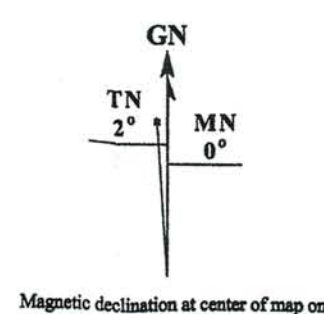
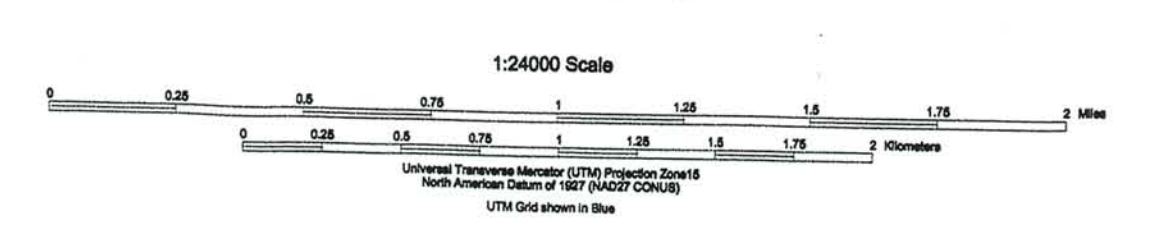
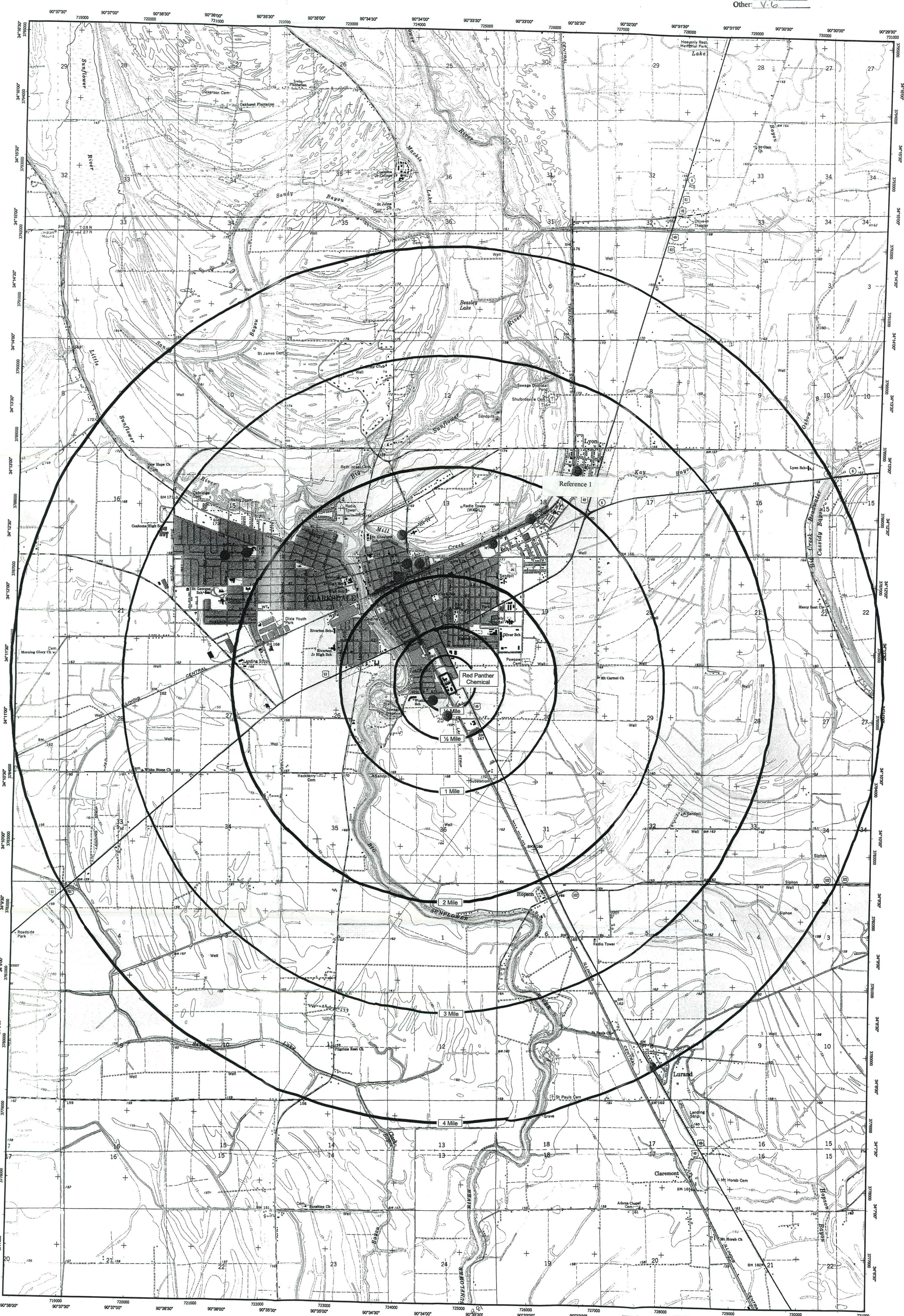


