-monitoring wells within a 4-mile radius of the site. Table 1 lists specific technical attributes (total and casing depth, static water level, date drilled, yield, etc.) of the non-monitoring wells found within 4 miles of the site.

Some wells listed in the Logmain database may no longer be used. Prior to 1987, registry of private wells was not required, so some existing older wells may not be included in the database. Also, current regulations do not require private landowners to register self-installed wells on their own property. Because of these exceptions, the databases may not accurately depict water well usage in this area. Since a public water supply district does not cover the well survey area outside of the City of Springfield, most residential homes and businesses outside of Springfield are likely to have a private well.

Stratigraphic unit descriptions are based on logged wells located within a 1-mile radius of the site. Table 2 lists the geohydrologic properties (thickness, lithology, nature of porosity and permeability, hydraulic conductivity, and hydrologic unit) of the strata beneath the site.

Soil and Residuum

Soil and Residuum: The soil beneath the Litton Industries site is the Keeno-Eldon cherty silt loam complex. Keeno-Eldon cherty silt loam is composed of roughly twenty-five to fifty percent clay (Hughes, 1982). Residuum beneath the soil is cherty silty clay that grades into cherty silty clayey gravel with depth. The soil and residuum range in thickness from 10 to over 60 feet beneath the site, based on logs from on site wells.

Hydrology

The Keeno-Eldon soil complex is acidic (pH 3.6 to 6.5) and permeability is moderate to rapid (6.0 to 0.2 inches per hour) (Hughes, 1982). The hydraulic conductivity is roughly 4.2×10^{-3} to 1.4×10^{-4} centimeters per second (cm/sec). Site specific data indicates the overburden groundwater flow direction is toward the north-northwest beneath the site.

Springfield Plateau Aquifer

Stratigraphy

Mississippian-Age Limestone: The Mississippian-age rocks beneath the site are divided into the Burlington-Keokuk Limestone, Reeds Spring, and Fern Glen formations. These formations consist of limestone, cherty limestone, and argillaceous limestone units (Thompson, 1995). The Mississippian-age rocks in this aquifer beneath the site extend from near ground surface to approximately 235 feet below ground surface.

Hydrology

The hydraulic conductivity of the Springfield Plateau Aquifer is roughly 7.8×10^{-3} cm/sec (Imes and Smith, 1990). Due to the karst nature, permeability and gradient characteristics may vary over short distances. Fifty-two wells of record, within the 4-mile target area, are completed in the Springfield Plateau Aquifer.

Based upon site specific and dye trace data, the Springfield Plateau Aquifer groundwater flow direction is toward the north to north-northwest (MEGA, 2003).

Ozark Confining Unit

Stratigraphy

Mississippian-Age Rocks: The deepest and oldest Mississippian-age rocks beneath the site consist of the Northview Formation. This formation is composed of shale and cherty limestone (Logmain, 2003). This formation is the local representation of the Ozark Confining Unit and forms a semi-effective barrier to downward migration of water in the area. The Northview Formation is roughly 30 feet thick beneath the site.

Hydrology

The hydraulic conductivity of the Ozark Confining Unit ranges from 1.0×10^{-5} to 5.0×10^{-6} cm/sec (Imes and Emmett, 1994). Of the known wells, 285 within the 4-mile well survey are cased through this unit.

Tracing dyes of water traces injected into sinkholes, lagoons, and losing streams in the soils above the Springfield Plateau Aquifer have been recovered in springs and gaining streams discharging from Ozark Aquifer strata a few miles north-northeast of the site. This indicates that the Ozark Confining Unit is not an effective aquitard within all parts of the 4-mile well survey.

Ozark Aquifer

Stratigraphy

Ordovician-Age Dolomite: The Ordovician-age rocks beneath the site are divided into the Cotter and Jefferson City Dolomite, Roubidoux Formation, and Gasconade Dolomite formations. These formations consist dominantly of dolomite and cherty dolomite with occasional sandstone and cherty sandstone beds (Thompson, 1995). The Ordovician-age rocks beneath the site extend from nearly 265 feet below ground surface to approximately 1170 feet below ground surface.

Cambrian-Age Formations: The upper Cambrian-age Eminence Dolomite consists of medium- to coarsely-crystalline dolomite with mostly nodular chert (Thompson,1995). Porosity is mostly vug and intercrystalline types (Woody and others, 1996; He and others, 1997).

Hydrology

The hydraulic conductivity of the Ozark Aquifer ranges from 1×10^{-4} to 1×10^{-5} cm/sec (Davis, 1969; Imes, 1990). Of the wells of record within the 4-mile target area, 285 are known to be completed in the Ozark Aquifer.

Based upon injected dyes detected in springs located in the Ordovician-age strata along the Little Sac River to the north of the site, groundwater flow within the Ozark Aquifer beneath the site may be toward the north-northeast. Table 3 indicates the locations and measured flows of springs known to exist within 4 miles of the site. All of the springs discharge from slopes that expose the Ozark Aquifer to the surface.

St. Francois Confining Unit

Stratigraphy

Cambrian-Age Formations: None of the wells in the 4-mile target penetrate the Cambrian-age Derby-Doerun Dolomite and Davis Formation of the St. Francois Confining Unit. This sequence of alternating shale and argillaceous dolomite is most likely about 150 feet thick, however, none of the wells extend to such a depth locally (Thompson, 1995).

Hydrology

The St. Francois Confining Unit is an effective barrier to downward groundwater movement (Imes, 1990). The Derby- Doerun may have hydraulic conductivity as low as 1×10^{-8} cm/sec (Imes and Emmett, 1994).

STRUCTURAL FEATURES

There are three east-west faults within 4 miles of the site that may influence groundwater flow direction (Thompson, unpublished; Middendorf, unpublished). These faults may allow water to flow from the Springfield Plateau Aquifer into the underlying Ozark Aquifer.

SURFACE WATER PATHWAY

Potential Point of Entry (PPE)

Surface water leaving the Litton Industries site flows roughly 0.7 mile north-northwest down the slope of the low ridge until it enters a sinkhole network. From this point, surface water infiltrates the Springfield Plateau Aquifer and becomes part of the groundwater regime. The

infiltrated water most likely discharges from the springs located north of the site. Due to the sinkhole, there is no PPE for surface water at this site.

Miscellaneous Surface Water Characteristics

There are no known surface drinking water intakes within 15 miles downstream of the site. The site lies outside of a floodplain. The surface water runoff area up gradient from the site is less than 20 acres. The 2-year, 24-hour rainfall is approximately 3.8 inches (Weather Bureau, 1961).

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PFB:lm

Attachments

Litton Industries Site, Greene County, Missouri

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
0 to 0.25 Mile																
Logmain	022630	1390	--	S2	SW	SE	6	29N	22W	1277	--	1964	Industrial	LITTON INDUSTRIES	Ozark	300
Total number of wells located 0 to 0.25 Mile from the Litton Industries Site:														1		
0.25 to 0.5 Mile																
Logmain	008718	1250	--	SE	SE	SE	1	29N	23W	1267	--	1944	Community Public Well	SPFD. MUNICIPAL ARPT #1	Ozark	307
Total number of wells located 0.25 to 0.5 Mile from the Litton Industries Site:														1		
0.5 to 1 Mile																
Logmain	016604	487	--	NW	NW	NW	8	29N	22W	1269	--	1957	Domestic	MILLER, JAMES	Ozark	10
PWS	51050	750	--	NE	NW	NE	12	29N	23W	--	--	1978	Non-community Public	Springfield- Branson Airport	Ozark	--
WIMS	198419	555	100	C	C	C	5	29N	22W	--	180	1998	Domestic	UPDEGRAFF	Ozark	10
WIMS	231421	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	231422	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	231423	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	237643	--	--	C	C	C	5	29N	22W	--	--	2000	Domestic	WALLACE	Unknown	10
WIMS	290205	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	30911	--	--	C	C	C	6	29N	22W	--	--	1989	--	QUINN	Unknown	10
Total number of wells located 0.5 to 1 Mile from the Litton Industries Site:														9		
1 to 2 Miles																
Logmain	001901	720	--	SE	SW	C	7	29N	22W	1385	--	1915	Community Public	COUNTY HOME WELL	Ozark	60
Logmain	003597	205	--	SE	SE	SE	8	29N	22W	--	95	1936	Domestic	LINDSEY, O.E.	Springfield and/or Ozark	6
Logmain	003822	170	--	SW	SE	SE	7	29N	22W	1272	70	1936	Domestic	MCBRIDE, F.D.	Springfield Plateau	1
Logmain	004408	205	--	SW	NW	W2	17	29N	22W	1271	30	1937	Domestic	HOLIWAY	Springfield and/or Ozark	--
Logmain	004977	158	--	SW	SW	NW	9	29N	22W	1281	--	1938	Domestic	BALL, GEORGE	Springfield Plateau	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
Logmain	005612	355	--	N2	SW	SE	5	29N	22W	1259	--	1939	Domestic	PAMPLIN, F.M. #1	Ozark	10
Logmain	005714	380	--	SE	SE	SW	8	29N	22W	1278	--	1939	Noncommunity Public	GREAT SOUTHERN LOAN CO.	Ozark	--
Logmain	005769	180	--	NE	NE	SE	18	29N	22W	1283	--	1939	Domestic	LANGSTON	Springfield Plateau	--
Logmain	005933	80	--	SW	NW	C	17	29N	22W	1265	27	1939	Domestic	EVANS, MRS. ANNIE	Springfield Plateau	1
Logmain	006203	170	--	NE	SW	SW	18	29N	22W	1278	81	1940	Domestic	GRIZZLE, J.M.	Springfield Plateau	--
Logmain	008388	369	--	NW	SW	NW	13	29N	23W	1305	218	1943	Domestic	KAYLOR, L.T.	Ozark	5
Logmain	009084	402	--	SW	NE	SW	18	29N	22W	1305	--	1946	Domestic	MOBLEY, R.B. #2	Ozark	6
Logmain	009992	380	--	N2	SE	SW	5	29N	22W	1275	--	1947	Domestic	HELBIG, FRANK	Ozark	10
Logmain	010667	205	--	NE	NW	NW	17	29N	22W	1283	75	1947	Domestic	WHITEHEAD, EUELL A.	Springfield and/or Ozark	45
Logmain	010951	150	--	SW	SW	SW	7	29N	22W	1296	--	1947	Domestic	SPELLMAN, W.R.	Springfield Plateau	--
Logmain	010969	150	--	SE	NE	SE	8	29N	22W	1293	--	1947	Domestic	ROELOFSZ, CLARENCE	Springfield Plateau	5
Logmain	012275	235	--	N2	SW	NW	5	29N	22W	1254	170	1953	Domestic	WALTON, E.L.	Ozark	5
Logmain	013774	205	--	S2	SW	NE	5	29N	22W	1278	110	1955	Domestic	SHOEMATE, MRS.	Springfield and/or Ozark	9
Logmain	015368	335	--	N2	NW	SW	6	29N	22W	1240	225	1956	Domestic	BUNSELMEYER, WALTER	Ozark	13
Logmain	015840	465	--	S2	SW	SE	5	29N	22W	1264	--	1957	Domestic	LOSER, JAMES	Ozark	12
Logmain	016949	400	--	NE	NE	NE	17	29N	22W	1280	--	1952	Domestic	POTTER, J.M. (JESSE)	Ozark	8
Logmain	019355	139	--	NE	NW	N2	11	29N	23W	1275	84	1960	Domestic	SMITH, MELVIN R.	Springfield Plateau	15
Logmain	019775	315	--	N2	SE	SE	5	29N	22W	1247	167	1961	Domestic	DURBIN, JACK	Ozark	10
Logmain	019844	840	--	SW	SE	NE	8	29N	22W	1299	--	1960	Noncommunity Public	C & H ESTATES INC	Ozark	--
Logmain	021335	148	--	S2	SE	SW	5	29N	22W	1271	124	1962	Domestic	GOODMAN, H.E.	Springfield Plateau	5
Logmain	025805	800	--	SE	NE	NW	5	29N	22W	1268	--	1968	Noncommunity Public	COUNTRY SQUIRE VILLAGE	Ozark	--
Logmain	028105	605	--	NE	NW	NE	11	29N	23W	1257	--	1977	Community Public	SPRINGFIELD AIRPORT	Ozark	--
PWS	41099	800	402	NW	NE	SW	5	29N	22W	--	231	1968	Community Public	Country Squire MHP	Ozark	--
PWS	42372	580	120	SE	SE	NE	13	29N	23W	--	--	1989	Non-community Public	Players Softball Complex	Ozark	--
PWS	51378	--	--	NW	NW	SW	5	29N	22W	--	--	--	Non-community Public	Evergreen Church	Ozark	--
PWS	51474	--	340	NW	NW	SW	5	29N	22W	--	--	1999	Non-community Public	Evergreen Church	Ozark	45
WIMS	101609	476	359	SW	SW	NW	12	29N	23W	1280	240	1994	Multi-family	--	Ozark	--
WIMS	14439	580	--	C	C	C	18	29N	22W	--	180	1989	Domestic	--	Ozark	--
WIMS	158497	615	105	SE	NW	SW	5	29N	22W	1305	180	1996	Domestic	ZIPF	Ozark	--
WIMS	170093	475	140	SW	SW	SE	2	29N	23W	1260	240	1997	Domestic	HOFFMAN	Ozark	10
WIMS	170172	580	104	C	C	C	5	29N	22W	--	190	1997	Domestic	CLINE	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	173374	710	358	C	C	SW	18	29N	22W	--	--	1998	Domestic	BLANTON	Ozark	--
WIMS	198420	431	105	C	C	NE	2	29N	23W	--	120	1998	Domestic	RAND	Ozark	--
WIMS	209122	455	126	C	C	NW	5	29N	22W	--	--	1998	Domestic	SHORES	Ozark	--
WIMS	209123	--	--	C	C	C	5	29N	22W	--	--	2000	Domestic	SHORES	Unknown	10
WIMS	209178	640	340	C	C	SE	6	29N	22W	--	--	1999	Non-Community Public	SNYDER	Ozark	--
WIMS	225141	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	228172	548	343	C	NE	SW	18	29N	22W	--	322	1999	Domestic	STAHAL	Ozark	--
WIMS	229658	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	231408	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	232145	500	280	SE	SE	SE	5	29N	22W	--	160	2000	Domestic	HARPER	Ozark	--
WIMS	233717	588	105	NE	SE	SW	5	29N	22W	1210	200	1999	Domestic	DAUME	Ozark	10
WIMS	235588	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	248526	425	105	C	C	C	5	29N	22W	--	120	2000	Domestic	TROYER	Ozark	10
WIMS	256407	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	257439	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	258707	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	273238	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281364	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281803	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281857	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	290203	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	293097	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	30204	568	--	C	SE	SE	5	29N	22W	--	--	--	--	BAXTER	Ozark	8
WIMS	30909	505	--	C	C	C	18	29N	22W	--	--	1988	--	PROCTOR	Ozark	10
WIMS	33490	460	--	C	NE	SE	5	29N	22W	1270	270	1990	Domestic	BLEDSOE	Ozark	7
WIMS	33497	420	117	C	C	C	5	29N	22W	--	250	1990	--	RACE	Ozark	--
WIMS	38863	568	211	C	SE	SE	5	29N	22W	1240	150	1990	Domestic	BAXTER	Ozark	--
WIMS	44769	430	231	SE	SE	NW	6	29N	22W	1250	150	1989	--	QUINN	Ozark	--
WIMS	60361	385	210	C	NE	SW	5	29N	22W	1280	120	1990	Domestic	--	Ozark	14
WIMS	66919	610	389	NE	SE	NW	5	29N	22W	1235	200	1992	Domestic	SMALLEY	Ozark	10
WIMS	67683	604	--	C	C	C	18	29N	22W	--	360	1991	Domestic	HAGENHOFF	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	6791	465	210	C	NE	SE	5	29N	22W	1300	150	1988	Domestic	REAM	Ozark	40
WIMS	7047	505	150	C	SW	NE	18	29N	22W	--	200	1987	Domestic	PROCTOR	Ozark	--
WIMS	78281	375	253	SW	SW	SE	2	29N	23W	1260	150	1992	Domestic	ARNOLD	Ozark	--
WIMS	78282	420	191	C	SW	NW	12	29N	23W	1270	180	1992	Domestic	WEST	Ozark	--
WIMS	89160	551	295	C	C	C	5	29N	22W	--	--	1994	Domestic	CARDEN	Ozark	10
WIMS	89699	425	252	NW	SE	SE	5	29N	22W	1260	90	1993	Domestic	PRICE	Ozark	10
WIMS	98633	465	105	C	NE	SW	2	29N	23W	1235	200	1994	--	BAKER	Ozark	10
WIMS	98806	480	--	SW	NW	SE	2	29N	23W	1240	--	1994	Domestic	RICE	Ozark	10

Total number of wells located 1 to 2 Miles from the Litton Industries Site: **75**

2 to 3 Miles

Logmain	003423	137	--	SW	SW	SW	16	29N	22W	1263	--	1935	Domestic	KUHN, W. #1	Springfield Plateau	2
Logmain	003448	127	--	NW	NW	SE	10	29N	22W	1278	30	1935	Domestic	HOLT, JAMES H.	Springfield Plateau	--
Logmain	003493	177	--	SW	SE	SW	18	29N	22W	1299	20	1935	Domestic	MOBLEY, R.B.	Springfield Plateau	--
Logmain	003533	385	--	NW	SE	NE	16	29N	22W	1282	--	1936	Noncommunity Public	ALMA LOHMEYER & J. WINDLE	Ozark	12
Logmain	003567	174	--	SE	SE	SW	18	29N	22W	1268	104	1936	Noncommunity Public	HIWAY CAFE #1	Springfield Plateau	2
Logmain	003587	65	--	NW	NE	NE	19	29N	22W	1270	--	1936	Domestic	CLARK	Springfield Plateau	--
Logmain	003713	185	--	NW	NE	N2	20	29N	22W	1241	--	1936	Noncommunity Public	LOG CABIN CAMP #1	Springfield Plateau	--
Logmain	003775	345	--	NW	NE	NW	20	29N	22W	1241	115	1936	Noncommunity Public	LOG CABIN CAMP #2	Ozark	1
Logmain	003778	375	--	SE	SE	SE	18	29N	22W	1267	--	1936	Noncommunity Public	RED BIRD FILLING STATION	Ozark	10
Logmain	003866	120	--	NW	SW	C	11	29N	23W	1259	66	1936	Domestic	MILLER	Springfield Plateau	--
Logmain	004476	115	--	SW	NE	SE	9	29N	22W	1282	--	1937	Domestic	KIMBALL	Springfield Plateau	--
Logmain	004514	147	--	SW	SW	SW	16	29N	22W	1258	--	1937	Domestic	PARSONS, CLIF	Springfield Plateau	--
Logmain	004856	60	--	NW	C	C	1	29N	23W	1258	--	1938	Domestic	PROPHET, LON	Springfield Plateau	--
Logmain	004860	246	--	SE	SE	NE	33	30N	22W	1213	105	1938	Domestic	VALDRICK, CHAS.	Ozark	--
Logmain	004911	139	--	NW	NW	NW	21	29N	22W	1244	20	1938	Domestic	WILLIAMS, J.V.	Springfield Plateau	--
Logmain	004917	230	--	N2	NE	SW	5	29N	22W	1238	--	1938	Domestic	HARDESTY, JIM	Springfield and/or Ozark	1
Logmain	004978	207	--	SW	SW	SW	9	29N	22W	1285	82	1938	Noncommunity Public	MILTON OIL CO.	Springfield and/or Ozark	--
Logmain	005188	395	--	SE	SE	SE	14	29N	23W	1306	--	1938	Noncommunity Public	LITTLE, ANDREW	Ozark	3
Logmain	005342	184	--	SE	NW	NW	19	29N	22W	1281	58	1939	Domestic	TUCKNESS, JESSIE	Springfield Plateau	1
Logmain	005578	430	--	SW	SE	SE	4	29N	22W	1251	--	1939	Domestic	BERG, FRANK	Ozark	3

