

**REMEDIAL ACTION REPORT
RECOVERY OF BURIED DRUMS
FORMER GENERAL MOTORS
LEEDS ASSEMBLY PLANT
KANSAS CITY, MISSOURI**

August 2000

**96-620-3-005
GMLEEDS**

**Burns & McDonnell Engineering Company, Inc.
Engineers-Geologists-Scientists
Kansas City, Missouri**

LEEDS002489

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1.0 INTRODUCTION

On May 18, 1999, several drums were unearthed at the former General Motors Leeds facility located at 6817 Stadium Drive in Kansas City, Missouri. The discovery was made during a sewer extension project conducted by Leeds Industrial (the facility's current owner). Based on available information, the drums are suspected of containing paint waste generated during the assembly of automobiles. General Motors has chosen to voluntarily investigate the extent of buried drums and implement corrective actions as necessary to protect human and ecological receptors. General Motors has completed the following activities and reports:

- Subsurface Investigation – May 25, 1999
- *Subsurface Investigation Report* – July 1999
- *Remedial Action Plan* – July 1999
- Recovery of Buried Drums – December 20, 1999 to December 30, 1999
- Geophysical Survey – January 26, 2000 to January 28, 2000
- Site Restoration – April 25, 2000 to April 28, 2000
- Land Survey – May 15, 2000 to May 18, 2000
- Disposal of Waste Materials – June 5, 2000 to July 27, 2000

This document provides details on activities completed in the vicinity of the drum discovery between December 1999 and July 2000.

1.1 FACILITY HISTORY

More than 8.2 million vehicles were manufactured at the Leeds facility from 1929 to 1988. Activities performed at the Leeds plant by General Motors included:

- Welding of car bodies and component parts
- Assembling automobiles
- Cleaning and preparation of automobiles for priming, painting, and finishing
- Priming, painting, and finishing automobiles

The Leeds facility was indefinitely idled by General Motors in April 1988. General Motors officially announced the plant's closing in October 1990 and offered it for sale. The facility was sold to a group of local investors in 1993. Leeds Industrial currently leases space to approximately 70 industrial tenants. A variety of business activities occur at the facility; however, storage appears to be the principle use of the property.

1.2 LOCATION

The legal description of the Leeds plant is as follows:

Jackson County, Missouri
Section 24, Township 49, Range 33
All South 1/2 of the Northeast 1/4 of Section 24-49-33
Lying South of 37th St., North of Blue River
East of present East line of Missouri Pacific R/W
West of present West line of Kansas City Southern R/W

The facility is located in a mixed industrial, commercial, and residential area. The plant faces north along Stadium Drive. An employee parking lot was located on the north side of the street. Northwest of the site is an industrial area. Railroads border the plant on the east and west sides. Beyond the railroad to the east are parking lots, residences, and commercial properties. West of the western rail line are residences, commercial properties, and industrial facilities. To the southeast of the plant across the Blue River is undeveloped open land with several residences and small businesses. The Blue River forms the southern property boundary.

The drums were discovered in the southwest portion of the facility (see Figure 1). An automobile auction company occupied the area when the drums were discovered; however, the tenant has since moved to an off-site location. The location of the drum discovery and existing infrastructure is presented on Figure 2.

1.3 ORIGIN OF DRUMS

There are no historical records documenting the disposal of drums at the Leeds facility. The drums unearthed were inspected for labels, but corrosion had removed all markings. Visual observations of the unearthed drums however, provided important clues on the drum contents and time of burial.

Based upon available information, the drums were used to store paint waste. Relatively homogeneous layers of red, blue, green, and purple material were observed in the drums. This observation indicates the possibility of paint waste generated during automobile finishing. Metal pigments and solvents contained within older paint are the primary environmental concern.

During the recovery of buried drums, debris was uncovered that included wire, metal banding, bottles, and concrete. Carbon paper and automobile license plates were also discovered with the buried drums. Both items were dated between 1954 and 1955. Records and aerial photographs indicate the asphalt pavement covering the southern portion of the facility was placed prior to 1964 to provide a vehicle staging area for shipping. The area was used continually for new car marshalling and shipping; it is unlikely that General Motors would have disturbed the pavement to bury waste on-site. Therefore, the

general conclusion was drawn that the buried drums and other debris were buried during the late 1950s or early 1960s.

* * * * *

2.0 SITE CHARACTERISTICS

2.1 LAND USE

The former General Motors Leeds Assembly Plant is located on approximately 115 acres of land with approximately 2.3 million square feet of floor space in the manufacturing plant. The developed portion of the property consists of the main manufacturing building (where all manufacturing activities were conducted), a car shipping building, a wastewater treatment plant, a powerhouse, the caustic building, the paint mix building, and a drum storage area. A security fence encloses the facility and nearly all of the area is paved with concrete or asphalt.

The land surrounding and encompassing the facility is currently zoned M2, Heavy Industrial Use. Zoning is not expected to change significantly in the future; therefore, the industrial nature of the land use is likely to remain unchanged. Additionally, the former Leeds facility is located in the 100-yr floodplain, which limits potential future land uses. For these reasons, it is anticipated that the future land use will remain industrial.

2.2 GEOLOGY

The Leeds facility is located within the alluvial valley of the Blue River. Asphalt pavement, approximately 4-inches in depth, covers the southern portion of the facility. Artificial fill mixed with native materials is present from the pavement subbase to approximately 8 to 12 feet below grade. The native soil underlying the fill consists predominantly of fine-grained alluvial materials such as silty clay, clayey silt, and fine sand. The hydraulic conductivity of the alluvial materials generally ranges from 10^{-4} to 10^{-8} cm/sec. Geologic information on the Blue River valley indicates that alluvial soil extends to depths of 50 to 60 feet below grade. The fine-grained soils are generally underlain by a layer of coarse-grained clayey gravel and shale bedrock of the Pennsylvanian Pleasanton Group.

2.3 HYDROLOGY

The piezometric surface was not encountered during investigation or corrective action activities. Historic records and information on the Blue River Valley were used to estimate the site's hydrogeology. The piezometric surface is estimated to be approximately 15 feet below grade. The piezometric groundwater surface elevations are generally lowest during the winter and early spring and highest during the summer and fall. The seasonal groundwater fluctuations correspond positively with periods of low and high precipitation and river stages.

During normal to below normal river stage, groundwater flow is generally toward the Blue River. During periods of heavy precipitation and high water levels within the Blue River channel, the hydraulic gradient may be temporarily reversed causing groundwater to flow away from the Blue River. These periods of flow reversal are probably of short duration.

The Pennsylvanian Pleasonton Group bedrock is considered an aquitard throughout much of western Missouri. The facility lies within the bedrock groundwater province referred to as the Saline Groundwater Province. Paleozoic (Pennsylvanian to Cambrian) bedrock aquifers beneath the Kansas City area contain groundwater with total dissolved solid (TDS) levels that exceed 20,000 parts per million (ppm) and are not usable for potable supply. The potential for hydraulic interconnection occurring between the floodplain alluvial aquifer and the underlying Paleozoic aquifers is believed to be minimal.

* * * * *

3.0 DRUM RECOVERY ACTIVITIES

3.1 OBJECTIVE

General Motors is committed to protecting human and ecological receptors. The initial remedial action proposed by General Motors was to recover buried drums and contaminated materials near the May 1999 discovery. During drum recovery activities, it became obvious that the horizontal and vertical limits of buried drums were greater than originally estimated. In addition, analytical results indicate that most buried materials do not have toxicity levels exceeding those defined in 40 CFR 261.24. The discovery that buried drums occupy a much larger area than initially estimated and the low level of leachable contaminants made excavation less desirable and on-site management more attractive.

3.2 APPLICABLE REGULATIONS

General Motors voluntarily initiated corrective action to address the buried drum discovery. Neither CERCLA nor RCRA corrective action currently applies to the drum discovery. However, the Missouri Department of Natural Resources' (MDNR) Hazardous Waste Program has provided regulatory oversight during the project and corrective action cleanup goals were established using TCLP values from 40 CFR 261.24 and Missouri's Voluntary Cleanup Program (10 CAR 25-15.010).

3.3 LIMITS OF DRUM RECOVERY

Based upon the May 25, 1999 subsurface investigation, artificial fill containing debris was estimated to extend north and east of the drum discovery area. However, no drums or contamination were detected during the investigation. Therefore, the drums were assumed to be limited to a relatively small area. The area designated for corrective action was 40 feet square and 12 feet deep.

Burns & McDonnell, on behalf of General Motors, initiated the excavation of buried drums on December 20, 1999. Approximately 1,400 cubic yards of soil and debris were excavated during the project. The footprint of the final excavation was approximately 300 square yards (see Figure 2). Depth of the excavation ranged from 15 to 20 feet below grade. The bulk of materials recovered during the project were excavated in 1999.

Drums and drum fragments were observed in a visually distinct lift of debris approximately 12 feet thick. Based upon field observations, the materials were compacted upon an incline (see Figure 2). In the western portion of the excavation, drums and debris were found directly under the pavement. The top of the lift was over fifteen feet below grade in the eastern portion of the excavation. The lift of debris and drums dipped to the east and the vertical limits were not defined within the excavation.

Recovery of buried drums was suspended when it became obvious that the drums were not limited to a relatively small area. The western limit of the debris was defined in the excavation; however, debris and drums extended for an unknown distance to the north, south, and east. In January 2000, Burns &

McDonnell conducted a geophysical survey to assess the horizontal limits of metal-containing debris. Results of the survey are presented in Section 7.0 and Appendix A.

3.4 MATERIALS RECOVERED

Drums recovered from the excavation were corroded, crushed, or broken apart. Most of the drums that were recovered intact were empty and crushed. Drums containing paint waste had been broken apart during placement making it impossible to segregate materials within the lift of debris. Based upon field observations, drums and their contents made up less than 10 percent of materials contained in the 12-foot lift of debris. Soil excavated above and below the lift was free of drums and debris except for occasional pieces of concrete.

Two horizontal layers of distinct green and red material were observed in the eastern portion of the excavation. The green layer was observed approximately 7 feet below grade and was 24 inches thick. The layer of red material was directly under the green layer and was approximately 24 inches thick. The layers were observed in the east wall of the excavation; however, they were not observed in the west wall.

The groundwater table was not encountered during drum recovery activities. This observation was anticipated because excavation activities were conducted when the groundwater surface is typically lowest (winter and early spring). However, perched groundwater was observed in portions of the excavation. The water was primarily found in voids created by pieces of debris. The free liquid accumulated in low spots of the excavation and was typically absorbed by surrounding soil within 24 hours.

3.5 SEGREGATION AND STOCKPILING OF MATERIALS

Excavated materials were segregated and placed into separate stockpiles based on the potential for contamination. Asphalt pavement and overburden were assumed to have a low probability of contamination. Soil and debris surrounding buried drums were assumed to be contaminated and were stockpiled accordingly.

Approximately 400 cubic yards of overburden were segregated as ‘clean’ based upon visual observations and photo-ionization detector (PID) readings. Contaminant concentrations in soil samples collected from the segregated stockpile did not exceed Cleanup Levels for Missouri (CALM); therefore the material was used to backfill the excavation. The first 400 cubic yards of backfill placed and compacted in the excavation during site restoration consisted of segregated materials. Approximately 84 tons of asphalt were segregated and transported off-site for recycling at Superior Asphalt Recycling of Kansas City, Missouri.

Materials suspected of containing contaminants of concern were temporarily stockpiled on-site until they were transported off-site for disposal. Plastic sheeting was placed under and over the stockpiles of

potentially contaminated materials to minimize wind and water erosion. In addition, orange barricade fence was placed around the stockpiles to minimize unauthorized access.

* * * * *

4.0 ENVIRONMENTAL SAMPLING

Burns & McDonnell collected thirteen soil samples during the project to evaluate the magnitude and extent of contamination at the drum discovery area. The soil samples were collected using a decontaminated sampling trowel. Field personnel wore new gloves and change them between sample locations. All samples from the excavation were collected from an excavator bucket because the excavation was unsafe for human entry.

Samples collected by Burns & McDonnell were analyzed by American Technical & Analytical Services (ATAS) of Maryland Heights, Missouri. In addition, MDNR collected five split samples for independent analysis. The analytical results provided by both ATAS and MDNR are evaluated in this section of the report and complete laboratory reports are provided in Appendix B and C.

4.1 RECOVERED MATERIALS

On December 30, 1999, samples were collected from three visually unique materials encountered during the excavation activities. These materials included paint, a green material, and a red layer of material. The objective of the sampling activity was to identify contaminants of concern.

The contents of a buried drum containing paint was sampled and submitted for laboratory analysis. The sample was analyzed for volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260; the Eight RCRA metals using USEPA Methods 6010 and 7471; and for semi-volatile organic compounds (SVOCs) using USEPA Method 8270. Barium, cadmium, and chromium were detected in the paint sample above TCLP values multiplied by twenty (20 X TCLP) but below CALM values. Lead concentrations exceeded both 20 X TCLP and CALM values. Volatile and semi-volatile compounds did not have concentrations above applicable clean-up standards.

Distinct layers of green and red material were observed in the excavation approximately 7 feet below grade. Volatile organic compounds were not detected in the field using a PID; therefore, the samples were only analyzed for metals. The green material is suspected to be a zinc phosphate undercoating for automobiles based upon visual observations and was analyzed for the Eight RCRA metals, manganese, and zinc using USEPA Methods 6010 and 7471. The red material underlying the green materials was of unknown origin and may be naturally occurring. A sample of the red material was collected for laboratory analysis for the Eight RCRA metals using USEPA Methods 6010 and 7471. Neither the red or green materials had metals concentrations exceeding 20 X TCLP or CALM values.

Analytical results for the three samples are summarized in Table 1.

4.2 STOCKPILE OF SEGREGATED MATERIAL

Four soil samples were collected from the 400 cubic yard stockpile of segregated materials suspected of being "clean" to determine if the material was suitable for backfill. Sampling locations were selected by visibly examining the stockpile and taking PID readings. The outermost foot of soil was removed to expose selected sampling points.

The samples were analyzed for total petroleum hydrocarbons (TPH) using SW Method M8015; pH using USEPA Method 150.1; VOCs using USEPA Method 8260; the Eight RCRA metals using USEPA Methods 6010 and 7471; and SVOCs using USEPA Method 8270. Based upon analytical results the materials were not impacted with contaminants and the stockpile was used to backfill the excavation.

Analytical results for the four samples collected from the stockpile are summarized in Table 2.

4.3 SPLIT SAMPLES WITH MDNR

MDNR and Burns & McDonnell collected samples from the excavation on January 17, 2000. The objective of the sampling event was to document the magnitude of contamination left-in-place prior to backfilling the excavation. Burns & McDonnell and MDNR split five samples from the four corners of the excavation and the southern trench. The four samples collected from the excavation were primarily soil; the sample from the trench was a unique greenish material contained within a recovered drum. In addition, Burns & McDonnell collected a soil sample from the trench. All samples were collected from the bottom of the excavation; approximately 15 feet below grade.

The samples were analyzed for total petroleum hydrocarbons (TPH) using SW Method M8015; pH using USEPA Method 150.1; VOCs using USEPA Method 8260; the Eight RCRA metals using USEPA Methods 6010 and 7471; and SVOCs using USEPA Method 8270. Samples having contaminant concentrations exceeding 20 X TCLP values were also analyzed for leachable contaminants.

Contaminant concentrations did not exceed 20 X TCLP or CALM values in samples collected from the western corners of the excavation. In the eastern corners, benzo (a) pyrene was detected above CALM values but all other contaminant concentrations were below applicable cleanup levels.

Burns & McDonnell and MDNR collected samples from a unique greenish material contained within a drum recovered from the southern trench. The samples had metals and VOC concentrations that exceeded 20 X TCLP and CALM values; therefore, the samples were run through TCLP and reanalyzed for leachable contaminants. Leachable lead and benzene concentrations exceed values in 40 CFR 261.24; therefore, the material was classified as a characteristic hazardous waste. Total extractable hydrocarbons were also detected; however, the detections did not match referenced hydrocarbon standards and were classified as "miscellaneous." The hydrocarbon detections are suspected to be interferences from volatile

and semi-volatile compounds detected in the sample. The material was segregated and profiled for off-site disposal.

Burns & McDonnell collected a soil sample from the trench near where the drum of unique greenish material was encountered. The concentration of lead exceeded 20 X TCLP; however, leachable concentrations of lead did not exceed values in 40 CFR 261.24.

Analytical results for samples collected on January 17, 2000 are summarized in Tables 3, 4, and 5.

* * * * *

5.0 SITE RESTORATION

The site was restored to the condition existing prior to the drum discovery. Soil and debris with contaminant concentrations not exceeding CALM levels were returned to the excavation as backfill. Additional backfill was imported from off-site and compacted to restore the site to its original grade. Contaminated materials were transported off-site for disposal. At the conclusion of the project, the asphalt pavement was replaced to match existing pavement. Site restoration activities are documented in the following paragraphs.

5.1 BACKFILLING

After MDNR and Burns & McDonnell collected samples from the excavation and trench, the excavation was backfilled with excavated materials having contaminant concentrations below CALM and loess imported from an off-site borrow pit. Materials were compacted with a vibrating sheep's-foot compactor within the excavation and trench. Density measurements by Terracon of Lenexa, Kansas and field observations indicate that compaction requirements were achieved (see Appendix D). However, some settlement may occur because failing sidewalls were not reconsolidated and the bottom of the excavation could not be safely compacted. Pavement was not replaced for approximately two months to allow for settlement of the backfill materials.

5.2 PAVEMENT REPLACEMENT

The drum recovery activities disturbed approximately 840 square yards of pavement. During the week of June 19, 2000, the asphalt pavement disturbed by the excavation activities was restored. The restored pavement profile consists of 24 inches of crushed aggregate and 4 inches of asphalt pavement. The pavement was installed by Wil-Pav of Independence, Missouri.

5.3 SITE CLEANING

During the project, Double Check collected soil and debris on a daily basis that was tracked outside the stockpile area or excavation. At the conclusion of the project, the entire area was cleaned with a street sweeper. Soil and debris collected during site cleaning activities were stockpiled and disposed of by Safety Kleen Services (SK Services). No residual soil or debris associated with the excavation was observed during a final inspection of the site.

5.4 EQUIPMENT DECONTAMINATION

Portions of equipment that came in contact with contaminated soil were decontaminated. Visible dirt was first removed from the equipment by hand and placed in appropriate stockpiles. The equipment was power washed to remove residual contaminants before exiting the barricaded area. The wash water was containerized in drums and sampled for disposal. Soil collected during equipment decontamination activities was stockpiled and disposed of by SK Services.

* * * * *

6.0 WASTE DISPOSAL

General Motors retained SK Services to transport and dispose of impacted materials in compliance with applicable local, state, and federal regulations. Materials stored on-site and those excavated during remedial actions were characterized for off-site disposal. Materials having contaminant concentrations below CALM guidelines were used as backfill on-site. Contaminated materials were transported to SK Services's Lone Mountain Facility in Waynoka, Oklahoma or Aragonite Facility in Aragonite, Utah for disposal.

6.1 WASTE PROFILING

Waste materials were sampled to determine their hazard classification for disposal. Sample frequency and analytical parameters were specified by the Lone Mountain Facility. A sample of red paint waste was submitted to SK Services to profile the stockpile containing drum fragments, paint waste, debris, and soil. Based upon analytical results and the waste material characteristics, SK Services and General Motors determined that the stockpiled materials were acceptable for landfill disposal under a non-hazardous classification. The Notification of Waste Acceptance is provided in Appendix E.

The contents of the drum discussed in Section 4.3 was segregated, placed in a new drum, and profiled separately from the stockpiled soil and debris. The material was classified as a characteristic hazardous material based upon leachable lead and benzene concentrations. The Notification of Waste Acceptance is provided in Appendix E.

6.2 DISPOSAL OF NON-HAZARDOUS MATERIALS

SK Services loaded, transported, and disposed of approximately 1,520 tons of non-hazardous materials associated with this project. The materials were transported to the Lone Mountain Facility (RCRA Subtitle C facility) for disposal. Materials were transported off-site between June 5, 2000 and July 27, 2000. An example Bill of Lading used to transport the materials and a truck log are provided in Appendix E.

6.3 DISPOSAL OF HAZARDOUS MATERIALS

SK Services loaded, transported, and disposed of a drum of hazardous materials associated with this project. The drum was transported to the Aragonite Facility (RCRA Subtitle C facility) for incineration. The drum was transported off-site on July 27, 2000. A copy of the waste manifest is provided in Appendix E.

6.4 DISPOSAL OF FREE LIQUIDS

Six drums of free liquids were generated during the decontamination of sampling and construction equipment. No surface water or groundwater was collected or encountered during excavation activities. One composite sample was collected for analysis according to the City of Kansas City, Missouri (City)

guidelines. Analytical results of the testing were submitted to the City for review. If the groundwater meets the City's Publicly Owned Treatment Works (POTW) acceptance levels, it will be discharged to the POTW upon City approval. If the groundwater is contaminated above POTW acceptance levels, it will be transported and disposed of at an appropriate off-site disposal facility.

* * * * *

7.0 SITE SURVEYS

7.1 GEOPHYSICAL SURVEY

MidWest Geomar Geophysics of Frankfort, Illinois completed a geophysical survey of the drum discovery area during the week of January 24, 2000. The objective of the survey was to define the horizontal limits of metal containing debris. Two pieces of equipment were utilized to increase the accuracy of the field screening. The equipment included a Geometrics 858-G Magnetometer-Gradiometer and electromagnetic Geonics EM-61. A detailed report of the survey is provided in Appendix A.

Buried metal debris appears to extend east and south of the drum discovery area (see Figure 3). The buried debris does not appear to extend north or west of the excavation, but it does appear to extend eastward beyond the Jack Cooper Marshalling Yard. The area east of the yard was not surveyed because parked vehicles would have interfered with geophysical equipment performance.

The geophysical survey is a field screening technique that can not definitively distinguish between drums and other metallic objects. Therefore, survey results presented in the report prepared by MidWest Geomar Geophysics should not be used to define the limits of buried drums. However, based upon field observations during excavation activities, it is probable that drums are associated with the anomalous readings obtained by the geophysical survey. The survey information is useful in focusing future investigations in areas that have the greatest potential of impact by waste materials associated with buried drums.

7.2 LAND SURVEY

At the request of MDNR, a land survey was completed to locate surface features and define topography within the Jack Cooper Marshalling Yard. Anderson Survey Company of Lee's Summit Missouri completed the survey in May 2000. Based upon surface features, the drum discovery area drains to a ravine located west of the site. There is approximately 30 feet of relief between the pavement surface at the drum discovery area and the bottom of the ravine. Surface water draining through the ravine flows southward to the Blue River. Surface features and site topography are shown on Figure 4.

* * * * *

8.0 RECOMMENDATIONS

Based upon field observations and the geophysical survey, the horizontal limit of buried metallic debris is greater than initially anticipated. Excavation and off-site disposal of the debris is not economically desirable if the materials do not pose a risk to human and ecological receptors. Burns & McDonnell recommends that additional investigation be conducted to assess contaminant migration pathways and potential receptors. Based upon results of the investigation, the necessity and feasibility of final corrective actions can be assessed.

8.1 ADDITIONAL INVESTIGATION

Receptor contact with the metallic debris is not anticipated because the property is covered with pavement. In addition, institutional controls can be developed that would limit the future disturbance of pavement and specify methods for handling materials excavated during infrastructure development projects. Therefore, the initial investigation will focus on groundwater and not materials in the vadose zone. If groundwater contamination is detected and an active source of contaminants is suspected, a focused investigation of the vadose zone would be completed.

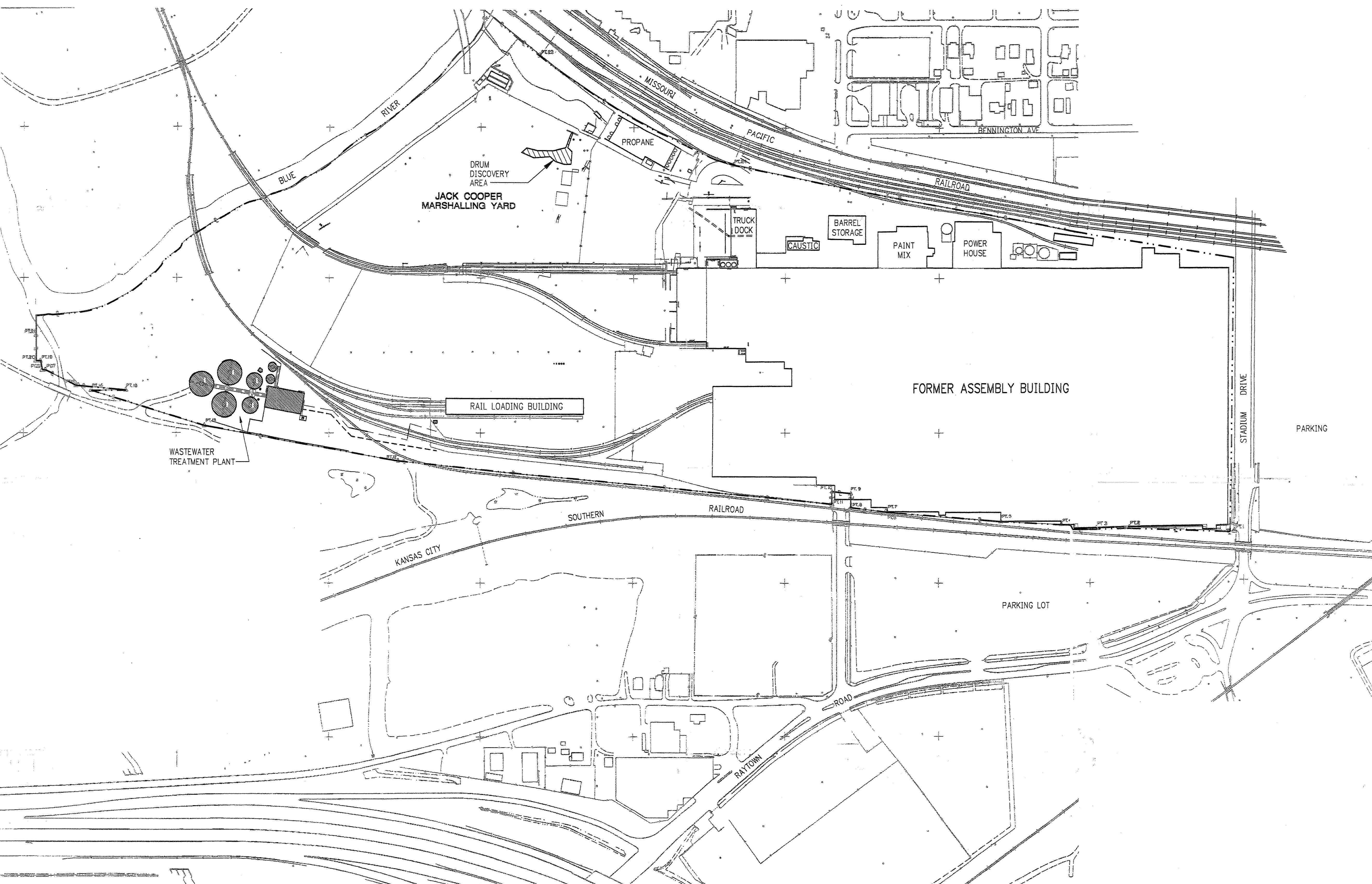
Burns & McDonnell recommends collecting groundwater samples between the metal containing debris detected by the geophysical survey and the Blue River. Samples collected would be analyzed for TPH, dissolved metals, VOCs, and SVOCs. If groundwater contamination is detected, additional samples would be collected using soil probes or wells to define the limits of impact. Specific details of the investigation will be provided in a Workplan. The Workplan will be submitted to General Motors and MDNR for approval before initiating the investigation.

8.2 ASSESSMENT OF RISK

Burns & McDonnell recommends conducting an assessment of risk if groundwater contamination is detected. The risk assessment would use investigation results to develop a Waste Management Plan that is protective of receptors, technically feasible, and economically justifiable. The objective would be to develop site-specific cleanup goals and implement corrective actions as necessary to protect both on-site and off-site human and ecological receptors. If necessary, corrective action could include institutional controls or remedial efforts that reduce the toxicity, mobility, or volume of wastes.

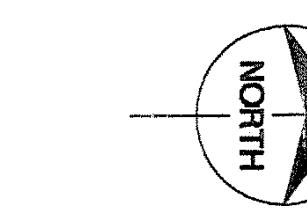
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FIGURES

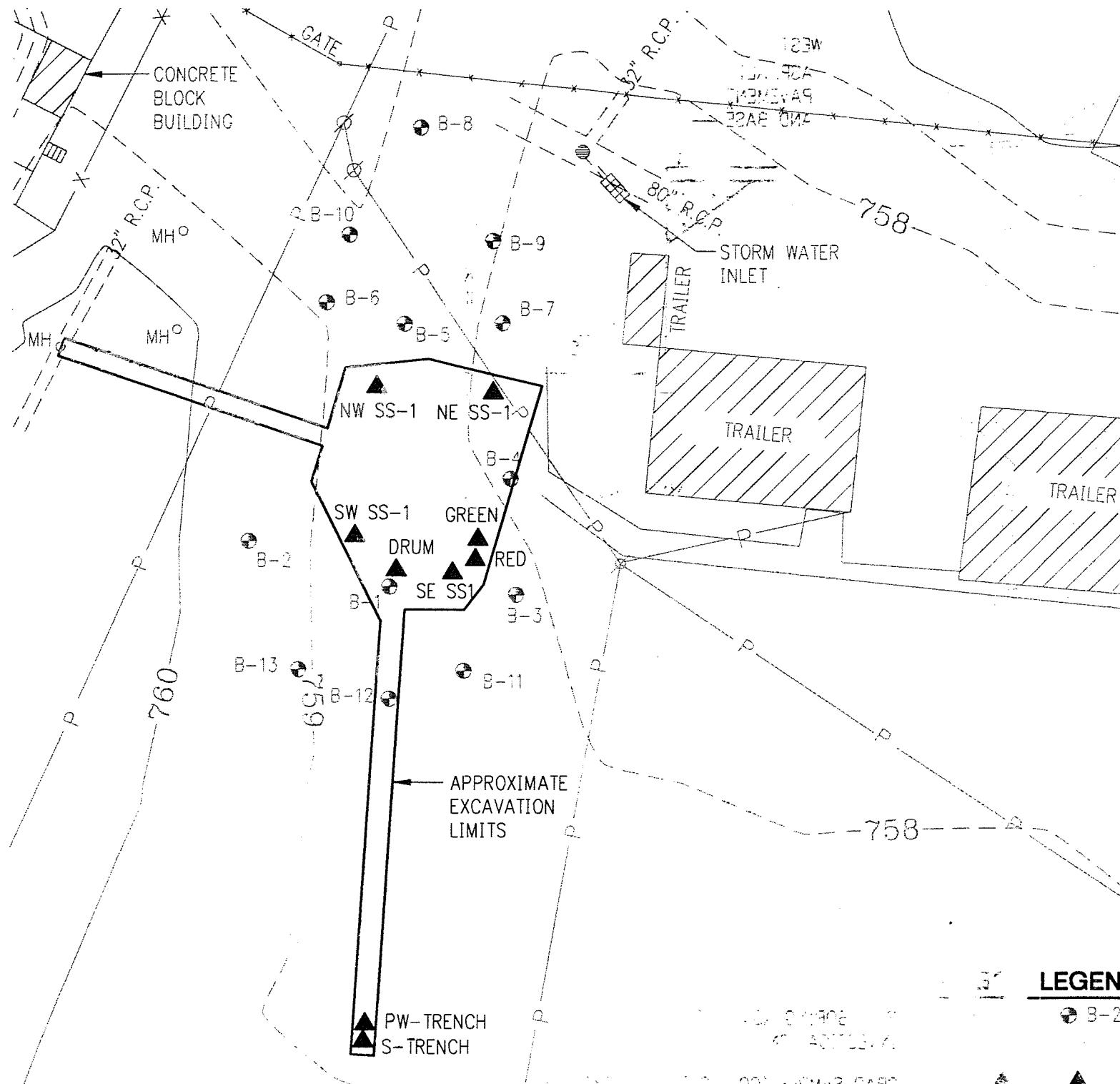


LEGEND

- PROPERTY LINE
- STRUCTURES



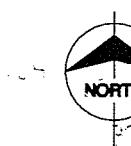
APPROXIMATE SCALE: 1" = 150'

**DRUM RECOVERY EXCAVATION**

30 0 30 60

SCALE IN FEET

100' = 1' GM LEEDS PLANT



NORTH

P0134

760

—

—

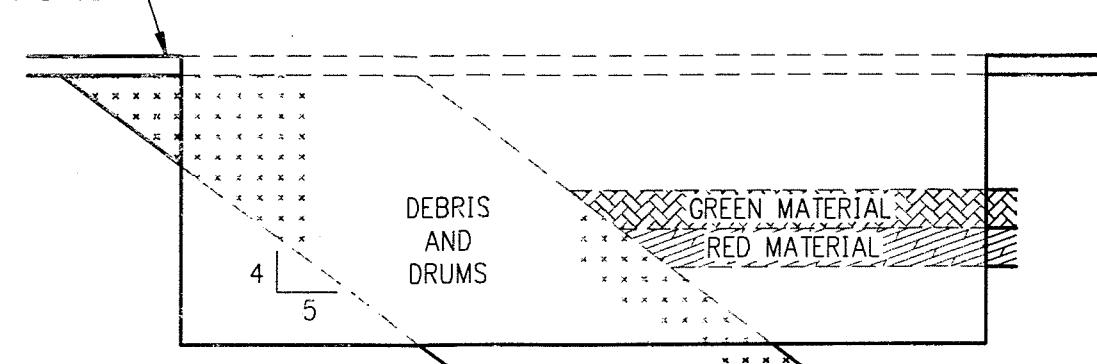
758

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WEST
ASPHALT
PAVEMENT
AND BASE

EAST

**VERTICAL PLACEMENT OF DEBRIS IN EXCAVATION****LEGEND**● B-2 SOIL BORING ADVANCED IN MAY, 1999
INVESTIGATION▲ ▲ GRAB SAMPLE (COLLECTED APPROXIMATELY
15' BELOW GRADE)

○ MH MANHOLE

○ PO POWER POLE

— O LINE OVERHEAD POWER LINE

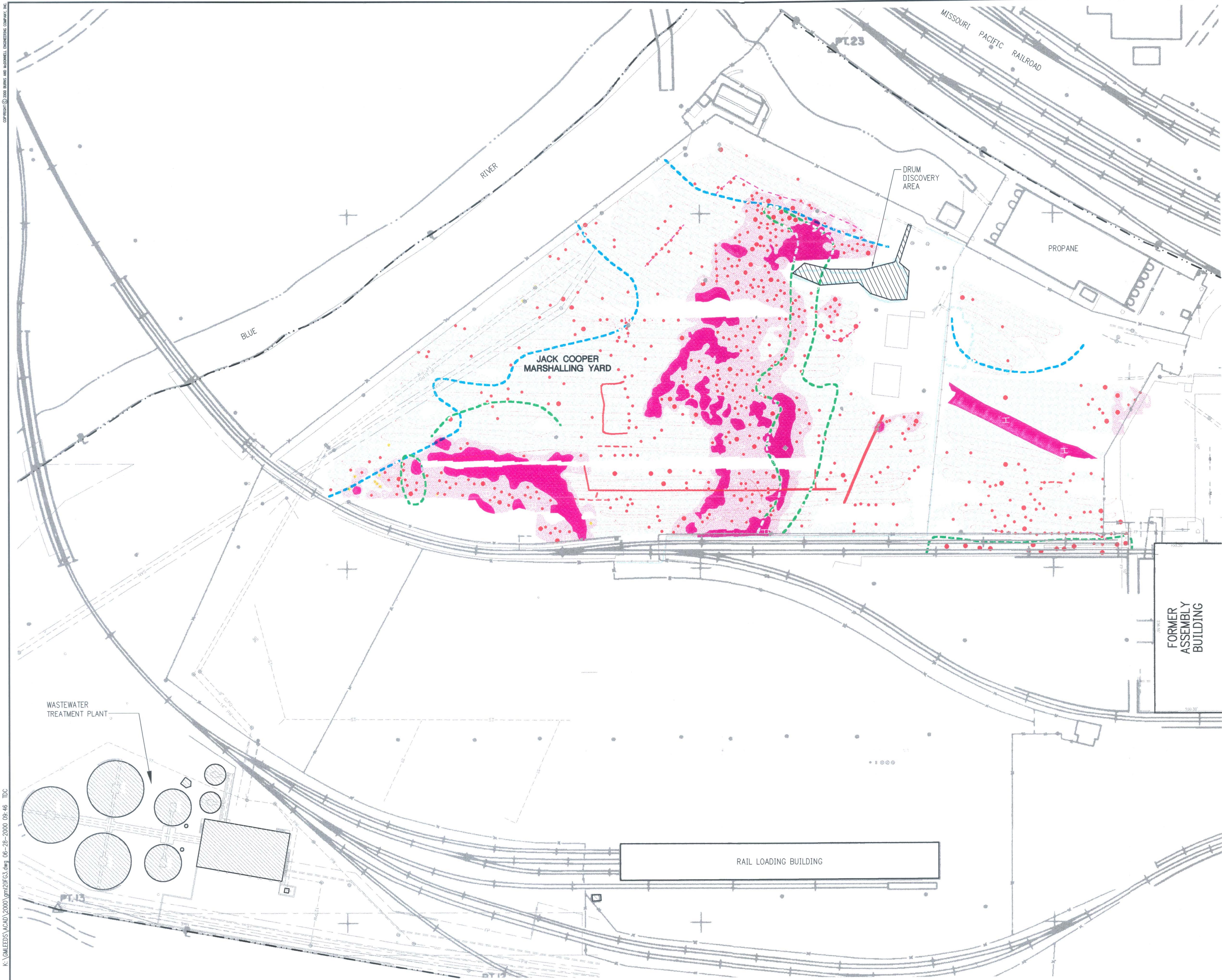
— FENCE

— Existing Grade 10 Foot Contour

— Existing Grade 1 Foot Contour

LEEDS002510

Figure 2DRUM DISCOVERY AREA
FORMER GM LEEDS PLANT
KANSAS CITY, MISSOURI



SOURCES:
REFERENCE DRAWING 36529RB2.DWG DATED 8/13/93 BY
ANDERSON SURVEY COMPANY.
REFERENCE DRAWING 39171-1.DWG DATED 5/24/00 BY
ANDERSON SURVEY COMPANY.