Site: RED PANTHER
 Break: 1.9
 Other: V.6



USGS Quadrangle Index		
1	2	3
4	5	6
7	8	9

ID	Date	Quadrangle Name
1	1978	Prine Point
2	1965	Coahoma
3	1969	Jackson
4	1968	Shard
5	1968	Clarksdale
6	1981	Sabbal
7	1966	Daman
8	1969	Macon
9	1968	Turkville

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Weston Solutions, Inc.
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Norcross, GA 30092
(770) 325-7900

December 27, 2005

Mr. Steve Spurlin
On-Scene Coordinator, Jackson, Tennessee Outpost
U.S. Environmental Protection Agency, Region 4
Ed Jones Federal Building
109 South Highland Avenue B13
Jackson, TN 38301

Subject: **Final Removal Action Letter Report, Revision 1
Red Panther
Clarksdale, Coahoma County, Mississippi
EPA ID No. MSD000272385
EPA Contract No. 68-W-00-123
Technical Direction Document (TDD) No. 4W-02-07-B-007
Document Control No. WSI-RPS-0017**

Dear Mr. Spurlin:

Weston Solutions, Inc., Superfund Technical Assessment and Response Team - 2 (START-2) is submitting one copy of the Final Removal Action Letter Report for the Red Panther site located in Clarksdale, Coahoma County, Mississippi.

Please contact me at (770) 325-7968, or Greg Harper at (770) 325-7972, if you have any questions or comments regarding this letter report.

Sincerely,
Weston Solutions, Inc.

A handwritten signature in black ink, appearing to read "Timothy J. Maher".

Timothy J. Maher
START-2 Project Manager

Enclosure

cc: Karen Knight, EPA Project Officer
Debbie Hoover, EPA Contracting Officer
Joseph Baer, START-2 Program Manager (w/o enclosure)
Greg Harper, START Removal Coordinator (w/o enclosure)
START-2 File



**FINAL REMOVAL ACTION
LETTER REPORT**

**RED PANTHER
1201 NORMANDY AVE
CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI
EPA ID No. MSD000272385**

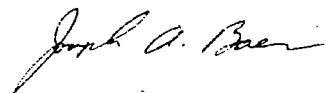
Revision 1

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
Atlanta, Georgia 30303**

Contract No.	:	68-W-00-123
TDD No.	:	4W-02-07-B-007
DCN	:	WSI-RPS-0017
Work Order No.	:	12587.001.002.0155.00
Date Prepared	:	December 27, 2005
EPA Work Assignment Manager	:	Steve Spurlin
Telephone No.	:	731-422-0101
Prepared by	:	Weston Solutions, Inc. - START-2
START Project Manager	:	Timothy J. Maher
Telephone No.	:	770-325-7968

Approved:



Joseph A. Baer
START -2 Program Manager

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ATTACHMENT 2 - NewFields Figures

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1.0 INTRODUCTION

This document has been prepared in accordance with Technical Direction Document (TDD) No. 4W-02-07-B-007, which the United States Environmental Protection Agency (EPA) assigned to the Weston Solutions, Inc., (Weston) Superfund Technical Assessment and Response Team - 2 (START-2). The scope of this TDD, monitored by EPA On-Scene Coordinator (OSC) Steve Spurlin, was to provide oversight of the removal and site restoration activities conducted by the Potentially Responsible Parties' (PRPs) contractors.

2.0 SITE BACKGROUND

This section describes previous investigations and source areas at the site.

2.1 SITE HISTORY

The Red Panther Chemical site consists of approximately 6.5 acres and is located at 550 Patton & Leflore Roads, Clarksdale, Coahoma County, Mississippi (see Site Location Map in Attachment 1). The facility is bordered to the north by Graeber Brothers, to the south by Master Mix Concrete, Inc., to the east by Normandy Avenue and the west by East Tallahatchie Street (see Site Diagram in Attachment 1). During its operational period, wastewater from the formulating process was routinely released, resulting in contamination of the property with a wide variety of pesticides and arsenic. The property is currently used by Coahoma, Inc. as a storage facility for seeds, cotton and farm chemicals.

The Red Panther Chemical facility operated as a pesticide formulation plant between 1949 and 1978 producing liquid and dry herbicides, insecticides, and fungicides, including toxaphene, aldrin, arsenic and DDT. Previous owners of the facility include Coahoma Chemical Company, Riverside Chemical Company and MFC Services.

In 1980, the Red Panther facility filed a Resource Conservation and Recovery Act (RCRA) hazardous waste management activity notification and Part A application for the storage of wastewater and used solvents on the site. Wastewater containing pesticide and solvent residues were generated from the cleaning of equipment at the facility. It is not clear whether a storage permit was granted at this time.

In November of 1985, the Mississippi Bureau of Pollution Control (MBPC) granted the facility a RCRA Part B permit to store wastewater and spent solvents at the site. Prior to obtaining the RCRA permit, wastewater and spent solvents were discharged directly to an offsite ditch or into an underground leaching field on the property.