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
Logmain	005623	260	--	NE	SW	N2	19	29N	22W	1286	--	1939	Domestic	DAVIS, MRS. L.M.	Ozark	--
Logmain	005771	95	--	SE	NW	SW	9	29N	22W	1284	--	1939	Domestic	KIMBLE	Springfield Plateau	--
Logmain	005987	328	--	S2	NE	NW	4	29N	22W	1242	90	1940	Domestic	GREENWADE	Ozark	20
Logmain	006048	177	--	SE	SE	SW	17	29N	22W	1246	60	1940	Domestic	HARMON, DR. W.R.	Springfield Plateau	13
Logmain	006049	354	--	SE	SW	NW	17	29N	22W	1258	165	1940	Domestic	CLARKE, J.S.	Ozark	10
Logmain	007302	130	--	SE	NE	NW	19	29N	22W	1292	--	1941	Domestic	MILLER, FRANK	Springfield Plateau	--
Logmain	007303	393	--	NW	NW	C	21	29N	22W	1243	--	1941	Domestic	PAMPLIN, E. #1	Ozark	5
Logmain	007305	184	--	SW	SE	NW	17	29N	22W	1248	--	1941	Domestic	BENNETT, H.W.	Springfield Plateau	6
Logmain	007623	389	--	SW	SW	SW	16	29N	22W	1265	--	1941	Domestic	GORTON, WM., JR.	Ozark	5
Logmain	008135	81	--	C	C	C	--	29N	21W	--	--	1945	Domestic	DICKENS, PEARL	Springfield Plateau	--
Logmain	009562	420	--	NW	NE	NW	20	29N	22W	1248	--	1947	Irrigation	YOUNG'S ORCHARD #1	Ozark	--
Logmain	009991	335	--	N2	SE	N2	5	29N	22W	1246	185	1947	Domestic	McKINLEY, THOMAS	Ozark	8
Logmain	010064	176	--	NE	SE	SW	20	29N	22W	1246	90	1947	Domestic	HOWARD, DONALD E. & FAITH	Springfield Plateau	1
Logmain	010079	100	--	SE	SE	SE	18	29N	22W	1266	40	1948	Domestic	THOMAS, LOWELL	Springfield Plateau	1
Logmain	010399	432	--	S2	SE	SE	4	29N	22W	1243	--	1948	Domestic	HEALEY, J.E.	Ozark	5
Logmain	010589	--	--	S2	SE	SE	4	29N	22W	--	--	--	Domestic	BERG, FRANK	Unknown	--
Logmain	010666	165	--	NW	SW	SE	19	29N	22W	1270	--	1947	Domestic	BILYEU, W.D.	Springfield Plateau	--
Logmain	010755	282	--	N2	NE	NW	5	29N	22W	1252	165	1947	Noncommunity Public	SCHUYLER SCHOOL	Ozark	10
Logmain	010756	330	--	S2	NE	SW	4	29N	22W	1279	230	1947	Domestic	MORRIS, J.E.	Ozark	2
Logmain	010879	330	--	N2	NW	E2	6	29N	22W	1285	220	1949	Domestic	DAVIS, J.W.	Ozark	4
Logmain	010955	175	--	NE	NE	SE	17	29N	22W	1286	--	1947	Noncommunity Public	HUTCO EQUIP CO.	Springfield Plateau	2
Logmain	010968	170	--	NE	NW	SE	9	29N	22W	1314	--	1947	Domestic	VAUGHN, EVERETT	Springfield Plateau	1
Logmain	011381	825	--	NE	SW	NW	16	29N	22W	1290	--	1950	Noncommunity Public	NEW BISSETT SCHOOL	Ozark	20
Logmain	011388	405	--	SW	SW	SW	17	29N	22W	1258	--	1950	Noncommunity Public	SUNSET DRIVE-IN THEATER	Ozark	18
Logmain	011835	182	--	SE	SE	SE	18	29N	22W	1255	45	1951	Domestic	GARRETT, WILLIAM	Springfield Plateau	3
Logmain	012036	168	--	S2	SW	NE	4	29N	22W	1234	85	1952	Domestic	SELL, HARLIN	Springfield Plateau	5
Logmain	012580	339	--	S2	SE	E2	4	29N	22W	1267	255	1953	Domestic	McCOY, JAMES	Ozark	2
Logmain	012699	1216	--	NW	NE	SE	20	29N	22W	1258	--	1954	Community Public	CITY OF SPRINGFIELD #2	Ozark	350
Logmain	012729	500	--	NW	NE	N2	20	29N	22W	1244	--	1954	Domestic	LILLEY, F.C.	Ozark	20
Logmain	013316	330	--	NE	SE	NE	5	29N	22W	1243	190	1954	Domestic	BLALOCK, B.D.	Ozark	20
Logmain	014380	525	--	SW	SE	SE	16	29N	22W	1266	--	1955	Noncommunity Public	CHILES TRACTOR	Ozark	12

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
Logmain	014381	365	--	NE	SE	SW	20	29N	22W	1235	150	1955	Domestic	BIESIKE, ED	Ozark	3
Logmain	015847	390	--	SE	NW	NE	17	29N	22W	1268	--	1956	Domestic	SUCKOW, WARREN	Ozark	4
Logmain	016606	480	--	SW	NW	NE	20	29N	22W	1261	--	1956	Domestic	JONES, F.G.	Ozark	10
Logmain	016912	376	--	NE	SW	SE	20	29N	22W	1248	--	1957	Domestic	THOMAS, LEROY	Ozark	7
Logmain	016915	425	--	S2	SE	SE	4	29N	22W	1270	--	1957	Domestic	KELLER, GEORGE	Ozark	11
Logmain	017078	200	--	SW	NE	W2	16	29N	22W	1286	--	1958	Noncommunity Public	PAT ROPER ELECTRIC CO.	Springfield Plateau	30
Logmain	017241	715	--	NE	NW	NE	19	29N	22W	1257	--	1958	Noncommunity Public	WEBSTER OIL CO.	Ozark	15
Logmain	017297	376	--	SW	NE	NE	20	29N	22W	1268	--	1958	Domestic	RADER, T.P.	Ozark	5
Logmain	018272	800	--	NW	NE	NE	20	29N	22W	1246	--	1959	Domestic	LILLEY, FRANK C.	Ozark	22
Logmain	019841	367	--	N2	NW	NW	6	29N	22W	1272	--	1961	Domestic	GLENDENNING, GEORGE	Ozark	21
Logmain	023057	640	--	SE	SW	SE	18	29N	22W	1283	--	1964	Noncommunity Public	SEVEN GABLES CAFE	Ozark	130
Logmain	023731	460	--	SE	SW	NW	10	29N	23W	1264	--	--	Domestic	RHEN, DOWAL	Ozark	15
Logmain	024089	705	--	SE	SW	S2	17	29N	22W	1254	--	--	Noncommunity Public	CANDLE LIGHT TRAILER PARK	Ozark	100
Logmain	024764	505	--	NE	NW	SE	19	29N	22W	1285	--	1966	Domestic	HENDRIX, KENNETH L.	Ozark	50
Logmain	026632	700	--	SE	NW	SE	3	29N	23W	1253	--	1970	Community Public	JONES, REX (ADDITION)	Ozark	225
Logmain	026826	--	--	NE	SW	NW	24	29N	23W	--	--	--	Community Public	TRAVELERS TRAILER PARK	Unknown	--
Logmain	027073	715	--	NE	SW	NW	24	29N	23W	1282	--	--	Community Public	TRAVELERS TRAILER PARK	Ozark	30
Logmain	027104	1500	--	SE	SW	SW	3	29N	23W	1240	--	--	Community Public	VILLA PARK HEIGHTS	Ozark	--
Logmain	027297	--	--	SE	SW	SW	3	29N	23W	--	--	--	Noncommunity Public	VILLA PARK HEIGHTS	Unknown	--
PWS	12699	1215	389	NE	NE	NW	20	29N	22W	--	--	1954	Municipal	Springfield	Ozark	279
PWS	27073	715	425	SW	NW	NE	24	29N	23W	--	175	1970	Community Public	Travelers MHP	Ozark	40
PWS	27104	1500	431	SW	SW	SE	2	29N	23W	--	205	1972	Community Public	Meadows Water Co.	Ozark	900
PWS	51015	640	345	SW	SW	NE	4	29N	22W	--	180	1997	Non-community Public	Northwest Baptist Church	Ozark	--
PWS	51295	588	420	SE	SW	SE	14	29N	23W	--	--	1999	Non-community Public	Agape Life Fellowship	Ozark	--
WIMS	108505	425	210	NE	SW	SW	32	30N	22W	--	150	1994	Domestic	BLIZZARD	Ozark	--
WIMS	11747	330	195	NW	SE	NW	4	29N	22W	1200	100	1988	Domestic	CHAPPEL	Ozark	--
WIMS	120718	425	105	NW	NW	SW	3	29N	22W	1180	150	1994	Domestic	MUELLER	Ozark	10
WIMS	120740	565	105	NW	NW	SW	4	29N	22W	1230	250	1994	Domestic	TERRY	Ozark	10
WIMS	12683	330	80	C	C	C	4	29N	22W	1250	90	1987	Domestic	MIDDLETON	Ozark	8
WIMS	135532	305	105	NE	SE	SE	3	29N	23W	1260	100	1995	Domestic	BIEVENS	Ozark	--
WIMS	13647	712	316	C	SE	NW	24	29N	23W	1280	180	1989	Domestic	--	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	138769	435	100	C	C	C	5	29N	22W	--	150	1995	Domestic	GUGEL	Ozark	--
WIMS	140472	584	105	C	C	SE	4	29N	22W	--	130	1995	Domestic	NEMETI	Ozark	10
WIMS	140496	545	105	C	C	SE	4	29N	22W	--	150	1995	Domestic	SMITH	Ozark	10
WIMS	14341	--	--	C	C	C	5	29N	22W	1230	--	1989	Domestic	GOODRUM	Unknown	8
WIMS	14991	560	--	C	C	C	4	29N	22W	--	--	1989	Domestic	FORTNER	Ozark	--
WIMS	151089	625	80	C	C	C	9	29N	22W	--	291	1996	Domestic	DILLON	Ozark	8
WIMS	155792	385	170	SW	SW	NW	32	30N	22W	1175	120	1996	Domestic	VERNON	Ozark	10
WIMS	157188	745	281	C	C	C	4	29N	22W	--	150	1996	Domestic	YOUNG	Ozark	--
WIMS	158499	585	105	SW	NW	NW	5	29N	22W	1240	180	1996	Domestic	LOONEY	Ozark	--
WIMS	158685	565	105	C	C	SE	14	29N	23W	--	320	1996	Domestic	CROUCH	Ozark	10
WIMS	16946	410	213	C	NW	SE	24	29N	23W	--	160	1990	Domestic	WHILOCK	Ozark	15
WIMS	169934	585	105	SE	NW	SE	4	29N	22W	1225	200	1996	Domestic	NEMENTI	Ozark	--
WIMS	170034	435	100	C	C	C	32	30N	22W	--	--	1997	Domestic	RUSSELL	Unknown	--
WIMS	173387	710	316	C	C	NE	4	29N	22W	--	280	1997	Domestic	ANDERSON	Ozark	--
WIMS	180729	640	340	C	C	C	4	29N	22W	--	--	1997	Non-Community Public		Ozark	--
WIMS	181657	416	106	C	NE	SE	4	29N	22W	--	200	1997	Domestic	CREWS-INLOW	Ozark	10
WIMS	185256	305	105	C	C	NE	4	29N	22W	--	--	1997	Domestic	UCKELE	Ozark	--
WIMS	186569	510	232	NE	NE	SE	31	30N	22W	1190	170	1998	Domestic	WALKER	Ozark	--
WIMS	192684	1400	500	SW	SE	SW	2	29N	23W	1250	274	1998	Community Public	--	Ozark	650
WIMS	193065	348	273	SE	NE	SE	4	29N	22W	1200	70	1998	Domestic	HANCOCK	Ozark	10
WIMS	198411	556	180	C	SE	SE	4	29N	22W	1200	--	1998	Domestic	LACHMUND	Ozark	--
WIMS	209171	455	100	SW	NE	NW	4	29N	22W	1220	150	1998	Domestic	KINNEY	Ozark	--
WIMS	210160	445	105	C	C	SE	31	30N	22W	--	200	1998	Domestic	--	Ozark	20
WIMS	211346	428	120	C	NE	NE	5	29N	22W	--	165	1999	Domestic	MICHAEL	Ozark	10
WIMS	211684	588	420	SE	SW	SE	14	29N	23W	1320	210	1998	Non-Community Public	--	Ozark	10
WIMS	214129	511	170	C	C	C	14	29N	23W	--	150	1999	Domestic	BROOKS	Ozark	12
WIMS	216237	428	105	C	C	NW	2	29N	23W	--	180	1999	Domestic	MATLOCK	Ozark	10
WIMS	225138	--	--	C	C	C	4	29N	22W	--	--	2000	Domestic	KRUMHOLZ	Unknown	10
WIMS	225140	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	227110	405	105	SW	NE	NE	6	29N	22W	1250	180	1999	Domestic	--	Ozark	10
WIMS	228216	625	126	C	C	SE	2	29N	23W	--	140	1999	Domestic	JONES	Ozark	40

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	231420	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	232319	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	233628	585	189	C	C	SE	31	30N	22W	--	120	1999	Domestic		Ozark	60
WIMS	233674	585	294	NE	NW	NE	5	29N	22W	1230	160	2000	Domestic	WALLACE	Ozark	--
WIMS	234374	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	234375	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	234376	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	234377	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	235589	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	236326	510	190	C	C	NE	3	29N	23W	--	170	2000	Domestic	GOODWYN	Ozark	
WIMS	236336	550	253	SW	SW	NW	4	29N	22W	1250	200	2000	Domestic	KRUMHOLZ	Ozark	--
WIMS	238131	425	105	C	C	C	5	29N	22W	--	180	2000	Domestic	CHAPPELL	Ozark	10
WIMS	249525	630	295	C	C	C	6	29N	22W	--	210	2000	Domestic	JOHNSON	Ozark	--
WIMS	249795	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	252806	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	254107	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	256452	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	259963	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	259964	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	261202	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	262114	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	26990	535	330	C	SW	NW	19	29N	22W	1290	180	1990	Domestic	JEROME	Ozark	--
WIMS	275824	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	28169	535	--	C	SW	NW	19	29N	22W	--	--	1990	Domestic	JEROME	Ozark	10
WIMS	30400	550	--	C	C	C	24	29N	23W	--	320	1990	Domestic	SMITH	Ozark	6
WIMS	30913	330	--	C	C	C	4	29N	22W	--	--	1990	--	CHAPPEL	Ozark	10
WIMS	33476	425	--	C	C	C	5	29N	22W	1240	240	1989	Domestic	WINNFREE	Ozark	6
WIMS	33505	425	--	C	C	C	5	29N	22W	--	240	1989	Domestic	KLEMMAN	Ozark	10
WIMS	41082	540	360	C	C	C	4	29N	22W	--	150	1989	Domestic	TUMMONS	Ozark	--
WIMS	42944	579	300	SW	SE	SE	14	29N	23W	1305	180	1991	Domestic	ANDERSON	Ozark	--
WIMS	4598	525	84	C	NW	NE	24	29N	23W	1300	250	1987	--	WILSON	Ozark	20

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	4612	308	105	C	C	C	5	29N	22W	--	130	1987	Domestic	SMALLEY	Ozark	--
WIMS	46818	445	231	C	NE	SE	4	29N	22W	1222	130	1990	Domestic	PFISTER	Ozark	15
WIMS	5136	403	159	C	C	C	34	30N	22W	--	140	1986	Domestic	STONE	Ozark	--
WIMS	57539	535	--	C	C	C	24	29N	23W	--	330	1990	Domestic	CAMPBLE	Ozark	6
WIMS	61361	400	222	SE	SE	NE	5	29N	22W	1240	150	1991	Domestic	KLEEMAN	Ozark	--
WIMS	61826	622	340	C	SE	SE	14	29N	23W	1312	180	1991	Domestic	KENNEDY	Ozark	--
WIMS	63277	425	315	C	SE	SW	14	29N	23W	1285	180	1991	Domestic	GOVERO	Ozark	8
WIMS	66206	170	151	C	NW	SW	11	29N	23W	--	--	1991	Domestic	KNEPPER	Ozark	--
WIMS	66920	610	375	SW	NE	NE	5	29N	22W	1260	200	1992	Domestic	CAMPL, JR	Ozark	--
WIMS	66922	610	369	SE	NW	NE	5	29N	22W	1250	300	1992	Domestic	ROBERTSON	Ozark	--
WIMS	66979	91	85	C	C	C	0	--	--	--	--	1992	Domestic	ELLIOTT	Springfield Plateau	--
WIMS	6901	405	147	C	SW	NE	33	30N	22W	1200	120	1987	Domestic	REYNOLDS	Ozark	20
WIMS	75219	465	168	NW	NW	SW	4	29N	22W	1210	150	1992	Domestic	PFISTER	Ozark	10
WIMS	75239	425	315	NW	NE	NW	5	29N	22W	1205	150	1992	Domestic	SWADLEY	Ozark	10
WIMS	76046	475	182	C	NW	NW	11	29N	23W	--	250	1992	Domestic	FRIEND	Ozark	10
WIMS	821	388	220	C	C	C	1	29N	23W	--	150	1987	Domestic	BINKLEY	Ozark	8
WIMS	82411	375	83	SE	SE	NW	4	29N	22W	1210	150	1993	Domestic	MCGROSKY	Ozark	10
WIMS	88273	405	--	C	SW	NE	33	30N	22W	1200	--	1992	--	REYNOLDS	Ozark	--
WIMS	88290	525	315	NE	NE	NE	24	29N	23W	1295	240	1992	Domestic	DRENNON	Ozark	20
WIMS	92830	325	270	C	SE	SE	4	29N	22W	--	150	1993	Domestic	JACKSON	Ozark	--
WIMS	93281	460	180	NE	SW	SE	4	29N	22W	1205	120	1993	Domestic	LEADER	Ozark	10
WIMS	98772	480	180	C	NW	NE	5	29N	22W	--	150	1993	Domestic	MOORE	Ozark	10

Total number of wells located 2 to 3 Miles from the Litton Industries Site: **166**