LEGEND

- PROPERTY LINE

STRUCTURES

Anomalous Zone
Possible Substantial Metallic Objects

Anomalous Zone of Possible Numerous Buried Metallic or Concrete Objects

Linear Anomalies Possible Pipes, Cables, or other Linear Features

Possible Buried Metallic Objects

Shallow or Surface Metallic Objects

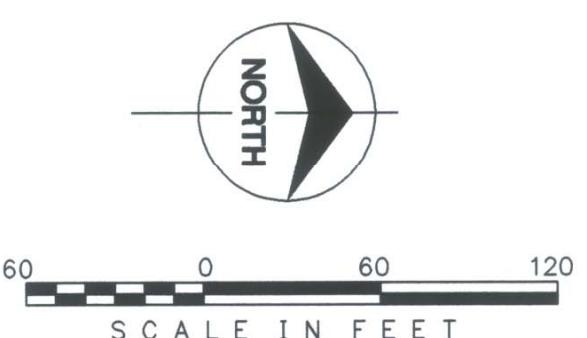
Outline of Anomalous Zones Specific to Magnetic Survey Results

Outlines of Areas Affected by Interferences

EM61 Survey Lines

G858 Survey Lines

Positioning by DGPS (Trimble ProXRS)
Coordinate System:
Universal Transverse Mercator (UTM)
Zone 15S
Datum:
World Geodetic System (WGS-84)



A horizontal scale bar with tick marks at 60, 0, 60, and 120. The text "SCALE IN FEET" is centered below the bar.

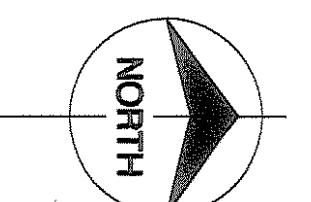
LEEDS002511

Figure 3
ANOMALIES CONTOUR MAP
FORMER GM LEEDS PLANT
KANSAS CITY, MISSOURI

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SOURCES:
REFERENCE DRAWING 36529RB2.DWG DATED 8/13/93 BY
ANDERSON SURVEY COMPANY.
REFERENCE DRAWING 39171-1.DWG DATED 5/24/00 BY
ANDERSON SURVEY COMPANY.

LEGEND

- PROPERTY LINE
- STRUCTURES
- 760 5 FOOT CONTOUR
- - - 760 1 FOOT CONTOUR



60 0 60 120
SCALE IN FEET

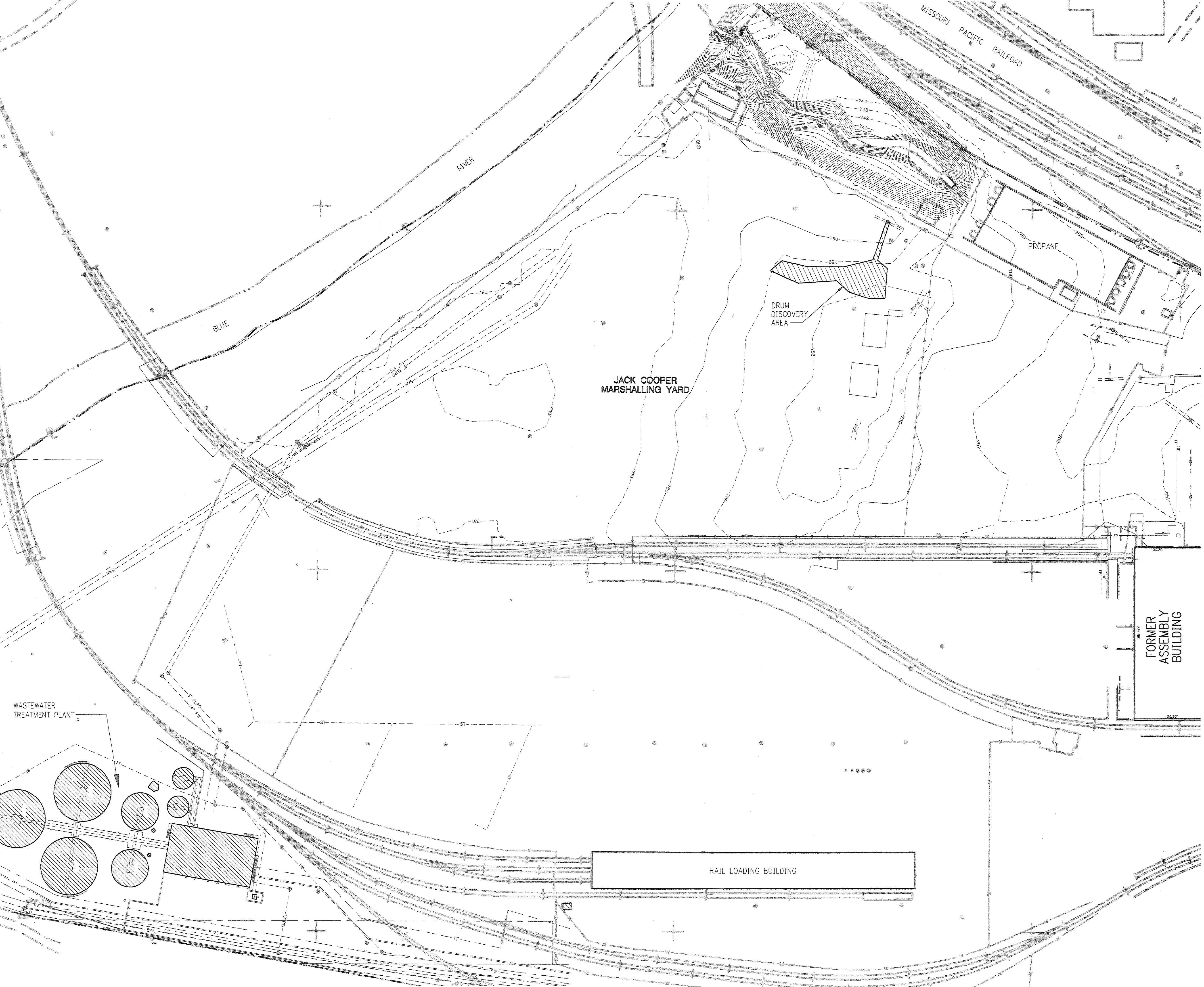


Figure 4

Burns &
McDonnell
SINCE 1916
LEEDS002512
SITE TOPOGRAPHY MAP
FORMER GM LEEDS PLANT
KANSAS CITY, MISSOURI

TABLES

Table 1
Material Analytical Summary
Drum Excavation
Former GM Leeds Assembly Plant
Kansas City, Missouri

Parameter	Units	Sample ID: Sample Date: Laboratory Number:	GREEN 12/30/99 28625.01	RED 12/30/99 28625.02	DRUM 12/30/99 28625.03	20 X TCLP	Cleanup Levels for Missouri (CALM)**
Total Extractable Hydrocarbons (SW Method M8015)							
Gasoline	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Mineral Spirits	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Kerosene	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Diesel	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
#6 Fuel Oil	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Hydraulic Fluid	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Motor Oil	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
Miscellaneous	mg/kg	NA	NA	NA	NA	NA	500 (TPH)
pH (USEPA Method 150.1)							
pH	S.U.	NA	NA	NA	NA	NA	NA
Metals (SW Method 6010/7471)							
Arsenic	mg/kg	3.13	2.8	8.36	100	11	
Banum	mg/kg	236	251	3090	2,000	3,930	
Cadmium	mg/kg	0.3 U	0.3 U	21.9	20	120	
Chromium	mg/kg	24.2	29.2	566	100	1,800	
Lead	mg/kg	12.8* U	14.1* U	682	100	660	
Silver	mg/kg	0.3 U	0.3 U	0.3 U	100	490	
Selenium	mg/kg	2.6 U	2.8 U	3.19	20	420	
Mercury	mg/kg	0.3 U	0.3 U	0.3 U	4	96	
Manganese	mg/kg	151	NA	NA	NA	7,160	
Zinc	mg/kg	45.6	NA	NA	NA	NA	53,000
Volatile Organic Compounds (USEPA Method 8060)							
Xylene (Total)	mg/kg	NA	NA	4,500 J	NA	1,510	
Acetone	mg/kg	NA	NA	10,000 U	NA	3,780	
Methylene Chloride	mg/kg	NA	NA	2,600 J	NA	71	
2-Butanone	mg/kg	NA	NA	10,000 U	4000	NA	
Benzene	mg/kg	NA	NA	5,000 U	10	11	
4-Methyl-2-Pentanone	mg/kg	NA	NA	10,000 U	NA	NA	
Toluene	mg/kg	NA	NA	5,000 U	NA	890	
Ethylbenzene	mg/kg	NA	NA	2,300 J	NA	1,460	
Isopropylbenzene	mg/kg	NA	NA	9,000	NA	NA	
n-Propylbenzene	mg/kg	NA	NA	58,000	NA	NA	
1,3,5-Trimethylbenzene	mg/kg	NA	NA	6,800 J	NA	NA	
1,2,4-Trimethylbenzene	mg/kg	NA	NA	23,000	NA	NA	
sec-Butylbenzene	mg/kg	NA	NA	16,000	NA	NA	
p-Isopropyltoluene	mg/kg	NA	NA	5,000 U	NA	NA	
n-Butylbenzene	mg/kg	NA	NA	32,000	NA	NA	
Naphthalene	mg/kg	NA	NA	2,600 J	NA	1,350	
Semi-Volatile Organic Compounds (USEPA Method 8270)							
Benzoic Acid	mg/kg	NA	NA	12,000 U	NA	NA	
Naphthalene	mg/kg	NA	NA	5,000 U	NA	1,350	
2-Methylnaphthalene	mg/kg	NA	NA	55,100	NA	NA	
Acenaphthylene	mg/kg	NA	NA	3,200 J	NA	NA	
Acenaphthene	mg/kg	NA	NA	5,000 U	NA	5,900	
Dibenzofuran	mg/kg	NA	NA	5,000 U	NA	NA	
Fluorene	mg/kg	NA	NA	4,300 J	NA	3,900	
Phenanthrene	mg/kg	NA	NA	9,700	NA	NA	
Anthracene	mg/kg	NA	NA	1,600 J	NA	29,500	
Di-n-butylphthalate	mg/kg	NA	NA	11,000	NA	NA	
Fluoranthene	mg/kg	NA	NA	2,600 J	NA	830	
Pyrene	mg/kg	NA	NA	2,500 J	NA	2,950	
Butylbenzylphthalate	mg/kg	NA	NA	5,000 U	NA	930	
Bis (2-ethylhexyl) phthalate	mg/kg	NA	NA	28,000	NA	200	
Benzo (a) anthracene	mg/kg	NA	NA	0,800 J	NA	NA	
Chrysene	mg/kg	NA	NA	1,300 J	NA	52	
Di-n-octylphthalate	mg/kg	NA	NA	1,100 J	NA	NA	
Benzo (b) fluoranthene	mg/kg	NA	NA	0,720 J	NA	1.4	
Benzo (k) fluoranthene	mg/kg	NA	NA	0,610 J	NA	11.5	
Benzo (a) pyrene	mg/kg	NA	NA	0,850 J	NA	0.23	
Dibenzo(a,h)anthracene	mg/kg	NA	NA	5,000 U	NA	0.21	
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NA	5,000 U	NA	4.20	
Benzo(g,h,i)Perylene	mg/kg	NA	NA	5,000 U	NA	NA	

mg/kg - Milligrams per kilogram

U - Not detected at or above method detection limit

NA - Not analyzed or applicable

B - Analyte detected in method blank

J - Estimated value; below reporting limit

* - Diluted due to interference

Exceeds 20 X TCLP levels and/or CALM levels

** Using Tier 1 Standards, Exposure Scenario B

Note: Only those Volatile Organic Compounds and Semi-Volatile Organic Compounds with detections were included in table.

Table 2
Soil Stockpile Analytical Summary
Drum Excavation
Former GM Leeds Assembly Plant
Kansas City, Missouri

Parameter	Units	Sample ID: Sample Date: Laboratory Number:	SP-1/STOCKPILE 01/11/00 28688.01	SP-2/STOCKPILE 01/11/00 28688.02	SP-3/STOCKPILE 01/11/00 28688.03	SP-4/STOCKPILE 01/11/00 28688.04	20 X TCLP	Cleanup Levels for Missouri (CALM)**
Total Extractable Hydrocarbons (SW Method M8015)								
Gasoline	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Mineral Spirits	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Kerosene	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Diesel	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
#6 Fuel Oil	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Hydraulic Fluid	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Motor Oil	mg/kg	3.8 U	3.9 U	4.4 U	3.8 U	NA	500 (TPH)	
Miscellaneous	mg/kg	49.3	NA	33.1	NA	NA	500 (TPH)	
pH (USEPA Method 150.1)								
pH	S.U.	8.1	7.8	8	7.9	NA	NA	
Metals (SW Method 6010/7471)								
Arsenic	mg/kg	9.03	1.32 U	2.76	4.41	100	11	
Barium	mg/kg	109	220	240	145	2,000	3,930	
Cadmium	mg/kg	0.75	0.132	0.265	0.205	20	120	
Chromium	mg/kg	24	20.1	26.8	23.6	100	1,800	
Lead	mg/kg	18.4	20	18.1	12.8	100	660	
Silver	mg/kg	0.5 U	0.53 U	0.59 U	0.51 U	100	490	
Selenium	mg/kg	2.5 U	2.63 U	2.94 U	2.56 U	20	420	
Mercury	mg/kg	0.25 U	0.26 U	0.29 U	0.26 U	4	96	
Manganese	mg/kg	NA	NA	NA	NA	NA	7,160	
Zinc	mg/kg	NA	NA	NA	NA	NA	53,000	
Volatile Organic Compounds (USEPA Method 8060)								
Xylene (Total)	mg/kg	0.006 U	0.001 J	0.007 U	0.006 U	NA	1,510	
Acetone	mg/kg	0.012 U	0.047	0.060	0.039	NA	3,780	
Methylene Chloride	mg/kg	0.013 B	0.011 B	0.016 B	0.009 B	NA	71	
2-Butanone	mg/kg	0.012 U	0.013 U	0.015 U	0.013 U	4000	NA	
Benzene	mg/kg	0.002 J	0.004 J	0.007 U	0.002 J	10	11	
4-Methyl-2-Pentanone	mg/kg	0.012 U	0.013 U	0.015 U	0.013 U	NA	NA	
Toluene	mg/kg	0.002 J	0.004 J	0.007 U	0.001 J	NA	890	
Ethylbenzene	mg/kg	0.006 U	0.001 J	0.007 U	0.006 U	NA	1,460	
Isopropylbenzene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
n-Propylbenzene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
1,3,5-Trimethylbenzene	mg/kg	0.006 U	0.001 J	0.007 U	0.006 U	NA	NA	
1,2,4-Trimethylbenzene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
sec-Butylbenzene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
p-Isopropyltoluene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
n-Butylbenzene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	NA	
Naphthalene	mg/kg	0.006 U	0.006 U	0.007 U	0.006 U	NA	1,350	
Semi-Volatile Organic Compounds (USEPA Method 8270)								
Benzoic Acid	mg/kg	0.028 JB	0.035 JB	0.058 JB	0.026 JB	NA	NA	
Naphthalene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	1,350	
2-Methylnaphthalene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	NA	
Acenaphthylene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	NA	
Acenaphthene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	5,900	
Dibenzofuran	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	NA	
Fluorene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	3,900	
Phenanthrene	mg/kg	0.060 J	0.440 U	0.041 J	0.430 U	NA	NA	
Anthracene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	29,500	
Di-n-butylphthalate	mg/kg	0.061 J	0.034 J	0.032 J	0.034 J	NA	NA	
Fluoranthene	mg/kg	0.100 J	0.440 U	0.085 J	0.031 J	NA	830	
Pyrene	mg/kg	0.086 J	0.440 U	0.190 J	0.037 J	NA	2,950	
Butylbenzylphthalate	mg/kg	0.420 U	0.440 U	0.048 J	0.045 J	NA	930	
Bis (2-ethylhexyl) phthalate	mg/kg	0.089 J	0.053 J	0.310 J	0.046 J	NA	200	
Benzo (a) anthracene	mg/kg	0.043 J	0.440 U	0.054 J	0.430 U	NA	NA	
Chrysene	mg/kg	0.044 J	0.440 U	0.067 J	0.022 J	NA	52	
Di-n-octylphthalate	mg/kg	0.130 JB	0.110 JB	0.072 JB	0.110 JB	NA	NA	
Benzo (b) fluoranthene	mg/kg	0.035 J	0.440 U	0.054 J	0.430 U	NA	1.4	
Benzo (k) fluoranthene	mg/kg	0.026 J	0.440 U	0.042 J	0.430 U	NA	11.5	
Benzo (a) pyrene	mg/kg	0.030 J	0.440 U	0.056 J	0.430 U	NA	0.23	
Dibenzo(a,h)anthracene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	0.21	
Indeno(1,2,3-cd)pyrene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	4.20	
Benzo(g,h,i)Perylene	mg/kg	0.420 U	0.440 U	0.490 U	0.430 U	NA	NA	

mg/kg - Milligrams per kilogram

U - Not detected at or above method detection limit

NA - Not applicable

B - Analyte detected in method blank

J - Estimated value; below reporting limit

* - Diluted due to interference

Exceeds 20 X TCLP levels and/or CALM levels

** Using Tier 1 Standards, Exposure Scenario B

Note: Only those Volatile Organic Compounds and Semi-Volatile Organic Compounds with detections were included in table.

LEEDS002515

Table 3
Excavation Analytical Summary
Drum Excavation
Former GM Leeds Assembly Plant
Kansas City, Missouri

Parameter	Units	NW SS-1 01/17/00 28731.01	NW Corner-MDNR 01/17/00 2004	NE SS-1 01/17/00 28731.02	NE Corner-MDNR 01/17/00 2007	20 X TCLP	Cleanup Levels for Missouri (CALM)**
Total Extractable Hydrocarbons (SW Method M8015)							
Gasoline	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Mineral Spirits	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Kerosene	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Diesel	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
#6 Fuel Oil	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Hydraulic Fluid	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Motor Oil	mg/kg	3 U	NA	3 U	NA	NA	500 (TPH)
Miscellaneous (1)	mg/kg	NA	NA	10.5	NA	NA	500 (TPH)
Miscellaneous (2)	mg/kg	NA	NA	22.3	NA	NA	500 (TPH)
pH (USEPA Method 150.1)							
pH	S.U.	6.7	NA	7.7	NA	NA	NA
Metals ATAS (SW Method 6010/7471) - MDNR (Method 200.7/206.2/239.2/245.1/270.2)							
Arsenic	mg/kg	4	8.91	5.2	7.73	100	11
Barium	mg/kg	135	315	149	355	2,000	3,930
Cadmium	mg/kg	0.35	1.43	1	1.83	20	120
Chromium	mg/kg	13.1	51.9	19.7	55.4	100	1,800
Lead	mg/kg	15.4	35.8	24.8	56.3	100	660
Silver	mg/kg	0.4 U	2.23	0.4 U	2.24	100	490
Selenium	mg/kg	2 U	2 U	2 U	2 U	20	420
Mercury	mg/kg	0.2 U	0.04 U	0.2 U	0.0474	4	96
Manganese	g/kg	NA	NA	NA	NA	NA	7,160
Zinc	mg/kg	NA	NA	NA	NA	NA	53,000
Volatile Organic Compounds (USEPA Method 8060)							
Xylene (Total)	mg/kg	0.005 U	0.002 U	0.005 U	0.002 U	NA	1.510
Acetone	mg/kg	0.042	0.100 U	0.420	0.100 U	NA	3,780
Methylene Chloride	mg/kg	0.016 B	0.100 U	0.070 B	0.100 U	NA	71
2-Butanone	mg/kg	0.010 U	0.025 U	0.010 U	0.041	4000	NA
Benzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	10	11
4-Methyl-2-Pentanone	mg/kg	0.010 U	0.005 U	0.010 U	0.007	NA	NA
Toluene	mg/kg	0.005 U	0.005 U	0.005	0.005 U	NA	890
Ethylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	1,460
Isopropylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
n-Propylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,3,5-Trimethylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,2,4-Trimethylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
sec-Butylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
p-Isopropyltoluene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
n-Butylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Naphthalene	mg/kg	0.005 U	0.015	0.005 U	0.006	NA	1,350
Semi-Volatile Organic Compounds (USEPA Method 8270)							
Benzoic Acid	mg/kg	0.830 U	0.250 U	0.830 U	0.250 U	NA	NA
Naphthalene	mg/kg	0.330 U	NA	0.330 U	NA	NA	1,350
2-Methylnaphthalene	mg/kg	0.330 U	0.250 U	0.330 U	0.670	NA	NA
Acenaphthylene	mg/kg	0.330 U	0.250 U	0.330 U	0.250 U	NA	NA
Acenaphthene	mg/kg	0.330 U	0.250 U	0.330 U	0.250 U	NA	5,900
Dibenzofuran	mg/kg	0.330 U	0.250 U	0.330 U	0.270	NA	NA
Fluorene	mg/kg	0.330 U	0.250 U	0.330 U	0.250 U	NA	3,900
Phenanthrene	mg/kg	0.330 U	0.250 U	0.330 U	0.460	NA	NA
Anthracene	mg/kg	0.330 U	0.250 U	0.330 U	0.350	NA	29,500
Di-n-butylphthalate	mg/kg	0.330 U	0.500 U	0.330 U	0.500 U	NA	NA
Fluoranthene	mg/kg	0.330 U	0.250 U	0.330 U	0.440	NA	830
Pyrene	mg/kg	0.330 U	0.500 U	0.330 U	0.630	NA	2,950
Butylbenzylphthalate	mg/kg	0.330 U	0.250 U	0.330 U	1.100	NA	930
Bis (2-ethylhexyl) phthalate	mg/kg	0.330 U	0.500 U	0.330 U	0.530	NA	200
Benzo (a) anthracene	mg/kg	0.330 U	0.250 U	0.330 U	0.250 U	NA	NA
Chrysene	mg/kg	0.330 U	0.250 U	0.330 U	0.460	NA	52
Di-n-octylphthalate	mg/kg	0.330 U	1.000 U	0.330 U	1.000 U	NA	NA
Benzo (b) fluoranthene	mg/kg	0.330 U	0.250 U	0.330 U	0.400	NA	1.4
Benzo (k) fluoranthene	mg/kg	0.330 U	0.250 U	0.330 U	0.380	NA	11.5
Benzo (a) pyrene	mg/kg	0.330 U	0.250 U	0.330 U	0.660	NA	0.23
Dibenzo(a,h)anthracene	mg/kg	0.330 U	0.250 U	0.330 U	0.250 U	NA	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.330 U	0.250 U	0.330 U	0.270	NA	4.20
Benzo(g,h,i)Perylene	mg/kg	0.330 U	0.250 U	0.330 U	0.290	NA	NA

mg/kg - Milligrams per kilogram

U - Not detected at or above method detection limit

NA - Not applicable

B - Analyte detected in method blank

J - Estimated value; below reporting limit

- Diluted due to interference

Exceeds 20 X TCLP levels and/or CALM levels

** Using Tier 1 Standards, Exposure Scenario B

Note: Only those Volatile Organic Compounds and Semi-Volatile Organic Compounds with detections were included in table.

LEEDS002516

Table 4
Trench Analytical Summary
Drum Excavation
Former GM Leeds Assembly Plant
Kansas City, Missouri

Parameter	Units	S-TRENCH Sample ID: Sample Date: Laboratory Number:	PW-TRENCH 01/17/00 28731.04	PW-MDNR 01/17/00 2006		20 X TCLP	Cleanup Levels for Missouri (CALM)**
Total Extractable Hydrocarbons (SW Method M8015)							
Gasoline	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Mineral Spirits	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Kerosene	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Diesel	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
#6 Fuel Oil	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Hydraulic Fluid	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Motor Oil	mg/kg	3 U	4500 U	NA		NA	500 (TPH)
Miscellaneous (1)	mg/kg	20.2	25500	NA		NA	500 (TPH)
Miscellaneous (2)	mg/kg	95.6	NA	NA		NA	500 (TPH)
pH (USEPA Method 150.1)							
pH	S.U.	8	7.3	NA		NA	NA
Metals ATAS (SW Method 6010/7471) - MDNR (Method 200.7/206.2/239.2/245.1/270.2)							
Arsenic	mg/kg	4	10 U	6.14		100	11
Barium	mg/kg	186	604	777		2,000	3,930
Cadmium	mg/kg	17.1	56.5	189		20	120
Chromium	mg/kg	73.6	314	2430		100	1,800
Lead	mg/kg	365	14200	14500		100	660
Silver	mg/kg	0.4 U	0.57	2.29		100	490
Selenium	mg/kg	7	14.6	42.4		20	420
Mercury	mg/kg	0.2 U	0.2 U	0.0555		4	96
Manganese	g/kg	NA	NA	NA		NA	7,160
Zinc	mg/kg	NA	NA	NA		NA	53,000
Volatile Organic Compounds (USEPA Method 8060)							
Xylene (Total)	mg/kg	0.250 J	170.000	167.000		NA	1,510
Acetone	mg/kg	1.000 U	100.000 U	100.000 U		NA	3,780
Methylene Chloride	mg/kg	0.770 B	82.000 B	100.000 U		NA	71
2-Butanone	mg/kg	1.000 U	100.000 U	38.500		4000	NA
Benzene	mg/kg	0.500 U	50.000 U	8.250		10	11
4-Methyl-2-Pentanone	mg/kg	1.000 U	100.000 U	5.000 U		NA	NA
Toluene	mg/kg	0.500 U	68.000	154.000		NA	890
Ethylbenzene	mg/kg	1.100	48.000 J	77.900		NA	1,460
Isopropylbenzene	mg/kg	0.2 J	17.000 J	22.600		NA	NA
n-Propylbenzene	mg/kg	1.1	100.000	125.000		NA	NA
1,3,5-Trimethylbenzene	mg/kg	0.400 J	250.000	245.000		NA	NA
1,2,4-Trimethylbenzene	mg/kg	1.300	980.000	1320.000		NA	NA
sec-Butylbenzene	mg/kg	0.490 J	59.000	53.500		NA	NA
p-Isopropyltoluene	mg/kg	0.500 U	88.000	67.100		NA	NA
n-Butylbenzene	mg/kg	0.980	50.000 U	247.000		NA	NA
Naphthalene	mg/kg	0.880 B	160.000 B	NA		NA	1,350
Semi-Volatile Organic Compounds (USEPA Method 8270)							
Benzoic Acid	mg/kg	0.830 U	0.830 U	3.750 U		NA	NA
Naphthalene	mg/kg	0.330 U	20.000	430.000		NA	1,350
2-Methylnaphthalene	mg/kg	0.330 U	6.900	73.000		NA	NA
Acenaphthylene	mg/kg	0.330 U	5.000 U	3.750 U		NA	NA
Acenaphthene	mg/kg	0.330 U	2.000 J	29.000		NA	5,900
Dibenzofuran	mg/kg	0.330 U	1.600 J	24.000		NA	NA
Fluorene	mg/kg	0.330 U	2.300 J	41.000		NA	3,900
Phenanthrene	mg/kg	0.330 U	9.800	150.000		NA	NA
Anthracene	mg/kg	0.330 U	1.700 J	31.000		NA	29,500
Di-n-butylphthalate	mg/kg	0.330 U	41.000	630.000		NA	NA
Fluoranthene	mg/kg	0.330 U	6.800	48.000		NA	830
Pyrene	mg/kg	0.330 U	8.400	160.000		NA	2,950
Butylbenzylphthalate	mg/kg	0.330 U	21.000	3.750 U		NA	930
Bis(2-ethylhexyl) phthalate	mg/kg	0.330 U	4.400 JB	43.000		NA	200
Benzo (a) anthracene	mg/kg	0.330 U	3.400 J	23.000		NA	NA
Chrysene	mg/kg	0.330 U	3.800 J	20.000		NA	52
Di-n-octylphthalate	mg/kg	0.330 U	0.960 JB	15.000 U		NA	NA
Benzo (b) fluoranthene	mg/kg	0.330 U	3.100 J	15.000		NA	1.4
Benzo (k) fluoranthene	mg/kg	0.330 U	3.000 J	13.000		NA	11.5
Benzo (a) pyrene	mg/kg	0.330 U	2.700 J	22.000		NA	0.23
Dibenzo(a,h)anthracene	mg/kg	0.330 U	0.720 J	3.750 U		NA	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.330 U	1.800 J	3.750 U		NA	4.20
Benzo(g,h,i)Perylene	mg/kg	0.330 U	5.000 U	3.750 U		NA	NA

mg/kg - Milligrams per kilogram

U - Not detected at or above method detection limit

NA - Not applicable

B - Analyte detected in method blank

J - Estimated value; below reporting limit

* - Diluted due to interference

Exceeds 20 X TCLP levels and/or CALM levels

** Using Tier 1 Standards, Exposure Scenario B

Note: Only those Volatile Organic Compounds and Semi-Volatile Organic Compounds with detections were included in table.

APPENDIX A
Geophysical Report

MIDWEST GEOMAR GEOPHYSICS, INC.

Associate of Geomar Geophysics, Ltd.
Ontario, Canada



**PROFESSIONAL
ENVIRONMENTAL GEOPHYSICAL INVESTIGATIONS**



ELECTROMAGNETIC SURVEY

Former General Motors Plant
6817 E. Stadium Drive
Kansas City, MO

Prepared by:

MidWest Geomar Geophysics, Inc.
429 ELM Street
Frankfort, Illinois 60423
Tel: (815) 464-6205

Prepared for:

Burns & McDonnell W C I
Kansas City, MO

February 4, 2000

LEEDS002522

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1. Introduction	1
2. Objectives	1
3. The Electromagnetic (inductive) Method	1
4. Instrumentation	1
5. Field Procedures	2
6. Data Processing	2
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8. Conclusions	5

Appendix Color Contour Maps

1. Introduction

An electromagnetic and magnetic survey was conducted at the property of a former General Motors Plant at 6817 E. Stadium Dr. In Kansas City, MO. The surveys were conducted on Jan. 26, 27, & 28, 2000.

MGG, Inc. employed the magnetic instrument, Geometrics 858-G Magnetometer-Gradiometer and electromagnetic Geonics EM-61 time domain instrument, to perform detailed measurements with the aim of mapping buried metallic objects within the survey area.

2. Objectives

The magnetic and electromagnetic investigations at the site were carried out with the following specific objectives:

- o to conduct a high resolution EM-61 survey within the site.
- o to conduct a magnetic survey for deeper metals using the Geometrics 858-G
- o to map areas of buried metallic material.

3. The Electromagnetic (inductive) Method

The electromagnetic instrument works on the principle of induction, using two coils (antennas); a transmitter and a receiver. Both coils are fixed in the same plane and are used near the surface of the earth. An alternating voltage applied to the transmitter coil causes electrical eddy currents to be induced in the earth. The electrical currents flowing in the earth are proportional to electrical conductivity of the medium. These currents in turn, generate a secondary magnetic field that is detected and measured by the receiver. Since this technique is a non contact method (i.e. not in contact with the ground) the measurements are very reliable and highly repeatable and therefore suitable for monitoring purposes.

4. Instrumentation

The Geonics EM61 is a high sensitivity high resolution time-domain instrument which is used to detect both ferrous and nonferrous metallic objects. It consists of a powerful transmitter that a pulsed primary magnetic field, which induces eddy currents in nearby metallic objects. The decay of these currents is measured by two receiver coils mounted on the coil assembly. The responses are recorded and displayed by an integrated digital data logger as a two channel information. By making the measurement at a relatively long time after termination of the primary pulse, the response is practically independent of the electrical conductivity of the ground.

The EM61 can detect a single 200 liter (55 gal) drum at a depth of over 3 meters and is excellent in pinpointing a target, and can be used in close proximity to metallic fences or buildings.

Geometrics G-858G Portable Cesium Magnetometer/Gradiometer: The systems are capable of 0.05 gamma sensitivity at up to 10 sample readings per second. This high sensitivity

can detect a single drum buried to a depth of 6 meters. The sensors were mounted on a cart, with the Magnetometer sensor being the lower the Gradiometer the upper. In the Kansas City, MO area, specifications were to orientate the sensors on a 45 degree angle away from each other, with a 180 degree offset to each other. The sensors were to be aligned in a E-W direction and the survey conducted on N-S lines.

5. Field Procedures

Prior to taking measurements, a survey grid was prepared in the field by placing orange cones at each end of the survey area.. The South West corner of the surveyed area was selected as a reference point (0,0), and will show on the map. The survey grid is plotted on Map 5 for future reference. The survey lines were laid out along the N-S. direction. Using DGPS and the grid for control, EM-61 survey lines were laid out in North South direction and were conducted on three (3) foot line spacing. The EM-61 data was collected in auto mode, collecting four (4) readings per second. This fine line spacing was to better map the numerous anomalies located within this area.

The 858-G data was collected in continuous mode with a time interval of (3) readings per second, which corresponds to approximately 1 foot between readings. The very narrow line separation and fine spacing between the readings resulted in excellent resolution of the computer generated maps.

6. Data Processing

Data files were transferred from the digital data logger to a PC computer and reviewed in the field. Geometrics, Geonics and Geomar software programs; Magmapper, DAT 61 and DIGGI programs were used in data reduction and preparation for contouring. A Geosoft Mapping System was used to process the data points in the production of the final color contour maps of collected measurements. Proprietary software from Geomar Software, Inc. was utilized for the final anomaly mapping, Map 5.

7. Results

The electromagnetic and magnetic surveys results for this site are presented on the following five maps:

- Map 1 - EM61 Channel B Response map,
- Map 2 - EM61 Channel N Response map,
- Map 3 - G-858 Total Magnetic Field map,
- Map 4 - G-858 Vertical Gradient of Magnetic Field,
- Map 5 - Map of Located Anomalies (depicts results of interpretation).

Anomalies on this map are divided in to seven groups:

- Magenta zones - indicate possible substantial metallic objects,
- Pink zones - indicate groups of numerous various metallic objects or concrete debris,
- Red Lines - Linear anomalies, possible pipes or other linear targets,
- Red circle - indicates location of a single buried metallic object,
- Yellow circle - indicates location of a single shallow or on surface metallic object,
- Green Dashed Line - outlines of anomalies specific to magnetic survey,
- Blue Dashed Line - outlines areas affected by interference.

The EM61 survey revealed anomalous nature of the EM61 response and measured magnetic intensity, especially in the most of the central and in the southeastern portions of the survey area. The entire site is affected by strong interference originated by electrical source (power line). The most affected was EM61 Channel T, which is used to calculate differential response. Therefore, a map with removed response from near surface objects was not generated. Instead a map of Channel N was plotted. Channel N uses ratio of Channels T and B to remove effects of power line noise. Results of this filter are presented on Map 2. Areas affected by especially strong interference are outlined by blue dashed lines on Map 5. These are: areas located West of outlines **N1** and **N2**, and area South of outline **N3**. In these areas anomalies caused by *small* metallic objects could be not detected by the survey.

Delineated anomalous areas and isolated anomalies are denoted on Map 5. In general, pink zones are used to mark areas of high EM61 response and high density of small anomalies. These areas may represent numerous buried metallic objects and concrete debris. Anomalies that may represent more substantial metallic objects are marked by magenta zones on Map 5. Magenta zones may be associated with clusters of buried steel waste containers or other significant metallic objects.

The most substantial and the largest anomalous area is located in the central portion of the site. This area is denoted by pink zone labeled **A** on Map 5. This anomalous area is very well delineated by the EM61 and magnetic surveys. The entire zone contains numerous various metallic objects. Anomalies that may represent significant and large metallic objects located within zone **A** are marked by magenta zones. It should be noted that magenta zones are distributed mainly along the southern and northern edges of zone **A**. The distribution of these anomalies along the southern edge is similarly indicated by the EM61 and magnetic surveys, while magnetic results are different in the northern portion of area **A**. The comparison of geophysical results along the northern limit of zone **A** indicates that magnetic response is stronger than EM61 response. This may indicate that metallic targets in the northern area of zone **A** are located deeper than in the southern portion of this zone. This area is enclosed by green dashed line **P** on Map 5. In summary the EM61 and magnetic results in area **A** confirm each other, however magnetic data indicates that metallic objects along the northern limit of this zone

may contain deeper ferrous objects. Both survey indicate that this anomalous area extends further East, beyond the survey area limit.

The second relatively large anomalous area is located in the southeastern corner of the site. It is marked by pink zone **B** on Map 5. Despite that this anomalous zone appears to be smaller than zone **A**, the distribution and nature of anomalies appears to be very similar. This indicates that zone **B** may contain the same type of wastes as zone **A**. Several areas located in zone **B** are marked by magenta zones which indicate locations of substantial metallic objects. One small area is outlined by green dashed line **Q** which may indicate presence of deeper metallic targets detected by magnetic survey. The magnetic survey allowed the delineation of several anomalies located along the green dashed line **R** (Maps 3 and 5). This may indicate presence of deeper metallic objects located West of zone **B**. Similarly to zone **A**, zone **B** appears to be extended East beyond the survey area.

Three smaller anomalous areas marked were delineated. These are marked by pink zones labeled **D**, **F**, and **E** on Map 5. These zones may contain various metallic objects. Zone **E**, located in the northern portion of the site may contain substantial metallic objects, however anomalous response in this zone may be also caused by interference located beyond the survey area.

One anomalous zone located in the northeastern corner of the site, beyond the EM61 coverage, was detected by magnetic survey. It is located East of green dashed line **S**. Since the G-858 locates anomalies much less accurate than the EM61 it is difficult to provide exact locations of particular anomalies located in this area.

A very high response anomaly was detected in the northern part of the site. It is marked by magenta zone labeled **H** on Map 5. This anomaly is very well delineated by the EM61 survey. It may indicate relatively uniform, buried metallic structure or a steel reinforced concrete paved pathway.

Several linear anomalies were detected. These are marked by red lines on Map 5. Well delineated linear anomalies are marked by solid red lines, while less indicative linear anomalies are denoted by red dashed lines. The most substantial linear anomalies are labeled **K**, **J**, and **M** on Map 5. Anomaly **K** appears to be the most substantial. It may represent a buried pipe or other linear structure. Anomaly **J** is of relatively low amplitude (Map 1) and it can be associated with deeper pipe or other linear structure. A shape of anomaly **M** indicates that this anomaly may be associated with a buried concrete curb or old foundations.

Numerous isolated anomalies associated with buried small metallic targets were detected on this site. These are marked by red circles on Map 5. A small number of anomalies that are likely associated with shallow or surface metallic objects were denoted by yellow circles on Map 5, the anomalous map.