2.2 PREVIOUS INVESTIGATIONS

In 1984, the MBPC conducted an inspection of the site. Environmental samples taken from in and around the site during this inspection were found to contain detectable levels of chlorinated pesticides and arsenic.

In 1999, the EPA tasked their Superfund Technical Assessment and Response Team (START) to conduct surface and subsurface soil sampling of the drainage ditches to the east of the property, the former onsite leaching field and septic tank on the north side of the property, and the rail spur in front of the loading dock that runs along the west side of the property. The results from this sampling event indicated that the site was contaminated with arsenic, organochlorinated pesticides, and their degradation byproducts including, but not limited to, aldrin, chlordane, dieldrin, 4,4'-DDT, endrin, endosulfan II and toxaphene.

In September of 2001, an Administrative Order on Consent (AOC)(Ref. 1) between the Performing PRPs and EPA Region IV was finalized. The AOC identified four constituents of concern (COCs) for surface soil criteria and three COCs for subsurface soil criteria. The surface COCs were identified as; arsenic, toxaphene, dieldrin and total chlorinated pesticides. The surface soil action levels defined in the AOC for these compounds were 23 parts per million (ppm), 39 ppm, 3 ppm, and 100 ppm respectively. The subsurface COCs were identified as, arsenic, toxaphene, and dieldrin. The subsurface soil action levels

defined in the AOC for these compounds were 270 ppm, 220 ppm, and 15 ppm respectively.

The PRPs retained NewFields and URS Corporation (URS) to perform a soil characterization at the site (Refs. 2; 3), develop a Sampling Analysis Plan (SAP)(Ref. 4), a Quality Assurance Project Plan (QAPP)(Ref. 5), a Site Safety and Health Plan (SSHP)(Ref. 6), and a Phase II Removal Action Final Design Work Plan (Ref. 7). Phase I of the work plan addressed the removal of contaminated soil from the drainage ditches on the perimeter of the property, soil characterization of areas to be addressed during Phase II activities, removal of the above ground storage tanks, and the removal of sections of the loading dock at the facility. Phase II of the work plan addressed the installation of a security fence around the perimeter of the property, the removal of a building above a breeze-way, which was found to have contaminated soil, removal of the concrete pads and loading ramp in Area B, and the contaminated soil from Areas B, C, and D (see Figure 1 in Attachment 2).

3.0 SITE ACTIVITIES

The following sections detail the activities conducted at the site during the Phase I and Phase II removal activities.

3.1 PHASE I ACTIVITIES

On November 12, 2002, START-2 mobilized to perform oversight of contractor and subcontractor activities at the Red Panther site. URS, in Atlanta, Georgia, was the primary contractor for the PRPs. URS retained HEPACO Incorporated, in Memphis, Tennessee, to carry out the planned site work.

Contaminated soils in the drainage ditches 1, 2, 3, and 4 in Area A (see Figure 1 in Attachment 2), to the east side of the site, were removed. The soils from these ditches were analyzed for volatile organic compounds (VOCs), Toxicity Characteristic Leachate Procedure (TCLP) semi-volatile organic compounds, TCLP metals, and TCLP pesticides for waste profiling. The surface-to-one foot level of the soil excavated from

ditch 1, the top two feet of ditches 2 and 3, and the soil from ditch 4 was profiled as nonhazardous waste. These soils were loaded directly into trucks for disposal in the Waste Management, Subtitle D Landfill, located in Robinson, Mississippi. The soils from the one-to-two foot level from ditch 1 were profiled as hazardous waste and were stockpiled inside the concrete berm in Area B to be removed during Phase II activities. During these activities, approximately 825 tons of soil were removed from the site. Due to high levels of arsenic found in drainage ditches 5 and 6, URS recommended that a chain link security fence be installed around the ditches to prevent public access, and the soil removal be addressed in the Phase II work plan.

During this removal activity, URS retained W.L. Burle Engineers, Inc., in Greenville, Mississippi, to conduct soil characterization sampling in Areas B, C, and D. Area B was segregated into 20 grids. A five-point composite surface sample was collected from each grid. Single point aliquots from each composite sample were collected in the event that the analysis from the composite sample indicated that further analysis was required. Two direct push technology (DPT) boring samples were taken in each grid. Each of these soil borings was sampled at the zero-to-two foot, two-to-six foot and six-to-ten foot intervals below ground surface (bgs). These levels were used in determining the vertical extent of the contamination. The grid layout and sample locations are presented in Attachment 1 as "Area B Sampling Locations."

There were five sets of DPT borings taken in Area C. Each of these soil borings was sampled at the zero-to-two foot, two-to-six foot and six-to-ten foot intervals, bgs. These levels were used in determining the vertical extent of the contamination. The sample locations are presented in Attachment 1 as "Area C DPT Locations."

Area D was segregated into 11 grids. A five-point composite surface sample was collected from each grid. Single point aliquots from each composite sample were collected in the event that the analysis from the composite sample indicated that further analysis was required. Two direct push technology (DPT) boring samples were taken in each grid. Each of these soil borings was sampled at the zero-to-two foot, two-to-six foot, and six-to-ten foot intervals, bgs. These levels were used in determining the vertical extent of the contamination. The grid layout and sample locations are presented in Attachment 1 as "Area D Sampling

Locations.”