3 to 4 Miles

Logmain	000133	827	--	C	C	C	3	29N	22W	1267	--	--	Noncommunity Public	GAS CO.	Ozark	--
Logmain	001515	720	--	C	C	C	3	29N	22W	1432	--	1870	Noncommunity Public	ST.LOUIS & FRISCO R.R.	Ozark	--
Logmain	001883	900	--	SE	W2	W2	10	29N	22W	1301	--	1910	Industrial	ST.LOUIS & FRISCO RR. #2	Ozark	--
Logmain	001884	930	--	SE	W2	C	10	29N	22W	1389	--	1910	Noncommunity Public	ST.LOUIS & FRISCO RR. #3	Ozark	--
Logmain	002488	316	--	NE	NE	NW	21	29N	22W	1280	--	1931	Domestic	CHANEY, AL	Ozark	--
Logmain	003418	100	--	N2	SE	SW	3	29N	22W	1148	--	1935	Noncommunity Public	KGBX RADIO STATION	Springfield Plateau	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
Logmain	003546	60	--	NE	NE	SE	21	29N	22W	1238	--	1936	Domestic	YAGER, JOHN	Springfield Plateau	--
Logmain	003652	100	--	NW	SE	NE	30	29N	22W	1222	--	--	Domestic	OWENS	Springfield Plateau	--
Logmain	003676	275	--	SE	SE	SW	16	29N	22W	1282	--	1936	Domestic	RANDOLPH, T.W.	Ozark	--
Logmain	003825	115	--	SE	NE	NE	22	29N	23W	1286	60	1936	Domestic	WILSON, S.E.	Springfield Plateau	--
Logmain	003826	430	--	NE	NE	NE	22	29N	23W	1281	--	1936	Domestic	JONES, M.K.	Ozark	10
Logmain	003829	240	--	SE	NE	C	23	29N	23W	1287	90	1936	Domestic	HILTON	Ozark	4
Logmain	004289	427	--	NE	NE	NE	21	29N	22W	1280	--	1937	Noncommunity Public	HALF MOON NITE CLUB	Ozark	--
Logmain	004351	360	--	NE	NE	SW	21	29N	22W	1267	--	1937	Domestic	HENDREX, HOWARD	Ozark	5
Logmain	004857	350	--	N2	NE	SW	3	29N	22W	1180	60	1938	Domestic	MONTGOMERY, FAITH	Ozark	3
Logmain	004921	450	--	NW	NE	SE	22	29N	22W	1292	--	1938	Domestic	BRAYMAN, HAROLD	Ozark	10
Logmain	005340	70	--	NW	SW	S2	21	29N	22W	1250	23	1939	Domestic	CAMPBEL	Springfield Plateau	--
Logmain	005411	1515	--	SE	SE	SE	16	29N	22W	1270	--	1938	Noncommunity Public	SCHAFFITZEL, W.J., JR.	Ozark	300
Logmain	005614	437	--	NW	NW	C	22	29N	22W	1277	--	1939	Noncommunity Public	QUALITY OIL CO.	Ozark	10
Logmain	005759	350	--	NW	NE	NE	33	30N	22W	1200	--	1939	Noncommunity Public	ENGLAND, IRA (PEARCY CAVE	Ozark	
Logmain	006187	190	--	SW	NW	NE	21	29N	22W	1245	25	1940	Domestic	CRAIG	Springfield Plateau	--
Logmain	006202	115	--	NE	SW	SE	21	29N	22W	1243	--	1940	Domestic	INMAN	Springfield Plateau	--
Logmain	006232	140	--	SW	SE	S2	21	29N	22W	1229	--	1940	Domestic	LONG, JOBIE	Springfield Plateau	--
Logmain	006392	334	--	NE	SW	C	21	29N	22W	1245	184	1940	Domestic	WHITT, C.P.	Ozark	--
Logmain	007311	190	--	SW	NE	SW	21	29N	22W	1225	--	1941	Domestic	SCHAFFITZEL, HARRY	Springfield Plateau	--
Logmain	007848	160	--	NW	NE	NE	3	29N	23W	1229	--	1942	Domestic	GAINES, RICHARD	Springfield Plateau	--
Logmain	008129	178	--	NE	NW	NE	29	29N	22W	1227	--	1942	Domestic	GREENE, BILL	Springfield Plateau	--
Logmain	009706	232	--	SE	NE	NE	21	29N	22W	1284	26	1946	Domestic	STARNES, W.B.	Springfield and/or Ozark	1
Logmain	010277	447	--	NW	NW	NW	22	29N	22W	1255	--	1948	Domestic	DECK BROS.	Ozark	5
Logmain	010400	240	--	SE	NE	C	23	29N	23W	1287	90	1948	Noncommunity Public	HILTON	Ozark	4
Logmain	010692	460	--	SE	NE	NE	21	29N	22W	1264	--	1947	Multi-Family	SCENIC ACRES	Ozark	4
Logmain	010730	445	--	NE	NW	SW	28	29N	22W	1213	--	1947	Domestic	McCLOSKY, MUMFORD C.	Ozark	--
Logmain	010821	45	--	S2	NE	SE	4	29N	23W	1171	--	1949	Domestic	WILLIAMS, MRS.	Springfield Plateau	--
Logmain	010827	151	--	NE	NW	NW	15	29N	23W	1259	--	1949	Domestic	WILSON, HOWARD	Springfield Plateau	--
Logmain	010956	100	--	N2	SE	SW	3	29N	23W	1224	--	1947	Domestic	MARSHALL, DEWEY	Springfield Plateau	--
Logmain	011026	160	--	NW	SE	NW	22	29N	22W	1285	--	1948	Domestic	COCHRAN, ROBERT	Springfield Plateau	--
Logmain	011031	436	--	SE	SW	SE	16	29N	22W	1283	--	1949	Domestic	STACEY, JOE	Ozark	5

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
Logmain	011578	375	--	SW	SW	NW	21	29N	22W	1220	--	1950	Domestic	CLINTON, W.H.	Ozark	5
Logmain	012684	227	--	SW	NW	NE	3	29N	23W	1231	130	1954	Domestic	McCONELL, J.A.	Springfield and/or Ozark	10
Logmain	014800	1275	--	SE	SW	NW	10	29N	22W	1298	--	1956	Industrial	FRISCO RAILROAD #4	Ozark	602
Logmain	015366	169	--	SE	SW	SW	15	29N	23W	1269	75	1956	Domestic	WILZY, FRANK	Springfield Plateau	3
Logmain	015415	100	--	NW	NW	NW	30	29N	22W	1292	27	1956	Domestic	TILLMAN, DR. W.W.	Springfield Plateau	26
Logmain	016965	335	--	N2	NW	NE	3	29N	22W	1195	140	1953	Domestic	SELPH, TILLMAN D.	Ozark	3
Logmain	017223	320	--	SW	SE	SW	21	29N	22W	1233	220	1958	Domestic	GREEN, DELMER	Ozark	8
Logmain	017652	460	--	S2	SW	SW	3	29N	22W	1246	--	1958	Domestic	LYONS, LAWRENCE	Ozark	--
Logmain	018687	325	--	NW	SE	SE	15	29N	23W	1273	160	1959	Domestic	ISLEY, ELMER	Ozark	16
Logmain	020318	340	--	SW	S2	C	21	29N	22W	1226	190	1961	Domestic	GREY, CLAUDE	Ozark	14
Logmain	022777	360	--	NE	NW	NW	30	29N	22W	1242	170	1960	Domestic	WILLIAMS, TRUMAN	Ozark	--
Logmain	026073	500	--	C	S2	SW	3	29N	22W	--	--	1968	Domestic	TINSLEY, REX	Ozark	20
Logmain	026075	640	--	SW	SW	SW	23	29N	23W	1272	--	1969	Noncommunity Public	STANDARD OIL STATION	Ozark	--
Logmain	027338	520	--	SW	SW	SE	24	29N	23W	1210	--	1973	Community Public	KOA CAMPGROUND	Ozark	--
Logmain	027651	500	--	SW	NW	SE	34	30N	22W	1150	--	1974	Noncommunity Public	RITTER SPRING PARK	Ozark	--
PWS	41139	1275	405	SW	NE	SE	10	29N	22W	--	500	1956	Industrial	Burlington Northern Railroad	Ozark	450
PWS	42043	520	425	SW	SW	SW	24	29N	23W	--	150	1973	Non-community Public	Springfield KOA	Ozark	12
PWS	42366	360	252	C	C	N2	33	30N	22W	--	60	1986	Non-community Public	Fantastic Caverns	Ozark	50
PWS	42367	180	--	C	C	N2	33	30N	22W	--	--	1962	Non-community Public	Fantastic Caverns	Ozark	--
PWS	50504	500	160	NE	SE	SW	34	30N	22W	--	--	1974	Non-community Public	Ritter Springs Park	Ozark	--
WIMS	100010	591	319	NW	NE	NW	25	29N	23W	1285	198	1994	Domestic	HENRY	Ozark	10
WIMS	100807	510	359	C	C	C	33	30N	22W	--	140	1994	Domestic	SMALLEY	Ozark	15
WIMS	119474	425	105	NW	NE	NW	3	29N	23W	1200	120	1994	Domestic	TOWNSAND	Ozark	10
WIMS	126173	440	100	C	SE	NW	25	29N	23W	--	90	1994	Domestic	MILLER	Ozark	10
WIMS	12953	--	--	C	SE	NE	29	29N	22W	--	--	1988	Domestic	EFFERSON	Unknown	12
WIMS	134768	456	--	C	C	SW	22	29N	23W	--	--	1995	Domestic	HENSON	Ozark	--
WIMS	135527	365	189	NW	NW	SE	29	30N	22W	--	90	1995	Domestic	GRAY	Ozark	10
WIMS	13605	480	281	C	C	C	30	29N	22W	1225	265	1989	Domestic	KEN	Ozark	--
WIMS	13611	355	210	C	C	C	28	30N	22W	1100	90	1989	Domestic	FLOYD	Ozark	14
WIMS	13614	504	315	C	SE	SE	25	30N	23W	1200	128	1988	Domestic	HUGHES	Ozark	12
WIMS	13693	475	153	C	NW	NW	11	29N	22W	1280	250	1989	Domestic	POINDEXTER	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	139183	450	233	NW	SE	SE	29	30N	22W	1145	110	1995	Domestic	LEA	Ozark	10
WIMS	143313	312	105	C	NW	NW	28	30N	22W	--	60	1995	Domestic	JOY	Ozark	--
WIMS	143324	455	100	SE	NE	SW	36	30N	23W	1190	120	1995	Domestic	BROWN	Ozark	10
WIMS	143326	415	140	C	C	NE	3	29N	22W	--	120	1995	Domestic	HANCOCK	Ozark	10
WIMS	143633	550	296	NE	SW	SW	30	29N	22W	1255	150	1995	Domestic	ANDERSON	Ozark	--
WIMS	14440	330	150	C	C	C	34	30N	22W	1120	90	1987	Domestic	SMITH	Ozark	8
WIMS	147447	425	170	SE	NW	SW	31	30N	22W	1200	150	1995	Domestic	DENNIS	Ozark	10
WIMS	155775	585	189	C	C	NW	3	29N	23W	--	100	1996	Domestic	HARRIS	Ozark	--
WIMS	157496	601	303	C	C	C	31	30N	22W	--	150	1996	Domestic	KREMPGES	Ozark	--
WIMS	158647	425	105	C	C	NE	15	29N	23W	--	180	1996	Domestic	BATSON	Ozark	20
WIMS	16238	450	190	NW	SE	NE	29	29N	22W	1220	80	1989	--	SMITHSON	Ozark	6
WIMS	16272	--	--	C	C	C	30	29N	22W	--	--	1989	Domestic	KEN	Unknown	10
WIMS	165286	--	--	C	C	C	26	29N	23W	--	--	1998	Domestic	BEESON	Ozark	--
WIMS	165288	--	--	C	C	C	22	29N	23W	--	--	1999	Domestic	WILEY	Unknown	--
WIMS	167383	456	106	C	NW	SW	36	30N	23W	--	210	1996	Domestic	ANDERSON	Ozark	--
WIMS	16913	480	274	C	NE	SW	30	29N	22W	1260	160	1989	Domestic	HODGES	Ozark	--
WIMS	169930	405	105	NE	NW	NW	26	29N	23W	1265	280	1996	Domestic	BURKS	Ozark	12
WIMS	170511	650	337	C	NE	NE	4	29N	22W	1190	165	1999	Domestic	TICE	Ozark	--
WIMS	171042	--	--	C	SW	SW	23	29N	23W	--	--	1999	Non-Community Public	JONES	Unknown	--
WIMS	180322	550	316	SE	SE	SE	35	30N	23W	1145	280	1997	Domestic	HUFFMAN	Ozark	--
WIMS	190936	330	100	C	C	C	28	30N	22W	--	--	1997	Domestic	SMITH	Ozark	--
WIMS	193083	348	147	C	C	NE	34	30N	22W	--	120	1998	Domestic	RODGERS	Ozark	10
WIMS	198404	492	160	C	C	C	25	29N	23W	--	180	1998	Domestic	BENNETT	Ozark	20
WIMS	200980	476	106	C	C	C	25	29N	23W	--	280	1999	Domestic	TYLER	Ozark	10
WIMS	204087	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	209130	535	270	C	C	C	26	29N	23W	--	300	1998	Domestic	BEESON	Ozark	10
WIMS	209312	575	220	C	C	C	25	29N	23W	--	200	1999	Domestic	PLEMONE	Ozark	10
WIMS	211345	608	421	NE	NW	SW	23	29N	23W	1280	180	1999	Non-Community Public	JONES	Ozark	--
WIMS	212117	388	105	SW	SE	SW	29	30N	22W	1267	90	1999	Domestic	ELDRIDGE	Ozark	10
WIMS	213164	552	190	NW	SW	SW	23	29N	23W	1270	270	1999	Domestic	HOOD	Ozark	10
WIMS	217826	535	120	C	C	NE	4	29N	23W	--	--	1999	Domestic	CAMPBELL	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	GSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	22	368	126	C	NW	NW	22	29N	23W	--	100	1986	Domestic	ALBRECHT	Ozark	--
WIMS	231976	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	232302	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	232349	330	123	SE	SW	SW	27	30N	22W	1120	--	1999	Domestic	WILLIAMS	Ozark	--
WIMS	232372	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	233638	645	378	NE	SE	NW	31	30N	22W	1220	150	2000	Domestic	--	Ozark	60
WIMS	238139	445	105	SW	SW	NE	15	29N	23W	1270	180	2000	Domestic	BATSON	Ozark	20
WIMS	248055	512	105	SW	SW	SW	14	29N	23W	1280	180	2000	--	KINDRICK	Ozark	7
WIMS	248696	405	105	SW	SE	SW	28	30N	22W	1130	90	2000	Domestic	COX	Ozark	10
WIMS	251354	--	--	C	C	C	25	29N	23W	--	--	2000	Domestic	TAYLOR	Unknown	20
WIMS	252807	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	253940	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	257444	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	259979	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	266112	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	272174	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	273202	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	273255	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281874	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281875	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	281876	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	2918	570	372	C	SW	NW	29	29N	22W	--	280	1987	Domestic	WILSON	Ozark	10
WIMS	293862	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	293866	--	--	C	C	C	0	--	--	--	--	--	--	--	Unknown	--
WIMS	33482	640	--	C	C	C	30	29N	22W	--	320	1989	Domestic	BAUMBERGER	Ozark	10
WIMS	33570	202	--	C	C	C	30	30N	22W	--	--	1999	Domestic	UNDERDAL	Ozark	10
WIMS	34616	355	150	C	C	C	34	30N	22W	1100	90	1989	--	PALMER	Ozark	3
WIMS	35741	510	235	C	SW	SW	19	29N	22W	1240	150	1989	--	HASELTINE	Ozark	--
WIMS	3811	265	147	C	SE	NE	33	30N	22W	--	120	1987	Domestic	MCLAUGHLIN	Ozark	12
WIMS	39118	405	189	C	NE	SE	34	30N	22W	1200	100	1990	Domestic	TINDLE	Ozark	14
WIMS	40795	450	205	C	SE	NE	36	30N	23W	1205	120	1989	Domestic	HUNT	Ozark	--

Non-monitoring wells located within 4.0 mile of the Litton Industries Site

Source	Well ID	Depth	CSG	Q1	Q2	Q3	SEC	TWN	RNG	Elev	SWL	Date	Use	Owner	Aquifer	GPM
WIMS	42184	350	151	SE	SE	SE	29	30N	22W	1150	100	1990	Domestic	CLINE	Ozark	--
WIMS	42433	480	232	C	SW	SW	35	30N	22W	--	120	1990	Domestic	SNEED	Ozark	--
WIMS	42941	312	152	NE	SW	SE	29	30N	22W	1145	80	1991	Domestic	GOULD	Ozark	10
WIMS	42953	538	84	SW	NW	NE	30	29N	22W	1240	300	1991	Domestic	FIELDEN	Ozark	8
WIMS	42957	437	--	SW	SE	NE	29	30N	22W	1110	--	1991	Domestic	CARROLL	Ozark	--
WIMS	42966	--	--	C	C	C	10	29N	22W	--	--	1991	Heat	--	Unknown	--
WIMS	43178	435	182	C	C	C	3	29N	22W	1235	120	1990	Domestic	MITCHELL	Ozark	14
WIMS	44745	--	--	C	C	C	25	29N	23W	--	--	1989	--	HANCOCK	Unknown	--
WIMS	4787	285	84	C	SW	NE	29	30N	22W	1100	40	1987	Domestic	SAGER	Ozark	12
WIMS	47897	400	160	C	NE	NW	3	29N	22W	1160	120	1991	Domestic	JENKINS	Ozark	--
WIMS	4790	285	84	C	NE	SE	29	30N	22W	1050	100	1987	Domestic	WARE	Ozark	14
WIMS	4832	325	84	C	NW	SE	29	30N	22W	1150	90	1987	Domestic	HAYES	Ozark	12
WIMS	5026	325	84	C	NE	NW	34	30N	22W	1000	90	1988	Domestic	ULRICH	Ozark	12
WIMS	55748	425	329	C	SE	SE	25	30N	23W	--	90	1990	Domestic	HENDERSON	Ozark	10
WIMS	61803	417	211	NW	NE	SW	3	29N	22W	1210	120	1991	Domestic	GALBRAITH	Ozark	--
WIMS	62351	561	261	C	NE	NE	4	29N	22W	1180	50	1991	Domestic	--	Ozark	10
WIMS	63312	325	189	NE	SE	SE	29	30N	22W	1115	90	1991	Domestic	MCMILLAN	Ozark	14
WIMS	63323	425	225	SW	NW	NW	35	30N	22W	121	120	1991	Domestic	LANGLE	Ozark	14
WIMS	63353	285	168	NE	SW	SW	27	30N	22W	1120	60	1991	Domestic	JOHNSTON	Ozark	20
WIMS	7057	250	--	C	SE	NE	29	29N	22W	1200	--	1988	Heat	--	Ozark	--
WIMS	75979	400	173	NE	SE	NE	29	30N	22W	1060	85	1992	Domestic	ANDRUS	Ozark	--
WIMS	822	288	210	C	C	C	29	30N	22W	--	90	1987	Domestic	TYNDALL	Ozark	--
WIMS	82402	375	60	NW	NW	NW	3	29N	22W	1175	150	1993	Domestic	NEEDHAM	Ozark	10
WIMS	89162	551	317	SW	SW	SW	35	30N	22W	1170	175	1994	Domestic	BILLMAN JR.	Ozark	10
WIMS	92781	375	235	C	SE	SE	29	30N	22W	--	40	1993	Domestic	HUGHES	Ozark	--
WIMS	92829	600	160	NE	NE	NE	4	29N	22W	1150	200	1993	Domestic	WEGNER	Ozark	10
WIMS	93268	540	175	NE	NE	NE	4	29N	22W	1185	120	1993	Domestic	PORTER	Ozark	10
WIMS	94602	572	104	SW	NW	SE	29	29N	22W	1220	--	1994	Domestic	WILSON	Ozark	20
WIMS	95772	405	252	C	SW	SW	35	30N	22W	--	120	1994	--	HENLEY	Ozark	10
WIMS	98608	500	456	C	C	C	3	29N	22W	--	160	1994	Domestic	POINDEXTER	Ozark	12

Total number of wells located 3 to 4 Miles from the Litton Industries Site: **160**

Table 2: Aquifer, Stratigraphy, and Hydrology of the Litton Industries Site

System	Stratigraphic Unit	Thickness (feet)	Lithology	Nature of Porosity and Permeability	Hydraulic Conductivity (cm/sec)	Hydrologic Unit
Post Mississippian	**Soil and Residuum**	10 - 60	Cherty, silty clay	Intergranular space throughout matrix with exception of clay; Moderate to rapid permeability	1.4×10^{-4} - 4.2×10^{-3}	None
Mississippian	**Burlington-Keokuk Limestones, Reeds Spring Formation, and Fern Glen Formation**	195 - 245	Cherty, coarse-grained, fossiliferous limestone	Limestone bedding seperations, fractures, and dissolution features; Moderate to high permeability	7.8×10^{-3}	Springfield Plateau Aquifer
	Northview Formation	30	Argillaceous limestone and shale	Bedding seperations, fractures, and possible dissolution features; Moderately low permeability	1×10^{-5} - 5×10^{-6}	Ozark Confining Unit
Ordovician	**Cotter and Jefferson City Dolomites, Roubidoux Formation, and Gasconade Dolomite**	approx. 1200	Dolomite, cherty dolomite, sandstone, dolomitic sandstone, argillaceous dolomite, and minor shales	Bedding seperations and fractures; Moderate permeability	1×10^{-4} - 1×10^{-5}	Ozark Aquifer
Cambrian	**Eminence and Potosi Dolomites**					
	Derby-Doe Run Dolomites	150	Medium-crystalline dolomite with beds of silt, shale, and sand	Bedding seperations and fractures; Moderate to low permeability	1×10^{-8}	St. Francois Confining Unit