Anomalies that may indicate isolated, however more significant metallic objects are marked by larger red circles.

It should be noted that the highest density of these anomalies were detected in anomalous zones **A** and **B**, and in the northeast corner of the site.

Several anomalies marked by red circles are aligned. These locations are marked by thin magenta dashed lines and labeled **T**, **U**, **V**, **Y**, and **W** on Map 5.

8. Conclusions

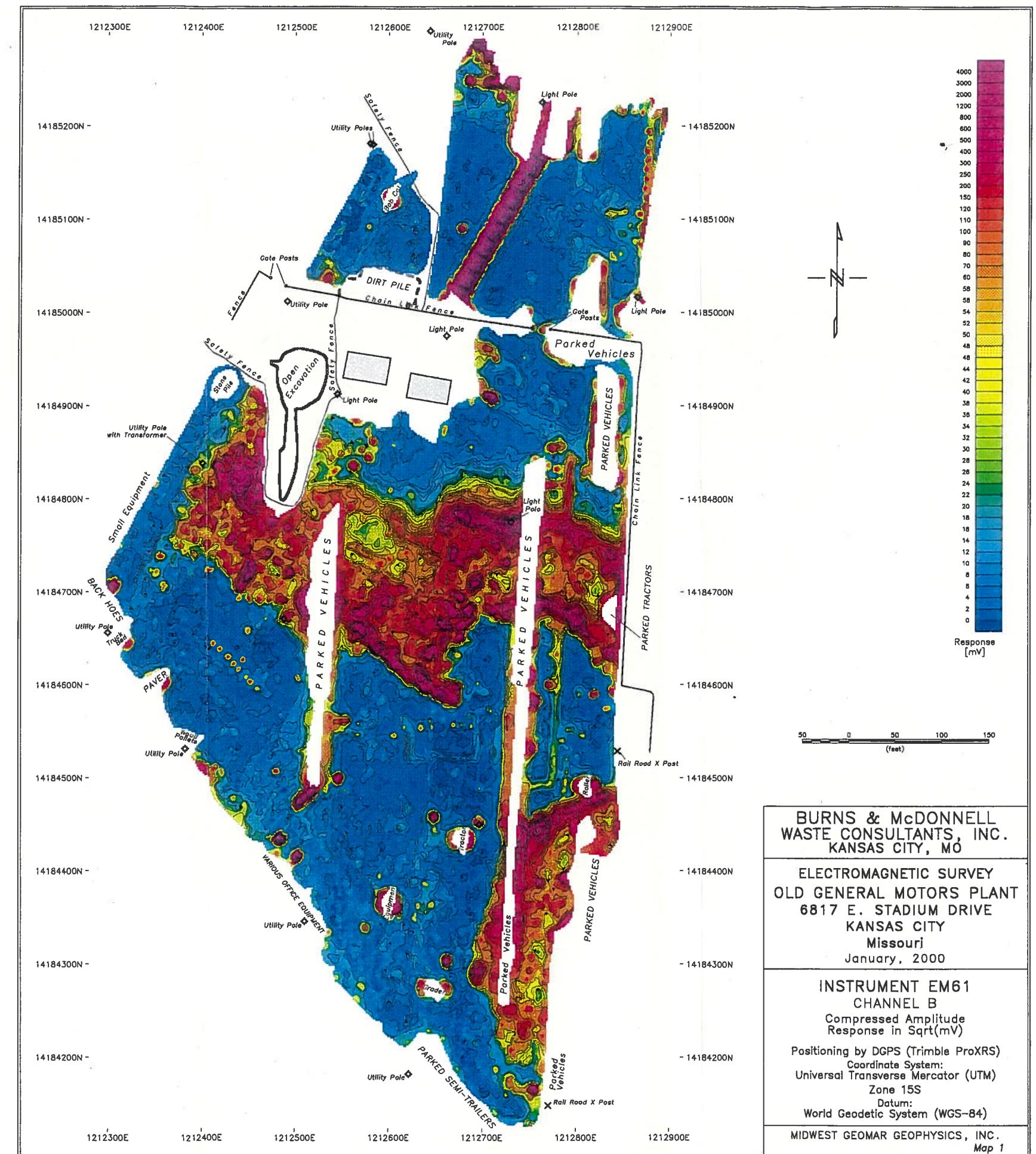
It appears further investigations at a later time, of both zone "A" and "B" continuing the surveys further East would be prudent on this site. It may also be wise to conduct an EM-31 survey over the entire site, to assist in determination of possible contamination plumes migrating away from the large metallic debris zones. Normally contamination plumes and exposure pathways cause a change in the soil conductivity. The depth of exploration of the EM-31 is from 17 to 20 feet. The EM-31 takes two readings simultaneously, Quad-phase (apparent soil conductivity) and In-phase (detection of both ferrous and nonferrous metals). This would allow further determination of the depth of the metallic response and the nature of the metal.

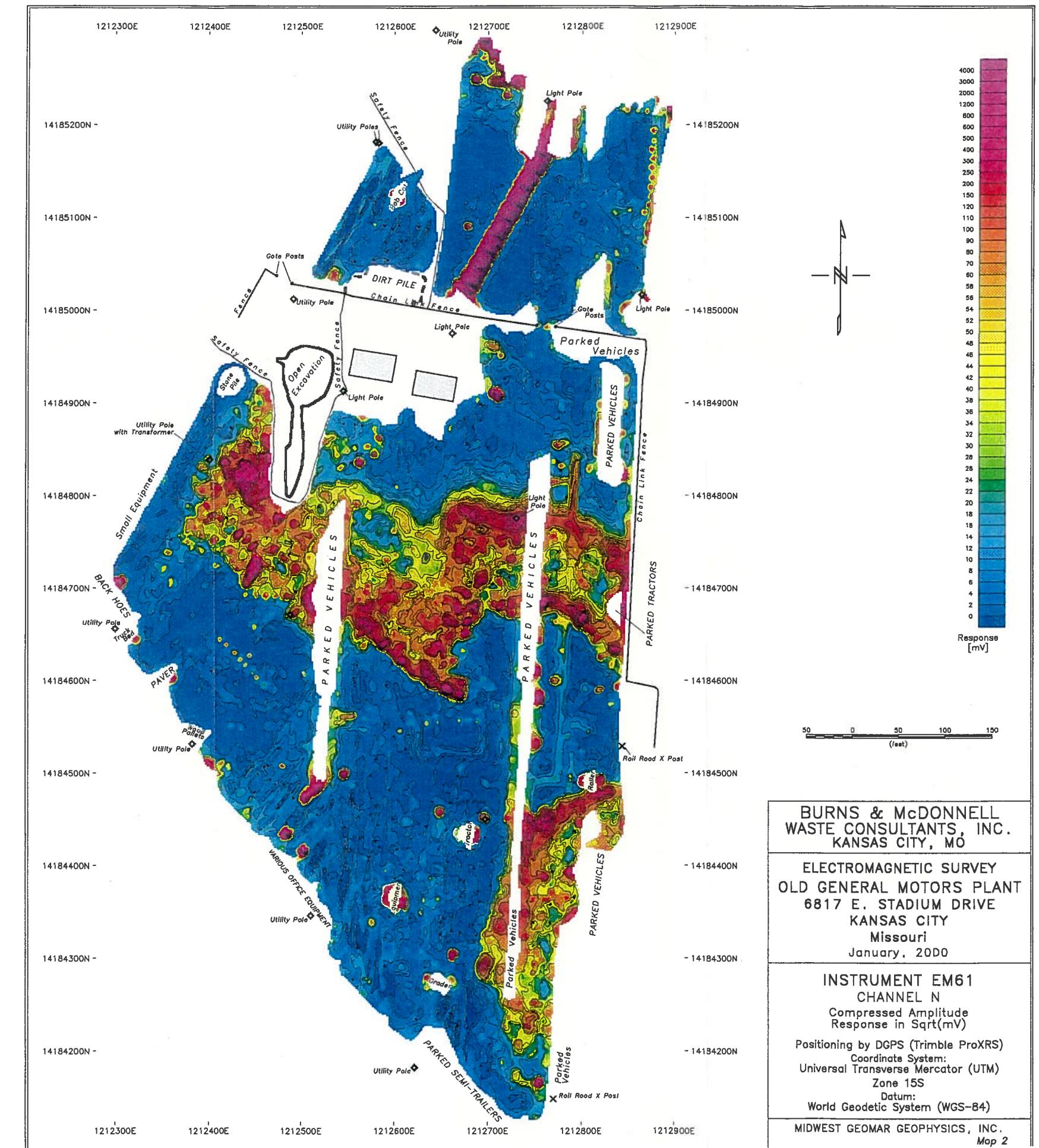
We appreciate the opportunity to have been of service to you, should you have any question regarding the information presented, please do not hesitate to contact the undersigned.

Sincerely,

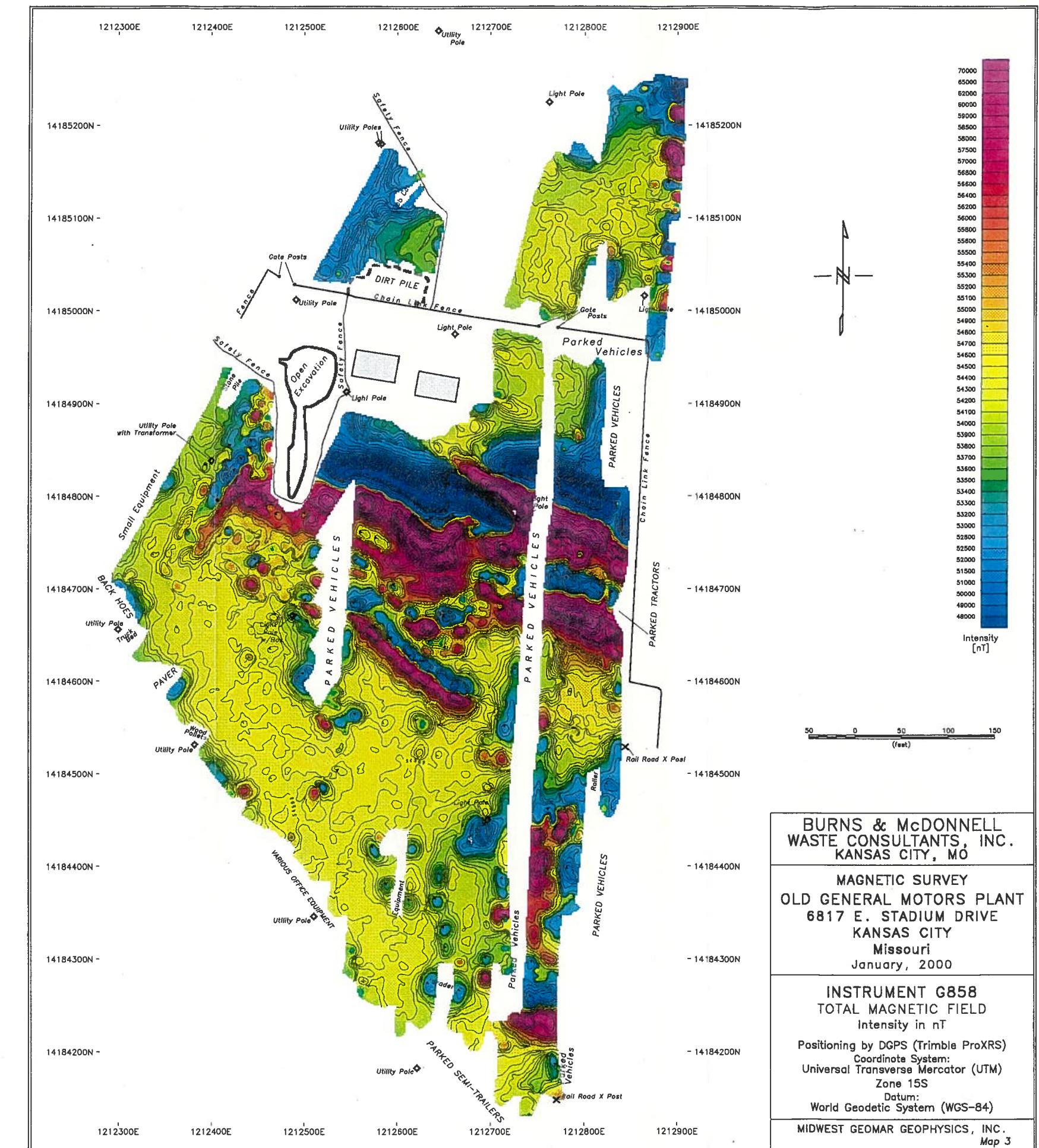


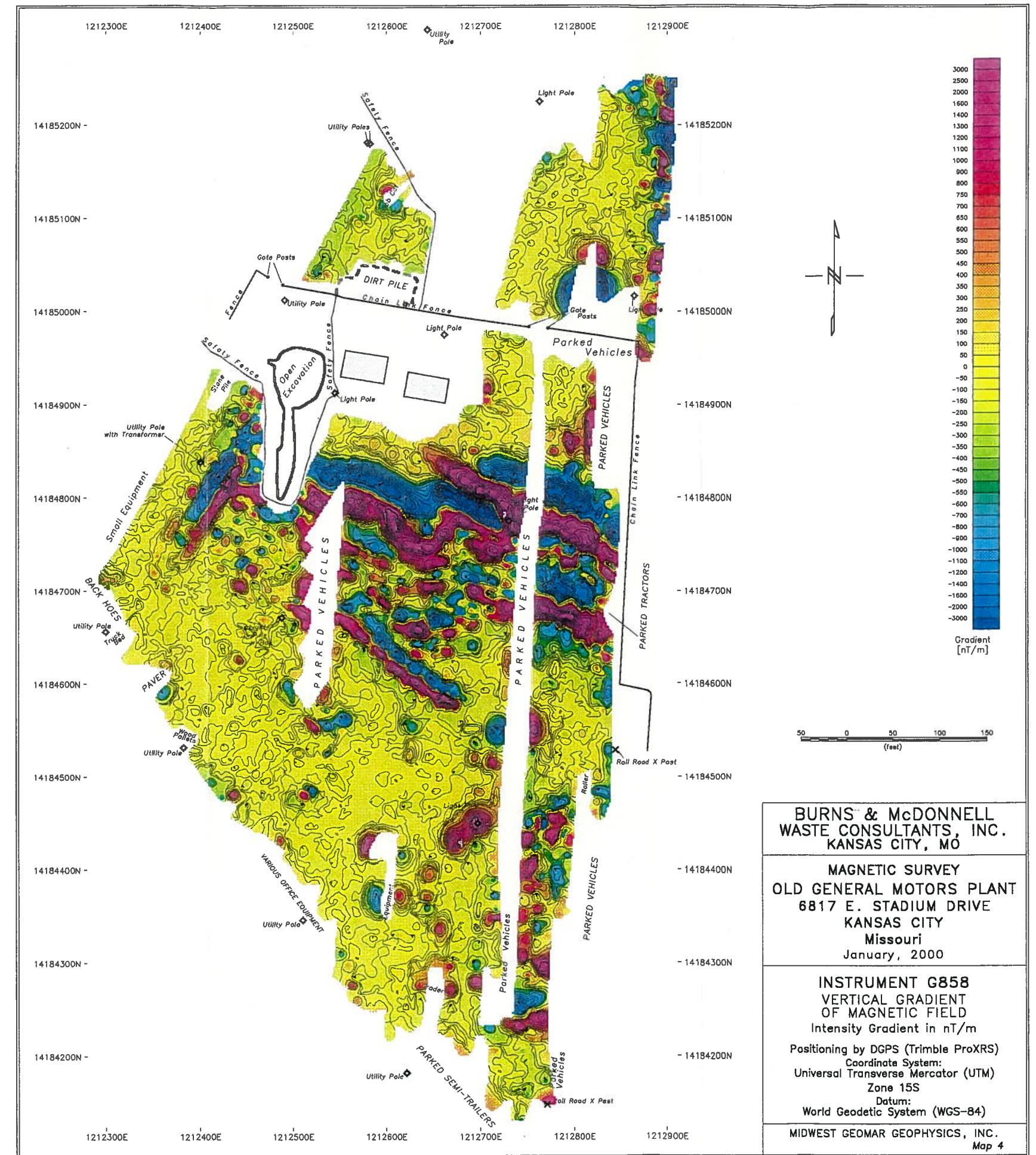
MidWest Geomar Geophysics, Inc.
By Ron C. Reed, President



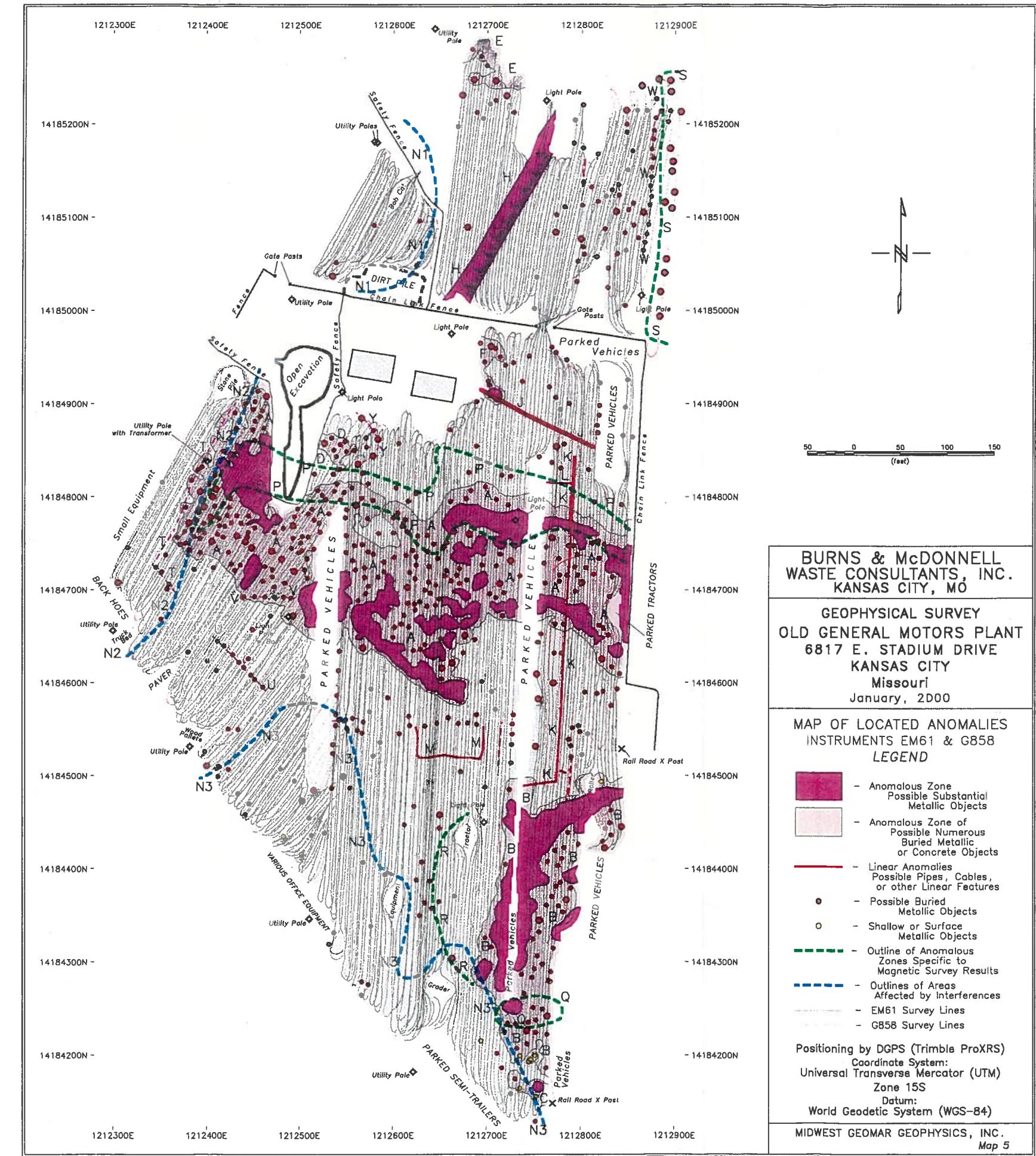


LEEDS002530





LEEDS002532



LEEDS002533

Table 5
TCLP Analytical Summary
Drum Excavation
Former GM Leeds Assembly Plant
Kansas City, Missouri

Parameter	Sample ID: Sample Date: Laboratory Number:	S-TRENCH 01/17/00	PW-TRENCH 01/17/00 28824.01	PW-MDNR 01/17/00 2006		TCLP
Total Extractable Hydrocarbons (SW Method M8015)						
Gasoline	mg/L	NA	NA	NA		NA
Mineral Spirits	mg/L	NA	NA	NA		NA
Kerosene	mg/L	NA	NA	NA		NA
Diesel	mg/L	NA	NA	NA		NA
#6 Fuel Oil	mg/L	NA	NA	NA		NA
Hydraulic Fluid	mg/L	NA	NA	NA		NA
Motor Oil	mg/L	NA	NA	NA		NA
Miscellaneous (1)	mg/L	NA	NA	NA		NA
Miscellaneous (2)	mg/L	NA	NA	NA		NA
pH (USEPA Method 150.1)						
pH	S.U.	NA	NA	NA		NA
Metals (SW Method 6010/7471)						
Arsenic	mg/L	0.1 U	0.1 U	NA		5.0
Barium	mg/L	1.83	1 U	0.9		100.0
Cadmium	mg/L	0.01 U	0.12	0.14		1.0
Chromium	mg/L	0.01 U	0.016	0.02		5.0
Lead	mg/L	0.1 U	12.7	12.2		5.0
Silver	mg/L	0.02 U	0.02 U	NA		5.0
Selenium	mg/L	0.1 U	0.1 U	0.02		1.0
Mercury	mg/L	0.002 U	0.002 U	NA		0.2
Manganese	mg/L	NA	NA	NA		NA
Zinc	mg/L	NA	NA	NA		NA
Volatile Organic Compounds (USEPA Method 8060)						
Xylene (Total)	mg/kg	NA	NA	NA		NA
Acetone	mg/kg	NA	NA	NA		NA
Methylene Chloride	mg/kg	NA	NA	NA		NA
2-Butanone	mg/kg	NA	NA	0.500 U		20.0
Benzene	mg/kg	NA	NA	0.700		0.5
4-Methyl-2-Pentanone	mg/kg	NA	NA	NA		NA
Toluene	mg/kg	NA	NA	NA		NA
Ethylbenzene	mg/kg	NA	NA	NA		NA
Isopropylbenzene	mg/kg	NA	NA	NA		NA
n-Propylbenzene	mg/kg	NA	NA	NA		NA
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA		NA
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA		NA
sec-Butylbenzene	mg/kg	NA	NA	NA		NA
p-Isopropyltoluene	mg/kg	NA	NA	NA		NA
n-Butylbenzene	mg/kg	NA	NA	NA		NA
Naphthalene	mg/kg	NA	NA	NA		NA
Semi-Volatile Organic Compounds (USEPA Method 8270)						
Benzoic Acid	mg/kg	NA	NA	NA		NA
Naphthalene	mg/kg	NA	NA	NA		NA
2-Methylnaphthalene	mg/kg	NA	NA	NA		NA
Acenaphthylene	mg/kg	NA	NA	NA		NA
Acenaphthene	mg/kg	NA	NA	NA		NA
Dibenzofuran	mg/kg	NA	NA	NA		NA
Fluorene	mg/kg	NA	NA	NA		NA
Phenanthrene	mg/kg	NA	NA	NA		NA
Anthracene	mg/kg	NA	NA	NA		NA
Di-n-butylphthalate	mg/kg	NA	NA	NA		NA
Fluoranthene	mg/kg	NA	NA	NA		NA
Pyrene	mg/kg	NA	NA	NA		NA
Butylbenzylphthalate	mg/kg	NA	NA	NA		NA
Bis(2-ethylhexyl) phthalate	mg/kg	NA	NA	NA		NA
Benzo (a) anthracene	mg/kg	NA	NA	NA		NA
Chrysene	mg/kg	NA	NA	NA		NA
Di-n-octylphthalate	mg/kg	NA	NA	NA		NA
Benzo (b) fluoranthene	mg/kg	NA	NA	NA		NA
Benzo (k) fluoranthene	mg/kg	NA	NA	NA		NA
Benzo (a) pyrene	mg/kg	NA	NA	NA		NA
Dibenz(a,h)anthracene	mg/kg	NA	NA	NA		NA
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NA	NA		NA
Benzo(g,h,i)Perylene	mg/kg	NA	NA	NA		NA

mg/kg - Milligrams per kilogram

U - Not detected at or above method detection limit

NA - Not applicable

B - Analyte detected in method blank

J - Estimated value; below reporting limit

* - Diluted due to interference

Exceeds TCLP

** Using Tier 1 Standards, Exposure Scenario B

Note: Only those Volatile Organic Compounds and Semi-Volatile Organic Compounds with detections were included in table.

LEEDS002519

APPENDIX B

Laboratory Reports

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 • FAX (314) 434-0080

January 10, 2000

Brian Foy
Burns & McDonnell Waste Consultants, Inc.
9400 Ward Parkway
Kansas City, MO 64114

RE: ATAS #28625.01 - #28625.03
#96-620-3-005 - GMLeeds

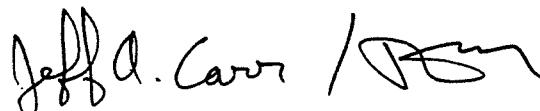
Dear Mr. Foy:

Enclosed are the analytical reports for the samples received in our laboratory on December 31, 1999.

If, in your review, you should have any questions or require additional information, please call.

Thank you for choosing ATAS for your analytical needs.

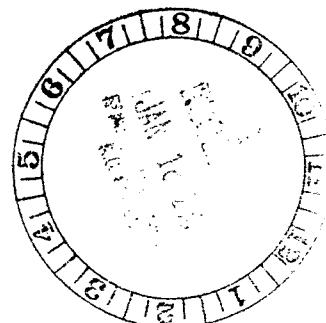
Sincerely,



Jeffrey A. Carr
Project Manager

Enclosures

JAC/sdp



ATAS

"Professional Commitment"

LEEDS002535

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2862501B(366)
DATE : 01-10-00

SAMPLE MATRIX : SOIL	METHOD REF.: SW846-8260B, EPA METHODOLOGY
ATAS # : 28625.03	PROJECT # : 96-620-3-005 - GMLEEDS
DATE SUBMITTED: 12-31-99	SAMPLE ID : DRUM
DATE ANALYZED : 01-04-00	

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

VOLATILES	R.L.	RESULTS	VOLATILES	R.L.	RESULTS
XYLENE (TOTAL)	5000	4500 J	TOLUENE	5000	ND
DICHLORODIFLUOROMETHANE	10000	ND	trans-1,3-DICHLOROPROPENE	5000	ND
CHLOROMETHANE	10000	ND	1,1,2-TRICHLOROETHANE	5000	ND
VINYL CHLORIDE	10000	ND	TETRACHLOROETHENE	5000	ND
BROMOMETHANE	10000	ND	1,3-DICHLOROPROPANE	5000	ND
CHLOROETHANE	10000	ND	2-HEXANONE	10000	ND
TRICHLORODIFLUOROMETHANE	10000	ND	DIBROMOCHLOROMETHANE	5000	ND
1,1-DICHLOROETHENE	5000	ND	1,2-DIBROMOETHANE	5000	ND
ACETONE	10000	ND	CHLOROBENZENE	5000	ND
IODOMETHANE	10000	ND	1,1,1,2-TETRACHLOROETHANE	5000	ND
CARBON DISULFIDE	5000	ND	ETHYLBENZENE	5000	2300 J
METHYLENE CHLORIDE	5000	2600 J	STYRENE	5000	ND
trans-1,2-DICHLOROETHENE	5000	ND	BROMOFORM	5000	ND
METHYL TERT-BUTYL ETHER	10000	ND	ISOPROPYLBENZENE	5000	9000
1,1-DICHLOROETHANE	5000	ND	1,1,2,2-TETRACHLOROETHANE	5000	ND
VINYL ACETATE	10000	ND	BROMOBENZENE	5000	ND
2,2-DICHLOROPROPANE	5000	ND	1,2,3-TRICHLOROPROPANE	5000	ND
cis-1,2-DICHLOROETHENE	5000	ND	n-PROPYLBENZENE	5000	58000
2-BUTANONE	10000	ND	2-CHLOROTOLUENE	5000	ND
BROMOCHLOROMETHANE	5000	ND	1,3,5-TRIMETHYLBENZENE	5000	6800 J
CHLOROFORM	5000	ND	4-CHLOROTOLUENE	5000	ND
1,1,1-TRICHLOROETHANE	5000	ND	TERT-BUTYLBENZENE	5000	ND
CARBON TETRACHLORIDE	5000	ND	1,2,4-TRIMETHYLBENZENE	5000	23000
1,1-DICHLOROPROPENE	5000	ND	sec-BUTYLBENZENE	5000	16000
BENZENE	5000	ND	1,3-DICHLOROBENZENE	5000	ND
1,2-DICHLOROETHANE	5000	ND	p-ISOPROPYLtoluene	5000	ND
TRICHLOROETHENE	5000	ND	1,4-DICHLOROBENZENE	5000	ND
1,2-DICHLOROPROPANE	5000	ND	n-BUTYLBENZENE	5000	32000
DIBROMOMETHANE	5000	ND	1,2-DICHLOROBENZENE	5000	ND
BROMODICHLOROMETHANE	5000	ND	1,2-DIBROMO-3-CHLOROPROPANE	5000	ND
cis-1,3-DICHLOROPROPENE	5000	ND	1,2,4-TRICHLOROBENZENE	5000	ND
4-METHYL-2-PENTANONE	10000	ND	HEXAChlorobutadiene	5000	ND
1,2,3-TRICHLOROBENZENE	5000	ND	NAPHTHALENE	5000	2600 J

QA/QC SURROGATE RECOVERIES

TOLUENE-d8(81-117) 97% BROMOFLUOROBENZENE(74-121) 94%
 1,2-DICHLOROETHANE-D4(70-121) 76%

J = ESTIMATED VALUE; BELOW REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 ATTN: BRIAN FOY

REPORT: 2862501B(366)
 DATE : 01-10-00

SAMPLE MATRIX : SOIL METHOD REF.: SW846-8260B, EPA METHODOLOGY
 ATAS # : METHOD BLANK PROJECT # : 96-620-3-005 - GMLEEDS
 DATE SUBMITTED: 12-31-99 SAMPLE ID : METHOD BLANK
 DATE ANALYZED : 01-04-00

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

VOLATILES	R.L.	RESULTS	VOLATILES	R.L.	RESULTS
XYLENE (TOTAL)	5	ND	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	ND	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	ND	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8(81-117) 101% BROMOFLUOROBENZENE(74-121) 106%
 1,2-DICHLOROETHANE-D4(70-121) 81%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION, POSITIVE VALUES BELOW THIS LIMIT WERE NOT REPORTED.

LEEDS002537

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX: SOIL
DATE ANALYZED: 01-04-00
METHOD REF. : SW846-8260B, EPA METHODOLOGY

REPORT DATE: 01-10-00

LABORATORY CONTROL SAMPLE / LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

<u>COMPOUND</u>	LCS % REC.	LCSD % REC.	RPD	QC RPD	ADVISORY LIMITS
1,1-DICHLOROETHENE	92	100	8	14	61-126
TRICHLOROETHENE	92	104	12	14	80-112
BENZENE	90	102	13*	11	86-112
TOLUENE	90	108	18*	13	90-116
CHLOROBENZENE	90	104	14*	13	81-117

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002538

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2862501B(366)**DATE :** 01-10-00

SAMPLE MATRIX : SOIL
ATAS # : 28625.03
DATE SUBMITTED: 12-31-99
SAMPLE ID : DRUM

DATE EXTRACTED: 01-03-00
DATE ANALYZED : 01-04-00
PROJECT : #96-620-3-005 - GMLEEDS
METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION(PPB)

SEMIVOLATILES	RESULTS		SEMIVOLATILE	RESULTS	
	RL	(ug/Kg)		RL	(ug/Kg)
PHENOL	5000	ND	3-NITROANILINE	12000	ND
BIS(2-CHLOROETHYL)ETHER	5000	ND	ACENAPHTHENE	5000	ND
2-CHLOROPHENOL	5000	ND	2,4-DINITROPHENOL	12000	ND
1,3-DICHLOROBENZENE	5000	ND	4-NITROPHENOL	12000	ND
1,4-DICHLOROBENZENE	5000	ND	2,4-DINITROTOLUENE	5000	ND
BENZYL ALCOHOL	5000	ND	DIBENZOFURAN	5000	ND
1,2-DICHLOROBENZENE	5000	ND	DIETHYLPHthalATE	5000	ND
2-METHYLPHENOL	5000	ND	4-CHLOROPHENYL-PHENYLETHER	5000	ND
BIS(2-CHLOROISOPROPYL)ETHER	5000	ND	FLUORENE	5000	4300 J
3/4-METHYLPHENOL	5000	ND	4-NITROANILINE	12000	ND
N-NITROSO-DI-n-PROPYLAMINE	5000	ND	4,6-DINITRO-2-METHYLPHENOL	12000	ND
HEXACHLOROETHANE	5000	ND	N-NITROSODIPHENYLAMINE	5000	ND
NITROBENZENE	5000	ND	4-BROMOPHENYL-PHENYLETHER	5000	ND
ISOPHORONE	5000	ND	HEXACHLOROBENZENE	5000	ND
2,4-DIMETHYLPHENOL	5000	ND	PENTACHLOROPHENOL	12000	ND
2-NITROPHENOL	5000	ND	PHENANTHRENE	5000	9700
BENZOIC ACID	12000	ND	ANTHRACENE	5000	1600 J
BIS(2-CHLOROETHOXY)METHANE	5000	ND	DI-N-BUTYLPHthalATE	5000	11000
2,4-DICHLOROPHENOL	5000	ND	FLUORANTHENE	5000	2600 J
1,2,4-TRICHLOROBENZENE	5000	ND	PYRENE	5000	2500 J
NAPHTHALENE	5000	ND	BUTYLBENZYLPHthalATE	5000	ND
4-CHLOROANILINE	5000	ND	BIS(2-ETHYLHEXYL)PHTHALATE	5000	28000
HEXACHLOROBUTADIENE	5000	ND	3,3'-DICHLOROBENZIDINE	5000	ND
4-CHLORO-3-METHYLPHENOL	5000	ND	BENZO(A)ANTHRACENE	5000	800 J
2-METHYLNAPHTHALENE	10000	55100	CHRYSENE	5000	1300 J
HEXACHLOROCYCLOPENTADIENE	5000	ND	DI-N-OCTYLPHthalATE	5000	1100 J
2,4,6-TRICHLOROPHENOL	5000	ND	BENZO(b)FLUORANTHENE	5000	720 J
2,4,5-TRICHLOROPHENOL	12000	ND	BENZO(k)FLUORANTHENE	5000	610 J
2-CHLORONAPHTHALENE	5000	ND	BENZO(a)PYRENE	5000	850 J
2-NITROANILINE	12000	ND	DIBENZO(A,H)ANTHRACENE	5000	ND
DIMETHYLPHthalATE	5000	ND	INDENO(1,2,3-CD)PYRENE	5000	ND
2,6-DINITROTOLUENE	5000	ND	BENZO(G,H,I)PERYLENE	5000	ND
ACENAPHTHYLENE	5000	3200 J			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5(23-120)	54 %	2-FLUOROBIPHENYL(30-115)	46 %
TERPHENYL-d14(18-137)	63 %	PHENOL-d5(24-113)	45 %
2-FLUOROPHENOL(25-121)	41 %	2,4,6-TRIBROMOPHENOL(19-122)	51 %

J = ESTIMATED VALUE; BELOW REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002539

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 ATTN: BRIAN FOY

REPORT: 2862501B(366)

DATE : 01-10-00

SAMPLE MATRIX : SOIL
 ATAS # : METHOD BLANK
 DATE SUBMITTED: 12-31-99
 SAMPLE ID : METHOD BLANK

DATE EXTRACTED: 01-03-00
 DATE ANALYZED : 01-04-00
 PROJECT : #96-620-3-005 - GMLEEDS
 METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION(PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>		<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	
	<u>RL</u>	<u>(ug/Kg)</u>		<u>RL</u>	<u>(ug/Kg)</u>
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS(2-CHLOROETHYL)ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2,4-DINITROPHENOL	830	ND
1,3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1,4-DICHLOROBENZENE	330	ND	2,4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1,2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENylether	330	ND
BIS(2-CHLOROISOPROPYL)ETHER	330	ND	FLUORENE	330	ND
3/4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4,6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENylether	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2,4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS(2-CHLOROETHOXY)METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2,4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1,2,4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS(2-ETHYLHEXYL)PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3,3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO(A)ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2,4,6-TRICHLOROPHENOL	330	ND	BENZO(b)FLUORANTHENE	330	ND
2,4,5-TRICHLOROPHENOL	830	ND	BENZO(k)FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO(a)PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO(A,H)ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO(1,2,3-CD)PYRENE	330	ND
2,6-DINITROTOLUENE	330	ND	BENZO(G,H,I)PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5(23-120)	58 %	2-FLUOROBIPHENYL(30-115)	63 %
TERPHENYL-d14(18-137)	75 %	PHENOL-d5(24-113)	59 %
2-FLUOROPHENOL(25-121)	54 %	2,4,6-TRIBROMOPHENOL(19-122)	57 %

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002540

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX : SOIL
DATE EXTRACTED: 01-03-00
DATE ANALYZED : 01-04-00
METHOD REF. : SW846-8270C, EPA METHODOLOGY

REPORT DATE: 01-10-00

LABORATORY CONTROL SAMPLE RECOVERY

COMPOUND	LCS % REC.	ADVISORY LIMITS
PHENOL	41	25-97
2-CHLOROPHENOL	40	29-98
1,4-DICHLOROBENZENE	44	31-103
N-NITROSO-DI-n-PROPYLAMINE	44	35-116
1,2,4-TRICHLOROBENZENE	48	32-108
4-CHLORO-3-METHYLPHENOL	48	35-101
ACENAPHTHENE	47	41-102
4-NITROPHENOL	58	42-117
2,4-DINITROTOLUENE	49	48-117
PENTACHLOROPHENOL	50	43-119
PYRENE	45	34-132

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002541

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2862501B (366)
DATE : 01-10-00

SAMPLE MATRIX : SOIL % SOLID: 78
ATAS # : 28625.01
DATE SUBMITTED: 12-31-99
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : GREEN