On February 9, 2004, START-2, URS and HEPACO mobilized to the Red Panther site to continue soil characterization sampling, to sample the contents of eight above ground storage tanks (ASTs) located on the west side of Area B, and sample the contents of one AST in Area D. HEPACO gained access to seven of the eight ASTs in Area B and the AST in Area D to sample the contents for waste profiling and determine product levels remaining in the tanks.

3.2 PHASE II ACTIVITIES

On October 4, 2004, START-2, URS and HEPACO mobilized to the Red Panther site to begin the initial removal action associated with the Phase II activities. Removal of the rail spur and parts of the loading dock in Area C, and the decontamination and removal of the ASTs was performed.

During these activities, approximately 700 feet of iron rail were removed from the rail spur in Area C and stockpiled for later disposal. There was 117 tons of concrete removed from the loading dock and shipped to the Waste Management, Subtitle D Landfill, located in Tunica, Mississippi, as construction debris. Some of the concrete from the north end of the loading dock appeared to be contaminated with pesticides. This concrete was segregated to be sampled for waste profiling. The stockpiled soil was profiled as hazardous pesticide waste. There was 59.84 tons of soil shipped to the Waste Management Landfill in Sulphur, Louisiana, for bioremediation treatment.

The ASTs were checked with a lower explosive limit (LEL) meter to determine if there was an explosive atmosphere inside the tanks. When it was determined that the atmosphere inside the tanks was not explosive, HEPACO personnel utilized a plasma cutting torch to cut the ends off the tanks to allow for easier removal of the residual material in the tanks. Once the residual material was removed and placed into a roll-off box, the tanks were vacuumed and triple-rinsed for decontamination. The vacuumed material and rinsate water were stored in a vac-tank until this material could be profiled for proper disposal. The tanks were then cut

into more manageable pieces to be shipped to Martin Brothers Scrap Metal in Clarksdale, Mississippi. A total of 32.64 tons of scrap metal was shipped to Martin Brothers.

There were three roll-off boxes, one vacuum tank and six drums of material generated during these activities. There was 48.43 tons of material in the three roll-off boxes shipped to the Waste Management Landfill in Emelle, Alabama for soil stabilization. A total of 5.39 tons of material in the vacuum tank and the six drums were shipped to the Waste Management Landfill in Emelle, Alabama for incineration.

On April 12, 2005, START-2 mobilized to perform oversight of contractor and subcontractor activities at the Red Panther site. URS, in Atlanta, Georgia, was the primary contractor for the PRPs. URS retained Compass Environmental, Inc. (Compass), in Chicago, Illinois, to carry out the planned site work.

Compass contracted Wright Steel Company, in Clarksdale, Mississippi, to remove the existing fence adjacent to the loading dock in Area C, install a security fence around the perimeter of the property to include closing East Tallahatchie Street, install gutters on the existing buildings on the property to control the effects of rain water on the site, and demolish the metal building above the breeze way between Area C and Area D.

Compass retained Evans Engineering, in Clarksdale, Mississippi, to survey the site prior to any excavations, to layout the sample grids in each Area, survey the sample locations in each grid (see Figure 2 in Attachment 2), survey the area elevations after excavations were complete, and perform compaction testing on backfill operations. Evans Engineering also surveyed the site at the completion of the restoration activities to provide as-built elevations for the PRPs.

On April 15, 2005, Compass began the demolition of the concrete pads in Area B, and the concrete ramps in Areas B and D. The majority of this material was profiled as nonhazardous waste and was shipped to the Waste Management, Subtitle D Landfill, located in Tunica, Mississippi, as construction debris. There was a total of 1,187.82 tons of nonhazardous concrete removed from the site during the Phase II removal activities. An additional 32.15 tons of hazardous concrete was shipped to the Waste Management Landfill

in Emelle, Alabama. This hazardous concrete was a combination of concrete from the loading dock, segregated during previous site activities, and concrete from the pads in Area B.

On April 28, 2005, Compass began excavations in Areas C and D to remove nonhazardous soils to be shipped to the Waste Management, Subtitle D Landfill, located in Tunica, Mississippi. Excavation of Area B began on May 3, 2005. High pesticide levels in soils from Area C required these materials to be shipped to the Waste Management Landfill, in Port Arthur, Texas, for bioremediation. High arsenic and pesticide levels in soils from Area B required these materials be shipped to the Waste Management Landfill, in Emelle, Alabama, for incineration for the pesticides followed by soil stabilization for the arsenic. Ditch 5 and ditch 6 were incorporated into Area B due to the high levels of arsenic contamination present. The material from this area was also shipped to the Waste Management Landfill, in Emelle, Alabama, for soil stabilization. A total of 15,035.38 tons of nonhazardous soil, 5,574.27 tons of hazardous arsenic soil, 1,133.76 tons of hazardous pesticide soil, and 777.64 tons of hazardous pesticide and arsenic soil were removed from the site during these Phase II activities (Ref. 8).