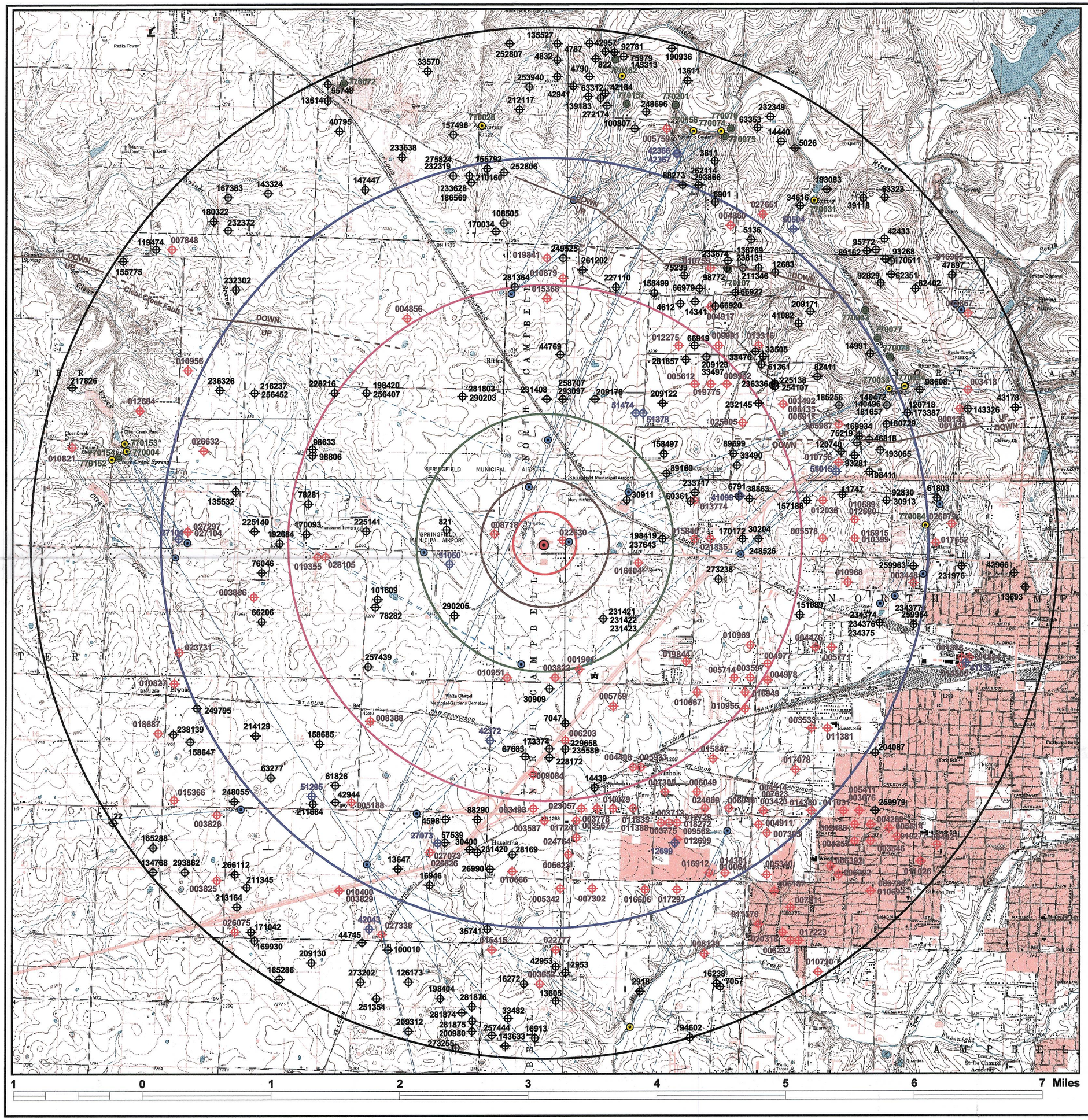
Data is from Davis, 1969; Imes and Smith, 1990; Imes and Emmett, 1994; and MDNR/DGLS well log records.

Table 3: Springs located within 4.0 miles of the Litton Industries site, Greene County, Missouri

ID Number	Distance	Name	Location within Section	Section	Township	Range	Elevation	Flow (gpm)
770152	3 to 4 Miles	CLEAR CREEK SPRING	NW1/4, SW1/4, NW1/4 (long section)	3	29N	23W	1155	NA
770153	3 to 4 Miles	CROOK (JIM) SPRING	NW1/4, SW1/4, SW1/4 (long section)	3	29N	23W	1150	NA
770154	3 to 4 Miles	GARDNER SPRING	NW1/4, SW1/4, SW1/4 (long section)	2	29N	23W	1155	NA
770156	3 to 4 Miles	FANTASTIC CAVERNS SP	NE1/4, NW1/4, NE1/4	33	30N	22W	1100	NA
770157	3 to 4 Miles	PARRISH SPRING	SW1/4, SW1/4, SW1/4	28	30N	22W	1085	100 - 450
770162	3 to 4 Miles	UNNAMED SPRING	NW1/4, NW1/4, SW1/4	28	30N	22W	1160	NA
770004	3 to 4 Miles	CLEAR CREEK PARK SPRING	NW1/4, SW1/4, SW1/4 (long section)	3	29N	23W	1160	450-4,500
770028	3 to 4 Miles	STODDARD SPRING	NW1/4, NW1/4, NW1/4	32	30N	22W	1120	1 - 10
770031	3 to 4 Miles	RITTER PARK SPRING	NW1/4, NW1/4, SE1/4	34	30N	22W	1075	10-100
770033	2 to 3 Miles	RITTER SPRING (WEST)	SE1/4, SE1/4, NE1/4 (long section)	4	29N	22W	1125	450-4,500
770034	3 to 4 Miles	RITTER SPRING (EAST)	NW1/4, NW1/4, SW1/4 (long section)	3	29N	22W	1125	450-4,500
770062	3 to 4 Miles		NW1/4, NE1/4, NE1/4 (long section)	4	29N	22W	1095	NA
770072	3 to 4 Miles	QUARRY WALL SPRING	NE1/4, SE1/4, SE1/4	25	30N	23W	1210	NA
770074	3 to 4 Miles	WILLIAMS SPRING	NW1/4, NE1/4, NE1/4	33	30N	22W	1090	450-4,500
770075	3 to 4 Miles		NE1/4, NE1/4, NE1/4	33	30N	22W	1110	NA
770076	3 to 4 Miles		NE1/4, NE1/4, NE1/4	33	30N	22W	1080	NA
770077	3 to 4 Miles		NW1/4, SE1/4, NE1/4 (long section)	4	29N	22W	1110	NA
770078	3 to 4 Miles	FIREPLACE SPRING	SE1/4, SE1/4, NE1/4 (long section)	4	29N	22W	1110	NA
770084	2 to 3 Miles	VICH SPRING	SE1/4, NE1/4, SW1/4 (long section)	3	29N	22W	1260	NA
770107	2 to 3 Miles		NW1/4, NE1/4, NE1/4 (long section)	5	29N	22W	1245	NA
770201	3 to 4 Miles	PERTUCHE SPRING	SE1/4, SW1/4	28	30N	22W	1050	1 - 10

Springs were autoplotted from ArcView shapefiles. gpm=gallons per minute.

Figure 1:
Four-Mile Well Survey
Litton Industries Site
Greene County, Missouri
December 17, 2003

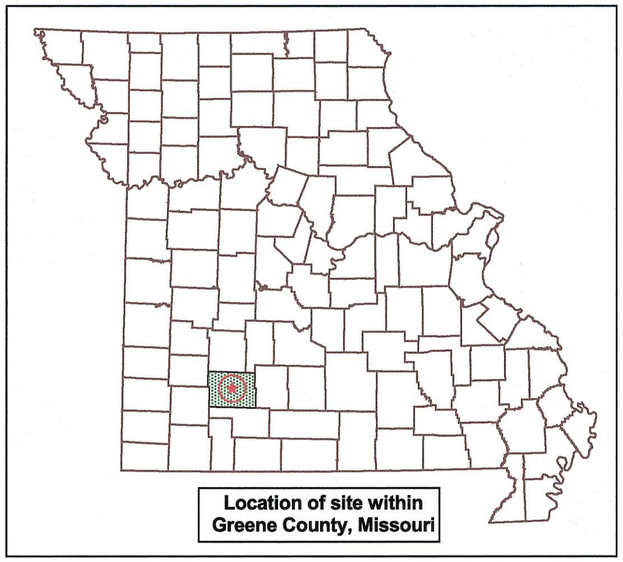


Target Limits
- 0.25 Mile
- 0.5 Mile
- 1 Mile
- 2 Miles
- 3 Miles
- 4 Miles

N W E S

- Litton Industries Site
- Well from MDNR/WPSCD Public Drinking Water Program(PDWP)
- Certified well from the Well Information Management System (WIMS) MDNR/GSRAD Wellhead Protection Section
- Well from MDNR/GSRAD sample well-log library (Logmain)
- Spring from MDNR/GSRAD spring database
- Dye injection point location from GSRAD MEGA database
- Dye reception point location from GSRAD MEGA database
- Connection line between dye injection and reception points (GSRAD MEGA)
- UP DOWN Observed fault. South side thrown down.
- DOWN UP Speculated fault. North side thrown down.

Well and spring locations were autoplotted from ArcView shapefiles and are accurate to within the smallest quarter section according to Table 1.



Base maps are taken from USGS 1:24,000 scale 37093-B3-TF-024 (Springfield), 37093-B4-TF-024 (Brookline), 37093-C3-TF-024 (Ebenezer), and 37093-C3-TF-024 (Willard) 7.5-minute quadrangles.

Peter Bachle/DGLS/MODNR
07/11/2006 11:26 AM

To Nancy Priddy/HWP/DEQ/MODNR@MODNR
cc
bcc
Subject Litton dye traces

History: This message has been replied to.

Nancy,

According to the databases from which the Litton 4 mile well survey map was made, the dye injection points, paths, and recovery points fall within this range;

- Dye traces were performed between 1977 and 1998

- Injections were performed by DNR-DGLS staff or under DGLS supervision (persons being; Duley, Pendergrass, Williams-Pendleton, Thomson, Young, and Aley).

- Dyes used were Fluorescein, Rhodamine WT, and one of Tinopal CBS-X.

- The underground travel distances observed from dye traces ranges from 0.4 to 6.3 miles. The most common range was between 1 to 3 miles.

Let me know if you need more information.

Peter Bachle
Geologist II
Geological Survey Program/Division of Geology and Land Survey
(573) 368-2472

Litton Systems Inc. Site
Site Reassessment
Reference # 20

PHASE III REMEDIAL INVESTIGATION WORK PLAN

LITTON SYSTEMS, INCORPORATED
INTERCONNECT TECHNOLOGIES DIVISION

4811 West Kearney
Springfield, Missouri

August 22, 2005

Prepared by:

Mark G. Densmore
Project Coordinator

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APPENDICES

Appendix A Field Sampling Plan
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Reference #21

Meeting Documentation

DATE: August 10, 2006

Attendees: Evan Kifer MDNR
Robert Hinkson, MDNR
Frances Klahr, MDNR
Mark Densmore, SECOR
Matt Shannon, Landmark Environmental

Purpose: SECOR provided an overview of previous Remedial Investigation findings from Phase I and II. They then presented findings of the Phase III Remedial Investigation and provided an update of planned Phase II Remedial Activities.

Litton Systems Inc. Site
Site Reassessment
Reference #12

TOXICOLOGICAL PROFILE FOR TRICHLOROETHYLENE

Prepared by:

Sciences International, Inc.
Under Subcontract to:

Research Triangle Institute
Under Contract No. 205-93-0606

Prepared for:

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry

September 1997

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Office of Research and
Development
Washington DC 20460

EPA/600/R-98/128
September 1998

EPA

Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water

Litton Systems Inc. Site
Site Reassessment
Reference # 23

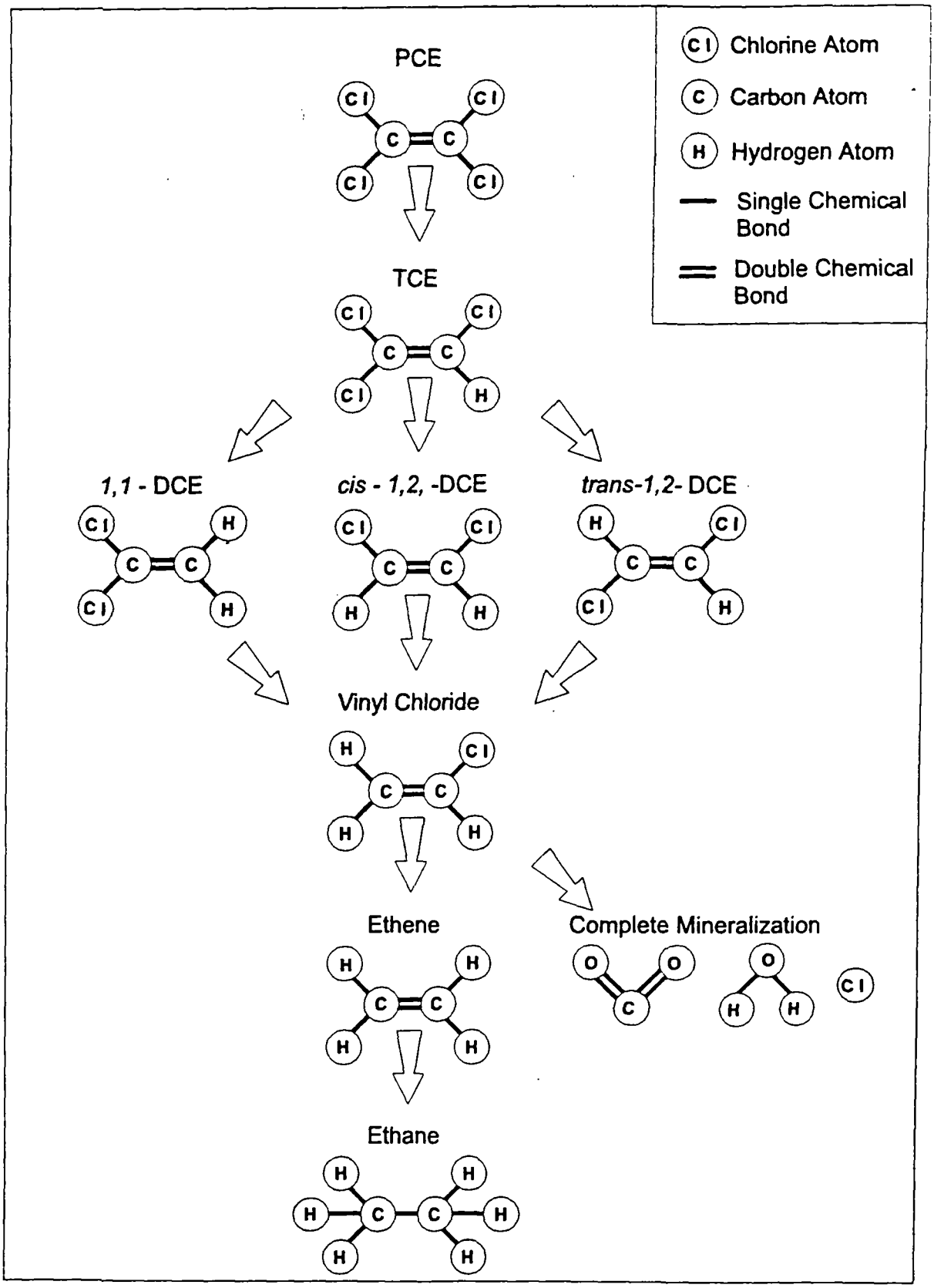


Figure 2.2 Reductive dehalogenation of chlorinated ethenes.

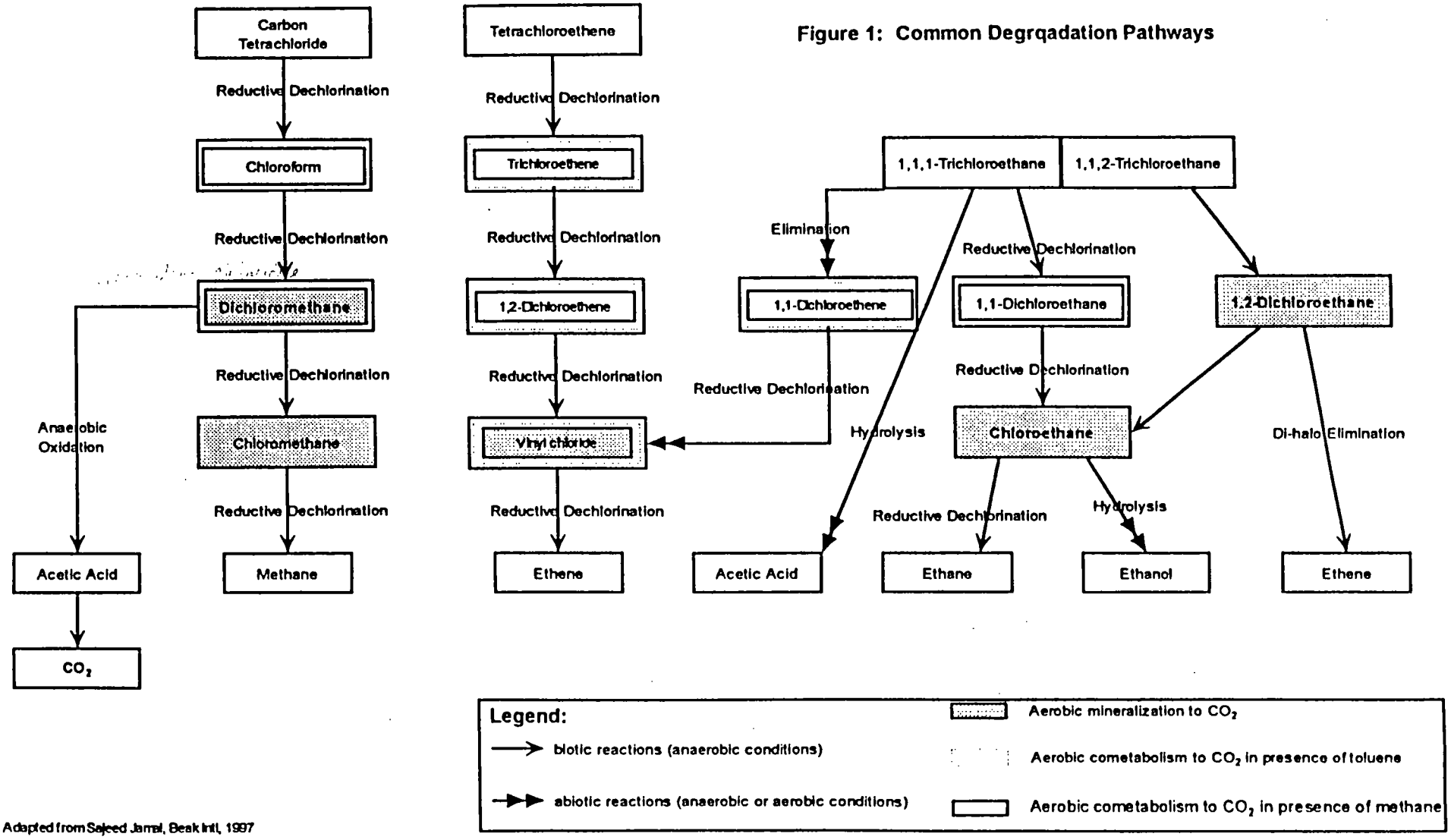
Draft EPA Region 4 Suggested Practices for Evaluation of a Site For Natural Attenuation (Biological Degradation) of Chlorinated Solvents[1]

November, 1997

Version 3.0

[1]This document was formerly titled Draft Region 4 Approach to Natural Attenuation of Chlorinated Solvents

Figure 1: Common Degrqadation Pathways



Adapted from Sajeed Jamal, Beak Intl, 1997

may be interrupted, with other processes then acting upon the products. During reductive dechlorination, all three isomers of DCE can theoretically be produced. However, Bouwer (1994) reports that under the influence of biodegradation, *cis*-1,2-DCE is a more common intermediate than *trans*-1,2-DCE, and that 1,1-DCE is the least prevalent of the three DCE isomers when they are present as daughter products. Reductive dechlorination of chlorinated solvent compounds is associated with the accumulation of daughter products and an increase in the concentration of chloride ions. Reductive dechlorination affects each of the chlorinated ethenes differently. Of these compounds, PCE is the most susceptible to reductive dechlorination because it is the most oxidized. Conversely, VC is the least susceptible to reductive dechlorination because it is the least oxidized of these compounds. As a result, the rate of reductive dechlorination decreases as the degree of chlorination decreases (Vogel and McCarty, 1985; Bouwer, 1994). Murray and Richardson (1993) have postulated that this rate decrease may explain the accumulation of VC in PCE and TCE plumes that are undergoing reductive dechlorination. Reductive dechlorination has been demonstrated under nitrate- and iron-reducing conditions, but the most rapid biodegradation rates, affecting the widest range of chlorinated aliphatic hydrocarbons, occur under sulfate-reducing and methanogenic conditions (Bouwer, 1994). Because chlorinated aliphatic hydrocarbon compounds are used as electron acceptors during reductive dechlorination, there must be an appropriate source of carbon for microbial growth in order for this process to occur (Bouwer, 1994). Potential carbon sources include natural organic matter, fuel hydrocarbons, or other anthropogenic organic compounds such as those found in landfill leachate.