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
METALS					
ARSENIC	1.3	mg/Kg	3.13	01-07-00	SW 6010
BARIUM	0.5	mg/Kg	236	01-07-00	SW 6010
CADMIUM	0.3	mg/Kg	ND	01-07-00	SW 6010
CHROMIUM	0.1	mg/Kg	24.2	01-07-00	SW 6010
LEAD	12.8*	mg/Kg	ND	01-07-00	SW 6010
MANGANESE	5.1	mg/Kg	151	01-10-00	SW 6010
SELENIUM	2.6	mg/Kg	ND	01-07-00	SW 6010
SILVER	0.3	mg/Kg	ND	01-07-00	SW 6010
ZINC	0.1	mg/Kg	45.6	01-10-00	SW 6010
MERCURY	0.3	mg/Kg	ND	01-05-00	SW 7471

* = DILUTED DUE TO INTERFERENCE

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002542

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 ATTN: BRIAN FOY

REPORT: 2862501B (366)

DATE : 01-10-00

SAMPLE MATRIX : SOIL % SOLID: 71
 ATAS # : 28625.02
 DATE SUBMITTED: 12-31-99
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : RED

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
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METALS

ARSENIC	1.4	mg/Kg	2.80	01-07-00	SW 6010
BARIUM	0.6	mg/Kg	251	01-07-00	SW 6010
CADMIUM	0.3	mg/Kg	ND	01-07-00	SW 6010
CHROMIUM	0.1	mg/Kg	29.2	01-07-00	SW 6010
LEAD	14.1*	mg/Kg	ND	01-07-00	SW 6010
SELENIUM	2.8	mg/Kg	ND	01-07-00	SW 6010
SILVER	0.3	mg/Kg	ND	01-07-00	SW 6010
MERCURY	0.3	mg/Kg	ND	01-05-00	SW 7471

* = DILUTED DUE TO INTERFERENCE

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2862501B(366)
DATE : 01-10-00

SAMPLE MATRIX : SOIL % SOLID: 67
ATAS # : 28625.03
DATE SUBMITTED: 12-31-99
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : DRUM

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
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METALS

ARSENIC	1.5	mg/Kg	8.36	01-07-00	SW 6010
BARIUM	0.6	mg/Kg	3090	01-07-00	SW 6010
CADMIUM	0.3	mg/Kg	21.9	01-07-00	SW 6010
CHROMIUM	0.15	mg/Kg	566	01-07-00	SW 6010
LEAD	1.5	mg/Kg	682	01-07-00	SW 6010
SELENIUM	2.0	mg/Kg	3.19	01-07-00	SW 6010
SILVER	0.3	mg/Kg	ND	01-07-00	SW 6010
MERCURY	0.3	mg/Kg	ND	01-05-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002544

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2862501B(366)
DATE : 01-10-00

QA/QC

DESCRIPTION		PARAMETER	RESULTS
METHOD BLANK	01-07-00	ARSENIC	<1.0 mg/Kg
METHOD BLANK	01-07-00	BARIUM	<0.4 mg/Kg
METHOD BLANK	01-07-00	CADMIUM	<0.2 mg/Kg
METHOD BLANK	01-07-00	CHROMIUM	<0.1 mg/Kg
METHOD BLANK	01-06-00	LEAD	<1.0 mg/Kg
METHOD BLANK	01-10-00	MANGANESE	<0.4 mg/Kg
METHOD BLANK	01-07-00	SELENIUM	<2.0 mg/Kg
METHOD BLANK	01-07-00	SILVER	<0.2 mg/Kg
METHOD BLANK	01-10-00	ZINC	<1.0 mg/Kg
METHOD BLANK	01-05-00	MERCURY	<0.2 mg/Kg
CONTROL SPIKE	01-07-00	ARSENIC	92 % RECOVERY
CONTROL SPIKE	01-07-00	BARIUM	89 % RECOVERY
CONTROL SPIKE	01-07-00	CADMIUM	90 % RECOVERY
CONTROL SPIKE	01-07-00	CHROMIUM	87 % RECOVERY
CONTROL SPIKE	01-06-00	LEAD	95 % RECOVERY
CONTROL SPIKE	01-10-00	MANGANESE	92 % RECOVERY
CONTROL SPIKE	01-07-00	SELENIUM	90 % RECOVERY
CONTROL SPIKE	01-07-00	SILVER	91 % RECOVERY
CONTROL SPIKE	01-10-00	ZINC	94 % RECOVERY
CONTROL SPIKE	01-05-00	MERCURY	98 % RECOVERY

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Waste Consultants, Inc.
 9400 Ward Parkway
 Kansas City, Missouri 64114
 Phone: (816) 333-8787 Fax: (816) 822-3463

Attention:
 Project Number: 96-620-3-0025

Site, Group, or SWMMU Name:

Laboratory American Technical + Analytical Services
 Address 875 Fee Fee Road
 City/State/Zip Maryland Heights, MO 63043-3211

Lab Reference No. or
 Episode No.:

Telephone:

LM
 1-3-00
 2-1C1

Project Name: GMLLEEDS

Sample Type:

Sample Number	Sample Location	Material Sampled	Matrix		Sample Collected	Date	Wipe	Grab	Quantity (sq. ft. or linear)
			A	B					
Green 56	GMLLEEDS	K50	12/29/99					✓	7-day turn
Red 56	GMLLEEDS	1020	12/30/99					✓	" "
Drum 56	" "	0840	12/30/99					✓	" "

Add Zn & Mn on
 Green Damp Joe Fair
 Brian Fair

1/5/00

Special Instructions:

Jeffrey D. Barlow 12/30/99
 RECEIVED

Special Instructions:

Relinquished By: <i>Jeffrey D. Barlow</i>	Date/Time: 12/29/99	Condition of Shipping Container: Good	Ice Present in Container: Yes
Relinquished By: <i>Jeffrey D. Barlow</i>	Date/Time: 12/30/99	Fair	No
Comments: 2.	(signature):		

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 • FAX (314) 434-0080

January 18, 2000

Brian Foy
Burns & McDonnell Waste Consultants, Inc.
9400 Ward Parkway
Kansas City, MO 64114

RE: ATAS #28688.01-#28688.04
#96-620-3-005 - GMLEEDS

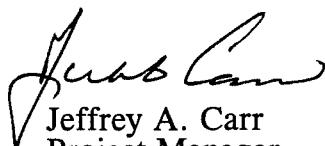
Dear Mr. Foy:

Enclosed are the analytical reports for the samples received in our laboratory on January 12, 2000.

If, in your review, you should have any questions or require additional information, please call.

Thank you for choosing ATAS for your analytical needs.

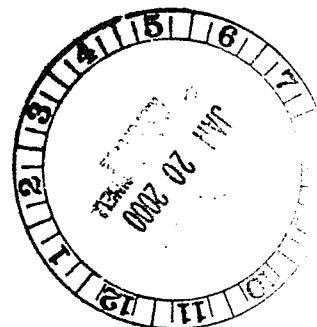
Sincerely,



Jeffrey A. Carr
Project Manager

Enclosures

JAC/pck



ATAS
"Professional Commitment"

LEEDS002547

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 ATTN: BRIAN FOY

REPORT: 2868801V(205)
 DATE : 01-17-00

SAMPLE MATRIX : SOIL
 ATAS # : 28688.01
 DATE SUBMITTED: 01-12-00
 DATE ANALYZED : 01-13-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
 PROJECT # : #96-620-3-005 - GMLEEDS
 SAMPLE ID : SP-1/STOCKPILE
 % SOLID: 80

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L. RESULTS</u>	<u>VOLATILES</u>	<u>R.L. RESULTS</u>		
XYLENE (TOTAL)	6	ND	TOLUENE	6	2 J
DICHLORODIFLUOROMETHANE	12	ND	trans-1,3-DICHLOROPROPENE	6	ND
CHLOROMETHANE	12	ND	1,1,2-TRICHLOROETHANE	6	ND
VINYL CHLORIDE	2	ND	TETRACHLOROETHENE	6	ND
BROMOMETHANE	12	ND	1,3-DICHLOROPROPANE	6	ND
CHLOROETHANE	12	ND	2-HEXANONE	12	ND
TRICHLOROFLUOROMETHANE	12	ND	DIBROMOCHLOROMETHANE	6	ND
1,1-DICHLOROETHENE	6	ND	1,2-DIBROMOETHANE	6	ND
ACETONE	12	ND	CHLOROBENZENE	6	ND
IODOMETHANE	12	ND	1,1,1,2-TETRACHLOROETHANE	6	ND
CARBON DISULFIDE	6	ND	ETHYLBENZENE	6	ND
METHYLENE CHLORIDE	6	13 B	STYRENE	6	ND
trans-1,2-DICHLOROETHENE	6	ND	BROMOFORM	6	ND
METHYL TERT-BUTYL ETHER	12	ND	ISOPROPYLBENZENE	6	ND
1,1-DICHLOROETHANE	6	ND	1,1,2,2-TETRACHLOROETHANE	6	ND
VINYL ACETATE	12	ND	BROMOBENZENE	6	ND
2,2-DICHLOROPROPANE	6	ND	1,2,3-TRICHLOROPROPANE	6	ND
cis-1,2-DICHLOROETHENE	6	ND	n-PROPYLBENZENE	6	ND
2-BUTANONE	12	ND	2-CHLOROTOLUENE	6	ND
BROMOCHLOROMETHANE	6	ND	1,3,5-TRIMETHYLBENZENE	6	ND
CHLOROFORM	6	ND	4-CHLOROTOLUENE	6	ND
1,1,1-TRICHLOROETHANE	6	ND	TERT-BUTYLBENZENE	6	ND
CARBON TETRACHLORIDE	6	ND	1,2,4-TRIMETHYLBENZENE	6	ND
1,1-DICHLOROPROPENE	6	ND	sec-BUTYLBENZENE	6	ND
BENZENE	6	2 J	1,3-DICHLOROBENZENE	6	ND
1,2-DICHLOROETHANE	6	ND	p-ISOPROPYLtoluene	6	ND
TRICHLOROETHENE	6	ND	1,4-DICHLOROBENZENE	6	ND
1,2-DICHLOROPROPANE	6	ND	n-BUTYLBENZENE	6	ND
DIBROMOMETHANE	6	ND	1,2-DICHLOROBENZENE	6	ND
BROMODICHLOROMETHANE	6	ND	1,2-DIBROMO-3-CHLOROPROPANE	6	ND
cis-1,3-DICHLOROPROPENE	6	ND	1,2,4-TRICHLOROBENZENE	6	ND
4-METHYL-2-PENTANONE	12	ND	HEXAChLOROBUTADIENE	6	ND
1,2,3-TRICHLOROBENZENE	6	ND	NAPHTHALENE	6	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8(81-117) 99% BROMOFLUOROBENZENE(74-121) 106%
 1,2-DICHLOROETHANE-D4(70-121) 97%

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002548

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801V(205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL METHOD REF.: SW846-8260B, EPA METHODOLOGY
 ATAS # : 28688.02 PROJECT # : #96-620-3-005 - GMLEEDS
 DATE SUBMITTED: 01-12-00 SAMPLE ID : SP-2/STOCKPILE
 DATE ANALYZED : 01-13-00 % SOLID: 76

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

VOLATILES	R.L.	RESULTS	VOLATILES	R.L.	RESULTS
XYLENE (TOTAL)	6	1 J	TOLUENE	6	4 J
DICHLORODIFLUOROMETHANE	13	ND	trans-1,3-DICHLOROPROPENE	6	ND
CHLOROMETHANE	13	ND	1,1,2-TRICHLOROETHANE	6	ND
VINYL CHLORIDE	3	ND	TETRACHLOROETHENE	6	ND
BROMOMETHANE	13	ND	1,3-DICHLOROPROPANE	6	ND
CHLOROETHANE	13	ND	2-HEXANONE	13	ND
TRICHLOROFUOROMETHANE	13	ND	DIBROMOCHLOROMETHANE	6	ND
1,1-DICHLOROETHENE	6	ND	1,2-DIBROMOETHANE	6	ND
ACETONE	13	47	CHLOROBENZENE	6	ND
IODOMETHANE	13	ND	1,1,1,2-TETRACHLOROETHANE	6	ND
CARBON DISULFIDE	6	ND	ETHYLBENZENE	6	1 J
METHYLENE CHLORIDE	6	11 B	STYRENE	6	ND
trans-1,2-DICHLOROETHENE	6	ND	BROMOFORM	6	ND
METHYL TERT-BUTYL ETHER	13	ND	ISOPROPYLBENZENE	6	ND
1,1-DICHLOROETHANE	6	ND	1,1,2,2-TETRACHLOROETHANE	6	ND
VINYL ACETATE	13	ND	BROMOBENZENE	6	ND
2,2-DICHLOROPROPANE	6	ND	1,2,3-TRICHLOROPROPANE	6	ND
cis-1,2-DICHLOROETHENE	6	ND	n-PROPYLBENZENE	6	ND
2-BUTANONE	13	ND	2-CHLOROTOLUENE	6	ND
BROMOCHLOROMETHANE	6	ND	1,3,5-TRIMETHYLBENZENE	6	1 J
CHLOROFORM	6	ND	4-CHLOROTOLUENE	6	ND
1,1,1-TRICHLOROETHANE	6	ND	TERT-BUTYLBENZENE	6	ND
CARBON TETRACHLORIDE	6	ND	1,2,4-TRIMETHYLBENZENE	6	ND
1,1-DICHLOROPROPENE	6	ND	sec-BUTYLBENZENE	6	ND
BENZENE	6	4 J	1,3-DICHLOROBENZENE	6	ND
1,2-DICHLOROETHANE	6	ND	p-ISOPROPYLtoluene	6	ND
TRICHLOROETHENE	6	ND	1,4-DICHLOROBENZENE	6	ND
1,2-DICHLOROPROPANE	6	ND	n-BUTYLBENZENE	6	ND
DIBROMOMETHANE	6	ND	1,2-DICHLOROBENZENE	6	ND
BROMODICHLOROMETHANE	6	ND	1,2-DIBROMO-3-CHLOROPROPANE	6	ND
cis-1,3-DICHLOROPROPENE	6	ND	1,2,4-TRICHLOROBENZENE	6	ND
4-METHYL-2-PENTANONE	13	ND	HEXACHLOROBUTADIENE	6	ND
1,2,3-TRICHLOROBENZENE	6	ND	NAPHTHALENE	6	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 102% BROMOFLUOROBENZENE (74-121) 112%
 1,2-DICHLOROETHANE-D4 (70-121) 92%

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002549

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801V(205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL METHOD REF.: SW846-8260B, EPA METHODOLOGY
 ATAS # : 28688.03 PROJECT # : #96-620-3-005 - GMLEEDS
 DATE SUBMITTED: 01-12-00 SAMPLE ID : SP-3/STOCKPILE
 DATE ANALYZED : 01-13-00 % SOLID: 68

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	7	ND	TOLUENE	7	ND
DICHLORODIFLUOROMETHANE	15	ND	trans-1,3-DICHLOROPROPENE	7	ND
CHLOROMETHANE	15	ND	1,1,2-TRICHLOROETHANE	7	ND
VINYL CHLORIDE	3	ND	TETRACHLOROETHENE	7	ND
BROMOMETHANE	15	ND	1,3-DICHLOROPROPANE	7	ND
CHLOROETHANE	15	ND	2-HEXANONE	15	ND
TRICHLOROFLUOROMETHANE	15	ND	DIBROMOCHLOROMETHANE	7	ND
1,1-DICHLOROETHENE	7	ND	1,2-DIBROMOETHANE	7	ND
ACETONE	15	60	CHLOROBENZENE	7	ND
IODOMETHANE	15	ND	1,1,1,2-TETRACHLOROETHANE	7	ND
CARBON DISULFIDE	7	ND	ETHYLBENZENE	7	ND
METHYLENE CHLORIDE	7	16 B	STYRENE	7	ND
trans-1,2-DICHLOROETHENE	7	ND	BROMOFORM	7	ND
METHYL TERT-BUTYL ETHER	15	ND	ISOPROPYLBENZENE	7	ND
1,1-DICHLOROETHANE	7	ND	1,1,2,2-TETRACHLOROETHANE	7	ND
VINYL ACETATE	15	ND	BROMOBENZENE	7	ND
2,2-DICHLOROPROPANE	7	ND	1,2,3-TRICHLOROPROPANE	7	ND
cis-1,2-DICHLOROETHENE	7	ND	n-PROPYLBENZENE	7	ND
2-BUTANONE	15	ND	2-CHLOROTOLUENE	7	ND
BROMOCHLOROMETHANE	7	ND	1,3,5-TRIMETHYLBENZENE	7	ND
CHLOROFORM	7	ND	4-CHLOROTOLUENE	7	ND
1,1,1-TRICHLOROETHANE	7	ND	TERT-BUTYLBENZENE	7	ND
CARBON TETRACHLORIDE	7	ND	1,2,4-TRIMETHYLBENZENE	7	ND
1,1-DICHLOROPROPENE	7	ND	sec-BUTYLBENZENE	7	ND
BENZENE	7	ND	1,3-DICHLOROBENZENE	7	ND
1,2-DICHLOROETHANE	7	ND	p-ISOPROPYLtoluene	7	ND
TRICHLOROETHENE	7	ND	1,4-DICHLOROBENZENE	7	ND
1,2-DICHLOROPROPANE	7	ND	n-BUTYLBENZENE	7	ND
DIBROMOMETHANE	7	ND	1,2-DICHLOROBENZENE	7	ND
BROMODICHLOROMETHANE	7	ND	1,2-DIBROMO-3-CHLOROPROPANE	7	ND
cis-1,3-DICHLOROPROPENE	7	ND	1,2,4-TRICHLOROBENZENE	7	ND
4-METHYL-2-PENTANONE	15	ND	HEXAChLOROBUTADIENE	7	ND
1,2,3-TRICHLOROBENZENE	7	ND	NAPHTHALENE	7	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8(81-117) 99% BROMOFLUOROBENZENE(74-121) 104%
 1,2-DICHLOROETHANE-D4(70-121) 94%

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002550

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801V(205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL METHOD REF.: SW846-8260B, EPA METHODOLOGY
 ATAS # : 28688.04 PROJECT # : #96-620-3-005 - GMLEEDS
 DATE SUBMITTED: 01-12-00 SAMPLE ID : SP-4/STOCKPILE
 DATE ANALYZED : 01-13-00 % SOLID: 78

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	R.L.	<u>RESULTS</u>	<u>VOLATILES</u>	R.L.	<u>RESULTS</u>
XYLENE (TOTAL)	6	ND	TOLUENE	6	1 J
DICHLORODIFLUOROMETHANE	13	ND	trans-1,3-DICHLOROPROPENE	6	ND
CHLOROMETHANE	13	ND	1,1,2-TRICHLOROETHANE	6	ND
VINYL CHLORIDE	2	ND	TETRACHLOROETHENE	6	ND
BROMOMETHANE	13	ND	1,3-DICHLOROPROPANE	6	ND
CHLOROETHANE	13	ND	2-HEXANONE	13	ND
TRICHLOROFUOROMETHANE	13	ND	DIBROMOCHLOROMETHANE	6	ND
1,1-DICHLOROETHENE	6	ND	1,2-DIBROMOETHANE	6	ND
ACETONE	13	39	CHLOROBENZENE	6	ND
IODOMETHANE	13	ND	1,1,1,2-TETRACHLOROETHANE	6	ND
CARBON DISULFIDE	6	ND	ETHYLBENZENE	6	ND
METHYLENE CHLORIDE	6	9 B	STYRENE	6	ND
trans-1,2-DICHLOROETHENE	6	ND	BROMOFORM	6	ND
METHYL TERT-BUTYL ETHER	13	ND	ISOPROPYLBENZENE	6	ND
1,1-DICHLOROETHANE	6	ND	1,1,2,2-TETRACHLOROETHANE	6	ND
VINYL ACETATE	13	ND	BROMOBENZENE	6	ND
2,2-DICHLOROPROPANE	6	ND	1,2,3-TRICHLOROPROPANE	6	ND
cis-1,2-DICHLOROETHENE	6	ND	n-PROPYLBENZENE	6	ND
2-BUTANONE	13	ND	2-CHLOROTOLUENE	6	ND
BROMOCHLOROMETHANE	6	ND	1,3,5-TRIMETHYLBENZENE	6	ND
CHLOROFORM	6	ND	4-CHLOROTOLUENE	6	ND
1,1,1-TRICHLOROETHANE	6	ND	TERT-BUTYLBENZENE	6	ND
CARBON TETRACHLORIDE	6	ND	1,2,4-TRIMETHYLBENZENE	6	ND
1,1-DICHLOROPROPENE	6	ND	sec-BUTYLBENZENE	6	ND
BENZENE	6	2 J	1,3-DICHLOROBENZENE	6	ND
1,2-DICHLOROETHANE	6	ND	p-ISOPROPYLtoluene	6	ND
TRICHLOROETHENE	6	ND	1,4-DICHLOROBENZENE	6	ND
1,2-DICHLOROPROPANE	6	ND	n-BUTYLBENZENE	6	ND
DIBROMOMETHANE	6	ND	1,2-DICHLOROBENZENE	6	ND
BROMODICHLOROMETHANE	6	ND	1,2-DIBROMO-3-CHLOROPROPANE	6	ND
cis-1,3-DICHLOROPROPENE	6	ND	1,2,4-TRICHLOROBENZENE	6	ND
4-METHYL-2-PENTANONE	13	ND	HEXACHLOROBUTADIENE	6	ND
1,2,3-TRICHLOROBENZENE	6	ND	NAPHTHALENE	6	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 101% BROMOFLUOROBENZENE (74-121) 106%
 1,2-DICHLOROETHANE-D4 (70-121) 103%

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002551

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801V(205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL METHOD REF.: SW846-8260B, EPA METHODOLOGY
 ATAS # : METHOD BLANK PROJECT # : #96-620-3-005 - GMLEEDS
 DATE SUBMITTED: 01-12-00 SAMPLE ID : METHOD BLANK
 DATE ANALYZED : 01-13-00

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L. RESULTS</u>	<u>VOLATILES</u>	<u>R.L. RESULTS</u>		
XYLENE (TOTAL)	5	ND	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	ND	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	14	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	2 J

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 102% BROMOFLUOROBENZENE (74-121) 106%
 1,2-DICHLOROETHANE-D4 (70-121) 89%

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002552

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX: SOIL
DATE ANALYZED: 01-13-00
METHOD REF. : SW846-8260B, EPA METHODOLOGY

REPORT DATE: 01-17-00

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

COMPOUND	28688.03	28688.03	RPD	QC	ADVISORY
	MS % REC.	MSD % REC.		RPD	LIMITS
1,1-DICHLOROETHENE	83	75	10	28	43-151
TRICHLOROETHENE	74	99	29*	7	45-137
BENZENE	99	107	8	12	57-143
TOLUENE	91	91	0	16	42-147
CHLOROBENZENE	90	85	6	7	58-133

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002553

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX: SOIL
DATE ANALYZED: 01-13-00
METHOD REF. : SW846-8260B, EPA METHODOLOGY

REPORT DATE: 01-17-00

LABORATORY CONTROL SAMPLE RECOVERY

<u>COMPOUND</u>	<u>LCS % REC.</u>	<u>QC ADVISORY LIMITS</u>
1,1-DICHLOROETHENE	78	64-127
TRICHLOROETHENE	104	69-115
BENZENE	110	77-118
TOLUENE	110	77-118
CHLOROBENZENE	98	81-109

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002554

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801S (205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL % SOLID: 80	DATE EXTRACTED: 01-12-00
ATAS # : 28688.01	DATE ANALYZED : 01-13-00
DATE SUBMITTED: 01-12-00	PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-1/STOCKPILE	METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>
PHENOL	420	ND	3-NITROANILINE	1000	ND
BIS (2-CHLOROETHYL) ETHER	420	ND	ACENAPHTHENE	420	ND
2-CHLOROPHENOL	420	ND	2, 4-DINITROPHENOL	1000	ND
1, 3-DICHLOROBENZENE	420	ND	4-NITROPHENOL	1000	ND
1, 4-DICHLOROBENZENE	420	ND	2, 4-DINITROTOLUENE	420	ND
BENZYL ALCOHOL	420	ND	DIBENZOFURAN	420	ND
1, 2-DICHLOROBENZENE	420	ND	DIETHYLPHthalATE	420	ND
2-METHYLPHENOL	420	ND	4-CHLOROPHENYL-PHENylether	420	ND
BIS (2-CHLOROISOPROPYL) ETHER	420	ND	FLUORENE	420	ND
3/4-METHYLPHENOL	420	ND	4-NITROANILINE	1000	ND
N-NITROSO-DI-n-PROPYLAMINE	420	ND	4, 6-DINITRO-2-METHYLPHENOL	1000	ND
HEXACHLOROETHANE	420	ND	N-NITROSODIPHENYLAMINE	420	ND
NITROBENZENE	420	ND	4-BROMOPHENYL-PHENylether	420	ND
ISOPHORONE	420	ND	HEXACHLOROBENZENE	420	ND
2, 4-DIMETHYLPHENOL	420	ND	PENTACHLOROPHENOL	1000	ND
2-NITROPHENOL	420	ND	PHENANTHRENE	420	60 J
BENZOIC ACID	1000	28 JB	ANTHRACENE	420	ND
BIS (2-CHLOROETHOXY) METHANE	420	ND	DI-N-BUTYLPHthalATE	420	61 J
2, 4-DICHLOROPHENOL	420	ND	FLUORANTHENE	420	100 J
1, 2, 4-TRICHLOROBENZENE	420	ND	PYRENE	420	86 J
NAPHTHALENE	420	ND	BUTYLBENZYLPHthalATE	420	ND
4-CHLOROANILINE	420	ND	BIS (2-ETHYLHEXYL) PHTHALATE	420	89 J
HEXACHLOROBUTADIENE	420	ND	3, 3'-DICHLOROBENZIDINE	420	ND
4-CHLORO-3-METHYLPHENOL	420	ND	BENZO (A) ANTHRACENE	420	43 J
2-METHYLNAPHTHALENE	420	ND	CHRYSENE	420	44 J
HEXACHLOROCYCLOPENTADIENE	420	ND	DI-N-OCTYLPHthalATE	420	130 JB
2, 4, 6-TRICHLOROPHENOL	420	ND	BENZO (b) FLUORANTHENE	420	35 J
2, 4, 5-TRICHLOROPHENOL	1000	ND	BENZO (k) FLUORANTHENE	420	26 J
2-CHLORONAPHTHALENE	420	ND	BENZO (a) PYRENE	420	30 J
2-NITROANILINE	1000	ND	DIBENZO (A, H) ANTHRACENE	420	ND
DIMETHYLPHthalATE	420	ND	INDENO (1, 2, 3-CD) PYRENE	420	ND
2, 6-DINITROTOLUENE	420	ND	BENZO (G, H, I) PERYLENE	420	ND
ACENAPHTHYLENE	420	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	45 %	2-FLUOROBIPHENYL (30-115)	50 %
TERPHENYL-d14 (18-137)	63 %	PHENOL-d5 (24-113)	41 %
2-FLUOROPHENOL (25-121)	33 %	2, 4, 6-TRIBROMOPHENOL (19-122)	47 %

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002555

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114
 ATTN: BRIAN FOY

REPORT: 2868801S (205)

DATE : 01-17-00

SAMPLE MATRIX : SOIL % SOLID: 76
 ATAS # : 28688.02
 DATE SUBMITTED: 01-12-00
 SAMPLE ID : SP-2/STOCKPILE

DATE EXTRACTED: 01-12-00
 DATE ANALYZED : 01-13-00
 PROJECT : #96-620-3-005 - GMLEEDS
 METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>RL</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>RL</u> <u>(ug/Kg)</u>
PHENOL	440	ND	3-NITROANILINE 1100 ND
BIS (2-CHLOROETHYL) ETHER	440	ND	ACENAPHTHENE 440 ND
2-CHLOROPHENOL	440	ND	2,4-DINITROPHENOL 1100 ND
1,3-DICHLOROBENZENE	440	ND	4-NITROPHENOL 1100 ND
1,4-DICHLOROBENZENE	440	ND	2,4-DINITROTOLUENE 440 ND
BENZYL ALCOHOL	440	ND	DIBENZOFURAN 440 ND
1,2-DICHLOROBENZENE	440	ND	DIETHYLPHthalATE 440 ND
2-METHYLPHENOL	440	ND	4-CHLOROPHENYL-PHENylether 440 ND
BIS (2-CHLOROISOPROPYL) ETHER	440	ND	FLUORENE 440 ND
3/4-METHYLPHENOL	440	ND	4-NITROANILINE 1100 ND
N-NITROSO-DI-n-PROPYLAMINE	440	ND	4,6-DINITRO-2-METHYLPHENOL 1100 ND
HEXACHLOROETHANE	440	ND	N-NITROSODIPHENYLAMINE 440 ND
NITROBENZENE	440	ND	4-BROMOPHENYL-PHENylether 440 ND
ISOPHORONE	440	ND	HEXACHLOROBENZENE 440 ND
2,4-DIMETHYLPHENOL	440	ND	PENTACHLOROPHENOL 1100 ND
2-NITROPHENOL	440	ND	PHENANTHRENE 440 ND
BENZOIC ACID	1100	35 JB	ANTHRACENE 440 ND
BIS (2-CHLOROETHOXY) METHANE	440	ND	DI-N-BUTYLPHthalATE 440 34 J
2,4-DICHLOROPHENOL	440	ND	FLUORANTHENE 440 ND
1,2,4-TRICHLOROBENZENE	440	ND	PYRENE 440 ND
NAPHTHALENE	440	ND	BUTYLBENZYLPHthalATE 440 ND
4-CHLOROANILINE	440	ND	BIS (2-ETHYLHEXYL) PHTHALATE 440 53 J
HEXACHLOROBUTADIENE	440	ND	3,3'-DICHLOROBENZIDINE 440 ND
4-CHLORO-3-METHYLPHENOL	440	ND	BENZO(A) ANTHRACENE 440 ND
2-METHYLNAPHTHALENE	440	ND	CHRYSENE 440 ND
HEXACHLOROCYCLOPENTADIENE	440	ND	DI-N-OCTYLPHthalATE 440 110 JB
2,4,6-TRICHLOROPHENOL	440	ND	BENZO(b) FLUORANTHENE 440 ND
2,4,5-TRICHLOROPHENOL	1100	ND	BENZO(k) FLUORANTHENE 440 ND
2-CHLORONAPHTHALENE	440	ND	BENZO(a) PYRENE 440 ND
2-NITROANILINE	1100	ND	DIBENZO(A,H) ANTHRACENE 440 ND
DIMETHYLPHthalATE	440	ND	INDENO(1,2,3-CD) PYRENE 440 ND
2,6-DINITROTOLUENE	440	ND	BENZO(G,H,I) PERYLENE 440 ND
ACENAPHTHYLENE	440	ND	

QA/OC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	68 %	2-FLUOROBIPHENYL (30-115)	69 %
TERPHENYL-d14 (18-137)	85 %	PHENOL-d5 (24-113)	56 %
2-FLUOROPHENOL (25-121)	44 %	2,4,6-TRIBROMOPHENOL (19-122)	64 %

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002556

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801S (205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL % SOLID: 68	DATE EXTRACTED: 01-12-00
ATAS # : 28688.03	DATE ANALYZED : 01-13-00
DATE SUBMITTED: 01-12-00	PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-3/STOCKPILE	METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>RL</u> (ug/Kg)	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>RL</u> (ug/Kg)
PHENOL	490	ND	3-NITROANILINE 1200 ND
BIS (2-CHLOROETHYL) ETHER	490	ND	ACENAPHTHENE 490 ND
2-CHLOROPHENOL	490	ND	2,4-DINITROPHENOL 1200 ND
1,3-DICHLOROBENZENE	490	ND	4-NITROPHENOL 1200 ND
1,4-DICHLOROBENZENE	490	ND	2,4-DINITROTOLUENE 490 ND
BENZYL ALCOHOL	490	ND	DIBENZOFURAN 490 ND
1,2-DICHLOROBENZENE	490	ND	DIETHYLPHthalATE 490 ND
2-METHYLPHENOL	490	ND	4-CHLOROPHENYL-PHENylether 490 ND
BIS (2-CHLORoisopROPYL) ETHER	490	ND	FLUORENE 490 ND
3/4-METHYLPHENOL	490	ND	4-NITROANILINE 1200 ND
N-NITROSO-DI-n-PROPYLAMINE	490	ND	4,6-DINITRO-2-METHYLPHENOL 1200 ND
HEXACHLOROETHANE	490	ND	N-NITROSODIPHENYLAMINE 490 ND
NITROBENZENE	490	ND	4-BROMOPHENYL-PHENylether 490 ND
ISOPHORONE	490	ND	HEXACHLOROBENZENE 490 ND
2,4-DIMETHYLPHENOL	490	ND	PENTACHLOROPHENOL 1200 ND
2-NITROPHENOL	490	ND	PHENANTHRENE 490 41 J
BENZOIC ACID	1200	58 JB	ANTHRACENE 490 ND
BIS (2-CHLOROETHOXY) METHANE	490	ND	DI-N-BUTYLPHthalATE 490 32 J
2,4-DICHLOROPHENOL	490	ND	FLUORANTHENE 490 85 J
1,2,4-TRICHLOROBENZENE	490	ND	PYRENE 490 190 J
NAPHTHALENE	490	ND	BUTYLBENZYLPHthalATE 490 48 J
4-CHLOROANILINE	490	ND	BIS (2-ETHYLHEXYL) PHTHALATE 490 310 J
HEXACHLOROBUTADIENE	490	ND	3,3'-DICHLOROBENZIDINE 490 ND
4-CHLORO-3-METHYLPHENOL	490	ND	BENZO (A) ANTHRACENE 490 54 J
2-METHYLNAPHTHALENE	490	ND	CHRYSENE 490 67 J
HEXACHLOROCYCLOPENTADIENE	490	ND	DI-N-OCTYLPHthalATE 490 72 JB
2,4,6-TRICHLOROPHENOL	490	ND	BENZO (b) FLUORANTHENE 490 54 J
2,4,5-TRICHLOROPHENOL	1200	ND	BENZO (k) FLUORANTHENE 490 42 J
2-CHLORONAPHTHALENE	490	ND	BENZO (a) PYRENE 490 56 J
2-NITROANILINE	1200	ND	DIBENZO (A, H) ANTHRACENE 490 ND
DIMETHYLPHthalATE	490	ND	INDENO (1,2,3-CD) PYRENE 490 ND
2,6-DINITROTOLUENE	490	ND	BENZO (G, H, I) PERYLENE 490 ND
ACENAPHTHYLENE	490	ND	

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	63 %	2-FLUOROBIPHENYL (30-115)	64 %
TERPHENYL-d14 (18-137)	78 %	PHENOL-d5 (24-113)	56 %
2-FLUOROPHENOL (25-121)	43 %	2,4,6-TRIBROMOPHENOL (19-122)	62 %

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002557

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.