On June 29, 2005, Compass completed excavation of the site. The EPA, On Scene Coordinator, Steve Spurlin indicated that START-2 would not need to remain to perform oversight of the contractors' activities during backfill operations. On July 5, 2005, START-2 demobilized from the site. Copies of the logbook notes are presented as Appendix B, and a photographic log of the site activities is presented as Appendix C.

4.0 ANALYTICAL SUMMARY

Due to the number of samples needing to be analyzed during the Phase II activities, URS retained Environmental Chemistry Consulting Services, Incorporated, in Madison, Wisconsin, to set up a mobile lab at the site. This facilitated a 24-hour turnaround time for results of the grid sample analyses. Each sixty-foot by sixty-foot grid would have a four-point composite confirmation sample taken (see Figure 3 in Attachment 2). A sample of the four individual aliquots for each grid was stored. If the grid sample exceeded the performance standards set forth in the AOC, the individual aliquots were analyzed to determine which parts

of the grid failed the performance standard. Once the analysis was complete, URS and NewFields could determine which parts of the grid needed to be excavated further in order to meet the performance standards.

Duplicate samples were analyzed for every one-in-ten grid samples taken for quality control purposes. In addition to the duplicate samples analyzed on-site, split samples of every one-in-ten grid samples was sent to an off-site independent lab for analysis. If the off-site analysis varied by more than 35%, the higher of the two values would be used in the data review. The highest levels encountered were 1,700 ppm of arsenic, in Area B, 22,000 ppm of toxaphene in Area C, and 7,000 ppm of dieldrin, also in Area C.

NewFields tracked the analytical data using "Domain Averaging" to determine if the data provided met the performance criteria. Using this system of data analysis, the values from all the grids in an Area were added together and then "averaged" over the "domain" of that area. This allowed some of the grids to exceed the performance standards while the majority of the grids were well below the performance standards. Hot spot criteria were developed to determine how far over the performance standards a grid was allowed to be without adversely affecting the rest of the domain. NewFields developed a confirmation sampling decision tree to standardize the decision procedure (see Figure 4 in Attachment 2). A summary of the grid performance (pass/fail), excavation depths, and the actions taken, is presented as Tables 1 through 4 in Appendix A

5.0 CONCLUSIONS

There are two types of arsenic compounds, organic and inorganic. Organic arsenic compounds were typically used as wood preservatives. Inorganic arsenic compounds were used in insecticides and are the types of compounds found to contaminate the Red Panther Chemical site. While some of these arsenic compounds are soluble in water, the removal of contaminated soil at this site should prevent any direct human contact with this contaminant, and significantly reduce the possibility of it migrating to the surrounding environment.

Toxaphene is an insecticide that used widely in the southern United States until 1982, when it was banned from most types of use. All use of this insecticide was banned in 1990. It can be found as a gas or a solid. The solid form was found to contaminate the soil at Red Panther. While it is not readily soluble in water, if exposed to the air, it will evaporate. The removal of the contaminated soil to more than two feet bgs, and the subsequent backfilling with clean soil, should prevent any direct human contact with this contaminant, and significantly reduce the possibility of it migrating to the surrounding environment.

Used extensively as an insecticide from the 1950's to the 1970's, dieldrin was banned from use except for termite control. All forms of its use were banned in 1974. Dieldrin is a breakdown byproduct of aldrin. It does not readily dissolve in water (Ref. 9). Its primary avenue of migration to the environment is evaporation. The removal of the contaminated soil to more than two feet bgs, and the subsequent backfilling with clean soil, should prevent any direct human contact with this contaminant, and significantly reduce the possibility of it migrating to the surrounding environment.

The existing buildings on the site were not considered an environmental threat to the community, and were left in place. A comprehensive summary of the analytical data and the actions taken by the PRP group under the AOC can be found in the Phase II Soil Removal Report currently being reviewed by the EPA (Ref.10).

The EPA Site Evaluation program plans to conduct a Reassessment at the Red Panther Superfund Site. EPA will utilize the data generated from the 18th Street investigation and the Red Panther Superfund removal action to conduct an analysis of potential long term threat to human health and the environment.

REFERENCES

1. U.S. EPA, Region 4, Administrative Order on Consent for Removal Action, September 2001.
2. URS, Phase I Soil Characterization Report, March 2003.
3. URS, Phase I Removal Action Report, March 2003.
4. NewFields, Sampling Analysis Plan (SAP), March 2005.
5. NewFields, Quality Assurance Project Plan (QAPP), April 2005.
6. URS, Site Safety and Health Plan (SSHP), April 2005.
7. NewFields, Phase II Removal Action Final Design Work Plan, April 2005.
8. URS, Daily Waste Tracking Spreadsheet, Red Panther Phase II Removal, July 2005.
9. Agency for Toxic Substances and Disease Registry, ToxFAQs, accessed online at www.atsdr.cdc.gov, August 23, 2005.
10. NewFields and URS, Phase II Soil Removal Report, October 2005.