2.2.1.1.2 Electron Donor Reactions

Murray and Richardson (1993) write that microorganisms are generally believed to be incapable of growth using PCE and TCE as a primary substrate (i.e., electron donor). However, under aerobic and some anaerobic conditions, the less oxidized chlorinated aliphatic hydrocarbons (e.g., VC) can be used as the primary substrate in biologically mediated oxidation-reduction reactions (McCarty and Semprini, 1994). In this type of reaction, the facilitating microorganism obtains energy and organic carbon from the degraded chlorinated aliphatic hydrocarbon. In contrast to reactions in which the chlorinated aliphatic hydrocarbon is used as an electron acceptor, only the least oxidized chlorinated aliphatic hydrocarbons can be used as electron donors in biologically mediated oxidation-reduction reactions. McCarty and Semprini (1994) describe investigations in which VC and 1,2-dichloroethane (DCA) were shown to serve as primary substrates under aerobic conditions. These authors also document that dichloromethane has the potential to function as a primary substrate under either aerobic or

Litton Systems Inc. Site
Site Reassessment
Reference #25

TOXICOLOGICAL PROFILE FOR COPPER

Prepared by:

Syracuse Research Corporation
Under Contract No. 205-1999-00024

Prepared for:

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry

September 2004

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SITTIG'S HANDBOOK OF TOXIC AND HAZARDOUS CHEMICALS AND CARCINOGENS

Fourth Edition

Richard P. Pohanish
Editor

Volume 1
A – H

np
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615.9'02--dc21

2001056289

Copper

Molecular Formula: Cu

Synonyms: 1721 gold: Allbri natural copper: Anac 110: Arwood copper: Bronze powder: CDA 101: CDA 102: CDA 110: CDA 122: C.I. 77400: C.I. pigment metal 2: Cobre (Spanish): Copper bronze: Elemental copper: Gold bronze: Kafar copper: M2 copper: MI (copper): OFHC Cu: Raney copper

CAS Registry Number: 7440-50-8: 1317-38-0 (CuO, copper fume)

RTECS Number: GL5325000: GL7900000 (CuO, copper fume)

Regulatory Authority

- Air Pollutant Standard Set (ACGIH)[1] (Australia) (DFG)[3] (HSE)[33] (Israel) (Mexico) (OSHA) (former USSR)[43] (Several States)[60] (Several Canadian Provinces)
- CLEAN WATER ACT: 40CFR423, Appendix A, Priority Pollutants: Section 313 Water Priority Chemicals (57FR41331, 9/9/92): Toxic Pollutant (Section 401.15)
- RCRA 40CFR264, Appendix 9: TSD Facilities Ground Water Monitoring List. Suggested test method(s) (PQL µg/l): (total) 6010 (60): 7210 (200)
- SAFE DRINKING WATER ACT: MCL, 1.3 mg/l: MCLG, 1 mg/l: SMLC, 1.0 mg/l: Regulated chemical (47 FR 9352)
- SUPERFUND/EPCRA 40CFR302.4 Reportable Quantity (RQ): CERCLA, 5,000 lb (2,270 kg) (no reporting of releases of this hazardous substance is required if the diameter of the pieces of solid metal released is equal to 0.004 in)
- EPCRA Section 313 Form R *de minimis* concentration reporting level: 1.0%
- Canada, WHMIS, Ingredients Disclosure List: National Pollutant Release Inventory (NPRI): CEPA Priority Substance List, Ocean dumping prohibited; Drinking Water Quality ≤ 1.0 mg/l
- Mexico, Drinking Water = 1.0 mg/l

Cited in U.S. State Regulations: Alaska (G), California (A, G, W), Connecticut (A), Florida (G, A), Illinois (G), Maine (G), Maryland (G), Massachusetts (G), Michigan (G), Minnesota (W), Montana (A), Nevada (A), New Hampshire (G), New Jersey (G), New York (G, A), North Dakota (A), Pennsylvania (G), Rhode Island (G), Virginia (A), West Virginia (G).

Description: Copper, Cu, is a reddish-brown metal which occurs free or in ores such as malachite, cuprite, and chalcopyrite. Copper fume is finely divided black particulate dispersed in air. Copper dusts and mists have been assigned the formula $CuSO_4 \cdot 5H_2O/CuCl$ by NIOSH. Copper fume has been designated as $Cu/CuO/Cu_2O$ by NIOSH. Boiling point = 2,595°C. Freezing/Melting point = 1,083°C It may form both mono- and divalent compounds. Copper is insoluble in water, but soluble in nitric acid and hot sulfuric acid.

Potential Exposure: Metallic copper is an excellent conductor of electricity and is widely used in the electrical industry in all gauges of wire for circuitry, coil, and armature windings, high conductivity tubes, commutator bars, etc. It is made into castings, sheets, rods, tubing and wire, and is used in water and gas piping, roofing materials, cooking utensils, chemical and pharmaceutical equipment and coinage. Copper forms many important alloys: Be-Cu alloy, brass, bronze, gunmetal, bell metal, German silver, aluminum bronze, silicon bronze, phosphor bronze, and manganese bronze.

Copper compounds are used as insecticides, algicides, molluscicides, plant fungicides, mordants, pigments, catalysts, and as a copper supplement for pastures, and in the manufacture of powdered bronze paint and percussion caps. They are also utilized in analytical reagents, in paints for ships' bottoms, in electroplating, and in the solvent for cellulose in rayon manufacture.

Incompatibilities: Copper dust, fume, and mists form shock-sensitive compounds with acetylene gas, acetylenic compounds, azides, and ethylene oxides. Incompatible with acids, chemically active metals such as potassium, sodium, magnesium, and zinc, zirconium, strong bases. Violent reaction, possibly explosive, if finely-divided material come in contact with strong oxidizers.

Permissible Exposure Limits in Air: The Federal standard (OSHA PEL 8-hour TWA)[58] for *copper fume* is 0.1 mg/m^3, and 1 mg/m^3 for *copper dusts and mists*. NIOSH recommends the same level for a 10-hour workshift. ACGIH recommends a TWA of 0.2 mg/m^3 for copper fume and 1 mg/m^3 for dusts and mists, as has HSE.[33] Australia, Israel, and the Canadian provinces of Alberta, BC, Ontario, and Quebec and HSE, Alberta, BC set a STEL for dusts and mists of 2.0 mg/m^3. The NIOSH IDLH is 100 mg/m^3 (as Cu). The DFG MAK for total dust is 1 mg/m^3; 0.1 mg/m^3 for fine dust and Peak Limitation is 2 times MAK (30 min), not to be exceeded 4 times during a workshift. Mexico set a limit of 0.2 mg/m^3 TWA and STEL of 2 mg/m^3. The former USSR-UNEP/IRPTC project[43] has set a MAC value for copper in workplace air of 1.0 mg/m^3 and 0.5 mg/m^3 on an average value per workshift basis.

Several states have set guidelines or standards for copper in ambient air[60] ranging from 0.26 – 1.57 µg/m^3 (Montana) to 2.0 µg/m^3 (North Dakota) to 2.0 – 20.0 µg/m^3 (Connecticut) to 4.0-20.0 µg/m^3 (Florida) to 5.0 µg/m^3 (Nevada) to 16.0 µg/m^3 (Virginia) to 20.0 µg/m^3 (New York).

Determination in Air: Copper dusts and mists are collected on a filter, worked up with acid, measured by atomic absorption. See NIOSH Method #7029 for copper. For copper fume: filter collection, acid digestion, measurement by atomic absorption. See NIOSH Method #7200 for welding and brazing fume.

Permissible Concentration in Water: To protect freshwater aquatic life: 5.6 µg/l as a 24-hour average, never to exceed $e^{[0.94 \ln(\text{hardness}) - 1.23]}$ µg/l. To protect human health:

Litton Systems Inc. Site
Site Reassessment
Reference #27

Geochemical Survey of Missouri

Geography of Soil Geochemistry of Missouri Agricultural Soils

By RONALD R. TIDBALL

Geochemical Classification by Factor Analysis of Missouri Agricultural Soils

By RONALD R. TIDBALL

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U.S. Geological Survey
604 South Pickett Street
Alexandria, VA 22304

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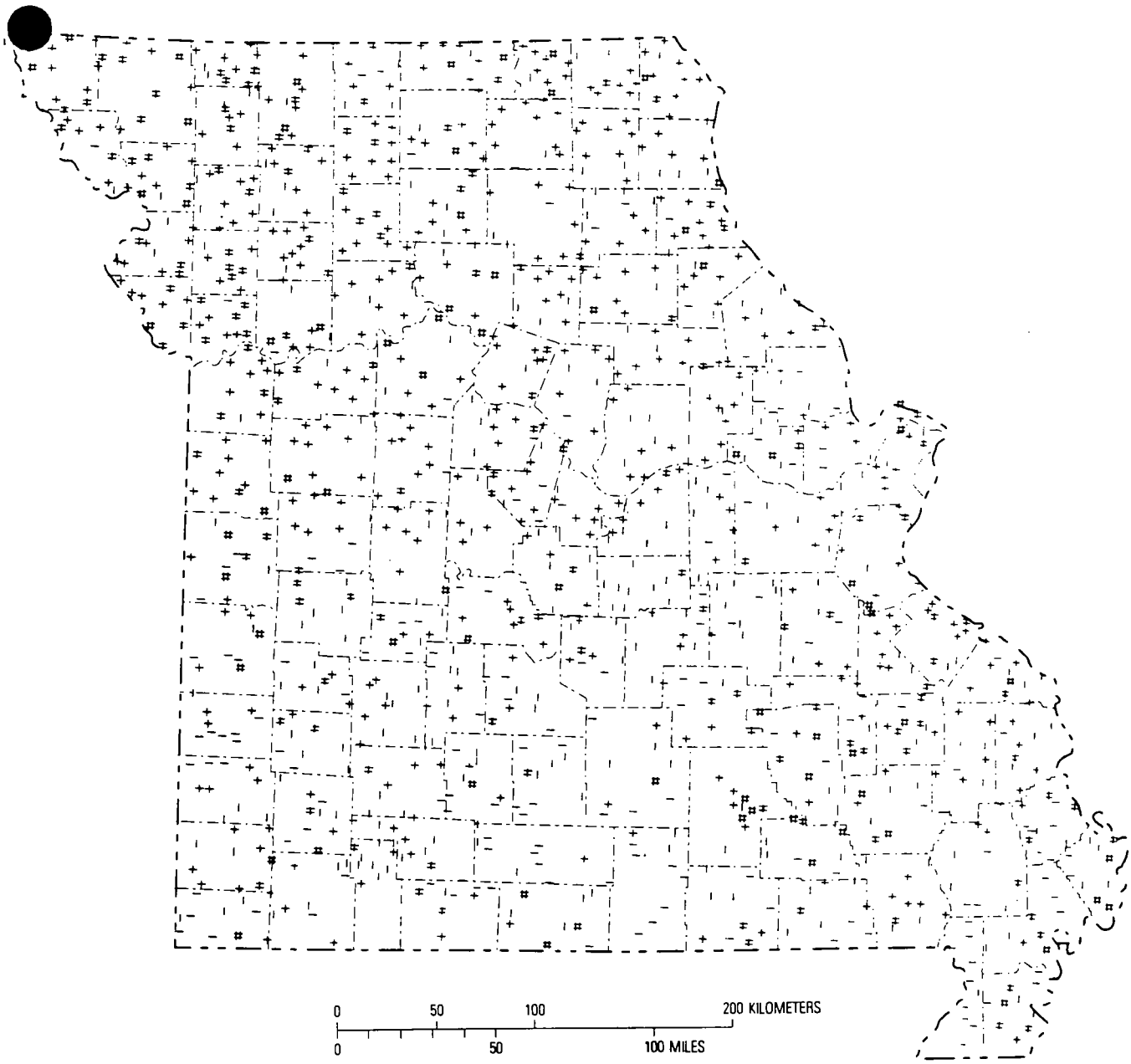

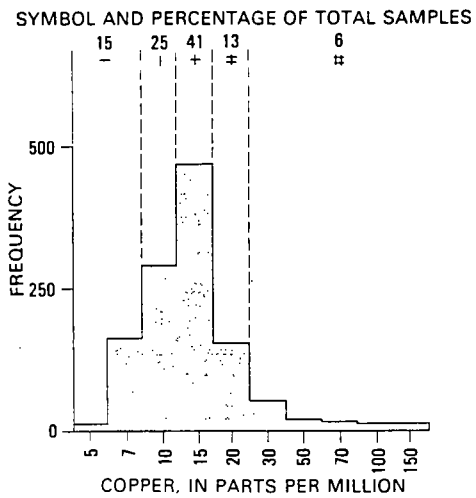

Geometric mean 13
Geometric deviation 1.55
Analytical error variance
(percent of total variance) 32
Number of analyses 1140

FIGURE 13.—Copper distribution in selected agricultural soils of Missouri. Map symbols correspond to frequency classes as shown in the histogram.

PM

Litton Systems Inc. Site
Site Reassessment
Reference # 28

PHASE II – FEASIBILITY STUDY REPORT

INTERCONNECT TECHNOLOGIES
DIVISION OF LITTON SYSTEMS, INC.

4811 West Kearney
Springfield, Missouri

July 22, 2005

Submitted by:

SECOR

SECOR International Incorporated
400 Bruns Lane
Springfield, IL 62702

PHASE II – FEASABILITY STUDY REPORT
INTERCONNECT TECHNOLOGIES
DIVISION OF LITTON SYSTEMS, INC.
SPRINGFIELD, MISSOURI

SECOR International Incorporated (SECOR) is submitting this Feasibility Study (FS) Report to Interconnect Technologies Division of Litton Systems Inc. (Litton-ITD). The FS Report was prepared to present the findings of Phase II FS conducted at their facility located at 4811 West Kearney Street, Springfield, Missouri. If you have any questions or comments concerning this FS Report, please contact me.

Respectfully submitted,

Mr. Mark G. Densmore, R.G.
SECOR – Project Coordinator
Missouri RG 2002002480

Mr. Larry B. Williams, P.E., P.G.
SECOR – FS Project Manager
Missouri PE 2003000043

EXECUTIVE SUMMARY

This report has been prepared to highlight the findings of the Phase II Feasibility Study (FS) conducted by the Interconnect Technologies Division of Litton Systems, Inc. (Litton-ITD) at their Springfield, Missouri facility (Site).

The purpose of the FS was to develop and evaluate remedial alternatives to ensure that the appropriate remedy can be selected. The FS included the following activities: project scoping (including identification of applicable or relevant and appropriate requirements (ARARs), development of remedial action objectives (RAOs), and identification and screening of potential remedial process options), targeted risk assessment (TRA), treatability studies, and development and analysis of remedial alternatives. This FS was conducted in general accordance with United States Environmental Protection Agency (USEPA) "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (October 1988) and the scope of work described in the Phase II FS Work Plan submitted to the Missouri Department of Natural Resources (MDNR) on June 25, 2004. The Phase II FS focused on providing practical alternatives for soil impacts at the Site.

Soil results from the Phase I and Phase II RI activities indicated copper, lead, chromium, arsenic, mercury and silver were above Cleanup Levels for Missouri (CALM) leaching concentration values (C_{LEACH}). Of these, copper was the most widespread inorganic contaminant found in the soil at the Site. Several volatile organic compounds (VOCs) were also above CALM C_{LEACH} values: 1,1,2-Trichloroethane (1,1,2-TCA), 1,1-Dichloroethene (1,1-DCE), 1,2-Dichloropropane (1,2-DCP), 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,1,1-Trichloroethane (1,1,1-TCA), 1,1-Dichloroethene (1,1-DCE), 1,2-Dichloroethane (1,2-DCA), 1,3,5-Trimethylbenzene, cis-1,2-Dichloroethylene (cis-1,2-DCE), dichloromethane (DCM), tetrachloroethene (PCE), toluene, trichloroethene (TCE), vinyl chloride (VC), and xylene. TCE was the most widespread VOC contaminant found in the soils. It appears that copper and TCE represent the primary contaminants of potential concern (COPC) that will ultimately drive soil remedial activities.

The soil at the Site is predominantly a red, cherty clay residuum weathered from limestone bedrock. Some of the red clay zones that are free of chert are very soft, exhibit very high moisture contents, and have low densities. Generally, these zones occur in close proximity to

bedrock. High moisture contents support the concept that significant portions of the soil above bedrock are saturated. The permeability of the clay material is very low with undisturbed samples having vertical hydraulic conductivities of 10^{-6} cm/sec to 10^{-7} cm/sec. A thin weathered zone is present at the soil-bedrock interface. The depth to bedrock is highly variable, with depths as great as 40.5 feet below ground surface, due to the presence of pinnacles and cutters. Cutters likely represent a preferential pathway for groundwater flow, particularly when intersected by fractures.

In order to reach RAOs for the COPC at the Site, the Phase II FS has identified seven remedial alternatives. These are divided into three scenarios: Metals-Only, VOCs-Only, and Combined Metal/VOC alternatives.

Metals-Only Alternatives

1. Engineered Barriers with Institutional Actions
2. Excavation with Non-Hazardous Disposal

VOCs-Only Alternatives

3. Excavation with Low Temperature Thermal Desorption (LTTD)
4. In-situ Radio Frequency (RF) Heating with soil vapor extraction (SVE)
5. In-situ Electrical Resistance Heating (ERH) with SVE

Combined Metal/VOC Alternatives

6. In-situ ERH with Engineered Barriers and Institutional Actions
7. In-situ ERH with Excavation and Non-Hazardous Disposal

Based on the Phase II FS findings, the following remedial alternatives appear to provide the most effective means of addressing soil impacts at the Site:

- Metals-Only: Alternative 1. Engineered Barriers with Institutional Actions appears to reduce exposure risk to copper via the dermal/inhalation/ingestion pathways.
- VOCs-Only: Alternative 5. In-situ ERH with SVE represents the remedial alternative having the greatest potential to meet RAOs for TCE based on Site conditions. A field-scale pilot study is proposed to quantify the magnitude of contaminant reduction;

establish full-scale design parameters, and evaluate potential adverse impacts to existing structures (buildings, roads, etc.) at the Site.

- Combined Metal/VOC: Alternative 6. In-situ ERH with Engineered Barriers and Institutional Actions can address both copper and TCE soil impacts.

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Litton Systems Inc. Site
Site Reassessment
Reference # 29

STATE OF MISSOURI

Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

9/14/06

MEMORANDUM

DATE: September 7, 2006

TO: Evan Kifer, Environmental Specialist
Hazardous Waste Program, Division of Environmental Quality

FROM: Peter Bachle, Geologist
Geological Survey Program, Division of Geology and Land Survey (DGLS)

SUBJECT: Geohydrologic Summary Addendum for Litton Industries Site

LOCATION: SE ¼, SW ¼, Section 6, Township 29 North, Range 22 West, Brookline 7.5-Minute Quadrangle, Greene County, Missouri
37° 14' 34" North Latitude and 93° 22' 40" West Longitude

GROUNDWATER PATHWAY

Due to the large size of the Litton Industries site, the well survey has been expanded (from a point source to a polygon roughly outlining the potential source area for the site). The additional wells and springs encompassed by this expansion are summarized below.

The DGLS databases contain records of additional nineteen domestic wells and one municipal well within a four-mile radius of the site. Figure 1 (addendum) illustrates the approximate locations of the twenty additional known non-monitoring wells within a 4-mile radius of the site. Table 1 (addendum) lists specific technical attributes (total and casing depth, static water level, date drilled, yield, etc.) of the non-monitoring wells found within 4 miles of the site. Table 3 (addendum) lists the additional springs found within four miles of the site. (Table 2 is not altered by the addendum).