REPORT: 2868801S (205)

9400 WARD PARKWAY

KANSAS CITY, MO 64114

ATTN: BRIAN FOY

DATE : 01-17-00

SAMPLE MATRIX : SOIL % SOLID: 78
 ATAS # : 28688.04
 DATE SUBMITTED: 01-12-00
 SAMPLE ID : SP-4/STOCKPILE

DATE EXTRACTED: 01-12-00
 DATE ANALYZED : 01-13-00
 PROJECT : #96-620-3-005 - GMLEEDS
 METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>
PHENOL	430	ND	3-NITROANILINE 1100 ND
BIS (2-CHLOROETHYL) ETHER	430	ND	ACENAPHTHENE 430 ND
2-CHLOROPHENOL	430	ND	2, 4-DINITROPHENOL 1100 ND
1, 3-DICHLOROBENZENE	430	ND	4-NITROPHENOL 1100 ND
1, 4-DICHLOROBENZENE	430	ND	2, 4-DINITROTOLUENE 430 ND
BENZYL ALCOHOL	430	ND	DIBENZOFURAN 430 ND
1, 2-DICHLOROBENZENE	430	ND	DIETHYLPHthalATE 430 ND
2-METHYLPHENOL	430	ND	4-CHLOROPHENYL-PHENylether 430 ND
BIS (2-CHLOROISOPROPYL) ETHER	430	ND	FLUORENE 430 ND
3/4-METHYLPHENOL	430	ND	4-NITROANILINE 1100 ND
N-NITROSO-DI-n-PROPYLAMINE	430	ND	4, 6-DINITRO-2-METHYLPHENOL 1100 ND
HEXACHLOROETHANE	430	ND	N-NITROSODIPHENYLAMINE 430 ND
NITROBENZENE	430	ND	4-BROMOPHENYL-PHENylether 430 ND
ISOPHORONE	430	ND	HEXACHLOROBENZENE 430 ND
2, 4-DIMETHYLPHENOL	430	ND	PENTACHLOROPHENOL 1100 ND
2-NITROPHENOL	430	ND	PHENANTHRENE 430 ND
BENZOIC ACID	1100	26 JB	ANTHRACENE 430 ND
BIS (2-CHLOROETHOXY) METHANE	430	ND	DI-N-BUTYLPHthalATE 430 34 J
2, 4-DICHLOROPHENOL	430	ND	FLUORANTHENE 430 31 J
1, 2, 4-TRICHLOROBENZENE	430	ND	PYRENE 430 37 J
NAPHTHALENE	430	ND	BUTYLBENZYLPHthalATE 430 45 J
4-CHLOROANILINE	430	ND	BIS (2-ETHYLHEXYL) PHthalATE 430 46 J
HEXACHLOROBUTADIENE	430	ND	3, 3'-DICHLOROBENZIDINE 430 ND
4-CHLORO-3-METHYLPHENOL	430	ND	BENZO (A) ANTHRACENE 430 ND
2-METHYLNAPHTHALENE	430	ND	CHRYSENE 430 22 J
HEXACHLOROCYCLOPENTADIENE	430	ND	DI-N-OCTYLPHthalATE 430 110 JB
2, 4, 6-TRICHLOROPHENOL	430	ND	BENZO (b) FLUORANTHENE 430 ND
2, 4, 5-TRICHLOROPHENOL	1100	ND	BENZO (k) FLUORANTHENE 430 ND
2-CHLORONAPHTHALENE	430	ND	BENZO (a) PYRENE 430 ND
2-NITROANILINE	1100	ND	DIBENZO (A, H) ANTHRACENE 430 ND
DIMETHYLPHthalATE	430	ND	INDENO (1, 2, 3-CD) PYRENE 430 ND
2, 6-DINITROTOLUENE	430	ND	BENZO (G, H, I) PERYLENE 430 ND
ACENAPHTHYLENE	430	ND	

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	58 %	2-FLUOROBIPHENYL (30-115)	61 %
TERPHENYL-d14 (18-137)	82 %	PHENOL-d5 (24-113)	53 %
2-FLUOROPHENOL (25-121)	39 %	2, 4, 6-TRIBROMOPHENOL (19-122)	50 %

B = ANALYTE DETECTED IN METHOD BLANK

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002558

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801S (205)
 9400 WARD PARKWAY
 KANSAS CITY, MO 64114 DATE : 01-17-00
 ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL DATE EXTRACTED: 01-12-00
 ATAS # : METHOD BLANK DATE ANALYZED : 01-13-00
 DATE SUBMITTED: 01-12-00 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : METHOD BLANK METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RL</u>	<u>RESULTS (ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RL</u>	<u>RESULTS (ug/Kg)</u>
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2,4-DINITROPHENOL	830	ND
1,3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1,4-DICHLOROBENZENE	330	ND	2,4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1,2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENYLETHER	330	ND
BIS (2-CHLORoisOPROPYL) ETHER	330	ND	FLUORENE	330	ND
3/4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4,6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENYLETHER	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2,4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	18 J	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2,4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1,2,4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3,3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	58 J
2,4,6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2,4,5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO(1,2,3-CD) PYRENE	330	ND
2,6-DINITROTOLUENE	330	ND	BENZO (G,H,I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	74 %	2-FLUOROBIPHENYL (30-115)	80 %
TERPHENYL-d14 (18-137)	84 %	PHENOL-d5 (24-113)	62 %
2-FLUOROPHENOL (25-121)	51 %	2,4,6-TRIBROMOPHENOL (19-122)	70 %

ND = NOT DETECTED

RL = REPORTING LIMIT

J = ESTIMATED VALUE BELOW REPORTING LIMIT

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002559

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX : SOIL
DATE EXTRACTED: 01-12-00
DATE ANALYZED : 01-13-00
METHOD REF. : SW846-8270C, EPA METHODOLOGY

REPORT DATE: 01-17-00

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

COMPOUND	28688.03		RPD	QC RPD	ADVISORY LIMITS
	MS % REC.	MSD % REC.			
PHENOL	54	57	5	35	19-103
2-CHLOROPHENOL	62	63	2	50	28-93
1,4-DICHLOROBENZENE	60	55	9	27	20-91
N-NITROSO-DI-n-PROPYLAMINE	70	68	3	38	32-114
1,2,4-TRICHLOROBENZENE	65	60	8	23	28-95
4-CHLORO-3-METHYLPHENOL	59	60	2	33	24-103
ACENAPHTHENE	74	73	1	19	38-100
4-NITROPHENOL	60	63	5	50	23-122
2,4-DINITROTOLUENE	89	86	3	47	31-131
PENTACHLOROPHENOL	70	66	6	47	2-142
PYRENE	82	87	6	36	22-132

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002560

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX : SOIL
DATE EXTRACTED: 01-12-00
DATE ANALYZED : 01-13-00
METHOD REF. : SW846-8270C, EPA METHODOLOGY

REPORT DATE: 01-17-00

LABORATORY CONTROL SAMPLE RECOVERY

<u>COMPOUND</u>	<u>LCS % REC.</u>	<u>QC ADVISORY LIMITS</u>
PHENOL	56	19-92
2-CHLOROPHENOL	62	21-98
1, 4-DICHLOROBENZENE	64	17-107
N-NITROSO-DI-n-PROPYLAMINE	65	28-109
1, 2, 4-TRICHLOROBENZENE	65	16-112
4-CHLORO-3-METHYLPHENOL	54	26-95
ACENAPHTHENE	71	27-109
4-NITROPHENOL	63	26-123
2, 4-DINITROTOLUENE	85	34-114
PENTACHLOROPHENOL	73	16-142
PYRENE	71	6-139

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002561

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC. REPORT: 2868801T(205)
9400 WARD PARKWAY
KANSAS CITY, MO 64114 DATE : 01-17-00
ATTN: BRIAN FOY

SAMPLE MATRIX : SOIL % SOLID: 80
ATAS # : 28688.01
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-1/STOCKPILE

PARAMETER	REPORTING LIMIT	RESULTS	DATE EXTRACTED	DATE ANALYZED
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TOTAL EXTRACTABLE HYDROCARBONS (OA-2/8015)

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

GASOLINE C6-C14	3.8	ND	01-12-00	01-13-00
MINERAL SPIRITS C7-C14	3.8	ND	01-12-00	01-13-00
KEROSENE C9-C16	3.8	ND	01-12-00	01-13-00
DIESEL C7-C26	3.8	ND	01-12-00	01-13-00
#6 FUEL OIL C10-C32	3.8	ND	01-12-00	01-13-00
HYDRAULIC FLUID C12-C33	3.8	ND	01-12-00	01-13-00
MOTOR OIL C16-C33	3.8	ND	01-12-00	01-13-00
MISCELLANEOUS (1)	3.8	49.3	01-12-00	01-13-00

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 97 %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002562

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801T(205)
DATE : 01-17-00

SAMPLE MATRIX : SOIL % SOLID: 76
ATAS # : 28688.02
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-2/STOCKPILE

PARAMETER	REPORTING LIMIT	RESULTS	DATE EXTRACTED	DATE ANALYZED
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TOTAL EXTRACTABLE HYDROCARBONS (OA-2/8015)

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

GASOLINE C6-C14	3.9	ND	01-12-00	01-13-00
MINERAL SPIRITS C7-C14	3.9	ND	01-12-00	01-13-00
KEROSENE C9-C16	3.9	ND	01-12-00	01-13-00
DIESEL C7-C26	3.9	ND	01-12-00	01-13-00
#6 FUEL OIL C10-C32	3.9	ND	01-12-00	01-13-00
HYDRAULIC FLUID C12-C33	3.9	ND	01-12-00	01-13-00
MOTOR OIL C16-C33	3.9	ND	01-12-00	01-13-00

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 91 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002563

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801T(205)

DATE : 01-17-00

SAMPLE MATRIX : SOIL % SOLID: 68
ATAS # : 28688.03
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-3/STOCKPILE

PARAMETER	REPORTING LIMIT	RESULTS	DATE EXTRACTED	DATE ANALYZED
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TOTAL EXTRACTABLE HYDROCARBONS (OA-2/8015)

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

GASOLINE C6-C14	4.4	ND	01-12-00	01-13-00
MINERAL SPIRITS C7-C14	4.4	ND	01-12-00	01-13-00
KEROSENE C9-C16	4.4	ND	01-12-00	01-13-00
DIESEL C7-C26	4.4	ND	01-12-00	01-13-00
#6 FUEL OIL C10-C32	4.4	ND	01-12-00	01-13-00
HYDRAULIC FLUID C12-C33	4.4	ND	01-12-00	01-13-00
MOTOR OIL C16-C33	4.4	ND	01-12-00	01-13-00
MISCELLANEOUS (1)	4.4	33.1	01-12-00	01-13-00

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 88 %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002564

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801T(205)

DATE : 01-17-00

SAMPLE MATRIX : SOIL % SOLID: 78
ATAS # : 28688.04
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-4/STOCKPILE

PARAMETER	REPORTING LIMIT	RESULTS	DATE EXTRACTED	DATE ANALYZED
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TOTAL EXTRACTABLE HYDROCARBONS (OA-2/8015)

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

GASOLINE C6-C14	3.8	ND	01-12-00	01-13-00
MINERAL SPIRITS C7-C14	3.8	ND	01-12-00	01-13-00
KEROSENE C9-C16	3.8	ND	01-12-00	01-13-00
DIESEL C7-C26	3.8	ND	01-12-00	01-13-00
#6 FUEL OIL C10-C32	3.8	ND	01-12-00	01-13-00
HYDRAULIC FLUID C12-C33	3.8	ND	01-12-00	01-13-00
MOTOR OIL C16-C33	3.8	ND	01-12-00	01-13-00

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 76 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002565

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

METHOD: OA-2

LABORATORY BLANK

MATRIX : SOIL DILUTION FACTOR: 1.0
EXTRACTION DATE: 01-12-00
ANALYSIS DATE : 01-13-00

COMPOUND	REPORTING LIMIT	UNIT	RESULTS
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TOTAL EXTRACTABLE HYDROCARBONS

GASOLINE	3.0	mg/Kg	ND
MINERAL SPIRITS	3.0	mg/Kg	ND
KEROSENE	3.0	mg/Kg	ND
DIESEL FUEL	3.0	mg/Kg	ND
#6 FUEL OIL	3.0	mg/Kg	ND
HYDRAULIC FLUID	3.0	mg/Kg	ND
MOTOR OIL	3.0	mg/Kg	ND

SURROGATE RECOVERY (P-TERPHENYL D14) : 87 %

LABORATORY CONTROL SAMPLE RESULTS

LCS
PERCENT
RECOVERY

KEROSENE 85

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002566

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801M(205)

DATE : 01-18-00

SAMPLE MATRIX : SOIL % SOLID: 80
ATAS # : 28688.01
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-1/STOCKPILE

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
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INORGANICS

pH	S.U.@25C	8.1	01-14-00	SW 9045
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METALS

ARSENIC	1.25	mg/Kg	9.03	01-14-00	SW 6010
BARIUM	0.50	mg/Kg	109	01-14-00	SW 6010
CADMIUM	0.13	mg/Kg	0.750	01-14-00	SW 6010
CHROMIUM	0.25	mg/Kg	24.0	01-14-00	SW 6010
LEAD	1.25	mg/Kg	18.4	01-14-00	SW 6010
SILVER	0.50	mg/Kg	ND	01-16-00	SW 6010
SELENIUM	2.50	mg/Kg	ND	01-14-00	SW 6010
MERCURY	0.25	mg/Kg	ND	01-14-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002567

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801M(205)

DATE : 01-18-00

SAMPLE MATRIX : SOIL % SOLID: 76
ATAS # : 28688.02
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-2/STOCKPILE

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH	S.U.@25C		7.8	01-14-00	SW 9045
METALS					
ARSENIC	1.32	mg/Kg	ND	01-14-00	SW 6010
BARIUM	0.53	mg/Kg	220	01-14-00	SW 6010
CADMIUM	0.13	mg/Kg	0.132	01-14-00	SW 6010
CHROMIUM	0.26	mg/Kg	20.1	01-14-00	SW 6010
LEAD	1.32	mg/Kg	20.0	01-14-00	SW 6010
SILVER	0.53	mg/Kg	ND	01-16-00	SW 6010
SELENIUM	2.63	mg/Kg	ND	01-14-00	SW 6010
MERCURY	0.26	mg/Kg	ND	01-14-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002568

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801M(205)

DATE : 01-18-00

SAMPLE MATRIX : SOIL % SOLID: 68
ATAS # : 28688.03
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-3/STOCKPILE

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
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INORGANICS

pH	S.U.@25c	8.0	01-14-00	SW 9045
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METALS

ARSENIC	1.47	mg/Kg	2.76	01-14-00	SW 6010
BARIUM	0.59	mg/Kg	240	01-14-00	SW 6010
CADMIUM	0.15	mg/Kg	0.265	01-14-00	SW 6010
CHROMIUM	0.29	mg/Kg	26.8	01-14-00	SW 6010
LEAD	1.47	mg/Kg	18.1	01-14-00	SW 6010
SILVER	0.59	mg/Kg	ND	01-16-00	SW 6010
SELENIUM	2.94	mg/Kg	ND	01-14-00	SW 6010
MERCURY	0.29	mg/Kg	ND	01-14-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002569

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801M(205)

DATE : 01-18-00

SAMPLE MATRIX : SOIL % SOLID: 78
ATAS # : 28688.04
DATE SUBMITTED: 01-12-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SP-4/STOCKPILE

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH	S.U.@25C		7.9	01-14-00	SW 9045
METALS					
ARSENIC	1.28	mg/Kg	4.41	01-14-00	SW 6010
BARIUM	0.51	mg/Kg	145	01-14-00	SW 6010
CADMIUM	0.13	mg/Kg	0.205	01-14-00	SW 6010
CHROMIUM	0.26	mg/Kg	23.6	01-14-00	SW 6010
LEAD	1.28	mg/Kg	12.8	01-14-00	SW 6010
SILVER	0.51	mg/Kg	ND	01-16-00	SW 6010
SELENIUM	2.56	mg/Kg	ND	01-14-00	SW 6010
MERCURY	0.26	mg/Kg	ND	01-14-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

NOTE: ALL REPORTED CONCENTRATIONS HAVE BEEN ADJUSTED TO DRY WEIGHT.

LEEDS002570

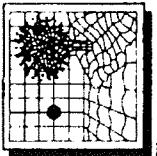
CLIENT: BURNS & MCDONNELL WASTE CONSULTANTS, INC.
9400 WARD PARKWAY
KANSAS CITY, MO 64114
ATTN: BRIAN FOY

REPORT: 2868801M(205)
DATE : 01-18-00

QA/QC

DESCRIPTION		PARAMETER	RESULTS
METHOD BLANK	01-14-00	ARSENIC	<1.00 mg/Kg
METHOD BLANK	01-14-00	BARIUM	<0.40 mg/Kg
METHOD BLANK	01-14-00	CADMIUM	<0.10 mg/Kg
METHOD BLANK	01-14-00	CHROMIUM	<0.20 mg/Kg
METHOD BLANK	01-14-00	LEAD	<1.00 mg/Kg
METHOD BLANK	01-16-00	SILVER	<0.40 mg/Kg
METHOD BLANK	01-14-00	SELENIUM	<2.00 mg/Kg
METHOD BLANK	01-14-00	MERCURY	<0.20 mg/Kg
CONTROL SPIKE	01-14-00	ARSENIC	91 % RECOVERY
CONTROL SPIKE	01-14-00	BARIUM	88 % RECOVERY
CONTROL SPIKE	01-14-00	CADMIUM	88 % RECOVERY
CONTROL SPIKE	01-14-00	CHROMIUM	91 % RECOVERY
CONTROL SPIKE	01-14-00	LEAD	90 % RECOVERY
CONTROL SPIKE	01-16-00	SILVER	85 % RECOVERY
CONTROL SPIKE	01-14-00	SELENIUM	90 % RECOVERY
CONTROL SPIKE	01-14-00	MERCURY	76 % RECOVERY

ATAS



AMERICAN TECHNICAL & ANALYTICAL SERVICES, Inc.
875 Farnie Road • Maryland Heights, MO 63043 • Office (314) 434-4570 • Fax (314) 434-0080

PAGE OF
No. 11384

CHAIN OF CUSTODY RECORD

ATAS Client Name <i>Burns & McDonnell</i>	Project # <i>96-620-3-005</i>	Form Completed By <i>Brian Fog</i>	P.O. #	Type of Analysis				No. of Containers	Lab Use Only <i>Initials Date Location 2</i>	
				Sample ID/Location	Sample Date	Sample Time	Sample Matrix			Group
SP-1 / Stockpile	1/11/00	14:10	Soil	X	4	X	X	X	B1	
SP-2 / Stockpile	1/11/00	14:30	Soil	X	4	X	X	X	B1	
SP-3 / Stockpile	1/11/00	14:45	Soil	X	4	X	X	X	B1	
SP-4 / Stockpile	1/11/00	15:00	Soil	X	4	X	X	X	B1	
Comments: <i>Collectors initials 1/11/00</i>										
Relinquished by:				Received by:				Remarks		
Signature <i>[Signature]</i>	Printed Name <i>WALTER DODSON</i>			Signature			Comments received unannounced with less than 48 hours holding time and/or ASAP request may be subject to additional surcharges.			
Printed Name <i>Brian Fog</i>	Firm <i>ATAS</i>	Date/Time <i>1/11/00</i>	Printed Name <i>ATAS</i>	Firm	Date/Time	<input checked="" type="checkbox"/> Cold	B-HNO ₃			
						<input checked="" type="checkbox"/> 3 working days	C-H ₂ SO ₄			
						<input type="checkbox"/> 10 working days	D-NaOH			
						<input type="checkbox"/> 15 working days	E-HCl			
						<input type="checkbox"/> F-_____				
SEND RESULTS TO (Name & Company): <i>Brian Fog Burns & McDonnell Kansas City</i>										
Original to ATAS / Copy to Client										

LEEDS002572

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 • FAX (314) 434-0080

January 25, 2000

Brian Foy
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: ATAS #28731.01-#28731.06
96-620-3-005 - GMLEEDS

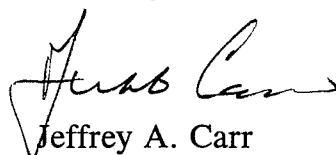
Dear Mr. Foy:

Enclosed are the analytical reports for the samples received in our laboratory on January 18, 2000.

If, in your review, you should have any questions or require additional information, please call.

Thank you for choosing ATAS for your analytical needs.

Sincerely,



Jeffrey A. Carr
Project Manager

Enclosures

JAC/cb

ATAS

"Professional Commitment"

LEEDS002573

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA(525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.01
 DATE SUBMITTED: 01-18-00
 DATE ANALYZED : 01-18-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
 PROJECT # : 96-620-3-005 - GMLEEDS
 SAMPLE ID : NW SS-1

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	5	ND	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	42	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	16 B	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 102% BROMOFLUOROBENZENE (74-121) 112%
 1,2-DICHLOROETHANE-D4 (70-121) 102%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION, POSITIVE VALUES BELOW THIS LIMIT WERE NOT REPORTED.

LEEDS002574

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731VOA (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.02
DATE SUBMITTED: 01-18-00
DATE ANALYZED : 01-18-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
PROJECT # : 96-620-3-005 - GMLEEDS
SAMPLE ID : NE SS-1

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	R.L.	<u>RESULTS</u>	<u>VOLATILES</u>	R.L.	<u>RESULTS</u>
XYLENE (TOTAL)	5	ND	TOLUENE	5	5
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	420	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	70 B	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 106% BROMOFLUOROBENZENE (74-121) 110%
1,2-DICHLOROETHANE-D4 (70-121) 100%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION, POSITIVE VALUES BELOW THIS LIMIT WERE NOT REPORTED.

LEEDS002575

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA(525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL	METHOD REF.: SW846-8260B, EPA METHODOLOGY
ATAS # : 28731.03	PROJECT # : 96-620-3-005 - GMLEEDS
DATE SUBMITTED: 01-18-00	SAMPLE ID : SW SS-1
DATE ANALYZED : 01-18-00	

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	5	9	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	220	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	5
METHYLENE CHLORIDE	5	15 B	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	27
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	14
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	12
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	20
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChlorobutadiene	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	5 B

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 104% BROMOFLUOROBENZENE (74-121) 110%
 1,2-DICHLOROETHANE-D4 (70-121) 99%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

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LEEDS002576

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA (525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.04
 DATE SUBMITTED: 01-18-00
 DATE ANALYZED : 01-19-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
 PROJECT # : 96-620-3-005 - GMLEEDS
 SAMPLE ID : S-TRENCH SS-1

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

VOLATILES	R.L.	RESULTS	VOLATILES	R.L.	RESULTS
XYLENE (TOTAL)	500	250 J	TOLUENE	500	ND
DICHLORODIFLUOROMETHANE	1000	ND	trans-1,3-DICHLOROPROPENE	500	ND
CHLOROMETHANE	1000	ND	1,1,2-TRICHLOROETHANE	500	ND
VINYL CHLORIDE	1000	ND	TETRACHLOROETHENE	500	ND
BROMOMETHANE	1000	ND	1,3-DICHLOROPROPANE	500	ND
CHLOROETHANE	1000	ND	2-HEXANONE	1000	ND
TRICHLOROFLUOROMETHANE	1000	ND	DIBROMOCHLOROMETHANE	500	ND
1,1-DICHLOROETHENE	500	ND	1,2-DIBROMOETHANE	500	ND
ACETONE	1000	ND	CHLOROBENZENE	500	ND
IODOMETHANE	1000	ND	1,1,1,2-TETRACHLOROETHANE	500	ND
CARBON DISULFIDE	500	ND	ETHYLBENZENE	500	1100
METHYLENE CHLORIDE	500	770 B	STYRENE	500	ND
trans-1,2-DICHLOROETHENE	500	ND	BROMOFORM	500	ND
METHYL TERT-BUTYL ETHER	1000	ND	ISOPROPYLBENZENE	500	200 J
1,1-DICHLOROETHANE	500	ND	1,1,2,2-TETRACHLOROETHANE	500	ND
VINYL ACETATE	1000	ND	BROMOBENZENE	500	ND
2,2-DICHLOROPROPANE	500	ND	1,2,3-TRICHLOROPROPANE	500	ND
cis-1,2-DICHLOROETHENE	500	ND	n-PROPYLBENZENE	500	1100
2-BUTANONE	1000	ND	2-CHLOROTOLUENE	500	ND
BROMOCHLOROMETHANE	500	ND	1,3,5-TRIMETHYLBENZENE	500	400 J
CHLOROFORM	500	ND	4-CHLOROTOLUENE	500	ND
1,1,1-TRICHLOROETHANE	500	ND	TERT-BUTYLBENZENE	500	ND
CARBON TETRACHLORIDE	500	ND	1,2,4-TRIMETHYLBENZENE	500	1300
1,1-DICHLOROPROPENE	500	ND	sec-BUTYLBENZENE	500	490 J
BENZENE	500	ND	1,3-DICHLOROBENZENE	500	ND
1,2-DICHLOROETHANE	500	ND	p-ISOPROPYLtoluene	500	ND
TRICHLOROETHENE	500	ND	1,4-DICHLOROBENZENE	500	ND
1,2-DICHLOROPROPANE	500	ND	n-BUTYLBENZENE	500	980
DIBROMOMETHANE	500	ND	1,2-DICHLOROBENZENE	500	ND
BROMODICHLOROMETHANE	500	ND	1,2-DIBROMO-3-CHLOROPROPANE	500	ND
cis-1,3-DICHLOROPROPENE	500	ND	1,2,4-TRICHLOROBENZENE	500	ND
4-METHYL-2-PENTANONE	1000	ND	HEXAChLOROBUTADIENE	500	ND
1,2,3-TRICHLOROBENZENE	500	ND	NAPHTHALENE	500	880 B

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 95% BROMOFLUOROBENZENE (74-121) 91%
 1,2-DICHLOROETHANE-D4 (70-121) 87%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

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RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA(525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL	METHOD REF.: SW846-8260B, EPA METHODOLOGY
ATAS # : 28731.05	PROJECT # : 96-620-3-005 - GMLEEDS
DATE SUBMITTED: 01-18-00	SAMPLE ID : PW-TRENCH SS-1
DATE ANALYZED : 01-19-00	

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L. RESULTS</u>	<u>VOLATILES</u>	<u>R.L. RESULTS</u>
XYLENE (TOTAL)	50000 170000	TOLUENE	50000 68000
DICHLORODIFLUOROMETHANE	100000 ND	trans-1,3-DICHLOROPROPENE	50000 ND
CHLOROMETHANE	100000 ND	1,1,2-TRICHLOROETHANE	50000 ND
VINYL CHLORIDE	100000 ND	TETRACHLOROETHENE	50000 ND
BROMOMETHANE	100000 ND	1,3-DICHLOROPROPANE	50000 ND
CHLOROETHANE	100000 ND	2-HEXANONE	100000 ND
TRICHLOROFLUOROMETHANE	100000 ND	DIBROMOCHLOROMETHANE	50000 ND
1,1-DICHLOROETHENE	50000 ND	1,2-DIBROMOETHANE	50000 ND
ACETONE	100000 ND	CHLOROBENZENE	50000 ND
IODOMETHANE	100000 ND	1,1,1,2-TETRACHLOROETHANE	50000 ND
CARBON DISULFIDE	50000 ND	ETHYLBENZENE	50000 48000 J
METHYLENE CHLORIDE	50000 82000 B	STYRENE	50000 ND
trans-1,2-DICHLOROETHENE	50000 ND	BROMOFORM	50000 ND
METHYL TERT-BUTYL ETHER	100000 ND	ISOPROPYLBENZENE	50000 17000 J
1,1-DICHLOROETHANE	50000 ND	1,1,2,2-TETRACHLOROETHANE	50000 ND
VINYL ACETATE	100000 ND	BROMOBENZENE	50000 ND
2,2-DICHLOROPROPANE	50000 ND	1,2,3-TRICHLOROPROPANE	50000 ND
cis-1,2-DICHLOROETHENE	50000 ND	n-PROPYLBENZENE	50000 100000
2-BUTANONE	100000 ND	2-CHLOROTOLUENE	50000 ND
BROMOCHLOROMETHANE	50000 ND	1,3,5-TRIMETHYLBENZENE	50000 250000
CHLOROFORM	50000 ND	4-CHLOROTOLUENE	50000 ND
1,1,1-TRICHLOROETHANE	50000 ND	TERT-BUTYLBENZENE	50000 ND
CARBON TETRACHLORIDE	50000 ND	1,2,4-TRIMETHYLBENZENE	50000 980000
1,1-DICHLOROPROPENE	50000 ND	sec-BUTYLBENZENE	50000 59000
BENZENE	50000 ND	1,3-DICHLOROBENZENE	50000 ND
1,2-DICHLOROETHANE	50000 ND	p-ISOPROPYLtoluene	50000 88000
TRICHLOROETHENE	50000 ND	1,4-DICHLOROBENZENE	50000 ND
1,2-DICHLOROPROPANE	50000 ND	n-BUTYLBENZENE	50000 ND
DIBROMOMETHANE	50000 ND	1,2-DICHLOROBENZENE	50000 ND
BROMODICHLOROMETHANE	50000 ND	1,2-DIBROMO-3-CHLOROPROPANE	50000 ND
cis-1,3-DICHLOROPROPENE	50000 ND	1,2,4-TRICHLOROBENZENE	50000 ND
4-METHYL-2-PENTANONE	100000 ND	HEXAChLOROBUTADIENE	50000 ND
1,2,3-TRICHLOROBENZENE	50000 ND	NAPHTHALENE	50000 160000 B

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 98% BROMOFLUOROBENZENE (74-121) 101%
 1,2-DICHLOROETHANE-D4 (70-121) 89%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

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LEEDS002578

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA(525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.06
 DATE SUBMITTED: 01-18-00
 DATE ANALYZED : 01-18-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
 PROJECT # : 96-620-3-005 - GMLEEDS
 SAMPLE ID : SE SS-1

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	5	ND	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	77	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	10 B	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 104% BROMOFLUOROBENZENE (74-121) 117%
 1,2-DICHLOROETHANE-D4 (70-121) 102%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

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LEEDS002579

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL	METHOD REF.: SW846-8260B, EPA METHODOLOGY
ATAS # : METHOD BLANK	PROJECT # : 96-620-3-005 - GMLEEDS
DATE SUBMITTED: 01-18-00	SAMPLE ID : METHOD BLANK
DATE ANALYZED : 01-18-00	

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	5	ND	TOLUENE	5	ND
DICHLORODIFLUOROMETHANE	10	ND	trans-1,3-DICHLOROPROPENE	5	ND
CHLOROMETHANE	10	ND	1,1,2-TRICHLOROETHANE	5	ND
VINYL CHLORIDE	10	ND	TETRACHLOROETHENE	5	ND
BROMOMETHANE	10	ND	1,3-DICHLOROPROPANE	5	ND
CHLOROETHANE	10	ND	2-HEXANONE	10	ND
TRICHLOROFLUOROMETHANE	10	ND	DIBROMOCHLOROMETHANE	5	ND
1,1-DICHLOROETHENE	5	ND	1,2-DIBROMOETHANE	5	ND
ACETONE	10	ND	CHLOROBENZENE	5	ND
IODOMETHANE	10	ND	1,1,1,2-TETRACHLOROETHANE	5	ND
CARBON DISULFIDE	5	ND	ETHYLBENZENE	5	ND
METHYLENE CHLORIDE	5	11	STYRENE	5	ND
trans-1,2-DICHLOROETHENE	5	ND	BROMOFORM	5	ND
METHYL TERT-BUTYL ETHER	10	ND	ISOPROPYLBENZENE	5	ND
1,1-DICHLOROETHANE	5	ND	1,1,2,2-TETRACHLOROETHANE	5	ND
VINYL ACETATE	10	ND	BROMOBENZENE	5	ND
2,2-DICHLOROPROPANE	5	ND	1,2,3-TRICHLOROPROPANE	5	ND
cis-1,2-DICHLOROETHENE	5	ND	n-PROPYLBENZENE	5	ND
2-BUTANONE	10	ND	2-CHLOROTOLUENE	5	ND
BROMOCHLOROMETHANE	5	ND	1,3,5-TRIMETHYLBENZENE	5	ND
CHLOROFORM	5	ND	4-CHLOROTOLUENE	5	ND
1,1,1-TRICHLOROETHANE	5	ND	TERT-BUTYLBENZENE	5	ND
CARBON TETRACHLORIDE	5	ND	1,2,4-TRIMETHYLBENZENE	5	ND
1,1-DICHLOROPROPENE	5	ND	sec-BUTYLBENZENE	5	ND
BENZENE	5	ND	1,3-DICHLOROBENZENE	5	ND
1,2-DICHLOROETHANE	5	ND	p-ISOPROPYLtoluene	5	ND
TRICHLOROETHENE	5	ND	1,4-DICHLOROBENZENE	5	ND
1,2-DICHLOROPROPANE	5	ND	n-BUTYLBENZENE	5	ND
DIBROMOMETHANE	5	ND	1,2-DICHLOROBENZENE	5	ND
BROMODICHLOROMETHANE	5	ND	1,2-DIBROMO-3-CHLOROPROPANE	5	ND
cis-1,3-DICHLOROPROPENE	5	ND	1,2,4-TRICHLOROBENZENE	5	ND
4-METHYL-2-PENTANONE	10	ND	HEXAChLOROBUTADIENE	5	ND
1,2,3-TRICHLOROBENZENE	5	ND	NAPHTHALENE	5	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 103% BROMOFLUOROBENZENE (74-121) 116%
 1,2-DICHLOROETHANE-D4 (70-121) 95%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

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LEEDS002580

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX: SOIL
DATE ANALYZED: 01-18-00
METHOD REF. : SW846-8260B, EPA METHODOLOGY

REPORT DATE: 01-25-00

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

<u>COMPOUND</u>	<u>28720.01</u>	<u>28720.01</u>	<u>RPD</u>	<u>QC RPD</u>	<u>ADVISORY LIMITS</u>
	<u>MS % REC.</u>	<u>MSD % REC.</u>			
1,1-DICHLOROETHENE	95	93	2	28	43-151
TRICHLOROETHENE	101	101	0	7	45-137
BENZENE	105	105	0	12	57-143
TOLUENE	101	101	0	16	42-147
CHLOROBENZENE	89	91	2	7	58-133

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002581

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731VOA(525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : METHOD BLANK
 DATE SUBMITTED: 01-18-00
 DATE ANALYZED : 01-19-00

METHOD REF.: SW846-8260B, EPA METHODOLOGY
 PROJECT # : 96-620-3-005 - GMLEEDS
 SAMPLE ID : METHOD BLANK

RESULTS REPORTED IN ug/Kg OR Parts Per Billion (PPB)

<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>	<u>VOLATILES</u>	<u>R.L.</u>	<u>RESULTS</u>
XYLENE (TOTAL)	500	ND	TOLUENE	500	ND
DICHLORODIFLUOROMETHANE	1000	ND	trans-1,3-DICHLOROPROPENE	500	ND
CHLOROMETHANE	1000	ND	1,1,2-TRICHLOROETHANE	500	ND
VINYL CHLORIDE	1000	ND	TETRACHLOROETHENE	500	ND
BROMOMETHANE	1000	ND	1,3-DICHLOROPROPANE	500	ND
CHLOROETHANE	1000	ND	2-HEXANONE	1000	ND
TRICHLORODIFLUOROMETHANE	1000	ND	DIBROMOCHLOROMETHANE	500	ND
1,1-DICHLOROETHENE	500	ND	1,2-DIBROMOETHANE	500	ND
ACETONE	1000	2800	CHLOROBENZENE	500	ND
IODOMETHANE	1000	ND	1,1,1,2-TETRACHLOROETHANE	500	ND
CARBON DISULFIDE	500	ND	ETHYLBENZENE	500	ND
METHYLENE CHLORIDE	500	210 J	STYRENE	500	ND
trans-1,2-DICHLOROETHENE	500	ND	BROMOFORM	500	ND
METHYL TERT-BUTYL ETHER	1000	ND	ISOPROPYLBENZENE	500	ND
1,1-DICHLOROETHANE	500	ND	1,1,2,2-TETRACHLOROETHANE	500	ND
VINYL ACETATE	1000	ND	BROMOBENZENE	500	ND
2,2-DICHLOROPROPANE	500	ND	1,2,3-TRICHLOROPROPANE	500	ND
cis-1,2-DICHLOROETHENE	500	ND	n-PROPYLBENZENE	500	ND
2-BUTANONE	1000	ND	2-CHLOROTOLUENE	500	ND
BROMOCHLOROMETHANE	500	ND	1,3,5-TRIMETHYLBENZENE	500	ND
CHLOROFORM	500	ND	4-CHLOROTOLUENE	500	ND
1,1,1-TRICHLOROETHANE	500	ND	TERT-BUTYLBENZENE	500	ND
CARBON TETRACHLORIDE	500	ND	1,2,4-TRIMETHYLBENZENE	500	ND
1,1-DICHLOROPROPENE	500	ND	sec-BUTYLBENZENE	500	ND
BENZENE	500	ND	1,3-DICHLOROBENZENE	500	ND
1,2-DICHLOROETHANE	500	ND	p-ISOPROPYLtolUENE	500	ND
TRICHLOROETHENE	500	ND	1,4-DICHLOROBENZENE	500	ND
1,2-DICHLOROPROPANE	500	ND	n-BUTYLBENZENE	500	ND
DIBROMOMETHANE	500	ND	1,2-DICHLOROBENZENE	500	ND
BROMODICHLOROMETHANE	500	ND	1,2-DIBROMO-3-CHLOROPROPANE	500	ND
cis-1,3-DICHLOROPROPENE	500	ND	1,2,4-TRICHLOROBENZENE	500	ND
4-METHYL-2-PENTANONE	1000	ND	HEXAChLOROBUTADIENE	500	ND
1,2,3-TRICHLOROBENZENE	500	ND	NAPHTHALENE	500	ND

QA/QC SURROGATE RECOVERIES

TOLUENE-d8 (81-117) 97% BROMOFLUOROBENZENE (74-121) 100%
 1,2-DICHLOROETHANE-D4 (70-121) 112%

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

J = ESTIMATED VALUE; BELOW REPORTING LIMIT

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT; DEFINED AS THE PRACTICAL QUANTITATION LIMIT PLUS ANY DILUTION

LEEDS002582

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX: WATER

REPORT DATE: 01-25-00

DATE ANALYZED: 01-19-00

METHOD REF. : SW846-8260B, EPA METHODOLOGY

LABORATORY CONTROL SAMPLE / LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

<u>COMPOUND</u>	LCS % REC.	LCSD % REC.	RPD	QC RPD	ADVISORY LIMITS
1,1-DICHLOROETHENE	114	100	13	14	61-126
TRICHLOROETHENE	106	98	8	14	80-112
BENZENE	110	100	10	11	86-112
TOLUENE	114	104	9	13	90-116
CHLOROBENZENE	106	96	10	13	81-117

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002583

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV (525)
 DATE : 01-25-00

SAMPLE MATRIX: SOIL
 ATAS #: 28731.01
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : NW SS-1

DATE SUBMITTED: 01-18-00
 DATE EXTRACTED: 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>		
<u>RL</u>	<u>RL</u>	<u>RL</u>	<u>RL</u>		
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2, 4-DINITROPHENOL	830	ND
1, 3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1, 4-DICHLOROBENZENE	330	ND	2, 4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1, 2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENYLETHER	330	ND
BIS (2-CHLOROISOPROPYL) ETHER	330	ND	FLUORENE	330	ND
4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4, 6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENYLETHER	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2, 4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2, 4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1, 2, 4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLORANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3, 3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2, 4, 6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2, 4, 5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO (1, 2, 3-CD) PYRENE	330	ND
2, 6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	40 %	2-FLUOROBIPHENYL (30-115)	45 %
TERPHENYL-d14 (18-137)	56 %	PHENOL-d5 (24-113)	33 %
2-FLUOROPHENOL (25-121)	28 %	2, 4, 6-TRIBROMOPHENOL (19-122)	35 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV(525)

DATE : 01-25-00

SAMPLE MATRIX:	SOIL	DATE SUBMITTED:	01-18-00
ATAS #	28731.02	DATE EXTRACTED:	01-18-00
PROJECT	#96-620-3-005 - GMLEEDS	DATE ANALYZED :	01-19-00
SAMPLE ID	NE SS-1	METHOD REF.	: SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2,4-DINITROPHENOL	830	ND
1,3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1,4-DICHLOROBENZENE	330	ND	2,4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1,2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENylether	330	ND
BIS (2-CHLOROISOPROPYL) ETHER	330	ND	FLUORENE	330	ND
4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4,6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENylether	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2,4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2,4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1,2,4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3,3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2,4,6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2,4,5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO (1,2,3-CD) PYRENE	330	ND
2,6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	52 %	2-FLUOROBIPHENYL (30-115)	57 %
TERPHENYL-d14 (18-137)	77 %	PHENOL-d5 (24-113)	46 %
2-FLUOROPHENOL (25-121)	39 %	2,4,6-TRIBROMOPHENOL (19-122)	51 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002585

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV(525)

DATE : 01-25-00

SAMPLE MATRIX:	SOIL	DATE SUBMITTED:	01-18-00
ATAS #	28731.03	DATE EXTRACTED:	01-18-00
PROJECT	#96-620-3-005 - GMLEEDS	DATE ANALYZED :	01-19-00
SAMPLE ID	SW SS-1	METHOD REF.	: SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	RESULTS		RESULTS	
	<u>RL</u>	<u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RL</u>
PHENOL	330	ND	3-NITROANILINE	830
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330
2-CHLOROPHENOL	330	ND	2, 4-DINITROPHENOL	830
1, 3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830
1, 4-DICHLOROBENZENE	330	ND	2, 4-DINITROTOLUENE	330
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330
1, 2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENylether	330
BIS (2-CHLOROISOPROPYL) ETHER	330	ND	FLUORENE	330
4-METHYLPHENOL	330	ND	4-NITROANILINE	830
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4, 6-DINITRO-2-METHYLPHENOL	830
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENylether	330
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330
2, 4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830
2-NITROPHENOL	330	ND	PHENANTHRENE	330
BENZOIC ACID	830	ND	ANTHRACENE	330
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330
2, 4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330
1, 2, 4-TRICHLOROBENZENE	330	ND	PYRENE	330
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330
HEXACHLOROBUTADIENE	330	ND	3, 3'-DICHLOROBENZIDINE	330
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330
2, 4, 6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330
2, 4, 5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330
DIMETHYLPHthalATE	330	ND	INDENO (1, 2, 3-CD) PYRENE	330
2, 6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330
ACENAPHTHYLENE	330	ND		