APPENDIX A
Tables

Table 1
Grid Action Summary
Area A Ditch Data
Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides					
	Surface Soil	23	39	3	100				
	Subsurface Soil	270	220	15	--				
	Max Hot Spot Criteria	954	1300	59	--				
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (bgs)	Action	
D1-SC1	4.1	210	20	160	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 4 feet	
D1-SC1(4')	109	1190	131	NA	Subsurface	<i>fail</i>	4 feet	Excavate an additional 2 feet	
D1-SC1(6')	9.5	220	5.2	NA	Subsurface	pass	6 feet	Request for backfill	
D1-SC2	4.9	42	6.2	29	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 4 feet	
D1-SC2(4')	47.3	243	9.8	NA	Subsurface	pass	4 feet	Average of "Domain" passes	
D2-SC1	20	4.5	0.87	< 10	Surface	pass	0 - 1 foot	Average of "Domain" passes	
D2-SC2	27	3.2	0.53	< 10	Surface	pass	0 - 1 foot	Average of "Domain" passes	
D2-SC3	25	19	2.3	12	Surface	pass	0 - 1 foot	Average of "Domain" passes	
D2-SC4	13	12	1.3	< 10	Surface	pass	0 - 1 foot	Average of "Domain" passes	
D3-SC1	150	6.5	1.3	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D3-SC1(2')	67	3.9	1.2	NA	Subsurface	pass	2 feet	Request for backfill	
D3-SC2	120	9.7	1.2	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D3-SC2(2')	16	4.2	0.6	NA	Subsurface	pass	2 feet	Request for backfill	
D3-SC3	95	3.7	0.42	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D3-SC3(2')	28	11	0.96	NA	Subsurface	pass	2 feet	Request for backfill	
D4-SC1	210	4.3	0.38	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D4-SC1(2')	19	BDL	0.15	NA	Subsurface	pass	2 feet	Request for backfill	
D4-SC2	140	< 3	0.27	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D4-SC2(2')	32	BDL	0.45	NA	Subsurface	pass	2 feet	Request for backfill	
D4-SC3	150	4.5	0.71	< 10	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
D4-SC3(2')	170	BDL	0.59	NA	Subsurface	pass	2 feet	Request for backfill	

Notes: Grid Number (#) - Grid analysis failed, additional excavation required
Bold - Result exceeds the performance standard
 NA - Analysis not required
 ppm - parts per million
 mg/kg - milligrams per kilogram (equivalent to ppm)
italics - Indicates the data failed to meet the performance criteria
 -- - Not analyzed for subsurface soils
 bgs - Below ground surface
 < - Less than

Table 2
Grid Action Summary
Area B Grid Data
Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides					
	Surface Soil	23	39	3	100				
	Subsurface Soil	270	220	15	--				
Max Hot Spot Criteria	954	1300	59	--					
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (fsgs)	Action	
B-1	18	3.5	< 0.1	NA	Subsurface	pass	2 feet	Request for backfill	
B-2	330	< 3	< 0.1	NA	Subsurface	fail	3 feet	Below hot spot criteria	
B-3	450	< 3	< 0.1	NA	Subsurface	fail	5 feet	Analyze individual Aliquots	
B-3A	11	< 3	< 0.1	NA	Subsurface	pass	5 feet	Request for backfill	
B-3B	44	< 3	< 0.1	NA	Subsurface	pass	5 feet	Request for backfill	
B-3C	680	< 3	< 0.1	NA	Subsurface	fail	5 feet	Below hot spot criteria	
B-3D	900	< 3	< 0.1	NA	Subsurface	fail	5 feet	Excavate an additional 2 feet	
B-3D(7')	7.1	< 3	< 0.1	NA	Subsurface	pass	7 feet	Request for backfill	
B-4	960	180	2.6	NA	Subsurface	fail	2 feet	Analyze individual aliquots	
B-4 A	270	< 3	0.65	NA	Subsurface	fail	2 feet	Below hot spot criteria	
B-4 B	1300	9.6	< 0.1	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
B-4 C	1700	8.2	1.1	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
B-4 B & C	32	< 3	< 0.1	NA	Subsurface	pass	3 feet	Request for backfill	
B-5	83	< 3	< 0.1	NA	Subsurface	pass	6 & 10 feet	Request for backfill	
B-6	100	< 3	< 0.1	NA	Subsurface	pass	6 & 10 feet	Request for backfill	
B-7	210	< 3	< 0.1	NA	Subsurface	pass	2 feet	Request for backfill	
B-8	740	110	1.6	NA	Subsurface	fail	2 & 6 feet	Analyze individual aliquots	
B-8 A	1100	15	2.0	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
B-8 A	560	< 3	< 0.1	NA	Subsurface	fail	3 feet	Below hot spot criteria	
B-8 B	310	< 3	< 0.1	NA	Subsurface	fail	6 feet	Below hot spot criteria	
B-8 C	180	9.0	0.32	NA	Subsurface	pass	6 feet	Request for backfill	
B-8 D	240	16	0.92	NA	Subsurface	pass	2 feet	Request for backfill	
B-9	69	7.9	0.13	NA	Subsurface	pass	2 feet	Request for backfill	
B-10	48	14	0.14	NA	Subsurface	pass	2 & 10 feet	Request for backfill	
B-11	210	85	5.8	65	Surface	fail	0 - 1 foot	Excavate an additional 2 feet	
B-11	83	< 3	< 0.1	NA	Subsurface	pass	2 feet	Request for backfill	