Some wells listed in the Logmain database may no longer be used. Prior to 1987, registry of private wells was not required, so some existing older wells may not be included in the database. Because of this exception, the databases may not accurately depict water well usage in this area. Since a public water supply district does not cover the well survey area outside of the City of Springfield, most residential homes and businesses outside of Springfield are likely to have a private well.

FILE Litton Industries PA/SI
Greene Co

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Hazardous Waste Program
MO Dept. of Natural Resources

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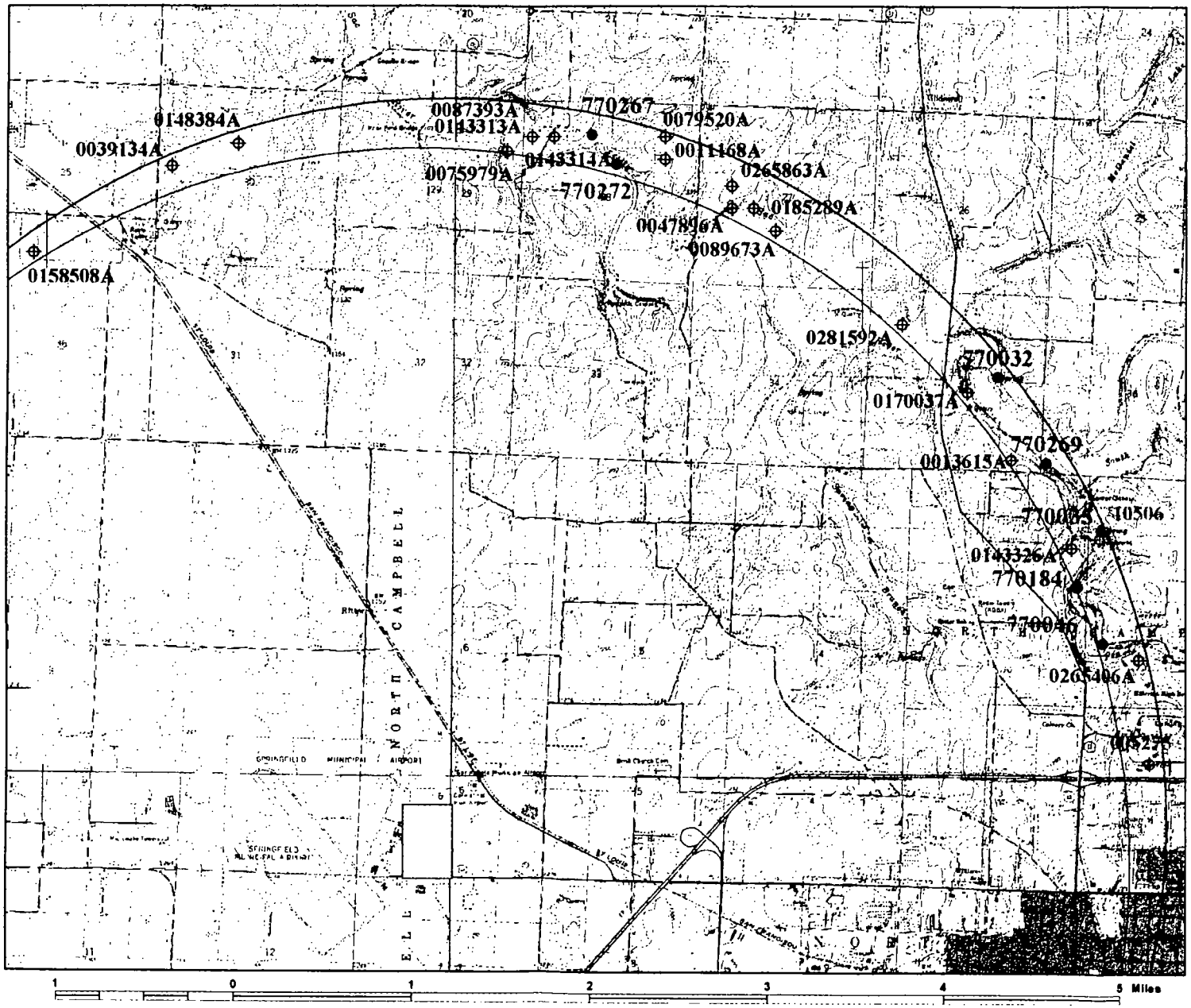

Figure 1: (Addendum)

Four-Mile Well Survey
Litton Industries Site
Greene County, Missouri
August 29, 2006

N
W E
S

- Litton Industries Site
- Addendum 4-mile radius
- Former 4-mile radius
- Well from MDNR/WPSCD Public Drinking Water Program (PDWP)
- Certified well from the Well Information Management System (WIMS) MDNR Wellhead Protection Section
- Well from MDNR/DGLS sample well-log library (Logmain)
- Spring from MDNR/DGLS spring database

Well and spring data were autoplotted from ArcView shapefiles and are accurate to within ¼ mile.

Table 1: Well Data For Litton Site, Greene County, Missouri (Addendum)

Non-monitoring wells located within 4.0 mile of the Littonl site

Source	Well ID	Depth	CSG	Elev	SWL	GPM	Date	Use	Owner	Aquifer
3 to 4 Miles										
Logmain	005275	105	--	1236	--	3	1939	Domestic	Jones	Springfield Plateau
PWS	10506	1404	148	--	96	2100	1915	Municipal	City of Springfield	Springfield & Ozark
WIMS	0011168A	305	84	--	60	50	1987	Domestic	MASTRORIO	Springfield & Ozark
WIMS	0013615A	405	252	1150	120	35	1989	Domestic	BROWN	Ozark
WIMS	0039134A	405	294	1150	120	40	1990	Domestic	LATHROP	Ozark
WIMS	0047896A	275	185	1170	90	60	1991	Domestic	COOK	Ozark
WIMS	0075979A	400	173	1060	85	50	1992	Domestic	ANDRUS	Springfield & Ozark
WIMS	0079520A	365	273	1175	120	100	1993	Domestic	HUDGINS	Ozark
WIMS	0087393A	308	190	1085	70	120	1992	Domestic	JOHNSTON	Springfield & Ozark
WIMS	0089673A	325	215	1065	120	90	1993	Domestic	--	Ozark
WIMS	0143313A	312	105	--	60	50	1995	Domestic	JOY	Springfield & Ozark
WIMS	0143314A	355	105	1115	120	50	1995	Domestic	PROCTOR	Springfield & Ozark
WIMS	0143326A	415	140	--	120	45	1995	Domestic	HANCOCK	Springfield & Ozark
WIMS	0148384A	425	105	1140	150	40	1996	Domestic	RIPPEE	Springfield & Ozark
WIMS	0158508A	440	100	--	200	40	1996	Domestic	DUCKWORTH	Springfield & Ozark
WIMS	0170037A	435	140	--	--	100	1997	Domestic	MOORE	Springfield & Ozark
WIMS	0185289A	325	105	--	90	80	1997	Domestic	BOLIN	Springfield & Ozark
WIMS	0265406A	--	--	--	--	--	2001	Domestic	PYLE	Springfield & Ozark
WIMS	0265863A	405	105	--	150	70	2001	Domestic	HURLEY	Springfield & Ozark
WIMS	0281592A	390	--	--	--	--	2001	Domestic	COOPER	Springfield & Ozark

Total number of wells located 3 to 4 Miles from the Littonl site: **20**

Table 3: Springs located within 4.0 miles of the Litton Industries site, Greene County, Missouri (Addendum)

ID Number	Distance	Name	Location within Section	Section	Township	Range	Elevation	Flow (gpm)
770032	3 to 4 Miles		SE1/4, SW1/4, NE1/4	35	30N	22W	1130	NA
770035	3 to 4 Miles	FULBRIGHT SPRING	SW1/4, NW1/4, NW1/4 (long section)	2	29N	22W	1120	450-4,500
770046	3 to 4 Miles		SE1/4, SW1/4, NW1/4 (long section)	2	29N	22W	1200	NA
770184	3 to 4 Miles		SE1/4, NE1/4 (long section)	3	29N	22W	1130	NA
770267	3 to 4 Miles	JOHNSTON SPRING	SE1/4,NE1/4,NW1/4	28	30N	22W	1070	NA
770269	3 to 4 Miles	LINE SPRING	SW1/4,SW1/4,SW1/4	36	30N	22W	1095	NA
770272	3 to 4 Miles	RIMSTONE CAVE SPRING	NW1/4,SW1/4,NE1/4	28	30N	22W	1050	NA

Springs were autoplotted from ArcView shapefiles. gpm=gallons per minute.

Litton Systems Inc. Site
Site Reassessment
City of Springfield, MO Public Water Supply (Reference 31)
September 5, 2006, Evan Kifer

Year ending 2005:	
Sources:	9
Water Meters:	69,293
Average Persons Per Household According to 2000 U.S. Census (Reference 28):	2.34
Number of Customers served by City of Springfield Public Water System (2.34 x 69,293):	162,146
Total Raw Water Treated in 2005 (In Million Gallons)	12,261.23

Source:	Distance from Site in miles:	2005 Total Raw Water Produced (In Million Gallons):	% of Total Raw Water Produced in 2005[a]:	% of Population Allocated to Source[b]:	Number of People Served[c]:
Orchard Crest Well (Well #10)	2-3	47.87	0.39	12.50	20,268
Fulbright Spring	3-4	1,200.88	9.80	12.50	20,268
Fulbright Well (Well #1)	3-4	638.72	5.21	12.50	20,268
McDaniel Lake	>4	3,130.08	25.53	12.50	20,268
James River	>4	2,552.09	20.81	12.50	20,268
Fellows Lake	>4	4,030.02	32.87	12.50	20,268
Well #11	>4	37.09	.30	12.50	20,268
Well #12	>4	261.02	2.13	12.50	20,268
Well #13	>4	0	0	0	0

Total People Served by City of Springfield Groundwater Source Located Within Four Miles of the Site: Orchard Crest Well, Fulbright Spring, and Fulbright Well[d]:	60,804

[a] - Total Raw Water Produced/Total Raw Water Treated in 2005

[b] - Since no source supplies more than 40% of the total population being served, the population is equally apportioned among 8 sources.

[c] - Number of Customers x 12.5%

[d] - 162,146 x 12.5% = 20,268

Litton Systems Inc. Site
Site Reassessment
Reference # 30

CENSUS OF MISSOURI PUBLIC WATER SYSTEMS 2004

Missouri Department of Natural Resources
Water Protection and Soil Conservation Division
Water Protection Program
Public Drinking Water Branch

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CITY UTILITIES

Bringing Power Home.

Litton Systems Inc. Site
Site Reassessment
Reference # 31

February 16, 2006

Prepared for: Rebecca Wells-Albers
Environmental Specialist
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

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FEB 21 2006

Hazardous Waste Program
MO Dept. of Natural Resources

Rebecca –

In response to your email dated 1/23/06, we are providing the following information:

Names of Drinking Water Sources For City Utilities:
Stockton Lake
Fellows Lake
McDaniel Lake
James River
Fulbright Spring
Well No. 1 (at Fulbright Water Treatment Plant)
Well No. 13 (at Blackman Water Treatment Plant)
Wells No. 10, 11, and 12 in the distribution system

Sources Within Four Miles of the Six Sites Under Investigation:
Well No. 1 (at Fulbright Water Treatment Plant)
Fulbright Spring (at Fulbright Water Treatment Plant)
Well No. 10 (Orchard Crest)

See the attached sheet for the FY2005 contributions from each source.

Two maps attached:
- **"City Utilities Water Facilities" shows locations of all facilities**
- **"Hydraulics of Multiple Source Influence" shows zones of mixing between various sources**

Please do not hesitate to call if you have questions.

Sincerely,

Amy Ruggeri

Amy Ruggeri, P.E.
City Utilities
P.O. Box 551
Springfield, MO 65801
417-831-8779

FY2005 SUMMARY

WATER TREATMENT DEPARTMENT MONTHLY SUMMARY OF PUMPAGES IN MILLION GALLONS

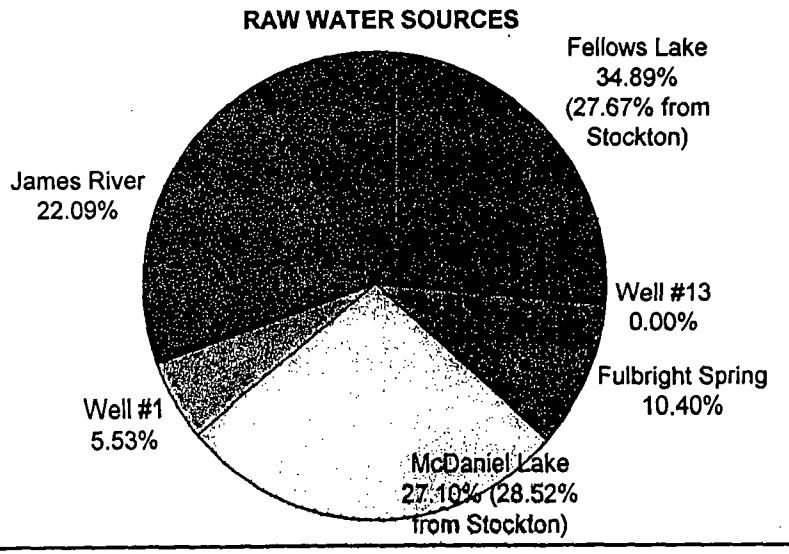
FOR FY 2004-2005

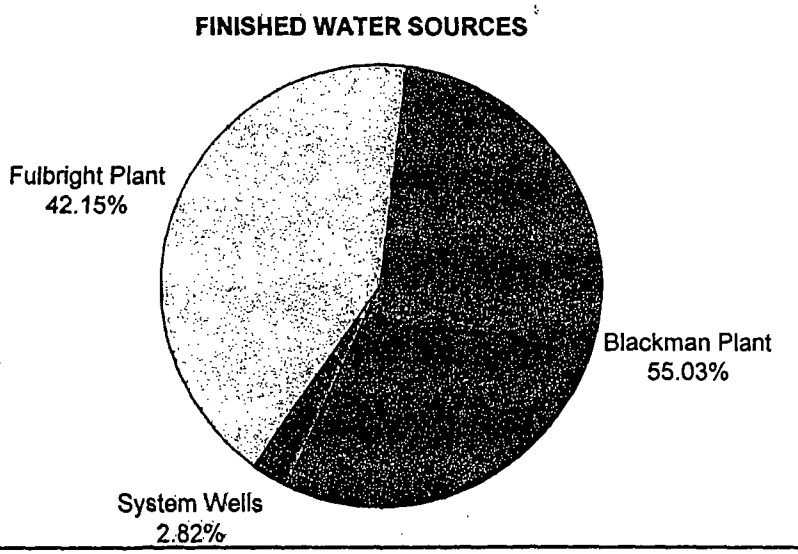
	FULBRIGHT				BLACKMAN				SYSTEM FINISH				WASHWATER		RAW WATER TRANSFERS				
	RAW				RAW				WELLS			TOT.			STL to	STL to	FEL to	JR to	FEL to
MO	SPG.	MCD.	WL#1	FIN.	J.R.	F.L.	WL13	FIN.	10	11	12	*FIN	FTP	BTP	FEL	MCD	MCD	FEL	JR**
Oct	23.63	280.25	90.67	365.12	186.79	352.47	0.00	560.94	9.63	9.88	56.04	1001.61	6.45	10.80	191.38	228.55	0.00	0.00	0.00
Nov	117.71	121.33	87.59	283.41	368.23	70.30	0.00	458.52	7.24	8.47	33.62	791.26	5.59	7.56	466.16	4.13	0.00	0.00	0.00
Dec	143.96	151.78	35.98	343.57	447.37	28.64	0.00	496.16	0.00	0.00	0.00	839.73	5.91	7.92	0.00	0.00	0.00	0.00	0.00
Jan	56.37	256.40	2.59	335.50	282.00	202.50	0.00	502.87	0.00	0.00	0.00	838.37	5.47	8.82	0.00	0.00	0.00	0.00	0.00
Feb	79.35	220.22	0.00	316.87	409.18	13.28	0.00	453.81	0.00	0.00	0.00	770.68	4.79	7.02	0.00	0.00	0.00	0.00	0.00
Mar	103.63	284.88	0.00	407.71	273.42	138.97	0.00	449.64	0.00	0.00	0.00	857.35	4.99	7.74	0.00	0.00	0.00	0.00	0.00
Apr	149.89	219.59	0.00	391.86	294.34	156.74	0.00	467.59	0.00	0.00	0.00	860.60	5.11	8.46	0.00	0.00	0.00	0.00	0.00
May	154.78	281.79	64.12	511.48	0.00	579.43	0.00	586.07	0.00	0.00	33.65	1131.20	7.27	11.70	0.00	0.00	0.00	0.00	0.00
Jun	115.99	312.31	90.99	555.42	0.00	686.03	0.00	678.67	0.00	0.00	44.99	1279.08	7.34	13.32	0.00	0.00	0.00	0.00	0.00
Jul	70.41	392.58	91.44	607.50	1.41	740.25	0.00	729.64	7.59	4.18	47.06	1395.97	9.30	14.22	1.27	273.23	0.00	0.00	0.00
Aug	68.69	364.11	89.63	567.57	34.15	645.30	0.00	680.58	12.18	0.67	44.13	1305.13	8.76	12.42	146.58	285.53	0.00	0.00	0.00
Sep	116.47	244.84	85.71	481.90	255.20	416.11	0.00	681.70	11.23	13.90	1.52	1190.25	6.86	11.88	309.69	101.21	0.00	0.00	0.00
TOT.	1200.88	3130.08	638.72	5167.91	2552.09	4030.02	0.00	6746.19	47.87	37.09	261.02	12261.23	77.85	121.86	1115.08	892.65	0.00	0.00	0.00
				42.15				55.02	Total	Wells	2.82								

*TOTAL FINISH = FINISH FULBRIGHT + FINISH BLACKMAN + FINISH/SYSTEM

**SUPPLEMENTAL COOLING CAPACITY FOR LAKE SPRINGFIELD

			11551.79											
Total Raw	Fulbright S	McDaniel L	Well #1	James Riv	Fellows La	Well #13					Fulbright Plan	Blackman Plant	System Wells	
%	10.40%	27.10%	5.53%	22.09%	34.89%	0.00%			TOTAL FINISHED SOURCES		42.15%	55.02%	2.82%	





ECTRIC POWER SUPPLY — FY 2005

'ER PLANTS	DATE IN SERVICE	CAPACITY (Megawatts)	% TOTAL
Fired			
ıwest Power Station	1976	195	23.7
es River No. 1	1957	23	2.8
es River No. 2	1957	23	2.8
es River No. 3	1960	44	5.4
es River No. 4	1964	60	7.3
es River No. 5	1970	105	12.8
otal Coal Fired		450	54.8
ɔustion Turbines			
ıwest No. 1	1983	52	6.3
thwest No. 2	1983	52	6.3
es River No. 1	1989	75	9.1
es River No. 2	1992	80	9.8
n Street	1968	12	1.5
Cartney Generating Station	2002	100	12.2
otal Combustion Turbines		371	45.2
ration Total		821	100.0
ɔ-TERM PURCHASED POWER SOURCES			
ɪ River Dam Authority		60	
ıwestern Power Administration		50	
ɜs City Power & Light		51	
Long-Term Purchased Power		161	

WindCurrent: Renewable Energy From CU 462 blocks purchased by 235 customers monthly.

WATER SUPPLY — 2005

	DATE IN SERVICE	CAPACITY (Nominal) MGD
Water Treatment Facilities		
Fulbright Treatment Plant	1941	20.6
Distribution Wells	1971	1.2
Blackman Treatment Plant	1981	35.1
Total		56.9
Water Supplies (Average Daily Yield, Drought Conditions)		
Fulbright Spring	1883	2.7
Fulbright Well No. 1	1915	2.0
McDaniel Lake	1929	3.4
Fellows Lake	1957	10.8
Distribution Wells	1971	1.2
James River	1981	7.5
Stockton Lake	1996	15.0
Total		42.2
Average Daily Pumpage		33.6
MGD--million gallons per day.		
Water Impoundment Areas		
McDaniel Lake	1929	1.5 Billion Gallons
Fellows Lake	1955	10.1 Billion Gallons
Total		11.6 Billion Gallons

Approximately 80% of Springfield's drinking water comes from surface waters (lakes, rivers) and the rest from ground water (wells, springs).