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	46 %	2-FLUOROBIPHENYL (30-115)	46 %
TERPHENYL-d14 (18-137)	54 %	PHENOL-d5 (24-113)	38 %
2-FLUOROPHENOL (25-121)	33 %	2, 4, 6-TRIBROMOPHENOL (19-122)	39 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002586

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV(525)

DATE : 01-25-00

SAMPLE MATRIX: SOIL
 ATAS #: 28731.04
 PROJECT #: #96-620-3-005 - GMLEEDS
 SAMPLE ID : S-TRENCH SS-1

DATE SUBMITTED: 01-18-00
 DATE EXTRACTED: 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REF. : SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>RL</u>	<u>(ug/Kg)</u>
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2, 4-DINITROPHENOL	830	ND
1, 3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1, 4-DICHLOROBENZENE	330	ND	2, 4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1, 2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENylether	330	ND
BIS (2-CHLOROISOPROPYL) ETHER	330	ND	FLUORENE	330	ND
4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4, 6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENylether	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2, 4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2, 4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1, 2, 4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3, 3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2, 4, 6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2, 4, 5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO (1, 2, 3-CD) PYRENE	330	ND
2, 6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	49 %	2-FLUOROBIPHENYL (30-115)	50 %
TERPHENYL-d14 (18-137)	67 %	PHENOL-d5 (24-113)	44 %
2-FLUOROPHENOL (25-121)	34 %	2, 4, 6-TRIBROMOPHENOL (19-122)	44 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002587

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV(525)

DATE : 01-25-00

SAMPLE MATRIX:	SOIL	DATE SUBMITTED:	01-18-00
ATAS #	: 28731.05	DATE EXTRACTED:	01-18-00
PROJECT	: #96-620-3-005 - GMLEEDS	DATE ANALYZED :	01-19-00
SAMPLE ID	: PW TRENCH SS-1	METHOD REF.	: SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>		
PHENOL	5000	ND	3-NITROANILINE	12000	ND
BIS (2-CHLOROETHYL) ETHER	5000	ND	ACENAPHTHENE	5000	2000 J
2-CHLOROPHENOL	5000	ND	2, 4-DINITROPHENOL	12000	ND
1, 3-DICHLOROBENZENE	5000	ND	4-NITROPHENOL	12000	ND
1, 4-DICHLOROBENZENE	5000	ND	2, 4-DINITROTOLUENE	5000	ND
BENZYL ALCOHOL	5000	ND	DIBENZOFURAN	5000	1600 J
1, 2-DICHLOROBENZENE	5000	ND	DIETHYLPHthalATE	5000	ND
2-METHYLPHENOL	5000	ND	4-CHLOROPHENYL-PHENYLETHER	5000	ND
BIS (2-CHLOROISOPROPYL) ETHER	5000	ND	FLUORENE	5000	2300 J
4-METHYLPHENOL	5000	ND	4-NITROANILINE	12000	ND
N-NITROSO-DI-n-PROPYLAMINE	5000	ND	4, 6-DINITRO-2-METHYLPHENOL	12000	ND
HEXACHLOROETHANE	5000	ND	N-NITROSODIPHENYLAMINE	5000	ND
NITROBENZENE	5000	ND	4-BROMOPHENYL-PHENYLETHER	5000	ND
ISOPHORONE	5000	ND	HEXACHLOROBENZENE	5000	ND
2, 4-DIMETHYLPHENOL	5000	ND	PENTACHLOROPHENOL	12000	ND
2-NITROPHENOL	5000	ND	PHENANTHRENE	5000	9800
BENZOIC ACID	830	ND	ANTHRACENE	5000	1700 J
BIS (2-CHLOROETHOXY) METHANE	5000	ND	DI-N-BUTYLPHthalATE	5000	41000
2, 4-DICHLOROPHENOL	5000	ND	FLUORANTHENE	5000	6800
1, 2, 4-TRICHLOROBENZENE	5000	ND	PYRENE	5000	8400
NAPHTHALENE	5000	20000	BUTYLBENZYLPHthalATE	5000	21000
4-CHLOROANILINE	5000	ND	BIS (2-ETHYLHEXYL) PHTHALATE	5000	4400 JB
HEXACHLOROBUTADIENE	5000	ND	3, 3'-DICHLOROBENZIDINE	5000	ND
4-CHLORO-3-METHYLPHENOL	5000	ND	BENZO (A) ANTHRACENE	5000	3400 J
2-METHYLNAPHTHALENE	5000	6900	CHRYSENE	5000	3800 J
HEXACHLOROCYCLOPENTADIENE	5000	ND	DI-N-OCTYLPHthalATE	5000	960 JB
2, 4, 6-TRICHLOROPHENOL	5000	ND	BENZO (b) FLUORANTHENE	5000	3100 J
2, 4, 5-TRICHLOROPHENOL	12000	ND	BENZO (k) FLUORANTHENE	5000	3000 J
2-CHLORONAPHTHALENE	5000	ND	BENZO (a) PYRENE	5000	2700 J
2-NITROANILINE	12000	ND	DIBENZO (A, H) ANTHRACENE	5000	720 J
DIMETHYLPHthalATE	5000	ND	INDENO (1, 2, 3-CD) PYRENE	5000	1800 J
2, 6-DINITROTOLUENE	5000	ND	BENZO (G, H, I) PERYLENE	5000	ND
ACENAPHTHYLENE	5000	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	61 %	2-FLUOROBIPHENYL (30-115)	55 %
TERPHENYL-d14 (18-137)	69 %	PHENOL-d5 (24-113)	39 %
2-FLUOROPHENOL (25-121)	35 %	2, 4, 6-TRIBROMOPHENOL (19-122)	50 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

J = ESTIMATED VALUE; BELOW REPORTING LIMIT

LEEDS00258

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV(525)

DATE : 01-25-00

SAMPLE MATRIX:	SOIL	DATE SUBMITTED:	01-18-00
ATAS #	28731.06	DATE EXTRACTED:	01-18-00
PROJECT	#96-620-3-005 - GMLEEDS	DATE ANALYZED :	01-19-00
SAMPLE ID	SE SS-1	METHOD REF.	: SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>		
<u>RL</u>		<u>RL</u>			
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2, 4-DINITROPHENOL	830	ND
1, 3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1, 4-DICHLOROBENZENE	330	ND	2, 4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1, 2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENYLETHER	330	ND
BIS (2-CHLORoisOPROPYL) ETHER	330	ND	FLUORENE	330	ND
4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4, 6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENYLETHER	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2, 4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	340
2, 4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1, 2, 4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3, 3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2, 4, 6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2, 4, 5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO (1, 2, 3-CD) PYRENE	330	ND
2, 6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	53 %	2-FLUOROBIPHENYL (30-115)	53 %
TERPHENYL-d14 (18-137)	64 %	PHENOL-d5 (24-113)	44 %
2-FLUOROPHENOL (25-121)	35 %	2, 4, 6-TRIBROMOPHENOL (19-122)	48 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002589

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731SV (525)

DATE : 01-25-00

SAMPLE MATRIX:	SOIL	DATE SUBMITTED:	01-18-00
ATAS #	METHOD BLANK	DATE EXTRACTED:	01-18-00
PROJECT	#96-620-3-005 - GMLEEDS	DATE ANALYZED :	01-19-00
SAMPLE ID	METHOD BLANK	METHOD REF. :	SW846-8270C

RESULTS REPORTED IN ug/Kg OR PARTS PER BILLION (PPB)

<u>SEMIVOLATILES</u>	<u>RESULTS</u> <u>(ug/Kg)</u>	<u>SEMIVOLATILE</u>	<u>RESULTS</u> <u>(ug/Kg)</u>		
RL	RL	RL	RL		
PHENOL	330	ND	3-NITROANILINE	830	ND
BIS (2-CHLOROETHYL) ETHER	330	ND	ACENAPHTHENE	330	ND
2-CHLOROPHENOL	330	ND	2, 4-DINITROPHENOL	830	ND
1, 3-DICHLOROBENZENE	330	ND	4-NITROPHENOL	830	ND
1, 4-DICHLOROBENZENE	330	ND	2, 4-DINITROTOLUENE	330	ND
BENZYL ALCOHOL	330	ND	DIBENZOFURAN	330	ND
1, 2-DICHLOROBENZENE	330	ND	DIETHYLPHthalATE	330	ND
2-METHYLPHENOL	330	ND	4-CHLOROPHENYL-PHENYLETHER	330	ND
BIS (2-CHLOROISOPROPYL) ETHER	330	ND	FLUORENE	330	ND
4-METHYLPHENOL	330	ND	4-NITROANILINE	830	ND
N-NITROSO-DI-n-PROPYLAMINE	330	ND	4, 6-DINITRO-2-METHYLPHENOL	830	ND
HEXACHLOROETHANE	330	ND	N-NITROSODIPHENYLAMINE	330	ND
NITROBENZENE	330	ND	4-BROMOPHENYL-PHENYLETHER	330	ND
ISOPHORONE	330	ND	HEXACHLOROBENZENE	330	ND
2, 4-DIMETHYLPHENOL	330	ND	PENTACHLOROPHENOL	830	ND
2-NITROPHENOL	330	ND	PHENANTHRENE	330	ND
BENZOIC ACID	830	ND	ANTHRACENE	330	ND
BIS (2-CHLOROETHOXY) METHANE	330	ND	DI-N-BUTYLPHthalATE	330	ND
2, 4-DICHLOROPHENOL	330	ND	FLUORANTHENE	330	ND
1, 2, 4-TRICHLOROBENZENE	330	ND	PYRENE	330	ND
NAPHTHALENE	330	ND	BUTYLBENZYLPHthalATE	330	ND
4-CHLOROANILINE	330	ND	BIS (2-ETHYLHEXYL) PHTHALATE	330	ND
HEXACHLOROBUTADIENE	330	ND	3, 3'-DICHLOROBENZIDINE	330	ND
4-CHLORO-3-METHYLPHENOL	330	ND	BENZO (A) ANTHRACENE	330	ND
2-METHYLNAPHTHALENE	330	ND	CHRYSENE	330	ND
HEXACHLOROCYCLOPENTADIENE	330	ND	DI-N-OCTYLPHthalATE	330	ND
2, 4, 6-TRICHLOROPHENOL	330	ND	BENZO (b) FLUORANTHENE	330	ND
2, 4, 5-TRICHLOROPHENOL	830	ND	BENZO (k) FLUORANTHENE	330	ND
2-CHLORONAPHTHALENE	330	ND	BENZO (a) PYRENE	330	ND
2-NITROANILINE	830	ND	DIBENZO (A, H) ANTHRACENE	330	ND
DIMETHYLPHthalATE	330	ND	INDENO (1, 2, 3-CD) PYRENE	330	ND
2, 6-DINITROTOLUENE	330	ND	BENZO (G, H, I) PERYLENE	330	ND
ACENAPHTHYLENE	330	ND			

QA/QC SURROGATE RECOVERIES

NITROBENZENE-d5 (23-120)	71 %	2-FLUOROBIPHENYL (30-115)	74 %
TERPHENYL-d14 (18-137)	79 %	PHENOL-d5 (24-113)	52 %
2-FLUOROPHENOL (25-121)	46 %	2, 4, 6-TRIBROMOPHENOL (19-122)	38 %

ND = NOT DETECTED ABOVE REPORTING LIMIT

RL = REPORTING LIMIT

B = ANALYTE DETECTED IN METHOD BLANK, POSSIBLY BELOW THE REPORTING LIMIT.

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

LEEDS002590

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

SAMPLE MATRIX : SOIL
DATE EXTRACTED: 01-18-00
DATE ANALYZED : 01-19-00
METHOD REF. : SW846-8270C, EPA METHODOLOGY

REPORT DATE: 01-25-00

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

<u>COMPOUND</u>	<u>28720.01</u>	<u>28720.01</u>	<u>RPD</u>	<u>QC RPD</u>	<u>ADVISORY LIMITS</u>
	<u>MS % REC.</u>	<u>MSD % REC.</u>			
PHENOL	50	49	2	35	19-103
2-CHLOROPHENOL	54	55	2	50	28-93
1, 4-DICHLOROBENZENE	58	62	7	27	20-91
N-NITROSO-DI-n-PROPYLAMINE	59	64	8	38	32-114
1, 2, 4-TRICHLOROBENZENE	64	69	8	23	28-95
4-CHLORO-3-METHYLPHENOL	47	51	8	33	24-103
ACENAPHTHENE	67	73	9	19	38-100
4-NITROPHENOL	57	56	2	50	23-122
2, 4-DINITROTOLUENE	62	68	9	47	31-131
PENTACHLOROPHENOL	58	56	4	47	2-142
PYRENE	101	120	17	36	22-132

* = VALUES OUTSIDE OF ADVISORY LIMITS

LEEDS002591

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731OA2 (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.01
DATE RECEIVED : 01-18-00
DATE EXTRACTED : 01-18-00
DATE ANALYZED : 01-19-00
METHOD REFERENCE: OA-2
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : NW SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

PARAMETER	REPORTING LIMIT	UNIT	RESULTS
<u>TOTAL EXTRACTABLE HYDROCARBONS</u>			
GASOLINE C6-C14	3.0	mg/Kg	ND
MINERAL SPIRITS C7-C14	3.0	mg/Kg	ND
KEROSENE C9-C16	3.0	mg/Kg	ND
DIESEL C7-C26	3.0	mg/Kg	ND
#6 FUEL OIL C10-C32	3.0	mg/Kg	ND
HYDRAULIC FLUID C12-C33	3.0	mg/Kg	ND
MOTOR OIL C16-C33	3.0	mg/Kg	ND

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 82 %

ND = NOT DETECTED ABOVE REPORTING LIMIT
I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

LEEDS002592

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731OA2 (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.02
 DATE RECEIVED : 01-18-00
 DATE EXTRACTED : 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REFERENCE: OA-2
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : NE SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

<u>PARAMETER</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>RESULTS</u>
<u>TOTAL EXTRACTABLE HYDROCARBONS</u>			
GASOLINE C6-C14	3.0	mg/Kg	ND
MINERAL SPIRITS C7-C14	3.0	mg/Kg	ND
KEROSENE C9-C16	3.0	mg/Kg	ND
DIESEL C7-C26	3.0	mg/Kg	ND
#6 FUEL OIL C10-C32	3.0	mg/Kg	ND
HYDRAULIC FLUID C12-C33	3.0	mg/Kg	ND
MOTOR OIL C16-C33	3.0	mg/Kg	ND
MISCELLANEOUS (1)	3.0	mg/Kg	10.5
MISCELLANEOUS (2)	3.0	mg/Kg	22.3

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 88 %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO GASOLINE AND WAS QUANTITATED FROM THAT STANDARD.

(2) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731OA2 (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.03
 DATE RECEIVED : 01-18-00
 DATE EXTRACTED : 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REFERENCE: OA-2
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : SW SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

PARAMETER	REPORTING LIMIT	UNIT	RESULTS
<u>TOTAL EXTRACTABLE HYDROCARBONS</u>			
GASOLINE C6-C14	3.0	mg/Kg	ND
MINERAL SPIRITS C7-C14	3.0	mg/Kg	ND
KEROSENE C9-C16	3.0	mg/Kg	ND
DIESEL C7-C26	3.0	mg/Kg	ND
#6 FUEL OIL C10-C32	3.0	mg/Kg	ND
HYDRAULIC FLUID C12-C33	3.0	mg/Kg	ND
MOTOR OIL C16-C33	3.0	mg/Kg	ND
MISCELLANEOUS (1)	3.0	mg/Kg	3.35
MISCELLANEOUS (2)	3.0	mg/Kg	15.1

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 92 %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.

THE PATTERN IS MOST SIMILAR TO GASOLINE AND WAS QUANTITATED FROM THAT STANDARD.

(2) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.

THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

LEEDS002594

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731OA2 (525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.04
 DATE RECEIVED : 01-18-00
 DATE EXTRACTED : 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REFERENCE: OA-2
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : S-TRENCH SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

PARAMETER	REPORTING LIMIT	UNIT	RESULTS
<u>TOTAL EXTRACTABLE HYDROCARBONS</u>			
GASOLINE C6-C14	3.0	mg/Kg	ND
MINERAL SPIRITS C7-C14	3.0	mg/Kg	ND
KEROSENE C9-C16	3.0	mg/Kg	ND
DIESEL C7-C26	3.0	mg/Kg	ND
#6 FUEL OIL C10-C32	3.0	mg/Kg	ND
HYDRAULIC FLUID C12-C33	3.0	mg/Kg	ND
MOTOR OIL C16-C33	3.0	mg/Kg	ND
MISCELLANEOUS (1)	3.0	mg/Kg	20.2
MISCELLANEOUS (2)	3.0	mg/Kg	95.6

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 I %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO MINERAL SPIRITS AND WAS QUANTITATED FROM THAT STANDARD.

(2) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731OA2 (525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.05
DATE RECEIVED : 01-18-00
DATE EXTRACTED : 01-18-00
DATE ANALYZED : 01-19-00
METHOD REFERENCE: OA-2
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : PW-TRENCH SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

PARAMETER	REPORTING LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
GASOLINE C6-C14	4500	mg/Kg	ND
MINERAL SPIRITS C7-C14	4500	mg/Kg	ND
KEROSENE C9-C16	4500	mg/Kg	ND
DIESEL C7-C26	4500	mg/Kg	ND
#6 FUEL OIL C10-C32	4500	mg/Kg	ND
HYDRAULIC FLUID C12-C33	4500	mg/Kg	ND
MOTOR OIL C16-C33	4500	mg/Kg	ND
MISCELLANEOUS (1)	4500	mg/Kg	25500

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 D %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
THE PATTERN IS MOST SIMILAR TO MINERAL SPIRITS AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

D = DILUTED OUT

LEEDS002596

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731OA2 (525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.06
 DATE RECEIVED : 01-18-00
 DATE EXTRACTED : 01-18-00
 DATE ANALYZED : 01-19-00
 METHOD REFERENCE: OA-2
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : SE SS-1

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION (PPM)

PARAMETER	REPORTING LIMIT	UNIT	RESULTS
<u>TOTAL EXTRACTABLE HYDROCARBONS</u>			
GASOLINE C6-C14	3.0	mg/Kg	ND
MINERAL SPIRITS C7-C14	3.0	mg/Kg	ND
KEROSENE C9-C16	3.0	mg/Kg	ND
DIESEL C7-C26	3.0	mg/Kg	ND
#6 FUEL OIL C10-C32	3.0	mg/Kg	ND
HYDRAULIC FLUID C12-C33	3.0	mg/Kg	ND
MOTOR OIL C16-C33	3.0	mg/Kg	ND
MISCELLANEOUS (1)	3.0	mg/Kg	5.39
MISCELLANEOUS (2)	3.0	mg/Kg	82.5

QA/QC SURROGATE RECOVERY

P-TERPHENYL D14 I %

(1) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO MINERAL SPIRITS AND WAS QUANTITATED FROM THAT STANDARD.

(2) = ANALYSIS SHOWS PEAKS WHICH CANNOT BE MATCHED TO ANY HYDROCARBON STANDARD LISTED ABOVE.
 THE PATTERN IS MOST SIMILAR TO MOTOR OIL AND WAS QUANTITATED FROM THAT STANDARD.

ND = NOT DETECTED ABOVE REPORTING LIMIT

I = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

METHOD : OA-2

LABORATORY BLANK

MATRIX : SOIL DILUTION FACTOR: 1.0
EXTRACTION DATE : 01-18-00
ANALYSIS DATE : 01-18-00

COMPOUND	REPORTING LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
GASOLINE	3.0	mg/Kg	ND
MINERAL SPIRITS	3.0	mg/Kg	ND
KEROSENE	3.0	mg/Kg	ND
DIESEL FUEL	3.0	mg/Kg	ND
#6 FUEL OIL	3.0	mg/Kg	ND
HYDRAULIC FLUID	3.0	mg/Kg	ND
MOTOR OIL	3.0	mg/Kg	ND
SURROGATE RECOVERY (P-TERPHENYL D14) :			95 %

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS

	28728.03 MS PERCENT RECOVERY	28728.03 MSD PERCENT RECOVERY	RELATIVE PERCENT DIFFERENCE
KEROSENE	82	80	2

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002598

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.01
DATE SUBMITTED: 01-18-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : NW SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	6.7	01-19-00	EPA 150.1
METALS					
ARSENIC	1.00	mg/Kg	4.0	01-20-00	SW 6010
BARIUM	0.40	mg/Kg	135	01-21-00	SW 6010
CADMIUM	0.20	mg/Kg	0.35	01-20-00	SW 6010
CHROMIUM	0.20	mg/Kg	13.1	01-20-00	SW 6010
LEAD	1.00	mg/Kg	15.4	01-20-00	SW 6010
SILVER	0.40	mg/Kg	ND	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	ND	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002599

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)
DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.02
DATE SUBMITTED: 01-18-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : NE SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	7.7	01-19-00	EPA 150.1
METALS					
ARSENIC	1.00	mg/Kg	5.2	01-20-00	SW 6010
BARIUM	0.40	mg/Kg	149	01-21-00	SW 6010
CADMIUM	0.20	mg/Kg	1.0	01-20-00	SW 6010
CHROMIUM	0.20	mg/Kg	19.7	01-20-00	SW 6010
LEAD	1.00	mg/Kg	24.8	01-20-00	SW 6010
SILVER	0.40	mg/Kg	ND	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	ND	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002600

CLIENT: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.03
DATE SUBMITTED: 01-18-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SW SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	7.1	01-19-00	EPA 150.1
METALS					
ARSENIC	1.00	mg/Kg	7.8	01-20-00	SW 6010
BARIUM	0.40	mg/Kg	278	01-21-00	SW 6010
CADMIUM	0.20	mg/Kg	1.8	01-20-00	SW 6010
CHROMIUM	0.20	mg/Kg	19.2	01-20-00	SW 6010
LEAD	1.00	mg/Kg	31.9	01-20-00	SW 6010
SILVER	0.40	mg/Kg	ND	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	ND	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.04
DATE SUBMITTED: 01-18-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : S-TRENCH SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	8.0	01-19-00	EPA 150.1
METALS					
ARSENIC	1.00	mg/Kg	4.0	01-20-00	SW 6010
BARIUM	0.40	mg/Kg	186	01-21-00	SW 6010
CADMIUM	0.20	mg/Kg	17.1	01-20-00	SW 6010
CHROMIUM	0.20	mg/Kg	73.6	01-20-00	SW 6010
LEAD	1.00	mg/Kg	365	01-20-00	SW 6010
SILVER	0.40	mg/Kg	ND	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	7.0	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002602

CLIENT: BURNS & MCDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28731MT(525)
 DATE : 01-25-00

SAMPLE MATRIX : SOIL
 ATAS # : 28731.05
 DATE SUBMITTED: 01-18-00
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : PW-TRENCH SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	7.3	01-19-00	EPA 150.1
METALS					
ARSENIC	10.0	mg/Kg	ND	01-20-00	SW 6010
BARIUM	4.00	mg/Kg	604	01-21-00	SW 6010
CADMIUM	2.00	mg/Kg	56.5	01-20-00	SW 6010
CHROMIUM	2.00	mg/Kg	314	01-20-00	SW 6010
LEAD	100	mg/Kg	14200	01-20-00	SW 6010
SILVER	0.40	mg/Kg	0.57	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	14.6	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)

DATE : 01-25-00

SAMPLE MATRIX : SOIL
ATAS # : 28731.06
DATE SUBMITTED: 01-18-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : SE SS-1

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
INORGANICS					
pH		S.U.@25C	7.4	01-19-00	EPA 150.1
METALS					
ARSENIC	1.00	mg/Kg	4.0	01-20-00	SW 6010
BARIUM	0.40	mg/Kg	221	01-21-00	SW 6010
CADMIUM	0.20	mg/Kg	1.1	01-20-00	SW 6010
CHROMIUM	0.20	mg/Kg	20.4	01-20-00	SW 6010
LEAD	1.00	mg/Kg	16.6	01-20-00	SW 6010
SILVER	0.40	mg/Kg	ND	01-20-00	SW 6010
SELENIUM	2.00	mg/Kg	ND	01-20-00	SW 6010
MERCURY	0.20	mg/Kg	ND	01-24-00	SW 7471

mg/Kg = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002604

CLIENT: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28731MT(525)

DATE : 01-25-00

QA/QC

DESCRIPTION		PARAMETER	RESULTS
METHOD BLANK	01-20-00	ARSENIC	<1.00 mg/Kg
METHOD BLANK	01-21-00	BARIUM	<0.40 mg/Kg
METHOD BLANK	01-20-00	CADMIUM	<0.20 mg/Kg
METHOD BLANK	01-20-00	CHROMIUM	<0.20 mg/Kg
METHOD BLANK	01-20-00	LEAD	<1.00 mg/Kg
METHOD BLANK	01-20-00	SILVER	<0.40 mg/Kg
METHOD BLANK	01-20-00	SELENIUM	<2.00 mg/Kg
METHOD BLANK	01-24-00	MERCURY	<0.20 mg/Kg
CONTROL SPIKE	01-20-00	ARSENIC	96 % RECOVERY
CONTROL SPIKE	01-21-00	BARIUM	96 % RECOVERY
CONTROL SPIKE	01-20-00	CADMIUM	89 % RECOVERY
CONTROL SPIKE	01-20-00	CHROMIUM	89 % RECOVERY
CONTROL SPIKE	01-20-00	LEAD	88 % RECOVERY
CONTROL SPIKE	01-20-00	SILVER	83 % RECOVERY
CONTROL SPIKE	01-20-00	SELENIUM	98 % RECOVERY
CONTROL SPIKE	01-24-00	MERCURY	118 % RECOVERY

Request for Chemical Analysis and Chain of Custody Record

LEEDS002606

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 • FAX (314) 434-0080

February 7, 2000

Brian Foy
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: ATAS #28824.01-#28824.02
#96-620-3-005 - GMLEEDS

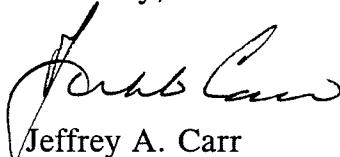
Dear Mr. Foy:

Enclosed are the analytical reports for the samples received in our laboratory on January 18, 2000.

If, in your review, you should have any questions or require additional information, please call.

Thank you for choosing ATAS for your analytical needs.

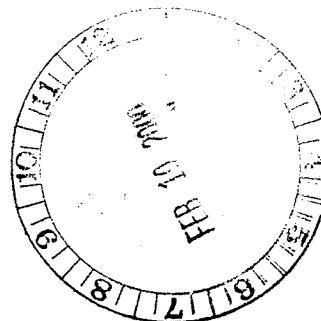
Sincerely,



Jeffrey A. Carr
Project Manager

Enclosures

JAC/cb



ATAS

"Professional Commitment"

LEEDS002607

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28824MT(525)

DATE : 02-04-99

SAMPLE MATRIX : SOIL
ATAS # : 28824.01
DATE SUBMITTED: 01-18-00
DATE EXTRACTED: 01-31-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : PW-TRENCH

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
TCLP TOXICITY METALS					
ARSENIC	0.10	mg/L	ND	02-03-00	SW 6010
BARIUM	1.00	mg/L	ND	02-03-00	SW 6010
CADMIUM	0.01	mg/L	0.12	02-03-00	SW 6010
CHROMIUM	0.01	mg/L	0.016	02-03-00	SW 6010
LEAD	0.10	mg/L	12.7	02-03-00	SW 6010
SILVER	0.02	mg/L	ND	02-03-00	SW 6010
SELENIUM	0.10	mg/L	ND	02-03-00	SW 6010
MERCURY	0.002	mg/L	ND	02-02-00	SW 7470

mg/L = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002608

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28824MT(525)
DATE : 02-07-99

SAMPLE MATRIX : SOIL
ATAS # : 28824.02
DATE SUBMITTED: 01-18-00
DATE EXTRACTED: 02-03-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : S-TRENCH

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
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TCLP TOXICITY METALS

ARSENIC	0.10	mg/L	ND	02-07-00	SW 6010
BARIUM	1.00	mg/L	1.83	02-07-00	SW 6010
CADMIUM	0.01	mg/L	ND	02-07-00	SW 6010
CHROMIUM	0.01	mg/L	ND	02-07-00	SW 6010
LEAD	0.10	mg/L	ND	02-07-00	SW 6010
SILVER	0.02	mg/L	ND	02-07-00	SW 6010
SELENIUM	0.10	mg/L	ND	02-07-00	SW 6010
MERCURY	0.002	mg/L	ND	02-07-00	SW 7470

mg/L = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002609

ATAS

875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28824MT(525)

DATE : 02-04-99

SAMPLE MATRIX : TCLP LEACHATE
ATAS # : TCLP BLANK
DATE SUBMITTED: 01-18-00
DATE EXTRACTED: 01-31-00
PROJECT : #96-620-3-005 - GMLEEDS
SAMPLE ID : TCLP BLANK

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
TCLP TOXICITY METALS					
ARSENIC	0.10	mg/L	ND	02-03-00	SW 6010
BARIUM	1.00	mg/L	ND	02-03-00	SW 6010
CADMIUM	0.01	mg/L	ND	02-03-00	SW 6010
CHROMIUM	0.01	mg/L	ND	02-03-00	SW 6010
LEAD	0.10	mg/L	ND	02-03-00	SW 6010
SILVER	0.02	mg/L	ND	02-03-00	SW 6010
SELENIUM	0.10	mg/L	ND	02-03-00	SW 6010
MERCURY	0.002	mg/L	ND	02-02-00	SW 7470

mg/L = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

LEEDS002610

CLIENT: BURNS & McDONNELL
 9400 WARD PARKWAY
 KANSAS CITY, MO 64111
 ATTN: BRIAN FOY

REPORT: 28824MT (525)

DATE : 02-07-99

SAMPLE MATRIX : TCLP LEACHATE
 ATAS # : TCLP BLANK
 DATE SUBMITTED: 01-18-00
 DATE EXTRACTED: 02-03-00
 PROJECT : #96-620-3-005 - GMLEEDS
 SAMPLE ID : TCLP BLANK

PARAMETER	REPORTING LIMIT	UNITS	RESULTS	DATE ANALYZED	METHOD REFERENCE
TCLP TOXICITY METALS					
ARSENIC	0.10	mg/L	ND	02-07-00	SW 6010
BARIUM	1.00	mg/L	ND	02-07-00	SW 6010
CADMIUM	0.01	mg/L	ND	02-07-00	SW 6010
CHROMIUM	0.01	mg/L	0.012	02-07-00	SW 6010
LEAD	0.10	mg/L	ND	02-07-00	SW 6010
SILVER	0.02	mg/L	ND	02-07-00	SW 6010
SELENIUM	0.10	mg/L	ND	02-07-00	SW 6010
MERCURY	0.002	mg/L	ND	02-07-00	SW 7470

mg/L = PARTS PER MILLION (PPM)

ND = NOT DETECTED ABOVE REPORTING LIMIT

CLIENT: BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64111
ATTN: BRIAN FOY

REPORT: 28824MT (525)
DATE : 02-07-99

QA/QC

DESCRIPTION		PARAMETER	RESULTS
METHOD BLANK	02-03-00	ARSENIC	<0.10 mg/L
METHOD BLANK	02-07-00	ARSENIC	<0.10 mg/L
METHOD BLANK	02-03-00	BARIUM	<1.00 mg/L
METHOD BLANK	02-07-00	BARIUM	<1.00 mg/L
METHOD BLANK	02-03-00	CADMIUM	<0.01 mg/L
METHOD BLANK	02-07-00	CADMIUM	<0.01 mg/L
METHOD BLANK	02-03-00	CHROMIUM	<0.01 mg/L
METHOD BLANK	02-07-00	CHROMIUM	<0.01 mg/L
METHOD BLANK	02-03-00	LEAD	<0.10 mg/L
METHOD BLANK	02-07-00	LEAD	<0.10 mg/L
METHOD BLANK	02-03-00	SILVER	<0.02 mg/L
METHOD BLANK	02-07-00	SILVER	<0.02 mg/L
METHOD BLANK	02-03-00	SELENIUM	<0.10 mg/L
METHOD BLANK	02-07-00	SELENIUM	<0.10 mg/L
METHOD BLANK	02-02-00	MERCURY	<0.002 mg/L
METHOD BLANK	02-07-00	MERCURY	<0.002 mg/L
CONTROL SPIKE	02-03-00	ARSENIC	105 % RECOVERY
CONTROL SPIKE	02-07-00	ARSENIC	104 % RECOVERY
CONTROL SPIKE	02-03-00	BARIUM	114 % RECOVERY
CONTROL SPIKE	02-07-00	BARIUM	114 % RECOVERY
CONTROL SPIKE	02-03-00	CADMIUM	98 % RECOVERY
CONTROL SPIKE	02-07-00	CADMIUM	106 % RECOVERY
CONTROL SPIKE	02-03-00	CHROMIUM	103 % RECOVERY
CONTROL SPIKE	02-07-00	CHROMIUM	106 % RECOVERY
CONTROL SPIKE	02-03-00	LEAD	102 % RECOVERY
CONTROL SPIKE	02-07-00	LEAD	108 % RECOVERY
CONTROL SPIKE	02-03-00	SILVER	116 % RECOVERY
CONTROL SPIKE	02-07-00	SILVER	114 % RECOVERY
CONTROL SPIKE	02-03-00	SELENIUM	106 % RECOVERY
CONTROL SPIKE	02-07-00	SELENIUM	108 % RECOVERY
CONTROL SPIKE	02-02-00	MERCURY	112 % RECOVERY
CONTROL SPIKE	02-07-00	MERCURY	103 % RECOVERY

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Waste Consultants, Inc.		Laboratory Annealed Technical Steel / Hot Dip Galvanized Steel / Stainless Steel	Document Control No.:				
Address	575 Fee Fee Road	Lab. Reference No. or Episode No.:					
City/State/Zip Maryland Heights MO/63043-3211							
Attention:	<u>Brian Foy</u>	Telephone	314-434-4570				
Project Number:	96-620-3-005	Project Name:	GARVEEDS				
Site, Group, or SWMU Name:		Sample Type					
Sample Number	Sample Location	Material Sampled	Matrix				
Sample Point	Sample Designator	Sample Collected Date	Grab				
			Wipe				
NW	SS-1	GARVEEDS Soil	9:00 1/17/00	X	X	X	X
NE	SS-1	GARVEEDS Soil	9:15 1/17/00	X	X	X	X
SW	SS-1	GARVEEDS Soil	9:35 1/17/00	X	X	X	X
S-Trench	SS-1	GARVEEDS Soil	9:55 1/17/00	X	X	X	X
SW-Tank	SS-1	GARVEEDS Water	10:10 1/17/00	X	X	X	X
SE	SS-1	GARVEEDS Soil	10:17 1/17/00	X	X	X	X
<u>(28824.01)</u>							
<u>Analyze PW-tranch for TCLP Metals, 3 day TAT per Brian Foy. JE 1/28/00</u>							
Special Instructions:							
Sampler (signature): <u>J. M.</u>		Relinquished By: <u>P. L. E. USPD</u>		Date/Time	Condition of Shipping Container:	Ice Present <input checked="" type="checkbox"/> Container:	
Relinquished By: <u>J. M.</u>		Relinquished By: <u>P. L. E. USPD</u>		1/17/00 16:00	Good <input checked="" type="checkbox"/>	Fair <input type="checkbox"/>	Poor <input type="checkbox"/>
Relinquished By: <u>J. M.</u>		Relinquished By: <u>P. L. E. USPD</u>		Date/Time	Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 1/14	

Sampler (signature):

Relinquished By: J. M.
 Relinquished By: P. L. E. USPD
 Date/Time: 1/17/00 16:00
 Date/Time: 1/17/00 16:00
 (signature):

Special Instructions:

Condition of Shipping Container:	Ice Present <input checked="" type="checkbox"/> Container:
Date/Time	Good <input checked="" type="checkbox"/>
Condition of Shipping Container:	Fair <input type="checkbox"/>
Date/Time	Poor <input type="checkbox"/>
Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 1/14

APPENDIX C

MDNR Laboratory Reports



Mel Carnahan, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

~~RECEIVED~~

ENVIRONMENTAL SERVICES PROGRAM

RESULTS OF SAMPLE ANALYSES

HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
NATURAL RESOURCES

Sample Number: 0002006
Lab Number: 00-D84

Reported To: HANNAH MARTIN
Affiliation: HWP
Project Code: 4071/9234

Report Date: 2/14/00
Date Collected: 1/17/00
Date Received: 1/18/00

Sample Collected by: HANNAH MARTIN, HWP
Sampling Location: GM LEEDS, UNKNOWN GREEN/BLUE
Sample Description: MATERIAL FROM SOUTH END OF TRENCH
County: JACKSON

Analysis Performed	Results	Analyzed	Method
Silver, Total	2,290	ug/kg	1/19/00 200.7
Arsenic, Total	6,140	ug/kg	1/20/00 206.2
Barium, Total	777,000	ug/kg	1/19/00 200.7
Cadmium, Total	189,000	ug/kg	1/19/00 200.7
Chromium, Total	2,430,000	ug/kg	1/19/00 200.7
Mercury, Total	55.5	ug/kg	1/26/00 245.1
Lead, Total	14,500,000	ug/kg	1/19/00 239.2
Selenium, Total	42,400	ug/kg	1/20/00 270.2
Barium, TCLP	0.90	ppm	1/27/00 200.7
Cadmium, TCLP	0.14	ppm	1/27/00 200.7
Chromium, TCLP	0.02	ppm	1/27/00 200.7
Lead, TCLP	12.2	ppm	1/27/00 239.2
Selenium, TCLP	0.02	ppm	1/27/00 270.2
VOA Results:			
Chloromethane	< 100,000	ug/kg	1/19/00 8260
Vinyl Chloride	< 10,000	ug/kg	1/19/00 8260
Bromomethane	< 25,000	ug/kg	1/19/00 8260
Chloroethane	< 25,000	ug/kg	1/19/00 8260
1,1-Dichloroethene	< 5,000	ug/kg	1/19/00 8260
Acetone	< 100,000	ug/kg	1/19/00 8260
Carbon Disulfide	< 5,000	ug/kg	1/19/00 8260
Methylene Chloride	< 100,000	ug/kg	1/19/00 8260
Methyl Tertiary Butyl Eth	< 10,000	ug/kg	1/19/00 8260
trans-1,2-Dichloroethene	< 5,000	ug/kg	1/19/00 8260