Table 2 (cont.)
 Grid Action Summary
 Area B Grid Data
 Red Panther Chemical
 Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides					
	Surface Soil	23	39	3	100				
	Subsurface Soil	270	220	15	--				
	Max Hot Spot Criteria	954	1300	59	--				
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (bgs)	Action	
B-12	850	< 3	0.62	NA	Subsurface	<i>fail</i>	2 feet	Analyze individual aliquots	
<i>B-12 A</i>	1000	< 3	0.26	NA	Subsurface	<i>fail</i>	2 feet	Excavate an additional 2 feet	
<i>B-12 B</i>	850	< 3	0.56	NA	Subsurface	<i>fail</i>	2 feet	Excavate an additional 2 feet	
<i>B-12</i>	79	< 3	< 0.1	NA	Subsurface	pass	3 feet	Request for backfill	
B-13 A & D	9.3	< 3	0.12	NA	Subsurface	pass	2 feet	Request for backfill	
B-13 B & C	300	< 3	0.45	NA	Subsurface	<i>fail</i>	2 feet	Below hot spot criteria	
B-14	77	19	1.8	26	Surface	<i>fail</i>	0 - 1 foot	Excavate an additional 2 feet	
<i>B-14</i>	220	< 3	< 0.1	< 10	Surface	<i>fail</i>	1 foot	Excavate an additional 1 foot	
<i>B-14</i>	4	< 3	< 0.1	NA	Subsurface	pass	2 feet	Request for backfill	
B-15	420	7.4	2.6	NA	Subsurface	<i>fail</i>	2 feet	Below hot spot criteria	

- Notes: **Bold Italics** - Grid analysis failed. individual aliquots analyzed
Bold - Result exceeds the performance standard
Shaded - Result exceeds performance standard. below hot spot criteria. will be averaged into "Domain"
 NA - Analysis not required
 ppm - parts per million
 mg/kg - milligrams per kilogram (equivalent to ppm)
italics - Indicates the data failed to meet the performance criteria
 -- - Not analyzed for subsurface soils
 bgs - Below ground surface
 < - Less than

Table 3
 Grid Action Summary
 Area C Grid Data
 Red Panther Chemical
 Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides				
	Surface Soil	23	39	3	100			
	Subsurface Soil	270	220	15	--			
	Max Hot Spot Criteria	954	1300	59	--			
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (bgs)	Action
C-1	22	0.27	0.13	NA	Subsurface	pass	6 feet	Request for backfill
C-2	210	7	0.89	NA	Subsurface	pass	2 feet	Request for backfill
C-3	110	100	59	NA	Subsurface	fail	2 feet	Analyze individual aliquots
C-3 A	< 2	< 3	0.29	NA	Subsurface	pass	2 feet	Request for backfill
C-3 B	< 2	46	13	NA	Subsurface	pass	2 feet	Request for backfill
C-3 C	13	39	19	NA	Subsurface	pass	2 feet	Below hot spot criteria
C-3 D	8.1	970	370	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot
C-3 D	3.0	< 3	0.31	NA	Subsurface	pass	3 feet	Request for backfill
C-4	110	14000	4100	NA	Subsurface	fail	2 feet	Analyze individual aliquots
C-4 A	200	1200	530	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-4 B	130	22000	1400	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-4 C	85	970	3900	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-4 D	56	2300	7000	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-4	64	30.0	9.2	NA	Subsurface	pass	4 feet	Request for backfill
C-5	440	5600	270	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-5 A	180	7000	430	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-5 B	220	2000	120	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-5 C	98	1400	67	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-5 D	860	7500	370	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-5	20	67	3.6	NA	Subsurface	pass	4 feet	Request for backfill
C-6	42	5100	50	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-6 A	49	5300	60	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-6 B	22	4100	61	NA	Subsurface	fail	2 feet	Excavate an additional 2 feet
C-6 C	4.4	15	0.99	NA	Subsurface	pass	2 feet	Request for backfill
C-6 D	92	110	8.6	NA	Subsurface	pass	2 feet	Request for backfill
C-6	35	97	0.12	NA	Subsurface	pass	4 feet	Request for backfill

Table 3 (cont.)
 Grid Action Summary
 Area C Grid Data
 Red Panther Chemical
 Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides				
Surface Soil	23	39	3	100				
Subsurface Soil	270	220	15	--				
Max Hot Spot Criteria	954	1300	59	--				
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (bgs)	Action
C-7	8.7	930	16	NA	Subsurface	<i>fail</i>	2 feet	Excavate an additional 2 feet
C-7 A	18	2000	23	NA	Subsurface	<i>fail</i>	2 feet	Excavate an additional 2 feet
C-7 A	2.9	< 3	< 0.1	NA	Subsurface	pass	4 feet	Request for backfill
C-7 B	4.8	280	21	NA	Subsurface	pass	2 feet	Below hot spot criteria
C-7 C	4.6	< 3	0.55	NA	Subsurface	pass	2 feet	Request for backfill
C-8	< 2	180	6.8	NA	Subsurface	pass	2 & 10 feet	Request for backfill