NATURAL GAS — 2005

	RESIDENTIAL	COMMERCIAL	INDUSTRIAL
Average Number of Customers	72,225	7,795	197
Annual Natural Gas Bill	$695	$3,914	$81,518
Therms Used	750	4,650	107,850
Revenue per Therm	$0.9266	$0.8417	$0.7558

Record Peak	122,655 Dekatherms - January 24,2003
Natural Gas Used by Power Plants 2005	780.780 Dekatherms
Firm Pipeline Capacity	125,000 Dekatherms per day
Firm Storage Capacity	2 Billion Cubic Feet
Natural Gas Distribution	1,266 miles
Transmission	45 miles
Service Line	1,104 miles
City Gate Stations	6
District Regulator Stations	170

ELECTRIC — 2005

	RESIDENTIAL	COMMERCIAL	INDUSTRIAL
Average Number of Customers	87,732	13,301	272
Annual Electric Bill	$660	$5,281	$80,791
Kilowatt Hours Used	11,000	109,632	1,964,068
Revenue per Kilowatt Hour	$0.0600	$0.0482	$0.0411

Record Peak	760 Megawatt Hours - July 22,2005
Electric Distribution Miles	1,924
Number of Substations	40
Street Lights	19,087

WATER — 2005

	RESIDENTIAL	COMMERCIAL	INDUSTRIAL
Average Number of Customers (meters)	69,293	7,325	178
Annual Water Bill	$248	$1,206	$7,444
Thousand Gallons Water Used	72	531	6,007
Revenue per Thousand Gallons	$3.44	$2.27	$1.24

Record Pumpage Peak	52.469 Million Gallons - July 29, 1999
Water Distribution Miles	1,143
Fire Hydrants	7,413

TRANSIT STATISTICS — FY 2005

Total Revenue Passengers	1,470,356
Motor Buses Owned	
Regular Street-Service Buses	28
Demand-Response Buses	5
Total	33
Bus Miles Operated	1,188,991
Bus Hours Operated	84,243
Miles of Route	175
Passenger Facilities	
Bus Passenger Shelters	Appr. 65
Bus Benches	242
Number of Fixed Routes	14

CITY UTILITIES
Bringing Power Home.

301 East Central, PO Box 551
Springfield, MO 65801-0551
www.cityutilities.net

USAGE BY CLASS OF CUSTOMER — FY 2005

	Unit Sales	Percent
Electric, Thousand kWh:		
Residential	965,034	26.1 %
Commercial	1,458,219	39.4
Industrial	534,226	14.4
Sales for Resale	741,141	20.1
Total	3,698,620	100.0 %
Natural Gas, Dekatherms:		
Residential	5,426,092	48.6 %
Commercial	3,622,664	32.4
Industrial	2,124,692	19.0
Total	11,173,448	100.0 %
Water, Thousand Gallons:		
Residential	5,015,765	50.3 %
Commercial	3,890,526	39.0
Industrial	1,069,228	10.7
Total	9,975,519	100.0 %

Commercial includes city and county government agencies, schools, etc.

Above totals do not reflect year-end adjustments for unbilled sales.

QUICK FACTS
For Fiscal Year End 2005

CITY UTILITIES PHONE NUMBERS

Dial 863-9000 and press:

1 Electric Service Problems/Outages
2 Natural Gas and Water Service Problems/Outages
3 Residential Services
4 Business Services
5 TecHOUSE
6 Transit

Key Accounts	**831-8355**
Energy Management	**831-8348**
Purchasing	**831-8363**
Natural Gas Emergency	**831-8750**
Call Before You Dig	**1-800-344-7483**

CITY UTILITIES
Bringing Power Home.

301 East Central, PO Box 551
Springfield, MO 65801-0551
www.cityutilities.net

Quick Facts . . .

CITY UTILITIES OF SPRINGFIELD, MISSOURI

City Utilities (CU) is responsible for the generation, transmission, and distribution of electric power; the acquisition, transportation, and distribution of natural gas; and the acquisition, treatment, and distribution of water; plus the operation of the bus transportation system. The CU service territory covers approximately 320 square miles, which includes all of the city of Springfield, portions of Greene County, and a part of northern Christian County. City Utilities is a publicly-owned utility, governed by an eleven-member Board of Public Utilities, nine who are customers inside the city limits and two outside, and appointed by City Council for three-year terms. The Board normally meets on the last Thursday of each month. The Board makes policy decisions for CU and appoints the General Manager, who is the Chief Executive Officer.

GENERAL INFORMATION — 2005

Service Area Population	222,000
Service Area (in square miles)	320
Full-time Employees	962

GENERAL MANAGER — JOHN TWITTY

BOARD OF PUBLIC UTILITIES — 2005 - 2

MEMBERS	TERM E
Ronald M. Reynaud, Chairman	12/
Virginia L. Fry, Vice Chairman	12/
Fred F. Marty, Secretary	12/
Phil Wannenmacher, Asst. Secretary	12/
Geoffrey Butler	12/
Mark McNay	12/
Lisa Officer	12/
Patrick Platter	12/
Ronald Ponds	12/
Debbie Shantz	12/
Don Thomson	12/

EARNINGS AND EXPENSES (thousands) — FY 2

Total Operating Revenues	$34
Total Operating Expenses	$32
Total Operating Income	$1
Other Income, Net of other Expense	
Net Income	$1

CITY UTILITIES WATER FACILITIES

LEGEND

- 8" WATER MAIN (AND SMALLER)
- 10" & 12" WATER MAIN
- 14" & 16" WATER MAIN
- 18" & 20" WATER MAIN
- 24" WATER MAIN
- 30" WATER MAIN
- 36" WATER MAIN
- RAW WATER MAIN
- WATER TOWER OR STORAGE TANKS
- PRESSURE BOOSTER AREA BOUNDARY
- CITY LIMITS

GRAPHIC SCALE

6000 0 3000 6000 12000 24000

(IN FEET)
1 inch = 6000ft.

JANUARY 2002, JMS

4 Mile Radius

THIS MAP IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. INFORMATION CONTAINED IN THIS MAP MAY NOT BE ACCURATE.

N W E S

FULBRIGHT PUMPING STATION
BOOSTER 1
BOOSTER 2
INTERSTATE 44
LD-BRANSON AIRPORT
LE COMPTE BOOSTER 2 PUMP STATION
BLAKE STREET BOOSTER PUMP STATION
DOWNTOWN AIRPORT
DIVISION STREET PUMP STATION AND STORAGE TANK
KANSAS EXPWY.
GLENSTONE
SCHOOLCRAFT
CHESTNUT EXP.
MILL STREET ELEV. TANK
GLENSTONE ELEV. TANK
SUNSHINE
HWY. 13 US HWY. 60
US HWY. 60
SOUTHWEST GROUND STORAGE TANK
BLACKMAN WATER TREATMENT PLANT
RAW WATER MAIN
JAMES RIVER FREEWAY
Kathryn Hill
Fairview Hill
US HWY. 160
JAMES RIVER POWER STATION

MAPPING & SURVEYING

CITY UTILITIES
Bringing Power Home

HYDRAULICS OF MULTIPLE SOURCE INFLUENCE
WITH MIXING ZONES

LEGEND:

- BLACKMAN WATER ZONE
- FULBRIGHT WATER ZONE
- BLACKMAN/FULBRIGHT MIXING ZONE
- WATER BOOSTER ZONE
- ORCHARD CREST WELL ZONE
- ORCHARD CREST MIXING ZONE
- FAIRVIEW/KANSAS WELL ZONE
- BORDER FOR BOOSTER ZONE

FULBRIGHT WATER TREATMENT PLANT

DIVISION ST. BOOSTER AND STORAGE TANKS

BLAINE ST. BOOSTER

MILL ST. TANK

GLENSTONE TANK

Orchard Crest Well (No. 10)

BLACKMAN WATER TREATMENT PLANT

SOUTHWEST STORAGE TANKS

KANSAS Well (No. 12)

FAIRVIEW Well (No. 11)

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JANUARY 2006 MM/JE

Litton Systems Inc. Site **Reference #32**

Site Reassessment

City of Springfield, MO Public Water Supply (Reference 31)

September 5, 2006, Evan Kifer

Year ending 2005:	
Sources:	9
Water Meters:	69,293
Average Persons Per Household According to 2000 U.S. Census (Reference 28):	2.34
Number of Customers served by City of Springfield Public Water System (2.34 x 69,293):	162,146
Total Raw Water Treated in 2005 (In Million Gallons)	12,261.23

Source:	Distance from Site in miles:	2005 Total Raw Water Produced (In Million Gallons):	% of Total Raw Water Produced in 2005[a]:	% of Population Allocated to Source[b]:	Number of People Served[c]:
Orchard Crest Well (Well #10)	2-3	47.87	0.39	12.50	20,268
Fulbright Spring	3-4	1,200.88	9.80	12.50	20,268
Fulbright Well (Well #1)	3-4	638.72	5.21	12.50	20,268
McDaniel Lake	>4	3,130.08	25.53	12.50	20,268
James River	>4	2,552.09	20.81	12.50	20,268
Fellows Lake	>4	4,030.02	32.87	12.50	20,268
Well #11	>4	37.09	.30	12.50	20,268
Well #12	>4	261.02	2.13	12.50	20,268
Well #13	>4	0	0	0	0

Total People Served by City of Springfield Groundwater Source Located Within Four Miles of the Site: Orchard Crest Well, Fulbright Spring, and Fulbright Well[d]:	60,804

[a] - Total Raw Water Produced/Total Raw Water Treated in 2005

[b] - Since no source supplies more than 40% of the total population being served, the population is equally apportioned among 8 sources.

[c] - Number of Customers x 12.5%

[d] - 162,146 x 12.5% = 20,268

U.S. Census Bureau

State & County QuickFacts

Litton Systems Inc. Site
Site Reassessment
Reference # 33

Greene County, Missouri

People QuickFacts	Greene County	Missouri
Population, 2005 estimate	250,784	5,800,310
Population, percent change, April 1, 2000 to July 1, 2005	4.3%	3.6%
Population, 2000	240,391	5,595,211
Population, percent change, 1990 to 2000	15.6%	9.3%
Persons under 5 years old, percent, 2004	6.1%	6.5%
Persons under 18 years old, percent, 2004	21.4%	24.1%
Persons 65 years old and over, percent, 2004	13.6%	13.3%
Female persons, percent, 2004	51.3%	51.2%
White persons, percent, 2004 (a)	94.0%	85.4%
Black persons, percent, 2004 (a)	2.4%	11.5%
American Indian and Alaska Native persons, percent, 2004 (a)	0.7%	0.5%
Asian persons, percent, 2004 (a)	1.2%	1.3%
Native Hawaiian and Other Pacific Islander, percent, 2004 (a)	0.1%	0.1%
Persons reporting two or more races, percent, 2004	1.6%	1.3%
Persons of Hispanic or Latino origin, percent, 2004 (b)	2.2%	2.6%
White persons, not Hispanic, percent, 2004	92.0%	83.1%
Living in same house in 1995 and 2000, pct age 5+, 2000	45.9%	53.6%
Foreign born persons, percent, 2000	1.9%	2.7%
Language other than English spoken at home, pct age 5+, 2000	4.0%	5.1%
High school graduates, percent of persons age 25+, 2000	84.7%	81.3%
Bachelor's degree or higher, pct of persons age 25+, 2000	24.2%	21.6%
Persons with a disability, age 5+, 2000	40,876	973,637
Mean travel time to work (minutes), workers age 16+, 2000	19.2	23.8
Housing units, 2004	113,156	2,564,340
Homeownership rate, 2000	63.6%	70.3%
Housing units in multi-unit structures, percent, 2000	20.9%	20.0%
Median value of owner-occupied housing units, 2000	$88,200	$89,900
Households, 2000	97,859	2,194,594
Persons per household, 2000	2.34	2.48
Per capita money income, 1999	$19,185	$19,936
Median household income, 2003	$35,958	$40,870

Persons below poverty, percent, 2003	12.5%	11.6%

Business QuickFacts	Greene County	Missouri
Private nonfarm establishments, 2003	7,868	150,415[1]
Private nonfarm employment, 2003	139,363	2,387,761[1]
Private nonfarm employment, percent change 2000-2003	1.6%	-0.5%[1]
Nonemployer establishments, 2003	17,530	347,644
Manufacturers shipments, 2002 ($1000)	3,453,869	92,909,173
Retail sales, 2002 ($1000)	3,743,851	61,861,163
Retail sales per capita, 2002	$15,392	$10,891
Minority-owned firms, percent of total, 1997	3.6%	6.5%
Women-owned firms, percent of total, 1997	22.1%	25.2%
Housing units authorized by building permits, 2004	2,659	32,791
Federal spending, 2004 ($1000)	1,351,428	45,730,137[1]

Geography QuickFacts	Greene County	Missouri
Land area, 2000 (square miles)	675	68,886
Persons per square mile, 2000	356.1	81.2
FIPS Code	077	29
Metropolitan or Micropolitan Statistical Area	Springfield, MO Metro Area	

1: Includes data not distributed by county.

|

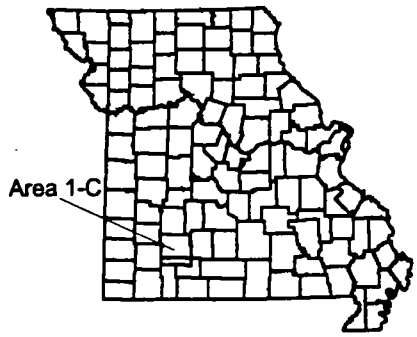
(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

FN: Footnote on this item for this area in place of data
NA: Not available
D: Suppressed to avoid disclosure of confidential information
X: Not applicable
S: Suppressed; does not meet publication standards
Z: Value greater than zero but less than half unit of measure shown
F: Fewer than 100 firms

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments

Last Revised: Thursday, 08-Jun-2006 09:33:04 EDT

Wellhead Protection Area 1-C Index Map



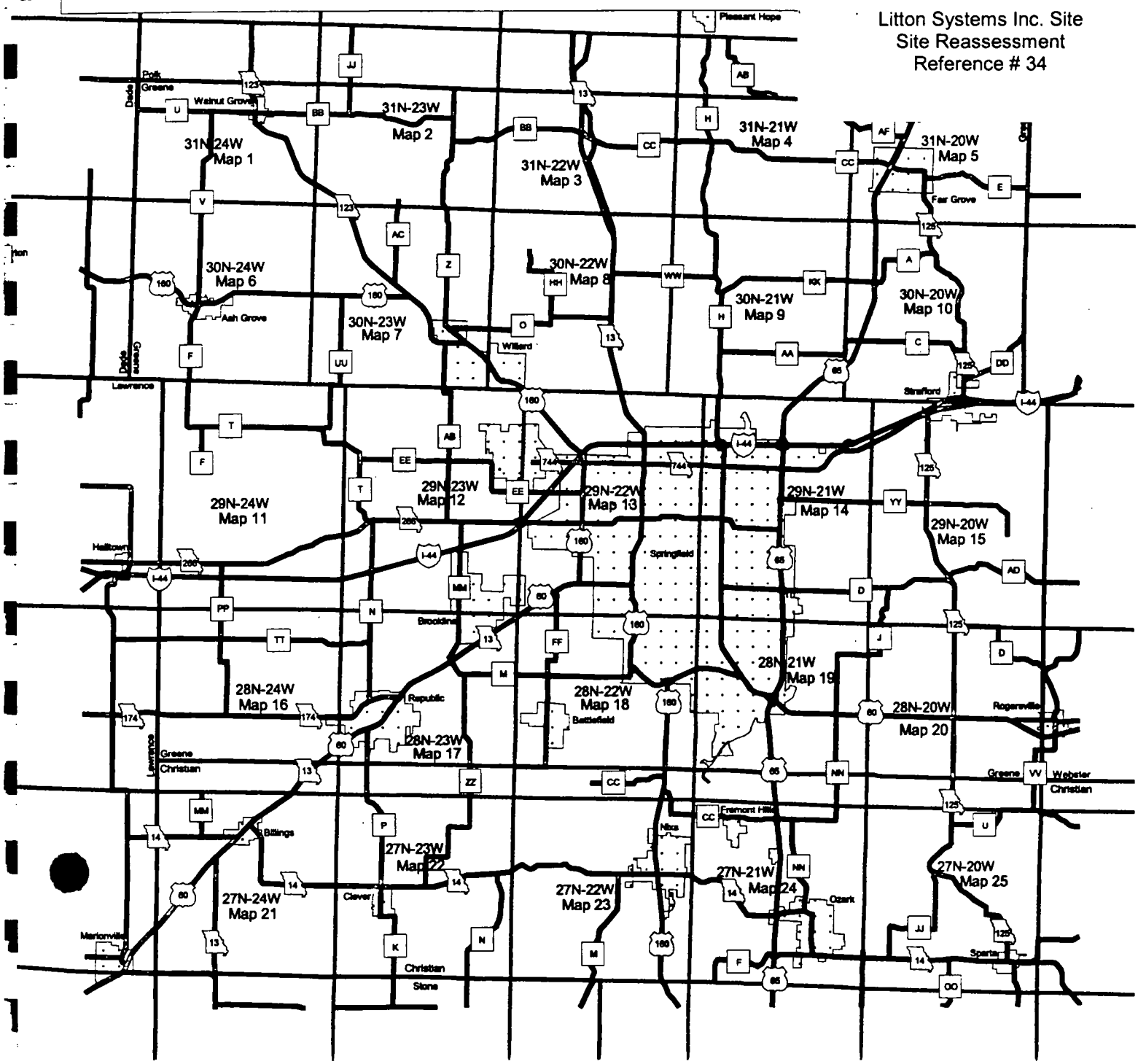
N

Primary roads
County borders
Urban areas
Township/Range grid

5 0 5 10 Miles

Missouri Department of
Natural Resources
Geological Survey and Resource Assessment Division
Water Resources Program
January 2003

Litton Systems Inc. Site
Site Reassessment
Reference # 34



HOW TO USE THE WELLHEAD PROTECTION AREA 1-C CASING REQUIREMENT MAP ATLAS

Locate the well site on the index map to determine the township, range, and map number

Turn to the map number of the well site and determine the section and quarter section

Read the three-digit number in the quarter section. This is the minimum amount of casing required to be installed for a domestic well in this quarter section.

Cartographic update and atlas compilation by Scott Kaden – January 2003

Digital compilation and original cartography by Michael Marcus – September 1994

Geologic analysis and data compilation by Michael Gawedzinski – September 1994

Data Sources

Depth is determined from a digital model of the Northview Shale Formation.
Certification records, residue well logs, driller logs, and geology are used in
[illegible]ing the sub-surface model.
[illegible] Land Survey System, roads, and hydrology are from 1:100,000 USGS Digital Line
[illegible] (DLG) data
[illegible] is from [illegible]
[illegible] are from [illegible],000 scale USGS topographic quadrangles.

Wellhead Protection Section
Department of Natural Resources
Geologic Survey and Resource Assessment Division
P.O. Box 250, 111 Fairgrounds Road
Rolla, Missouri 65401
573-368-2165
573-368-2317 FAX

Missouri Department of
Natural Resources
Geological Survey and Resource Assessment Division

Litton Systems Inc. Site
Site Reassessment
Reference # 35

STATE OF MISSOURI

Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

February 2, 2006

Mr. Shannon Cave
Policy Coordination Section
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102

RE: Sensitive Environment Information Request

Dear Mr. Cave:

The Missouri Department of Natural Resources is investigating several sites where a release of hazardous substances is known or suspected to have occurred. The investigations are being conducted under the authority of the federal Superfund Program. Part of the investigations includes identification of sensitive species populations or environments that may be at risk from hazardous substances at the site.

At this time, I am requesting the assistance of the Missouri Department of Conservation in identifying sensitive environments present on or near the sites listed below. By the U.S. Environmental Protection Agency's rules, this would include all sensitive environments, threatened or endangered species, and wetlands present on or near the sites located on the site itself, those within a four-mile radius of the site, and those within fifteen river miles downstream of the site. I have enclosed copies of the site location maps, which may include a 15-mile surface water drainage distance. I am also sending copies of these maps to your office electronically.