Analysis Performed	Results	Analyzed	Method
1,1-Dichloroethane	< 5,000	ug/kg	1/19/00 8260
2-Butanone	38,500	ug/kg	1/19/00 8260
cis-1,2-Dichloroethene	< 5,000	ug/kg	1/19/00 8260
Chloroform	< 5,000	ug/kg	1/19/00 8260
1,1,1-Trichloroethane	< 5,000	ug/kg	1/19/00 8260
Carbon Tetrachloride	< 5,000	ug/kg	1/19/00 8260
Benzene	8,250	ug/kg	1/19/00 8260
1,2-Dichloroethane	< 5,000	ug/kg	1/19/00 8260
Trichloroethene	< 5,000	ug/kg	1/19/00 8260
1,2-Dichloropropane	< 5,000	ug/kg	1/19/00 8260
Bromodichloromethane	< 5,000	ug/kg	1/19/00 8260
2-Hexanone	< 10,000	ug/kg	1/19/00 8260
Trans-1,3-Dichloropropene	< 5,000	ug/kg	1/19/00 8260
Toluene	154,000	ug/kg	1/19/00 8260
CIS-1,3-Dichloropropene	< 5,000	ug/kg	1/19/00 8260
1,1,2-Trichloroethane	< 5,000	ug/kg	1/19/00 8260
4-Methyl-2-Pentanone	< 5,000	ug/kg	1/19/00 8260
Tetrachloroethene	< 5,000	ug/kg	1/19/00 8260
Dibromochloromethane	< 5,000	ug/kg	1/19/00 8260
Chlorobenzene	< 5,000	ug/kg	1/19/00 8260
Ethylbenzene	77,900	ug/kg	1/19/00 8260
Total Xylenes	167,000	ug/kg	1/19/00 8260
Styrene	< 5,000	ug/kg	1/19/00 8260
Bromoform	< 5,000	ug/kg	1/19/00 8260
1,1,2,2-Tetrachloroethane	< 5,000	ug/kg	1/19/00 8260
1,3-Dichlorobenzene	< 5,000	ug/kg	1/19/00 8260
1,4-Dichlorobenzene	< 5,000	ug/kg	1/19/00 8260
1,2-Dichlorobenzene	< 5,000	ug/kg	1/19/00 8260
Diethyl Ether	< 100,000	ug/kg	1/19/00 8260
Iodomethane	< 25,000	ug/kg	1/19/00 8260
Acrylonitrile	< 10,000	ug/kg	1/19/00 8260
Allyl Chloride	< 5,000	ug/kg	1/19/00 8260
Propionitrile	< 100,000	ug/kg	1/19/00 8260
Methacrylonitrile	< 5,000	ug/kg	1/19/00 8260
Methyl Acrylate	< 50,000	ug/kg	1/19/00 8260
Tetrahydrofuran	< 25,000	ug/kg	1/19/00 8260
1-Chlorobutane	< 5,000	ug/kg	1/19/00 8260
Chloroacetonitrile	< 10,000	ug/kg	1/19/00 8260
2-Nitropropane	< 5,000	ug/kg	1/19/00 8260
Methylmethacrylate	< 5,000	ug/kg	1/19/00 8260
1,1-Dichloropropanone	< 10,000	ug/kg	1/19/00 8260
Ethyl Methacrylate	< 5,000	ug/kg	1/19/00 8260
t-1,4-Dichloro-2-butene	< 5,000	ug/kg	1/19/00 8260
Pentachloroethane	< 5,000	ug/kg	1/19/00 8260
Hexachloroethane	< 5,000	ug/kg	1/19/00 8260
Nitrobenzene	< 50,000	ug/kg	1/19/00 8260
Dichlorodifluoromethane	< 5,000	ug/kg	1/19/00 8260

Analysis Performed	Results		Analyzed	Method
Trichlorofluoromethane	< 25,000	ug/kg	1/19/00	8260
2,2-Dichloropropane	< 5,000	ug/kg	1/19/00	8260
Bromochloromethane	< 5,000	ug/kg	1/19/00	8260
1,1-Dichloropropene	< 5,000	ug/kg	1/19/00	8260
Dibromomethane	< 5,000	ug/kg	1/19/00	8260
1,3-Dichloropropane	< 5,000	ug/kg	1/19/00	8260
1,2-Dibromoethane	< 5,000	ug/kg	1/19/00	8260
1,1,1,2-Tetrachloroethane	< 5,000	ug/kg	1/19/00	8260
Isopropylbenzene	22,600	ug/kg	1/19/00	8260
1,2,3-Trichloropropane	< 5,000	ug/kg	1/19/00	8260
n-Propylbenzene	125,000	ug/kg	1/19/00	8260
Bromobenzene	< 5,000	ug/kg	1/19/00	8260
2-Chlorotoluene	< 5,000	ug/kg	1/19/00	8260
4-Chlorotoluene	< 5,000	ug/kg	1/19/00	8260
1,3,5-Trimethylbenzene	245,000	ug/kg	1/19/00	8260
tert-Butylbenzene	< 10,000	ug/kg	1/19/00	8260
1,2,4-Trimethylbenzene	1,320,000	ug/kg	1/19/00	8260
sec-Butylbenzene	53,500	ug/kg	1/19/00	8260
p-isopropyltoluene	67,100	ug/kg	1/19/00	8260
n-Butylbenzene	247,000	ug/kg	1/19/00	8260
1,2-Dibromo-3-Chloroprop	< 5,000	ug/kg	1/19/00	8260
1,2,4-Trichlorobenzene	< 5,000	ug/kg	1/19/00	8260
Hexachlorobutadiene	< 10,000	ug/kg	1/19/00	8260
Naphthalene	Not Analyzed		1/19/00	8260
1,2,3-Trichlorobenzene	< 10,000	ug/kg	1/19/00	8260
VOA TCLP Results:				
Vinyl Chloride (TCLP)	< 0.2	ppm	2/ 1/00	8260
1,1-Dichloroethene (TCLP)	< 0.7	ppm	2/ 1/00	8260
2-Butanone (TCLP)	< 0.5	ppm	2/ 1/00	8260
Chloroform (TCLP)	< 6.0	ppm	2/ 1/00	8260
Carbon Tetrachlor. (TCLP)	< 0.5	ppm	2/ 1/00	8260
Benzene (TCLP)	0.7	ppm	2/ 1/00	8260
1,2-Dichloroethane (TCLP)	< 0.5	ppm	2/ 1/00	8260
Trichloroethene (TCLP)	< 0.5	ppm	2/ 1/00	8260
Tetrachloroethene (TCLP)	< 0.7	ppm	2/ 1/00	8260
Chlorobenzene (TCLP)	< 100	ppm	2/ 1/00	8260
1,4-Dichlorobenz. (TCLP)	< 7.5	ppm	2/ 1/00	8260
BNA Results:				
Phenol	< 3,750	ug/kg	1/24/00	8270
bis(-2-Chloroethyl) Ether	< 3,750	ug/kg	1/24/00	8270
2-Chlorophenol	< 7,500	ug/kg	1/24/00	8270
1,3-Dichlorobenzene	< 3,750	ug/kg	1/24/00	8270
1,4-Dichlorobenzene	< 3,750	ug/kg	1/24/00	8270
N-nitrosodimethylamine	< 3,750	ug/kg	1/24/00	8270
1,2-Dichlorobenzene	< 3,750	ug/kg	1/24/00	8270
2-Methylphenol	< 3,750	ug/kg	1/24/00	8270
bis(2-Chloroisopropyl) Eth	< 3,750	ug/kg	1/24/00	8270

Analysis Performed	Results	Analyzed	Method
4-Methylphenol	< 3,750	ug/kg	1/24/00 8270
N-Nitro-Di-n-Propylamine	< 3,750	ug/kg	1/24/00 8270
Hexachloroethane	< 3,750	ug/kg	1/24/00 8270
Nitrobenzene	< 3,750	ug/kg	1/24/00 8270
Isophorone	< 3,750	ug/kg	1/24/00 8270
2-Nitrophenol	< 7,500	ug/kg	1/24/00 8270
2,4-Dimethylphenol	< 3,750	ug/kg	1/24/00 8270
Benzoic Acid	< 3,750	ug/kg	1/24/00 8270
bis(2-Chloroethoxy)Methan	< 3,750	ug/kg	1/24/00 8270
2,4-Dichlorophenol	< 3,750	ug/kg	1/24/00 8270
1,2,4-Trichlorobenzene	< 3,750	ug/kg	1/24/00 8270
Naphthalene	430,000	ug/kg	1/24/00 8270
Comment: 1/10 dilution on 1/26/00			
4-Chloroaniline	< 7,500	ug/kg	1/24/00 8270
Hexachlorobutadiene	< 3,750	ug/kg	1/24/00 8270
4-Chloro-3-Methylphenol	< 7,500	ug/kg	1/24/00 8270
2-Methylnaphthalene	73,000	ug/kg	1/24/00 8270
Hexachlorocyclopentadiene	< 3,750	ug/kg	1/24/00 8270
2,4,6-Trichlorophenol	< 7,500	ug/kg	1/24/00 8270
2,4,5-Trichlorophenol	< 3,750	ug/kg	1/24/00 8270
2-Chloronaphthalene	< 7,500	ug/kg	1/24/00 8270
2-Nitroaniline	< 7,500	ug/kg	1/24/00 8270
Dimethylphthalate	< 3,750	ug/kg	1/24/00 8270
Acenaphthylene	< 3,750	ug/kg	1/24/00 8270
2,6-Dinitrotoluene	< 3,750	ug/kg	1/24/00 8270
3-Nitroaniline	< 7,500	ug/kg	1/24/00 8270
Acenaphthene	29,000	ug/kg	1/24/00 8270
2,4-Dinitrophenol	< 11,200	ug/kg	1/24/00 8270
4-Nitrophenol	< 7,500	ug/kg	1/24/00 8270
Dibenzofuran	24,000	ug/kg	1/24/00 8270
2,4-Dinitrotoluene	< 3,750	ug/kg	1/24/00 8270
Diethylphthalate	< 3,750	ug/kg	1/24/00 8270
4-Chlorophenyl-phenylether	< 3,750	ug/kg	1/24/00 8270
Fluorene	41,000	ug/kg	1/24/00 8270
4-Nitroaniline	< 7,500	ug/kg	1/24/00 8270
4,6-Dinitro-2-Methylphenol	< 7,500	ug/kg	1/24/00 8270
N-Nitrosodiphenylamine	< 3,750	ug/kg	1/24/00 8270
4-Bromophenyl-phenylether	< 3,750	ug/kg	1/24/00 8270
Hexachlorobenzene	< 3,750	ug/kg	1/24/00 8270
Pentachlorophenol	< 7,500	ug/kg	1/24/00 8270
Phenanthrene	150,000	ug/kg	1/24/00 8270
Comment: 1/10 dilution on 1/26/00			
Anthracene	31,000	ug/kg	1/24/00 8270
Di-n-Butylphthalate	630,000	ug/kg	1/24/00 8270
Comment: 1/10 dilution on 1/26/00			
Fluoranthene	48,000	ug/kg	1/24/00 8270

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Analysis Performed	Results	Analyzed	Method
Pyrene	160,000	ug/kg	1/24/00 8270
Comment: 1/10 dilution on 1/26/00			
Butylbenzylphthalate	< 3,750	ug/kg	1/24/00 8270
3-3'-Dichlorobenzidine	< 7,500	ug/kg	1/24/00 8270
Benzo(a)anthracene	23,000	ug/kg	1/24/00 8270
Chrysene	20,000	ug/kg	1/24/00 8270
bis(2-ethylhexyl)phthalat	43,000	ug/kg	1/24/00 8270
Di-n-Octylphthalate	< 15,000	ug/kg	1/24/00 8270
Benzo(b)fluoranthene	15,000	ug/kg	1/24/00 8270
Benzo(k)fluoranthene	13,000	ug/kg	1/24/00 8270
Benzo(a)pyrene	22,000	ug/kg	1/24/00 8270
Indeno(1,2,3-cd)pyrene	< 3,750	ug/kg	1/24/00 8270
Dibenz(a,h)anthracene	< 3,750	ug/kg	1/24/00 8270
Benzo(g,h,i)perylene	< 3,750	ug/kg	1/24/00 8270
BNA TCLP Results:			
2-Methylphenol (TCLP)	< 0.1	ppm	2/ 4/00 8270
4-Methylphenol (TCLP)	< 0.1	ppm	2/ 4/00 8270
Cresol (TCLP)	< 0.1	ppm	2/ 4/00 8270
2,4,5-Trichlorophenol	< 0.1	ppm	2/ 4/00 8270
2,4,6-Trichlorophenol	< 0.1	ppm	2/ 4/00 8270
2,4-Dinitrotoluene (TCLP)	< 0.1	ppm	2/ 4/00 8270
Hexachlorobenzene (TCLP)	< 0.1	ppm	2/ 4/00 8270
Hexachlorobutadien (TCLP)	< 0.1	ppm	2/ 4/00 8270
Hexachloroethane (TCLP)	< 0.1	ppm	2/ 4/00 8270
Nitobenzene (TCLP)	< 0.1	ppm	2/ 4/00 8270
Pentachlorophenol (TCLP)	< 0.1	ppm	2/ 4/00 8270

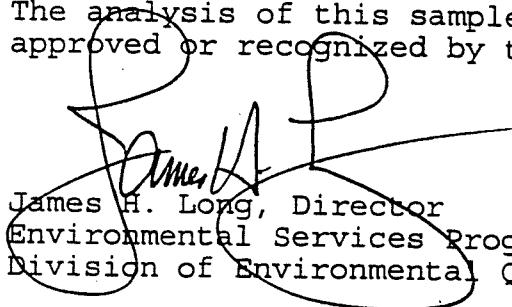
Page 6
Lab Number: 00-D84
Sample Number: 0002006
February 14, 2000

VOA Comments:

- 1.) A 1:5000 dilution was analyzed on 1/20/00 to quantitate 1,2,4-Trimethylbenzene.
- 2.) A 1:1000 dilution was analyzed on 1/19/00 to quantitate the remaining target compounds.

Metals results are reported on a dry weight basis

The analysis of this sample was performed in accordance with procedures approved or recognized by the U.S. Environmental Protection Agency.


James H. Long, Director
Environmental Services Program
Division of Environmental Quality

C: VALERIE WILDER, HWP

LEEDS002620

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STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Mel Carnahan, Governor • Stephen M. Mahfood, Director

FEB 14 2000

DIVISION OF ENVIRONMENTAL QUALITY
HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
P.O. Box 176 Jefferson City, MO 65102-0176 NATURAL RESOURCES

ENVIRONMENTAL SERVICES PROGRAM

RESULTS OF SAMPLE ANALYSES

Sample Number: 0002008
Lab Number: 00-D85

Reported To: HANNAH MARTIN
Affiliation: HWP
Project Code: 4071/9234

Report Date: 2/ 8/00
Date Collected: 1/17/00
Date Received: 1/18/00

Sample Collected by: HANNAH MARTIN, HWP
Sampling Location: GM LEEDS, SOIL GRAB
Sample Description: FROM SE CORNER
County: JACKSON

Analysis Performed	Results	Analyzed	Method
Silver, Total	< 2,000	ug/kg	1/19/00 200.7
Arsenic, Total	9,140	ug/kg	1/20/00 206.2
Barium, Total	290,000	ug/kg	1/19/00 200.7
Cadmium, Total	1,220	ug/kg	1/19/00 200.7
Chromium, Total	55,100	ug/kg	1/19/00 200.7
Mercury, Total	66.4	ug/kg	1/26/00 245.1
Lead, Total	12,800	ug/kg	1/19/00 239.2
Selenium, Total	< 2,000	ug/kg	1/20/00 270.2
VOA Results:			
Chloromethane	< 100	ug/kg	1/18/00 8260
Vinyl Chloride	< 10.0	ug/kg	1/18/00 8260
Bromomethane	< 25.0	ug/kg	1/18/00 8260
Chloroethane	< 25.0	ug/kg	1/18/00 8260
1,1-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Acetone	< 100	ug/kg	1/18/00 8260
Carbon Disulfide	< 5.0	ug/kg	1/18/00 8260
Methylene Chloride	< 100	ug/kg	1/18/00 8260
Methyl Tertiary Butyl Eth	< 10.0	ug/kg	1/18/00 8260
trans-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
2-Butanone	< 25.0	ug/kg	1/18/00 8260
cis-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Chloroform	< 5.0	ug/kg	1/18/00 8260
1,1,1-Trichloroethane	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
Carbon Tetrachloride	< 5.0	ug/kg	1/18/00 8260
Benzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
Trichloroethene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
Bromodichloromethane	< 5.0	ug/kg	1/18/00 8260
2-Hexanone	< 10.0	ug/kg	1/18/00 8260
Trans-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
Toluene	< 5.0	ug/kg	1/18/00 8260
CIS-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
1,1,2-Trichloroethane	< 5.0	ug/kg	1/18/00 8260
4-Methyl-2-Pentanone	< 5.0	ug/kg	1/18/00 8260
Tetrachloroethene	< 5.0	ug/kg	1/18/00 8260
Dibromochloromethane	< 5.0	ug/kg	1/18/00 8260
Chlorobenzene	< 5.0	ug/kg	1/18/00 8260
Ethylbenzene	< 5.0	ug/kg	1/18/00 8260
Total Xylenes	< 2.0	ug/kg	1/18/00 8260
Styrene	< 5.0	ug/kg	1/18/00 8260
Bromoform	< 5.0	ug/kg	1/18/00 8260
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	1/18/00 8260
1,3-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,4-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
Diethyl Ether	< 100	ug/kg	1/18/00 8260
Iodomethane	< 25.0	ug/kg	1/18/00 8260
Acrylonitrile	< 10.0	ug/kg	1/18/00 8260
Allyl Chloride	< 5.0	ug/kg	1/18/00 8260
Propionitrile	< 100	ug/kg	1/18/00 8260
Methacrylonitrile	< 5.0	ug/kg	1/18/00 8260
Methyl Acrylate	< 50.0	ug/kg	1/18/00 8260
Tetrahydrofuran	< 25.0	ug/kg	1/18/00 8260
1-Chlorobutane	< 5.0	ug/kg	1/18/00 8260
Chloroacetonitrile	< 5.0	ug/kg	1/18/00 8260
2-Nitropropane	< 10.0	ug/kg	1/18/00 8260
Methylmethacrylate	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropanone	< 10.0	ug/kg	1/18/00 8260
Ethyl Methacrylate	< 5.0	ug/kg	1/18/00 8260
t-1,4-Dichloro-2-butene	< 5.0	ug/kg	1/18/00 8260
Pentachloroethane	< 5.0	ug/kg	1/18/00 8260
Hexachloroethane	< 5.0	ug/kg	1/18/00 8260
Nitrobenzene	< 5.0	ug/kg	1/18/00 8260
Dichlorodifluoromethane	< 50.0	ug/kg	1/18/00 8260
Trichlorofluoromethane	< 5.0	ug/kg	1/18/00 8260
2,2-Dichloropropane	< 25.0	ug/kg	1/18/00 8260
Bromochloromethane	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
Dibromomethane	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
1,3-Dichloropropane	< 5.0 ug/kg	1/18/00	8260
1,2-Dibromoethane	< 5.0 ug/kg	1/18/00	8260
1,1,1,2-Tetrachloroethane	< 5.0 ug/kg	1/18/00	8260
Isopropylbenzene	< 5.0 ug/kg	1/18/00	8260
1,2,3-Trichloropropane	< 5.0 ug/kg	1/18/00	8260
n-Propylbenzene	< 5.0 ug/kg	1/18/00	8260
Bromobenzene	< 5.0 ug/kg	1/18/00	8260
2-Chlorotoluene	< 5.0 ug/kg	1/18/00	8260
4-Chlorotoluene	< 5.0 ug/kg	1/18/00	8260
1,3,5-Trimethylbenzene	< 5.0 ug/kg	1/18/00	8260
tert-Butylbenzene	< 10.0 ug/kg	1/18/00	8260
1,2,4-Trimethylbenzene	9.8 ug/kg	1/18/00	8260
sec-Butylbenzene	< 5.0 ug/kg	1/18/00	8260
p-isopropyltoluene	< 5.0 ug/kg	1/18/00	8260
n-Butylbenzene	< 5.0 ug/kg	1/18/00	8260
1,2-Dibromo-3-Chloroprop	< 5.0 ug/kg	1/18/00	8260
1,2,4-Trichlorobenzene	< 5.0 ug/kg	1/18/00	8260
Hexachlorobutadiene	< 10.0 ug/kg	1/18/00	8260
Naphthalene	8.2 ug/kg	1/18/00	8260
1,2,3-Trichlorobenzene	< 10.0 ug/kg	1/18/00	8260
BNA Results:			
Phenol	< 250 ug/kg	1/24/00	8270
bis(-2-Chloroethyl) Ether	< 250 ug/kg	1/24/00	8270
2-Chlorophenol	< 500 ug/kg	1/24/00	8270
1,3-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
1,4-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
N-nitrosodimethylamine	< 250 ug/kg	1/24/00	8270
1,2-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
2-Methylphenol	< 250 ug/kg	1/24/00	8270
bis(2-Chloroisopropyl) Eth	< 250 ug/kg	1/24/00	8270
4-Methylphenol	< 250 ug/kg	1/24/00	8270
N-Nitro-Di-n-Propylamine	< 250 ug/kg	1/24/00	8270
Hexachloroethane	< 250 ug/kg	1/24/00	8270
Nitrobenzene	< 250 ug/kg	1/24/00	8270
Isophorone	< 250 ug/kg	1/24/00	8270
2-Nitrophenol	< 500 ug/kg	1/24/00	8270
2,4-Dimethylphenol	< 250 ug/kg	1/24/00	8270
Benzoic Acid	< 250 ug/kg	1/24/00	8270
bis(2-Chloroethoxy) Methan	< 250 ug/kg	1/24/00	8270
2,4-Dichlorophenol	< 250 ug/kg	1/24/00	8270
1,2,4-Trichlorobenzene	< 250 ug/kg	1/24/00	8270
Naphthalene	< 250 ug/kg	1/24/00	8270
4-Chloroaniline	< 500 ug/kg	1/24/00	8270
Hexachlorobutadiene	< 250 ug/kg	1/24/00	8270
4-Chloro-3-Methylphenol	< 500 ug/kg	1/24/00	8270
2-Methylnaphthalene	< 250 ug/kg	1/24/00	8270
Hexachlorocyclopentadiene	< 250 ug/kg	1/24/00	8270

Analysis Performed	Results	Analyzed	Method
2,4,6-Trichlorophenol	< 500	ug/kg	1/24/00 8270
2,4,5-Trichlorophenol	< 250	ug/kg	1/24/00 8270
2-Chloronaphthalene	< 500	ug/kg	1/24/00 8270
2-Nitroaniline	< 500	ug/kg	1/24/00 8270
Dimethylphthalate	< 250	ug/kg	1/24/00 8270
Acenaphthylene	< 250	ug/kg	1/24/00 8270
2,6-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
3-Nitroaniline	< 500	ug/kg	1/24/00 8270
Acenaphthene	< 250	ug/kg	1/24/00 8270
2,4-Dinitrophenol	< 750	ug/kg	1/24/00 8270
4-Nitrophenol	< 500	ug/kg	1/24/00 8270
Dibenzofuran	< 250	ug/kg	1/24/00 8270
2,4-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
Diethylphthalate	< 250	ug/kg	1/24/00 8270
4-Chlorophenyl-phenylethane	< 250	ug/kg	1/24/00 8270
Fluorene	< 250	ug/kg	1/24/00 8270
4-Nitroaniline	< 500	ug/kg	1/24/00 8270
4,6-Dinitro-2-Methylpheno	< 500	ug/kg	1/24/00 8270
N-Nitrosodiphenylamine	< 250	ug/kg	1/24/00 8270
4-Bromophenyl-phenylether	< 250	ug/kg	1/24/00 8270
Hexachlorobenzene	< 250	ug/kg	1/24/00 8270
Pentachlorophenol	< 500	ug/kg	1/24/00 8270
Phenantrhene	< 250	ug/kg	1/24/00 8270
Anthracene	< 250	ug/kg	1/24/00 8270
Di-n-Butylphthalate	< 500	ug/kg	1/24/00 8270
Fluoranthene	380	ug/kg	1/24/00 8270
Pyrene	850	ug/kg	1/24/00 8270
Butylbenzylphthalate	630	ug/kg	1/24/00 8270
3-3'-Dichlorobenzidine	< 500	ug/kg	1/24/00 8270
Benzo(a)anthracene	< 250	ug/kg	1/24/00 8270
Chrysene	350	ug/kg	1/24/00 8270
bis(2-ethylhexyl)phthalate	970	ug/kg	1/24/00 8270
Di-n-Octylphthalate	< 1,000	ug/kg	1/24/00 8270
Benzo(b)fluoranthene	< 250	ug/kg	1/24/00 8270
Benzo(k)fluoranthene	320	ug/kg	1/24/00 8270
Benzo(a)pyrene	620	ug/kg	1/24/00 8270
Indeno(1,2,3-cd)pyrene	< 250	ug/kg	1/24/00 8270
Dibenz(a,h)anthracene	< 250	ug/kg	1/24/00 8270
Benzo(g,h,i)perylene	< 250	ug/kg	1/24/00 8270

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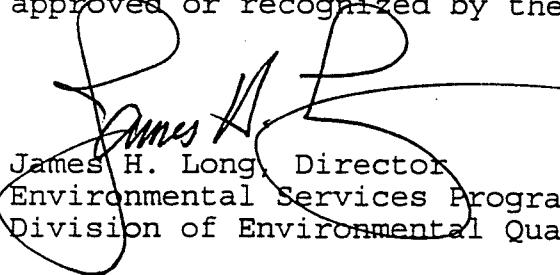
Lab Number: 00-D85

Sample Number: 0002008

February 8, 2000

Metals results are reported on a dry weight basis

The analysis of this sample was performed in accordance with procedures approved or recognized by the U.S. Environmental Protection Agency.


James H. Long, Director
Environmental Services Program
Division of Environmental Quality

c: VALERIE WILDER, HWP

LEEDS002625



Mel Carnahan, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

ENVIRONMENTAL SERVICES PROGRAM

RESULTS OF SAMPLE ANALYSES

Sample Number: 0002005
Lab Number: 00-D83

Reported To: HANNAH MARTIN
Affiliation: HWP
Project Code: 4071/9234

Report Date: 2/ 8/00
Date Collected: 1/17/00
Date Received: 1/18/00

Sample Collected by: HANNAH MARTIN, HWP
Sampling Location: GM LEEDS, SOIL GRAB
Sample Description: FROM SW CORNER OF EXCAVATION
County: JACKSON

Analysis Performed	Results	Analyzed	Method
Silver, Total	< 2,000	ug/kg	1/19/00 200.7
Arsenic, Total	9,840	ug/kg	1/20/00 206.2
Barium, Total	446,000	ug/kg	1/19/00 200.7
Cadmium, Total	1,540	ug/kg	1/19/00 200.7
Chromium, Total	50,300	ug/kg	1/19/00 200.7
Mercury, Total	45.3	ug/kg	1/26/00 245.1
Lead, Total	14,300	ug/kg	1/19/00 239.2
Selenium, Total	< 2,000	ug/kg	1/20/00 270.2
Barium, TCLP	1.32	ppm	1/27/00 200.7
VOA Results:			
Chloromethane	< 100	ug/kg	1/18/00 8260
Vinyl Chloride	< 10.0	ug/kg	1/18/00 8260
Bromomethane	< 25.0	ug/kg	1/18/00 8260
Chloroethane	< 25.0	ug/kg	1/18/00 8260
1,1-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Acetone	< 100	ug/kg	1/18/00 8260
Carbon Disulfide	< 5.0	ug/kg	1/18/00 8260
Methylene Chloride	< 100	ug/kg	1/18/00 8260
Methyl Tertiary Butyl Eth	< 10.0	ug/kg	1/18/00 8260
trans-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
2-Butanone	< 25.0	ug/kg	1/18/00 8260
cis-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Chloroform	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
1,1,1-Trichloroethane	< 5.0 ug/kg	1/18/00	8260
Carbon Tetrachloride	< 5.0 ug/kg	1/18/00	8260
Benzene	< 5.0 ug/kg	1/18/00	8260
1,2-Dichloroethane	< 5.0 ug/kg	1/18/00	8260
Trichloroethene	< 5.0 ug/kg	1/18/00	8260
1,2-Dichloropropane	< 5.0 ug/kg	1/18/00	8260
Bromodichloromethane	< 5.0 ug/kg	1/18/00	8260
2-Hexanone	< 10.0 ug/kg	1/18/00	8260
Trans-1,3-Dichloropropene	< 5.0 ug/kg	1/18/00	8260
Toluene	< 5.0 ug/kg	1/18/00	8260
CIS-1,3-Dichloropropene	< 5.0 ug/kg	1/18/00	8260
1,1,2-Trichloroethane	< 5.0 ug/kg	1/18/00	8260
4-Methyl-2-Pentanone	< 5.0 ug/kg	1/18/00	8260
Tetrachloroethene	< 5.0 ug/kg	1/18/00	8260
Dibromochloromethane	< 5.0 ug/kg	1/18/00	8260
Chlorobenzene	< 5.0 ug/kg	1/18/00	8260
Ethylbenzene	< 5.0 ug/kg	1/18/00	8260
Total Xylenes	< 2.0 ug/kg	1/18/00	8260
Styrene	< 5.0 ug/kg	1/18/00	8260
Bromoform	< 5.0 ug/kg	1/18/00	8260
1,1,2,2-Tetrachloroethane	< 5.0 ug/kg	1/18/00	8260
1,3-Dichlorobenzene	< 5.0 ug/kg	1/18/00	8260
1,4-Dichlorobenzene	< 5.0 ug/kg	1/18/00	8260
1,2-Dichlorobenzene	< 5.0 ug/kg	1/18/00	8260
Diethyl Ether	< 100 ug/kg	1/18/00	8260
Iodomethane	< 25.0 ug/kg	1/18/00	8260
Acrylonitrile	< 10.0 ug/kg	1/18/00	8260
Allyl Chloride	< 5.0 ug/kg	1/18/00	8260
Propionitrile	< 100 ug/kg	1/18/00	8260
Methacrylonitrile	< 5.0 ug/kg	1/18/00	8260
Methyl Acrylate	< 50.0 ug/kg	1/18/00	8260
Tetrahydrofuran	< 25.0 ug/kg	1/18/00	8260
1-Chlorobutane	< 5.0 ug/kg	1/18/00	8260
Chloroacetonitrile	< 10.0 ug/kg	1/18/00	8260
2-Nitropropane	< 5.0 ug/kg	1/18/00	8260
Methylmethacrylate	< 5.0 ug/kg	1/18/00	8260
1,1-Dichloropropanone	< 10.0 ug/kg	1/18/00	8260
Ethyl Methacrylate	< 5.0 ug/kg	1/18/00	8260
t-1,4-Dichloro-2-butene	< 5.0 ug/kg	1/18/00	8260
Pentachloroethane	< 5.0 ug/kg	1/18/00	8260
Hexachloroethane	< 5.0 ug/kg	1/18/00	8260
Nitrobenzene	< 50.0 ug/kg	1/18/00	8260
Dichlorodifluoromethane	< 5.0 ug/kg	1/18/00	8260
Trichlorofluoromethane	< 25.0 ug/kg	1/18/00	8260
2,2-Dichloropropane	< 5.0 ug/kg	1/18/00	8260
Bromochloromethane	< 5.0 ug/kg	1/18/00	8260
1,1-Dichloropropene	< 5.0 ug/kg	1/18/00	8260

Analysis Performed	Results	Analyzed	Method
Dibromomethane	< 5.0	ug/kg	1/18/00 8260
1,3-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
1,2-Dibromoethane	< 5.0	ug/kg	1/18/00 8260
1,1,1,2-Tetrachloroethane	< 5.0	ug/kg	1/18/00 8260
Isopropylbenzene	6.1	ug/kg	1/18/00 8260
1,2,3-Trichloropropane	< 5.0	ug/kg	1/18/00 8260
n-Propylbenzene	26.6	ug/kg	1/18/00 8260
Bromobenzene	< 5.0	ug/kg	1/18/00 8260
2-Chlorotoluene	< 5.0	ug/kg	1/18/00 8260
4-Chlorotoluene	< 5.0	ug/kg	1/18/00 8260
1,3,5-Trimethylbenzene	7.2	ug/kg	1/18/00 8260
tert-Butylbenzene	< 10.0	ug/kg	1/18/00 8260
1,2,4-Trimethylbenzene	59.5	ug/kg	1/18/00 8260
sec-Butylbenzene	13.7	ug/kg	1/18/00 8260
p-isopropyltoluene	< 5.0	ug/kg	1/18/00 8260
n-Butylbenzene	24.8	ug/kg	1/18/00 8260
1,2-Dibromo-3-Chloroprop	< 5.0	ug/kg	1/18/00 8260
1,2,4-Trichlorobenzene	< 5.0	ug/kg	1/18/00 8260
Hexachlorobutadiene	< 10.0	ug/kg	1/18/00 8260
Naphthalene	11.4	ug/kg	1/18/00 8260
1,2,3-Trichlorobenzene	< 10.0	ug/kg	1/18/00 8260
BNA Results:			
Phenol	< 250	ug/kg	1/24/00 8270
bis(-2-Chloroethyl) Ether	< 250	ug/kg	1/24/00 8270
2-Chlorophenol	< 500	ug/kg	1/24/00 8270
1,3-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
1,4-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
N-nitrosodimethylamine	< 250	ug/kg	1/24/00 8270
1,2-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
2-Methylphenol	< 250	ug/kg	1/24/00 8270
bis(2-Chloroisopropyl) Eth	< 250	ug/kg	1/24/00 8270
4-Methylphenol	< 250	ug/kg	1/24/00 8270
N-Nitro-Di-n-Propylamine	< 250	ug/kg	1/24/00 8270
Hexachloroethane	< 250	ug/kg	1/24/00 8270
Nitrobenzene	< 250	ug/kg	1/24/00 8270
Isophorone	< 250	ug/kg	1/24/00 8270
2-Nitrophenol	< 500	ug/kg	1/24/00 8270
2,4-Dimethylphenol	< 250	ug/kg	1/24/00 8270
Benzoic Acid	< 250	ug/kg	1/24/00 8270
bis(2-Chloroethoxy) Methan	< 250	ug/kg	1/24/00 8270
2,4-Dichlorophenol	< 250	ug/kg	1/24/00 8270
1,2,4-Trichlorobenzene	< 250	ug/kg	1/24/00 8270
Naphthalene	< 250	ug/kg	1/24/00 8270
4-Chloroaniline	< 500	ug/kg	1/24/00 8270
Hexachlorobutadiene	< 250	ug/kg	1/24/00 8270
4-Chloro-3-Methylphenol	< 500	ug/kg	1/24/00 8270
2-Methylnaphthalene	280	ug/kg	1/24/00 8270

Analysis Performed	Results	Analyzed	Method
Hexachlorocyclopentadiene	< 250	ug/kg	1/24/00 8270
2,4,6-Trichlorophenol	< 500	ug/kg	1/24/00 8270
2,4,5-Trichlorophenol	< 250	ug/kg	1/24/00 8270
2-Chloronaphthalene	< 500	ug/kg	1/24/00 8270
2-Nitroaniline	< 500	ug/kg	1/24/00 8270
Dimethylphthalate	< 250	ug/kg	1/24/00 8270
Acenaphthylene	< 250	ug/kg	1/24/00 8270
2,6-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
3-Nitroaniline	< 500	ug/kg	1/24/00 8270
Acenaphthene	< 250	ug/kg	1/24/00 8270
2,4-Dinitrophenol	< 750	ug/kg	1/24/00 8270
4-Nitrophenol	< 500	ug/kg	1/24/00 8270
Dibenzofuran	< 250	ug/kg	1/24/00 8270
2,4-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
Diethylphthalate	< 250	ug/kg	1/24/00 8270
4-Chlorophenyl-phenylethane	< 250	ug/kg	1/24/00 8270
Fluorene	< 250	ug/kg	1/24/00 8270
4-Nitroaniline	< 500	ug/kg	1/24/00 8270
4,6-Dinitro-2-Methylpheno	< 500	ug/kg	1/24/00 8270
N-Nitrosodiphenylamine	< 250	ug/kg	1/24/00 8270
4-Bromophenyl-phenylether	< 250	ug/kg	1/24/00 8270
Hexachlorobenzene	< 250	ug/kg	1/24/00 8270
Pentachlorophenol	< 500	ug/kg	1/24/00 8270
Phenanthrene	< 250	ug/kg	1/24/00 8270
Anthracene	< 250	ug/kg	1/24/00 8270
Di-n-Butylphthalate	940	ug/kg	1/24/00 8270
Fluoranthene	< 250	ug/kg	1/24/00 8270
Pyrene	< 500	ug/kg	1/24/00 8270
Butylbenzylphthalate	400	ug/kg	1/24/00 8270
3,3'-Dichlorobenzidine	< 500	ug/kg	1/24/00 8270
Benzo(a)anthracene	< 250	ug/kg	1/24/00 8270
Chrysene	< 250	ug/kg	1/24/00 8270
bis(2-ethylhexyl)phthalate	1,100	ug/kg	1/24/00 8270
Di-n-Octylphthalate	< 1,000	ug/kg	1/24/00 8270
Benzo(b)fluoranthene	< 250	ug/kg	1/24/00 8270
Benzo(k)fluoranthene	< 250	ug/kg	1/24/00 8270
Benzo(a)pyrene	< 250	ug/kg	1/24/00 8270
Indeno(1,2,3-cd)pyrene	< 250	ug/kg	1/24/00 8270
Dibenz(a,h)anthracene	< 250	ug/kg	1/24/00 8270
Benzo(g,h,i)perylene	< 250	ug/kg	1/24/00 8270

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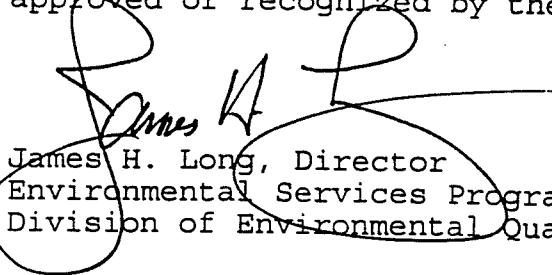
Lab Number: 00-D83

Sample Number: 0002005

February 8, 2000

Metals results are reported on a dry weight basis

The analysis of this sample was performed in accordance with procedures approved or recognized by the U.S. Environmental Protection Agency.