Washington County Lead District-Potosi Site: This is an especially large project located in Washington County in and surrounding the town of Potosi. This site covers a considerable area of approximately 30 square miles. A map showing the site boundaries is enclosed. If it would be useful, we can also provide an ArcGIS shapefile containing this site boundary.

This site needs sensitive environment information within both a 4-mile radius of the site boundaries and 15 downstream river miles of the site boundaries, along the surface water drainage pathways. The primary surface water drainages will include the Mineral Fork River to the north (and main tributaries) and Mill Creek to the east of the site. Tributaries to these drainages include Bates Creek, Breton Creek, Keyes Branch, Rubeneau Creek, Fountain Farm Branch, and Cadet Creek. If you have questions about this site, please telephone the project manager Mr. Michael Stroh at (573) 522-9902.

Kerr McGee Chemical Corporation Site: located in Springfield, Greene County, Missouri. The site is located on the Springfield, MO Topographic Quadrangle. This site needs sensitive environment

information on the site, within a 4-mile radius of the site, and 15 river miles downstream of the site along the surface water drainage. If you have questions about this site, please telephone the project manager, Ms. Rebecca Wells-Albers at (573) 751-8393.

Former Mono Manufacturing Site: located in Springfield, Greene County, Missouri. The site is located on the Springfield MO Topographic Quadrangle. This site needs sensitive environment information on the site and within a 4-mile radius of the site. There is no surface water pathway evaluation for this site. If you have questions about this site, please telephone the project manager, Ms. Rebecca Wells-Albers at (573) 751-8393.

Tuthill, MD-Pneumatics Division Site: located in Springfield, Greene County, Missouri. The site is located on the Brookline, MO Topographic Quadrangle. This site needs sensitive environment information on the site and within a 4-mile radius of the site. There is no surface water pathway evaluation for this site. If you have questions about this site, please telephone the project manager, Ms. Rebecca Wells-Albers, (573) 751-8393.

MO-AVCRAD (MO National Guard) Site: located in Springfield, Greene County, Missouri. The site is located on the Brookline, MO Topographic Quadrangle. This site needs sensitive environment information on the site and within a 4-mile radius of the site. There is no surface water pathway evaluation for this site. If you have questions about this site, please telephone the project manager, Ms. Shelly Jackson, at (573) 751-1288.

Litton Systems, Inc. Site: located in Springfield, Greene County, Missouri. The site is located on the Brookline MO Topographic Quadrange. This site needs sensitive environment information on the site and within a 4-mile radius of the site. There is no surface water pathway evaluation for this site. If you have questions about this site, please telephone the project manager, Ms. Nancy Priddy at (573) 751-8858.

I appreciate your assistance in this matter. If you have any questions regarding this request, please telephone Mr. Michael Stroh at (573) 522-9902 or myself at (573) 751-8858.

Sincerely,

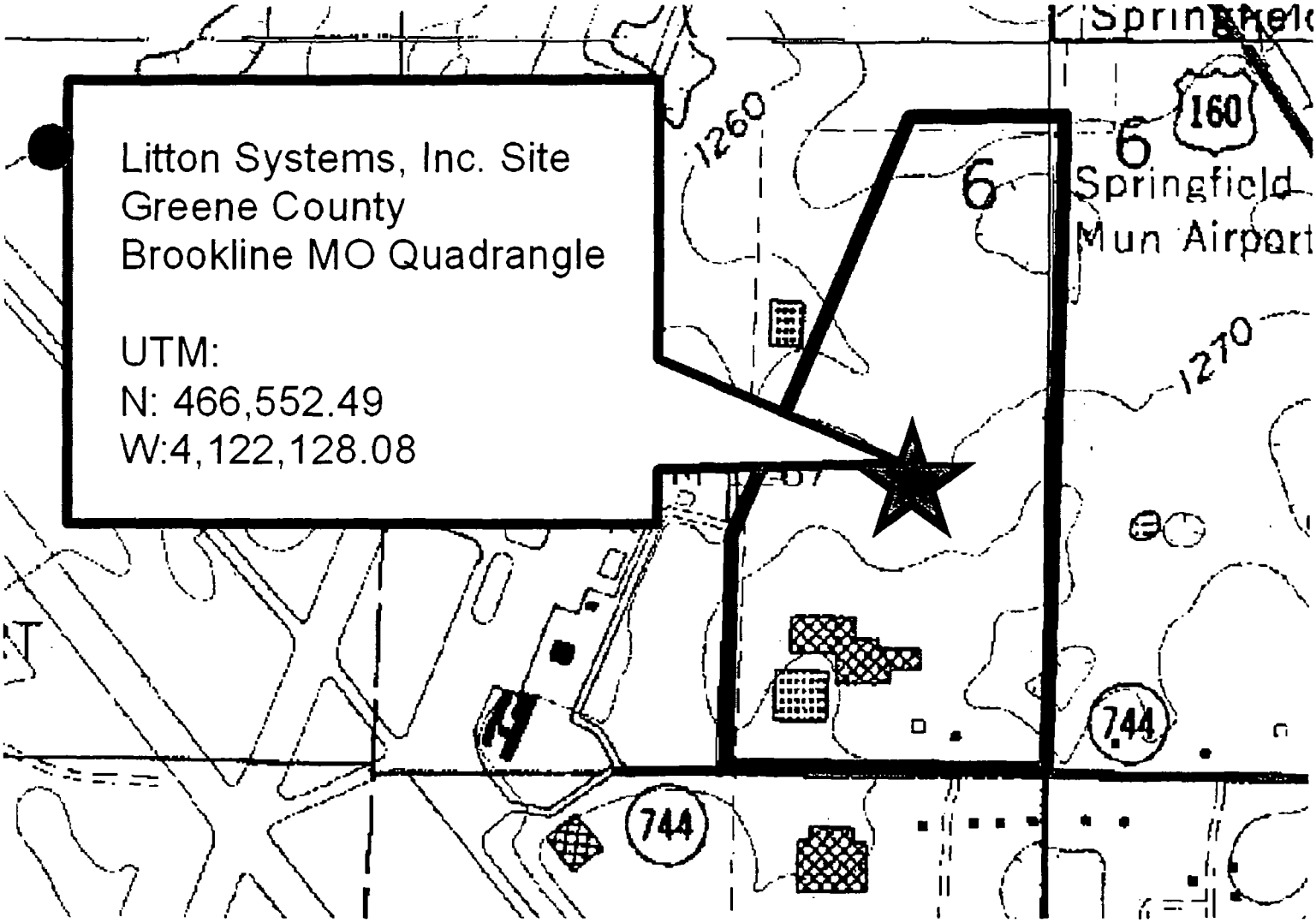
HAZARDOUS WASTE PROGRAM

Nancy H. Priddy

Nancy Priddy
Environmental Specialist

NP:lb

Enclosures


Litton Systems, Inc. Site
Greene County
Brookline MO Quadrangle
UTM:
N: 466,552.49
W:4,122,128.08
1260
6
160
Springfield
Mun Airport
1270
744
744

Missouri Department of Conservation
Policy Coordination Unit
P. O. Box 180
Jefferson City, MO 65102
573-522-4115 X 3250 – Shannon.Cave@mdc.mo.gov

Heritage Review Report

Ms. Nancy Priddy
MO DNR – Hazardous Waste Program
P.O. Box 176
Jefferson City, Missouri 65102-0176
Copies: USFWS:

Project type: Hazardous Substances Investigations (4)

Site Name	Location	Site Name	Location
Mono	UTM 4,122361.86N and 467,426.05W	Tuthill	UTM 4,121,527.92N and 466,435.23W
MO-AVCRAD	UTM 465,542.95N and 4,122,477.71W	Litton	UTM 466,552.49N and 4,122,128.08W

Described in query as: Sensitive Environmental Information Request – Hazardous Substances
Date query received: February 2, 2006

This is not a site clearance letter, but a report of Missouri Department of Conservation records concerning public lands and sensitive resources known to be near and possibly affected by the proposed project. The four sites are fairly close to each other, and to simplify the report a single table is based on a radius of four miles from the triangle cornered at Mono, Tuthill and MO-AVCRAD. While some repeated records are not within 4 miles of one of the sites, at least one instance of each species listed occurs within 4 miles of each site.

Prepared by:
7-Feb-06

Species/habitats with Federal and State concerns:

Scientific Name	Common Name	Federal Status	State Status	State Rank	Quadrangle	Last record	Sec	Twp/Rng
Myotis grisescens	Gray Bat	E	E	S3	Ebenezer	2000-06-21	34	T30N R22W
Amblyopsis rosae	Ozark Cavefish	T	E	S2	Willard	1958-03	2	T29N R23W
Amblyopsis rosae	Ozark Cavefish	T	E	S2	Ebenezer	1996-08-07	33	T30N R22W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Ebenezer	2000-05-02	28	T30N R22W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Willard	2000-04-27	36	T30N R23W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Willard	1999-05-23	30	T30N R22W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Willard	2000-04-27	25	T30N R23W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Willard	1999-05-23	30	T30N R22W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Ebenezer	2000-04-28	29	T30N R22W
Lesquerella filiformis	Missouri Bladder-pod	T	E	S3	Ebenezer	2000-04-28	34	T30N R22W
Lepus californicus	Black-tailed Jackrabbit		E	S1	Willard	1987	1	T29N R23W
Lepus californicus	Black-tailed Jackrabbit		E	S1	Springfield	1987	16	T29N R22W
Amblyopsis rosae recharge area	Ozark Cavefish Recharge Area			S2	Springfield	1989	17	T29N R22W
Thelesperma filifolium var. filifolium	Thelesperma			S2	Ebenezer	1989-04-18	28	T30N R22W

RECEIVED
FEB 0 9 2006
Hazardous Waste Program

Thelesperma filifolium var. filifolium	Thelesperma			S2	Ebenezer	1989-05-10	27	T30N R22W
Amblyopsis rosae recharge area	Ozark Cavefish Recharge Area			S2	Ebenezer	2002	6	T29N R22W
Typhlotriton spelaeus	Grotto Salamander			S2S3	Springfield	1995-07-14	1	T29N R22W
Typhlotriton spelaeus	Grotto Salamander			S2S3	Ebenezer	1996-08-07	33	T30N R22W
Typhlotriton spelaeus	Grotto Salamander			S2S3	Ebenezer	1996-03-26	34	T30N R22W
Cambarus setosus	Bristly Cave Crayfish			S3	Ebenezer	1989-11-08	2	T29N R22W
Cambarus setosus	Bristly Cave Crayfish			S3	Springfield	1996-08-15	1	T29N R22W
Cambarus setosus	Bristly Cave Crayfish			S3	Ebenezer	1996-08-07	33	T30N R22W
Chalybion zimmermanni zimmermanni	A Blue Mud Dauber			SU	Springfield	1965-06-24	19	T29N R21W
Effluent cave					Ebenezer	1997-07	33	T30N R22W

STATUS CODES- Federal status derives from the federal Endangered Species Act, administered by the U.S. Fish and Wildlife Service. The ESA provides protection for plants and animals listed as: E = Endangered, T = Threatened, C = Candidate, PE = Proposed Endangered for Federal listing. Consult with U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132) if your project affects a listed species. "State Status" is either E, for "endangered," or blank. "State Rank" codes are:

- *S1=Critically imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. (typically 5 or fewer occurrences or very few remaining individuals)*
- *S2=Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. (6 to 20 occurrences or few remaining individuals or acres)*
- *S3=Rare and uncommon in the state. (21 to 100 occurrences)*
- *SU=Unrankable: Possibly in peril in the state, but status uncertain; need more information.*

Missouri bladderpod (lesquerella filiformis, Federally endangered, State endangered) may occur in the project area on limestone glades or limestone rock outcrops along roadsides or in pastures. The species may persist as a seed bank for several years and not be found during plant surveys. Soil disturbance or fire can stimulate seed germination in the fall, yielding flowering plants the following spring. Best management recommendations may be seen at http://www.mdc.mo.gov/documents/nathis/endangered/bladderpod.pdf

Gray bats (myotis grisescens, Federally endangered, State endangered) are likely to occur in the project area, as they roost in caves and forage over streams, rivers, and reservoirs in this part of Missouri. See http://www.mdc.mo.gov/documents/nathis/endangered/graybat.pdf for best management recommendations.

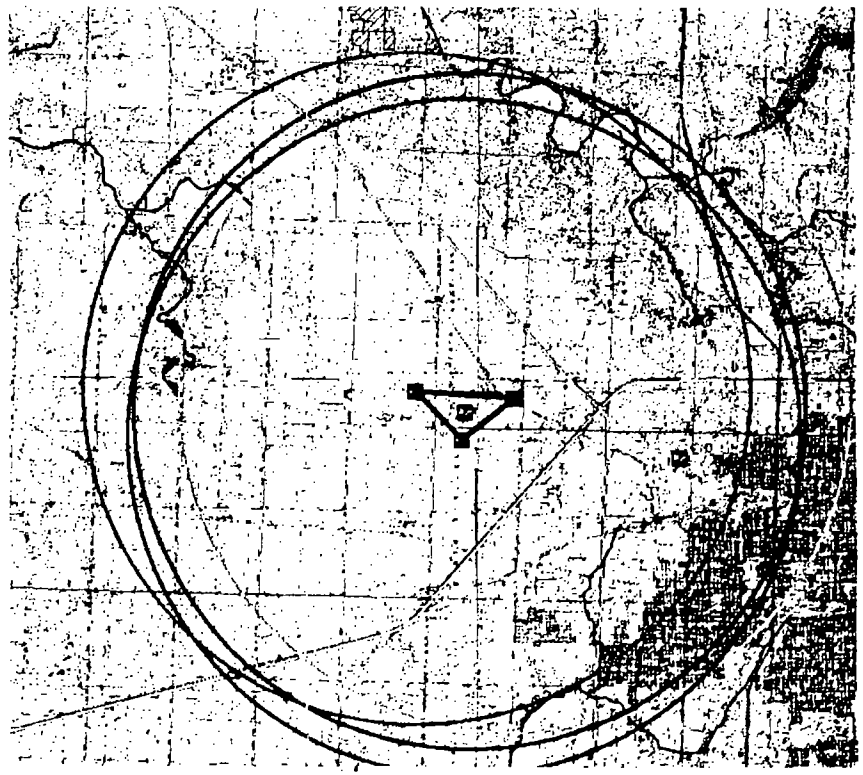
The MO-AVCRAD and Litton sites are in a state designated recharge areas for the Ozark cavefish (*Amblyopsis rosae*), the other two sites within 0.25 miles. All activities that might adversely impact groundwater quality should be avoided. See http://www.mdc.mo.gov/documents/nathis/endangered/o_cavefish.pdf for best-management recommendations.

If you determine that your project is likely to affect subterranean water quality or limestone glades, consult with the Columbia Ecological Services Office, U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181).

Concerns & management recommendations based on site or project details, not related to specific heritage records:
The project area is in region with known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Such features are not routinely identified in heritage records but may be encountered by the project. Since cave fauna are influenced by changes to water quality, every effort should be made to protect groundwater in the project area. See http://www.mdc.mo.gov/documents/nathis/endangered/karst.pdf for best management information.

Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at http://www.mdc.mo.gov/documents/nathis/endangered/streams.pdf

Habitat loss can impact populations of grassland birds native to the area, including barn owls (state endangered), northern harriers (state endangered), Henslow's sparrow (imperiled in the state), and greater prairie-chickens (state endangered). Revegetation with native grasses and other flowering plants will minimize the impact of habitat disturbance. Best management practices may be found on-line at http://www.mdc.mo.gov/nathis/endangered/bmp.htm.



A HERITAGE REVIEW provides information about species and habitats of concern that could be affected by the project. Heritage records note things that were positively identified at some date and time, marked at a location that may be more or less precise. Animals move quickly but plant communities can move also. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean the project may not encounter something. Because of this, reports include information about records near but not necessarily on the project site. Three different kinds of information are provided.

- *FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.*
- *STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and protected under the Wildlife Code of Missouri (RSMo 3 CSR 10). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR10-4.111. "State Rank" is numeric rank of relative rarity, protected under general provisions of the Wildlife Code but not endangered.*
- *"Concerns & management recommendations" are things for which one might prudently look. There is no specific heritage record, but our knowledge of the surrounding landscape suggests consideration. 93% of Missouri's land is in private ownership, so most sites have never been carefully inspected by conservation professionals*

This report is not a site clearance letter. Rather, it provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from our Heritage Database into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive natural resources. However, the Heritage Database is only one reference that should be used to evaluate potential adverse impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information and species biological characteristics would additionally ensure that species of conservation concern are appropriately identified and addressed.

Additional information on rare, endangered and watched species may be found at http://www.mdc.mo.gov/nathis/endangered/.. If you would like printed copies of best management practices cited as internet URLs, please contact us.

Missouri Department of Health and Senior Services
P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010
RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2466

Julia M. Eckstein
Director

Matt Blunt
Governor

Litton Systems Inc. Site
Site Reassessment
Reference # 36

June 29, 2006

Dennis Stinson, Chief
Superfund Section
Hazardous Waste Program
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176

Re: Volatile organic compound (VOC) levels in air samples collected at Fantastic Caverns near Springfield, Missouri

Dear Mr. Stinson:

As requested by the Missouri Department of Natural Resources (MDNR), the Missouri Department of Health and Senior Services (MDHSS) has reviewed the available air sampling data collected inside Fantastic Caverns to determine whether detected levels of VOCs are a concern for workers and visitors in the cave.

As an initial screening, sample results were compared to the U.S. Environmental Protection Agency (EPA) Region 9 Preliminary Remediation Goals (PRGs). EPA Region 9 Ambient Air PRGs are risk-based concentrations that are considered to be health protective for cancer or non-cancer health effects from long-term chronic exposure, and are based on a residential exposure scenario. As noted in the data table provided by MDNR, the only contaminant detected that exceeded PRGs was Trichloroethene (TCE).

Given that workers and visitors in the cave would be expected to be exposed less frequently and for a shorter duration than receptors in a residential setting, sample results for TCE were also compared with the federal Agency for Toxic Substances and Disease Registry's Minimal Risk Levels. An MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse non-cancer health effects over a specified duration of exposure. These screening levels are used to identify contaminants and potential non-cancer health effects that may be of concern. MRLs are derived for acute (1 - 14 days), intermediate (>14 days - 364 days), and chronic (365 days and longer) exposure durations. ATSDR's acute inhalation MRL for TCE is 10,748 $\mu g/m^3$ or 2,000 parts per billion. The intermediate inhalation MRL for TCE is 537 $\mu g/m^3$ or 100 parts per billion. A chronic inhalation MRL for TCE has not been derived.

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Hazardous Waste Program
MO Dept. of Natural Resources

Of the samples collected, only two samples had detectable levels of TCE, 150 $\mu g/m^3$ and 53 $\mu g/m^3$, both of which were collected from underneath the bridge area estimated to be approximately 10 feet below where the tour tram passes overhead. Samples collected from breathing height at the tour turn-around point where the tour pauses for approximately 20 minutes for a presentation were non-detect for TCE.

Considering that the concentrations of TCE detected in the cave air are well below both the acute and intermediate inhalation MRLs, potential exposure by workers or visitors is not expected to pose any adverse health risk from acute or intermediate-duration exposures.

Additionally, it is unlikely that long-term, chronic exposures to concentrations of TCE in cave air would occur in this situation because the stream suspected to contain TCE and other VOCs is dry much of the year. Also, TCE was not detected in the samples which were collected from breathing height in the area of the turn-around point, where exposures would be most likely to occur. If conditions change, however, and TCE is detectable in areas where exposures would likely occur, workers exposed to elevated levels over a long period of time could have the potential for adverse non-cancer health effects and could also be at increased risk of developing cancer.

Because limited sampling is available and only two rounds of sampling actually occurred from areas with likely exposure potential, MDHSS would recommend additional monitoring to ensure that long-term exposure is not of concern.

If you have any questions or concerns, please contact Ms. Michelle Hartman of my staff at (573) 751-6102.

Sincerely,

Gale M. Carlson, Chief
Bureau of Environmental Epidemiology

GMC/KC/MDH/rb