James H. Long, Director
Environmental Services Program
Division of Environmental Quality

c: VALERIE WILDER, HWP

LEEDS002630



Mel Carnahan, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

ENVIRONMENTAL SERVICES PROGRAM

RESULTS OF SAMPLE ANALYSES

Sample Number: 0002007
Lab Number: 00-D82

Reported To: HANNAH MARTIN
Affiliation: HWP
Project Code: 4071/9234

Report Date: 2/ 8/00
Date Collected: 1/17/00
Date Received: 1/18/00

Sample Collected by: HANNAH MARTIN, HWP
Sampling Location: GM LEEDS, SOIL GRAB
Sample Description: FROM NE CORNER OF EXCAVATION
County: JACKSON

Analysis Performed	Results	Analyzed	Method
Silver, Total	2,240	ug/kg	1/19/00 200.7
Arsenic, Total	7,730	ug/kg	1/20/00 206.2
Barium, Total	355,000	ug/kg	1/19/00 200.7
Cadmium, Total	1,830	ug/kg	1/19/00 200.7
Chromium, Total	55,400	ug/kg	1/19/00 200.7
Mercury, Total	47.4	ug/kg	1/26/00 245.1
Lead, Total	56,300	ug/kg	1/19/00 239.2
Selenium, Total	< 2,000	ug/kg	1/20/00 270.2
Barium, TCLP	2.67	ppm	1/27/00 200.7
VOA Results:			
Chloromethane	< 100	ug/kg	1/18/00 8260
Vinyl Chloride	< 10.0	ug/kg	1/18/00 8260
Bromomethane	< 25.0	ug/kg	1/18/00 8260
Chloroethane	< 25.0	ug/kg	1/18/00 8260
1,1-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Acetone	< 100	ug/kg	1/18/00 8260
Carbon Disulfide	< 5.0	ug/kg	1/18/00 8260
Methylene Chloride	< 100	ug/kg	1/18/00 8260
Methyl Tertiary Butyl Eth	< 10.0	ug/kg	1/18/00 8260
trans-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
2-Butanone	40.5	ug/kg	1/18/00 8260
cis-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Chloroform	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
1,1,1-Trichloroethane	< 5.0	ug/kg	1/18/00 8260
Carbon Tetrachloride	< 5.0	ug/kg	1/18/00 8260
Benzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
Trichloroethene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
Bromodichloromethane	< 5.0	ug/kg	1/18/00 8260
2-Hexanone	< 10.0	ug/kg	1/18/00 8260
Trans-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
Toluene	< 5.0	ug/kg	1/18/00 8260
CIS-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
1,1,2-Trichloroethane	< 5.0	ug/kg	1/18/00 8260
4-Methyl-2-Pentanone	6.7	ug/kg	1/18/00 8260
Tetrachloroethene	< 5.0	ug/kg	1/18/00 8260
Dibromochloromethane	< 5.0	ug/kg	1/18/00 8260
Chlorobenzene	< 5.0	ug/kg	1/18/00 8260
Ethylbenzene	< 5.0	ug/kg	1/18/00 8260
Total Xylenes	< 2.0	ug/kg	1/18/00 8260
Styrene	< 5.0	ug/kg	1/18/00 8260
Bromoform	< 5.0	ug/kg	1/18/00 8260
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	1/18/00 8260
1,3-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,4-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
Diethyl Ether	< 100	ug/kg	1/18/00 8260
Iodomethane	< 25.0	ug/kg	1/18/00 8260
Acrylonitrile	< 10.0	ug/kg	1/18/00 8260
Allyl Chloride	< 5.0	ug/kg	1/18/00 8260
Propionitrile	< 100	ug/kg	1/18/00 8260
Methacrylonitrile	< 5.0	ug/kg	1/18/00 8260
Methyl Acrylate	< 50.0	ug/kg	1/18/00 8260
Tetrahydrofuran	< 25.0	ug/kg	1/18/00 8260
1-Chlorobutane	< 5.0	ug/kg	1/18/00 8260
Chloroacetonitrile	< 10.0	ug/kg	1/18/00 8260
2-Nitropropane	< 5.0	ug/kg	1/18/00 8260
Methylmethacrylate	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropanone	< 10.0	ug/kg	1/18/00 8260
Ethyl Methacrylate	< 5.0	ug/kg	1/18/00 8260
t-1,4-Dichloro-2-butene	< 5.0	ug/kg	1/18/00 8260
Pentachloroethane	< 5.0	ug/kg	1/18/00 8260
Hexachloroethane	< 5.0	ug/kg	1/18/00 8260
Nitrobenzene	< 50.0	ug/kg	1/18/00 8260
Dichlorodifluoromethane	< 5.0	ug/kg	1/18/00 8260
Trichlorofluoromethane	< 25.0	ug/kg	1/18/00 8260
2,2-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
Bromochloromethane	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropene	< 5.0	ug/kg	1/18/00 8260

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 Lab Number: 00-D82
 Sample Number: 0002007
 February 8, 2000

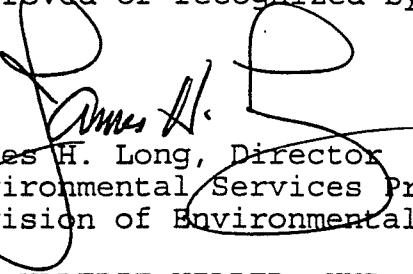
Analysis Performed	Results	Analyzed	Method
Dibromomethane	< 5.0	ug/kg	1/18/00 8260
1,3-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
1,2-Dibromoethane	< 5.0	ug/kg	1/18/00 8260
1,1,1,2-Tetrachloroethane	< 5.0	ug/kg	1/18/00 8260
Isopropylbenzene	< 5.0	ug/kg	1/18/00 8260
1,2,3-Trichloropropane	< 5.0	ug/kg	1/18/00 8260
n-Propylbenzene	< 5.0	ug/kg	1/18/00 8260
Bromobenzene	< 5.0	ug/kg	1/18/00 8260
2-Chlorotoluene	< 5.0	ug/kg	1/18/00 8260
4-Chlorotoluene	< 5.0	ug/kg	1/18/00 8260
1,3,5-Trimethylbenzene	< 5.0	ug/kg	1/18/00 8260
tert-Butylbenzene	< 10.0	ug/kg	1/18/00 8260
1,2,4-Trimethylbenzene	< 5.0	ug/kg	1/18/00 8260
sec-Butylbenzene	< 5.0	ug/kg	1/18/00 8260
p-isopropyltoluene	< 5.0	ug/kg	1/18/00 8260
n-Butylbenzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dibromo-3-Chloroprop	< 5.0	ug/kg	1/18/00 8260
1,2,4-Trichlorobenzene	< 5.0	ug/kg	1/18/00 8260
Hexachlorobutadiene	< 10.0	ug/kg	1/18/00 8260
Naphthalene	6.1	ug/kg	1/18/00 8260
1,2,3-Trichlorobenzene	< 10.0	ug/kg	1/18/00 8260
BNA Results:			
Phenol	< 250	ug/kg	1/24/00 8270
bis(-2-Chloroethyl) Ether	< 250	ug/kg	1/24/00 8270
2-Chlorophenol	< 500	ug/kg	1/24/00 8270
1,3-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
1,4-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
N-nitrosodimethylamine	< 250	ug/kg	1/24/00 8270
1,2-Dichlorobenzene	< 250	ug/kg	1/24/00 8270
2-Methylphenol	< 250	ug/kg	1/24/00 8270
bis(2-Chloroisopropyl) Eth	< 250	ug/kg	1/24/00 8270
4-Methylphenol	< 250	ug/kg	1/24/00 8270
N-Nitro-Di-n-Propylamine	< 250	ug/kg	1/24/00 8270
Hexachloroethane	< 250	ug/kg	1/24/00 8270
Nitrobenzene	< 250	ug/kg	1/24/00 8270
Isophorone	< 250	ug/kg	1/24/00 8270
2-Nitrophenol	< 500	ug/kg	1/24/00 8270
2,4-Dimethylphenol	< 250	ug/kg	1/24/00 8270
Benzoic Acid	< 250	ug/kg	1/24/00 8270
bis(2-Chloroethoxy) Methan	< 250	ug/kg	1/24/00 8270
2,4-Dichlorophenol	< 250	ug/kg	1/24/00 8270
1,2,4-Trichlorobenzene	< 250	ug/kg	1/24/00 8270
Naphthalene	< 250	ug/kg	1/24/00 8270
4-Chloroaniline	< 500	ug/kg	1/24/00 8270
Hexachlorobutadiene	< 250	ug/kg	1/24/00 8270
4-Chloro-3-Methylphenol	< 500	ug/kg	1/24/00 8270
2-Methylnaphthalene	670	ug/kg	1/24/00 8270

Analysis Performed	Results	Analyzed	Method
Hexachlorocyclopentadiene	< 250	ug/kg	1/24/00 8270
2,4,6-Trichlorophenol	< 500	ug/kg	1/24/00 8270
2,4,5-Trichlorophenol	< 250	ug/kg	1/24/00 8270
2-Chloronaphthalene	< 500	ug/kg	1/24/00 8270
2-Nitroaniline	< 500	ug/kg	1/24/00 8270
Dimethylphthalate	< 250	ug/kg	1/24/00 8270
Acenaphthylene	< 250	ug/kg	1/24/00 8270
2,6-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
3-Nitroaniline	< 500	ug/kg	1/24/00 8270
Acenaphthene	< 250	ug/kg	1/24/00 8270
2,4-Dinitrophenol	< 750	ug/kg	1/24/00 8270
4-Nitrophenol	< 500	ug/kg	1/24/00 8270
Dibenzofuran	270	ug/kg	1/24/00 8270
2,4-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
Diethylphthalate	< 250	ug/kg	1/24/00 8270
4-Chlorophenyl-phenylethe	< 250	ug/kg	1/24/00 8270
Fluorene	< 250	ug/kg	1/24/00 8270
4-Nitroaniline	< 500	ug/kg	1/24/00 8270
4,6-Dinitro-2-Methylpheno	< 500	ug/kg	1/24/00 8270
N-Nitrosodiphenylamine	< 250	ug/kg	1/24/00 8270
4-Bromophenyl-phenylether	< 250	ug/kg	1/24/00 8270
Hexachlorobenzene	< 250	ug/kg	1/24/00 8270
Pentachlorophenol	< 250	ug/kg	1/24/00 8270
Phenanthrene	< 500	ug/kg	1/24/00 8270
Anthracene	460	ug/kg	1/24/00 8270
350	ug/kg	1/24/00 8270	
Di-n-Butylphthalate	< 500	ug/kg	1/24/00 8270
Fluoranthene	440	ug/kg	1/24/00 8270
Pyrene	630	ug/kg	1/24/00 8270
Butylbenzylphthalate	1,100	ug/kg	1/24/00 8270
3-3'-Dichlorobenzidine	< 500	ug/kg	1/24/00 8270
Benzo(a)anthracene	< 250	ug/kg	1/24/00 8270
Chrysene	460	ug/kg	1/24/00 8270
bis(2-ethylhexyl)phthalat	530	ug/kg	1/24/00 8270
Di-n-Octylphthalate	< 1,000	ug/kg	1/24/00 8270
Benzo(b)fluoranthene	400	ug/kg	1/24/00 8270
Benzo(k)fluoranthene	380	ug/kg	1/24/00 8270
Benzo(a)pyrene	660	ug/kg	1/24/00 8270
Indeno(1,2,3-cd)pyrene	270	ug/kg	1/24/00 8270
Dibenz(a,h)anthracene	< 250	ug/kg	1/24/00 8270
Benzo(g,h,i)perylene	290	ug/kg	1/24/00 8270

Page 5
Lab Number: 00-D82
Sample Number: 0002007
February 8, 2000

Metals results are reported on a dry weight basis

The analysis of this sample was performed in accordance with procedures approved or recognized by the U.S. Environmental Protection Agency.


James H. Long, Director
Environmental Services Program
Division of Environmental Quality

c: VALERIE WILDER, HWP

LEEDS002635



Mel Carnahan, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

ENVIRONMENTAL SERVICES PROGRAM

RESULTS OF SAMPLE ANALYSES

Sample Number: 0002004
Lab Number: 00-D81

Reported To: HANNAH MARTIN
Affiliation: HWP
Project Code: 4071/9234

Report Date: 2/ 8/00
Date Collected: 1/17/00
Date Received: 1/18/00

Sample Collected by: HANNAH MARTIN, HWP
Sampling Location: GM LEEDS, SOIL GRAB
Sample Description: FROM NW CORNER OF EXCAVATION
County: JACKSON

Analysis Performed	Results	Analyzed	Method
Silver, Total	2,230	ug/kg	1/19/00 200.7
Arsenic, Total	8,910	ug/kg	1/20/00 206.2
Barium, Total	315,000	ug/kg	1/19/00 200.7
Cadmium, Total	1,430	ug/kg	1/19/00 200.7
Chromium, Total	51,900	ug/kg	1/19/00 200.7
Mercury, Total	< 40.0	ug/kg	1/26/00 245.1
Lead, Total	35,800	ug/kg	1/19/00 239.2
Selenium, Total	< 2,000	ug/kg	1/20/00 270.2
VOA Results:			
Chloromethane	< 100	ug/kg	1/18/00 8260
Vinyl Chloride	< 10.0	ug/kg	1/18/00 8260
Bromomethane	< 25.0	ug/kg	1/18/00 8260
Chloroethane	< 25.0	ug/kg	1/18/00 8260
1,1-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Acetone	< 100	ug/kg	1/18/00 8260
Carbon Disulfide	< 5.0	ug/kg	1/18/00 8260
Methylene Chloride	< 100	ug/kg	1/18/00 8260
Methyl Tertiary Butyl Eth	< 10.0	ug/kg	1/18/00 8260
trans-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
2-Butanone	< 25.0	ug/kg	1/18/00 8260
cis-1,2-Dichloroethene	< 5.0	ug/kg	1/18/00 8260
Chloroform	< 5.0	ug/kg	1/18/00 8260
1,1,1-Trichloroethane	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
Carbon Tetrachloride	< 5.0	ug/kg	1/18/00 8260
Benzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloroethane	< 5.0	ug/kg	1/18/00 8260
Trichloroethene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
Bromodichloromethane	< 5.0	ug/kg	1/18/00 8260
2-Hexanone	< 10.0	ug/kg	1/18/00 8260
Trans-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
Toluene	< 5.0	ug/kg	1/18/00 8260
CIS-1,3-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
1,1,2-Trichloroethane	< 5.0	ug/kg	1/18/00 8260
4-Methyl-2-Pentanone	< 5.0	ug/kg	1/18/00 8260
Tetrachloroethene	< 5.0	ug/kg	1/18/00 8260
Dibromochloromethane	< 5.0	ug/kg	1/18/00 8260
Chlorobenzene	< 5.0	ug/kg	1/18/00 8260
Ethylbenzene	< 5.0	ug/kg	1/18/00 8260
Total Xylenes	< 2.0	ug/kg	1/18/00 8260
Styrene	< 5.0	ug/kg	1/18/00 8260
Bromoform	< 5.0	ug/kg	1/18/00 8260
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	1/18/00 8260
1,3-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,4-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
1,2-Dichlorobenzene	< 5.0	ug/kg	1/18/00 8260
Diethyl Ether	< 100	ug/kg	1/18/00 8260
Iodomethane	< 25.0	ug/kg	1/18/00 8260
Acrylonitrile	< 10.0	ug/kg	1/18/00 8260
Allyl Chloride	< 5.0	ug/kg	1/18/00 8260
Propionitrile	< 100	ug/kg	1/18/00 8260
Methacrylonitrile	< 5.0	ug/kg	1/18/00 8260
Methyl Acrylate	< 50.0	ug/kg	1/18/00 8260
Tetrahydrofuran	< 25.0	ug/kg	1/18/00 8260
1-Chlorobutane	< 5.0	ug/kg	1/18/00 8260
Chloroacetonitrile	< 10.0	ug/kg	1/18/00 8260
2-Nitropropane	< 5.0	ug/kg	1/18/00 8260
Methylmethacrylate	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropanone	< 10.0	ug/kg	1/18/00 8260
Ethyl Methacrylate	< 5.0	ug/kg	1/18/00 8260
t-1,4-Dichloro-2-butene	< 5.0	ug/kg	1/18/00 8260
Pentachloroethane	< 5.0	ug/kg	1/18/00 8260
Hexachloroethane	< 5.0	ug/kg	1/18/00 8260
Nitrobenzene	< 50.0	ug/kg	1/18/00 8260
Dichlorodifluoromethane	< 5.0	ug/kg	1/18/00 8260
Trichlorofluoromethane	< 25.0	ug/kg	1/18/00 8260
2,2-Dichloropropane	< 5.0	ug/kg	1/18/00 8260
Bromochloromethane	< 5.0	ug/kg	1/18/00 8260
1,1-Dichloropropene	< 5.0	ug/kg	1/18/00 8260
Dibromomethane	< 5.0	ug/kg	1/18/00 8260

Analysis Performed	Results	Analyzed	Method
1,3-Dichloropropane	< 5.0 ug/kg	1/18/00	8260
1,2-Dibromoethane	< 5.0 ug/kg	1/18/00	8260
1,1,1,2-Tetrachloroethane	< 5.0 ug/kg	1/18/00	8260
Isopropylbenzene	< 5.0 ug/kg	1/18/00	8260
1,2,3-Trichloropropane	< 5.0 ug/kg	1/18/00	8260
n-Propylbenzene	< 5.0 ug/kg	1/18/00	8260
Bromobenzene	< 5.0 ug/kg	1/18/00	8260
2-Chlorotoluene	< 5.0 ug/kg	1/18/00	8260
4-Chlorotoluene	< 5.0 ug/kg	1/18/00	8260
1,3,5-Trimethylbenzene	< 5.0 ug/kg	1/18/00	8260
tert-Butylbenzene	< 10.0 ug/kg	1/18/00	8260
1,2,4-Trimethylbenzene	< 5.0 ug/kg	1/18/00	8260
sec-Butylbenzene	< 5.0 ug/kg	1/18/00	8260
p-isopropyltoluene	< 5.0 ug/kg	1/18/00	8260
n-Butylbenzene	< 5.0 ug/kg	1/18/00	8260
1,2-Dibromo-3-Chloroprop	< 5.0 ug/kg	1/18/00	8260
1,2,4-Trichlorobenzene	< 5.0 ug/kg	1/18/00	8260
Hexachlorobutadiene	< 10.0 ug/kg	1/18/00	8260
Naphthalene	15.1 ug/kg	1/18/00	8260
1,2,3-Trichlorobenzene	< 10.0 ug/kg	1/18/00	8260
BNA Results:			
Phenol	< 250 ug/kg	1/24/00	8270
bis(-2-Chloroethyl) Ether	< 250 ug/kg	1/24/00	8270
2-Chlorophenol	< 500 ug/kg	1/24/00	8270
1,3-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
1,4-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
N-nitrosodimethylamine	< 250 ug/kg	1/24/00	8270
1,2-Dichlorobenzene	< 250 ug/kg	1/24/00	8270
2-Methylphenol	< 250 ug/kg	1/24/00	8270
bis(2-Chloroisopropyl) Eth	< 250 ug/kg	1/24/00	8270
4-Methylphenol	< 250 ug/kg	1/24/00	8270
N-Nitro-Di-n-Propylamine	< 250 ug/kg	1/24/00	8270
Hexachloroethane	< 250 ug/kg	1/24/00	8270
Nitrobenzene	< 250 ug/kg	1/24/00	8270
Isophorone	< 250 ug/kg	1/24/00	8270
2-Nitrophenol	< 500 ug/kg	1/24/00	8270
2,4-Dimethylphenol	< 250 ug/kg	1/24/00	8270
Benzoic Acid	< 250 ug/kg	1/24/00	8270
bis(2-Chloroethoxy) Methan	< 250 ug/kg	1/24/00	8270
2,4-Dichlorophenol	< 250 ug/kg	1/24/00	8270
1,2,4-Trichlorobenzene	< 250 ug/kg	1/24/00	8270
Naphthalene	< 250 ug/kg	1/24/00	8270
4-Chloroaniline	< 500 ug/kg	1/24/00	8270
Hexachlorobutadiene	< 250 ug/kg	1/24/00	8270
4-Chloro-3-Methylphenol	< 500 ug/kg	1/24/00	8270
2-Methylnaphthalene	< 250 ug/kg	1/24/00	8270
Hexachlorocyclopentadiene	< 250 ug/kg	1/24/00	8270

LEEDS002638

Page 4
Lab Number: 00-D81
Sample Number: 0002004
February 8, 2000

Analysis Performed	Results	Analyzed	Method
2,4,6-Trichlorophenol	< 500	ug/kg	1/24/00 8270
2,4,5-Trichlorophenol	< 250	ug/kg	1/24/00 8270
2-Chloronaphthalene	< 500	ug/kg	1/24/00 8270
2-Nitroaniline	< 500	ug/kg	1/24/00 8270
Dimethylphthalate	< 250	ug/kg	1/24/00 8270
Acenaphthylene	< 250	ug/kg	1/24/00 8270
2,6-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
3-Nitroaniline	< 500	ug/kg	1/24/00 8270
Acenaphthene	< 250	ug/kg	1/24/00 8270
2,4-Dinitrophenol	< 750	ug/kg	1/24/00 8270
4-Nitrophenol	< 500	ug/kg	1/24/00 8270
Dibenzofuran	< 250	ug/kg	1/24/00 8270
2,4-Dinitrotoluene	< 250	ug/kg	1/24/00 8270
Diethylphthalate	< 250	ug/kg	1/24/00 8270
4-Chlorophenyl-phenylethe	< 250	ug/kg	1/24/00 8270
Fluorene	< 250	ug/kg	1/24/00 8270
4-Nitroaniline	< 500	ug/kg	1/24/00 8270
4,6-Dinitro-2-Methylpheno	< 500	ug/kg	1/24/00 8270
N-Nitrosodiphenylamine	< 250	ug/kg	1/24/00 8270
4-Bromophenyl-phenylether	< 250	ug/kg	1/24/00 8270
Hexachlorobenzene	< 250	ug/kg	1/24/00 8270
Pentachlorophenol	< 500	ug/kg	1/24/00 8270
Phenanthrrene	< 250	ug/kg	1/24/00 8270
Anthracene	< 250	ug/kg	1/24/00 8270
Di-n-Butylphthalate	< 500	ug/kg	1/24/00 8270
Fluoranthene	< 250	ug/kg	1/24/00 8270
Pyrene	< 500	ug/kg	1/24/00 8270
Butylbenzylphthalate	< 250	ug/kg	1/24/00 8270
3,3'-Dichlorobenzidine	< 500	ug/kg	1/24/00 8270
Benzo(a)anthracene	< 250	ug/kg	1/24/00 8270
Chrysene	< 250	ug/kg	1/24/00 8270
bis(2-ethylhexyl)phthalat	< 500	ug/kg	1/24/00 8270
Di-n-Octylphthalate	< 1,000	ug/kg	1/24/00 8270
Benzo(b)fluoranthene	< 250	ug/kg	1/24/00 8270
Benzo(k)fluoranthene	< 250	ug/kg	1/24/00 8270
Benzo(a)pyrene	< 250	ug/kg	1/24/00 8270
Indeno(1,2,3-cd)pyrene	< 250	ug/kg	1/24/00 8270
Dibenz(a,h)anthracene	< 250	ug/kg	1/24/00 8270
Benzo(g,h,i)perylene	< 250	ug/kg	1/24/00 8270

LEEDS002639

Page 5

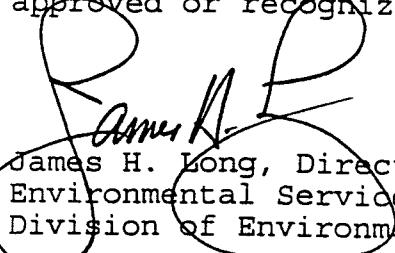
Lab Number: 00-D81

Sample Number: 0002004

February 8, 2000

Metals results are reported on a dry weight basis

The analysis of this sample was performed in accordance with procedures approved or recognized by the U.S. Environmental Protection Agency.


James H. Long, Director
Environmental Services Program
Division of Environmental Quality

C: VALERIE WILDER, HWP

LEEDS002640

APPENDIX D
Geotechnical Reports

Date: May 1, 2000



Double Check Company, Inc.
400 Raytown Road
Kansas City, MO 64129

13910 West 96th Terrace
Lenexa, Kansas 66215
(913) 492-7777 Fax: (913) 492-7443

Attention: Mr. Greg Gill

Re: GM Lees Plant Tank Removal

Job No.: 02001134.001

Gentlemen:

We are transmitting herewith
 under separate cover copies of the

- Field Data Laboratory Data Report
Regarding:
 Compacted Fills Boring Logs
 Footings Location Diagram
 Drilled Piers Soil Samples
 Piles Rock Core Samples
 Concrete Construction Material
 Asphalt Samples
 Roofing Moisture-Density
 Aggregate Consolidation
 Non-destructive Testing Triaxial Compression
of Steel Permeability
 Non-destructive Testing Field Boring Logs
of Concrete
 Grain Size Analysis

- Geologic Report of:
 Seismic Survey
 Resistivity Survey
 Site Rock Conditions
 Aggregate Development
 General Information
 Technical Expertise
 Resumes
 Other
 Report will follow under
separate cover

On-site observation services were provided Full time Part time

We have not been asked to interpret the data or make design and/or construction recommendations based on the data, and cannot assume responsibility or liability for interpretation of this data by others.

Remarks:

The reported percent compaction is based on the attached standard Proctor data (performed by Terracon on 4/22/98) as directed by Double Check. The Proctor is reportedly for a sample from the same borrow source utilized by Double Check on this project.

Yours truly,

Terracon

Darryl S. Basham, P.E.

Arizona ■ Arkansas ■ Colorado ■ Georgia ■ Idaho ■ Illinois ■ Iowa ■ Kansas ■ Kentucky ■ Minnesota ■ Missouri ■ Montana
Nebraska ■ Nevada ■ New Mexico ■ Oklahoma ■ Tennessee ■ Texas ■ Utah ■ Wisconsin ■ Wyoming

Quality Engineering Since 1965

LEEDS002642

913-492-7443

DOD WEISKE

Terracon**Laboratory Compaction Characteristics of Soil**

14700 West 107th Street
Lenexa, Kansas 66215
913-492-7777

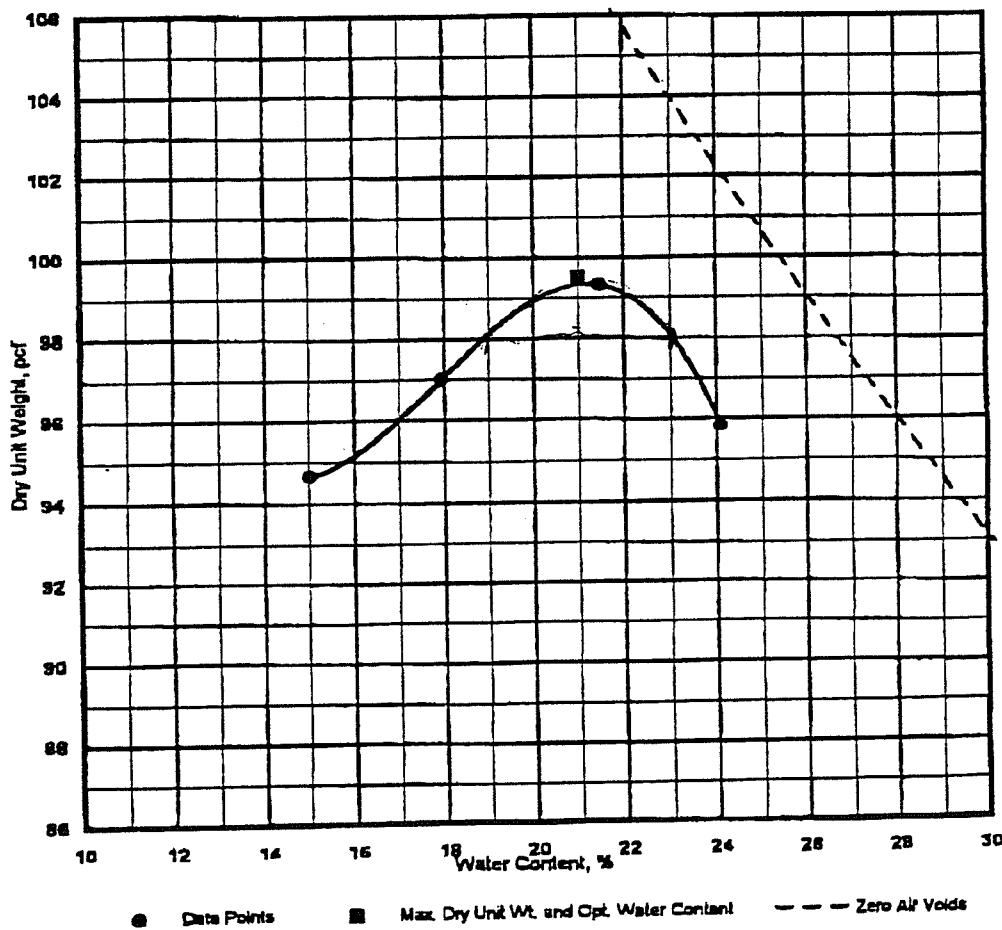
Client Name: _____
 Project Name: **SINCLAIR #24008**
 Location: _____
 Source Material: **OFF SITE**
 Sample Description: **LOESS, LEAN CLAY TR. SAND, LIGHT BROWN**
 Material Designation: **A** Sample date: **4/21/98**
 Test Method: **ASTM D698 (Standard)**
 Test Procedure: **Method B**
 Sample Preparation: **Dry Preparation**
 Rammer: **X Mechanical** **Manual**

Project No.: **50975197** Date: **4/22/98****TEST RESULTS**

Maximum Dry Unit Wt.: **89.5** pcf
 Optimum Water Content: **21.0** %

Liquid Limit: _____ Plastic Limit: _____
 Plasticity Index: _____
 Natural Moisture, %: _____
 % passing # 200 sieve: _____
 Reviewed by: _____

Zero air voids for specific gravity of 2.70



APPENDIX E
Disposal Manifests

RAR.DOC

LEEDS002645

04/05/00

One Mountain

NOTIFICATION OF



WASTE ACCEPTANCE

CUSTOMER INFORMATION

EPA ID#: MOD000822668
GENERAL MOTORS ASSEMBLY DIVISION
6817 STADIUM DR
KANSAS CITY, MO 64129-
CONTACT: FRED RINDHAGE
PHONE: (313) 556-0814

PROF. SHEET #:000036

RECEIVED: 01/21/00

SAMPLE #: LM00-0036 WASTE STREAM #: LM00-0036

WASTE NAME: SOIL & DRUM DEBRIS

INVOICE INFORMATION

REF #: 963825
GENERAL MOTORS-I/C FAC. #751
4475 DORT HIGHWAY
BURTON, MI 48529-
CONTACT: ACCOUNTS PAYABLE
PHONE: (810) 715-2730

Thank you for selecting SKI for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided on the profile sheet number listed above and conditions listed below. Our facility has the necessary permits to allow the storage, treatment, or disposal of this waste. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

Please contact Customer Service at (580) 697-3500 should you have any questions. To schedule a shipment, contact SKI customer service at 1-800-877-2416.

SKI Sales Representative: Inter Company

ACCEPTANCE INFORMATION

The waste identified by the waste stream number above is

Acceptable for: LANDFILL/DISPOSAL

This waste is acceptable for delivery beginning on 04/05/00 thru 04/04/01, at which time an update review may be required for continued acceptability.

Comments:

NONE.

Shipping Requirements:

NON-HAZARDOUS certificate required per 40 CFR 261.4 and/or Part 261 where said waste is not classified a hazardous waste in Subpart C.

Type of Container: BULK

SAFETY-KLEEN

ROUTE 2 BOX 170

WAYNOKA, OK 73860

580/697-3500

FAX 580/697-3596

©

LEEDS002646

04/05/00

PROFILE SHEET #: 000036

SAMPLE #: LM00-0036

WASTE NUMBER #: LM00-0036

WASTE STREAM ANALYSIS INFORMATION

Waste Name.....: SOIL & DRUM DEBRIS
Physical State.....: SOLID
Process Producing Waste...: RECOVERY OF BURIED DRUMS

EPA Waste Codes:
NONE

PREACCEPTANCE SAMPLE RESULTS

COLOR/APPEARANCE	MULTI	PHYSICAL STATE	SOLID
DUST PRESENT	NEG	FREE LIQUIDS%	NEG
RADIOACTIVITY SCREEN	NEG	ODOR	MILD
SPECIFIC GRAVITY (g/	0.712	pH RANGE	6.7
WATER SOLUBILITY	NEG	WATER REACTIVITY	NEG
<u>NORMALITY</u>	NA	OXIDIZER TEST	NEG
TLV SNIFF	<200	FLASH POINT RANGE	NEG
SOLID %	NA	HOC SCREEN	NEG
CN SCREEN	NEG	SULFIDE SCREEN	NEG

This analysis is solely for use by SKI employees for the purpose of determining waste acceptability. No other claims are made or implied.

LEEDS002647

Shipping Bill of Lading		1. Generator's US EPA ID No. (if any) MOD 000822682K003	2. Gen. BOL No.			
3. Generator's Name and Mailing Address FREDERICK LEEDS FACTORY 6817 STADIUM DR 15245 CITY 46412 Generator's Phone (313) 556-0811		RETURN MANIFEST TO FRED RINDHAGE LIES 335 MILWAUKEE DETROIT MI 48202 MC 482 310 004				
4. Transporter 1 Company Name CWRRY ICE-CARL		ILR 000063727 888-882-6472				
5. Transporter 2 Company Name						
6. Transporter 3 Company Name						
7. Transporter 4 Company Name						
8. Designated Facility Name and Site Address Safety-Kleen (Lone & Grassy Mountain), Inc. Lone Mountain Facility 5 Miles East, 1 Mile North of Jct. Hwys 281 & 412 Waynoka, OK 73860 Phone (405) 697-3500						
G E N E R A T O R	9. U.S. DOT Description (including Proper Shipping Name) HM a. NON REGULATED MAT'L PER CFR 40-42		10. Containers	11. Total Quantity	12. Unit Wt/Vol	13. Waste Profile Sheet #
	b.	No.	Type			
	001	CRM	23.5	T		
14. Additional Descriptions for Materials Listed Above SA; LM00-0036 501L						
15. Special Handling Instructions and Additional Information TRIS # 4-31						
IN CASE OF EMERGENCY CALL 800-585-5053						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.		060500				
Printed/Typed Name F.W. RINDHAGE		Signature FWRindhage		Month	Day	Year
				05	14	2010
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name SCOTT F. WHITCRACKEN		Signature Scott F. WhitCracken		Month	Day	Year
				16	15	2010
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
19. Transporter 3 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
20. Transporter 4 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
21. Discrepancy Indication Space						
22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21						
Printed/Typed Name		Signature		Month	Day	Year

30089 W



SK SERVICES, L.C.

WEIGHT TICKET / Intermodal Certification

(Required by 49 CFR 390.54)

CS 1st
400
47000

Generator FORMER GM Lied's FACILITY

Bill To: 98700

Waste Acceptance Number L4100-0034

*Reasonable Description of Contents SOIL & DIRT

*Generator Container Number (Loaded) 7661 Pick up POD No. _____

Set Container Number (Empty) _____

Manifest or Bill of Lading No. 2K003 / Date 6-5-00

Destination (circle one): ECDC GMF JMF GBF Other _____

Comments/Special Handling Instructions and Additional Information

GENERATOR:

Name (print) John T. for GM

* Signature (legible) for Certification B. J. T.

* Date 6/1/00

Driver's Signature John T. for GM

Company Name _____

Disposal Facility Signature _____

Disposal Date _____

*NT=GROSS CARGO WEIGHT

Copies: (1) Invoice Copy (2) Accounting Copy (3) Facility Copy (4) Burton Copy (5) Transporter Copy (6) Generator Copy

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES,
 DIVISION OF ENVIRONMENTAL QUALITY
 Hazardous Waste Program
 P.O. Box 176 Jefferson City, Missouri 65102
 573-751-3176

HAZARDOUS WASTE MANIFEST

This form is to be used for all manifestable hazardous waste shipments. Please attach the completion of Part II on a separate sheet.

GENERATOR'S NAME	ADDRESS	PHONE	STATE/FEDERAL
			136

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No 2050-0039. Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MOD0000822668-K10141	Manifest Document No. Altair Field Remediation 455 W. Main Street MC 472-3100-1	2. Page 1 of 1 Information in the shaded areas is required by State law.
3. Generator's Name and Mailing Address General Motors Powertrains Facility 6917 Sherman Dr. Kansas City, MO 64129		A. Missouri Manifest Document Number 001196		
4. Generator's Phone ((313) 556-0814)		B. G.S.I. (Gen. Site Address)		
5. Transporter 1 Company Name T. L. S. Gate Motor Transport Company		C. MO. Trans. ID		
7. Transporter 2 Company Name		D. Transporter's Phone (611) 624-3131		
9. Designated Facility Name and Site Address SALTY KLEEN INC. (Arizona Inc.) 11600 N 40th Rd. Phoenix, AZ 85029		E. MO. Trans. ID		
10. US EPA ID Number UT D981552177		F. Transporter's Phone		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, ID Number and Packing Group (if any)) a. KD. Hazardous wastes, solid, N.O.S., Class 1, Division 1, UN3077, III		12. Containers Number	13. Total Quantity	14. Unit Wt/Vol.
G E N E R A T O R	a.			P
	b.			
	c.			
	d.			
J. Additional Descriptions for Materials Listed Above a. AP2219326; Post waste; D008		K. HANDLING CODE (FACILITY USE ONLY) a. S01 T03		
15. Special Handling Instructions and Additional Information <i>In case of emergency call 24 hours</i>				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method available to me that I can afford.				
Printed/Typed Name FRED L. ELIA-DHAGIS		Signature <i>Fred L. Elia-Dhagis</i> Month Day Year 11/11/01		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name J. L. S. GATE MOTOR TRANSPORT CO.		Signature <i>J. L. S. GATE MOTOR TRANSPORT CO.</i> Month Day Year 11/11/01		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature Month Day Year		
19. Discrepancy Indication Space				
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name		Signature Month Day Year		