- Notes: ***Bold Italics*** - Grid analysis failed, individual aliquots analyzed
Bold - Result exceeds the performance standard
Shaded - Result exceeds performance standard, below hot spot criteria, will be averaged into "Domain"
 NA - Analysis not required
 ppm - parts per million
 mg/kg - milligrams per kilogram (equivalent to ppm)
italics - Indicates the data failed to meet the performance criteria
 -- - Not analyzed for subsurface soils
 bgs - Below ground surface
 < - Less than

Table 4
Grid Action Summary
Area D Grid Data
Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides					
	Surface Soil	23	39	3	100				
	Subsurface Soil	270	220	15	--				
	Max Hot Spot Criteria	954	1300	59	--				
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (fsg)	Action	
D-1	6.1	7.5	0.54	NA	Subsurface	pass	2 feet	Request for backfill	
D-2	58	3400	360	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
D-2	23	< 3	0.19	NA	Subsurface	pass	3 feet	Request for backfill	
D-3	24	78	11	NA	Subsurface	pass	2 feet	Request for backfill	
D-4	110	1100	41	NA	Subsurface	fail	2 & 5 feet	Excavate an additional 2 feet	
D-4	11	140	4.6	NA	Subsurface	pass	3 & 7 feet	Request for backfill	
D-5	73	1600	110	NA	Subsurface	fail	2 feet	Excavate an additional 5 feet	
D-5	6	380	31	NA	Subsurface	fail	7 feet	Excavate an additional 1 foot	
D-5	< 2	110	7.8	NA	Subsurface	pass	8 feet	Request for backfill	
D-6	13	130	12	NA	Subsurface	pass	2 feet	Request for backfill	
D-7	< 2	130	20	88	Surface	fail	0 - 1 feet	Analyze individual aliquots	
D-7A	< 2	660	90	610	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-7 B	< 2	3300	49	360	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-7 C	< 2	160	29	140	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-7 D	< 2	49	4.9	85	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-7	2.1	< 3	< 0.1	NA	Subsurface	pass	2 feet	Request for backfill	
D-8	12	1300	60	NA	Subsurface	fail	2 feet	Analyze individual aliquots	
D-8 A	11	2700	250	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
D-8 A	2.1	< 3	< 0.1	NA	Subsurface	pass	3 feet	Request for backfill	
D-8 B	3.7	< 3	0.17	NA	Subsurface	pass	2 feet	Request for backfill	
D-8 C	< 2	11	1.6	NA	Subsurface	pass	2 feet	Request for backfill	
D-8 D	2.1	5.7	1.0	NA	Subsurface	pass	2 feet	Excavate an additional 2 feet	
D-9	< 2	190	47	220	Surface	fail	0 - 1 feet	Analyze individual aliquots	
D-9 A	< 2	38	7.2	28	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-9 B	< 2	300	140	610	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-9 C	< 2	170	61	400	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-9 D	< 2	91	31	110	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-9	2.2	3.9	1.8	NA	Subsurface	pass	2 feet	Request for backfill	

Table 4 (cont.)
 Grid Action Summary
 Area D Grid Data
 Red Panther Chemical
 Clarksdale, Coahoma Coutny, Mississippi

Performance Standards	Arsenic (ppm)	Toxaphene (ppm)	Dieldrin (ppm)	Total Chlorinated Pesticides					
	Surface Soil	23	39	3	100				
	Subsurface Soil	270	220	15	--				
	Max Hot Spot Criteria	954	1300	59	--				
Grid Number	Result (mg/kg)				Surface/ Subsurface	Status (pass/fail)	Excavation Depth (bgs)	Action	
D-10	< 2	160	19	140	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-10 A	< 2	510	41	360	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-10 B	< 2	42	9.1	70	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-10 C	< 2	38	14	44	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-10 D	< 2	47	6.6	41	Surface	fail	0 - 1 feet	Excavate an additional 1 foot	
D-10	2.4	< 3	0.1	NA	Subsurface	pass	2 feet	Request for backfill	
D-11	2.4	< 3	0.6	NA	Subsurface	pass	2 feet	Request for backfill	
D-12	2.6	2800	65	NA	Subsurface	fail	2 feet	Analyze individual aliquots	
D-12 A	5.1	< 3	< 3	NA	Subsurface	pass	2 feet	Request for backfill	
D-12 B	3	300	11	NA	Subsurface	pass	2 feet	Below hot spot criteria	
D-12 C	60	2700	220	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
D-12 C	2.5	1600	7.3	NA	Subsurface	fail	3 feet	Excavate an additional 1 foot	
D-12 C	< 2	38	1.2	NA	Subsurface	pass	4 feet	Request for backfill	
D-12 D	3.3	4400	58	NA	Subsurface	fail	2 feet	Excavate an additional 1 foot	
D-12 D	52	1600	26	NA	Subsurface	fail	3 feet	Excavate an additional 1 foot	
D-12 D	< 2	1400	6.7	NA	Subsurface	fail	4 feet	Excavate an additional 2 feet	
D-12 D	< 2	180	2.3	NA	Subsurface	pass	6 feet	Request for backfill	
D-13	8.6	82	10	NA	Subsurface	pass	2 feet	Request for backfill	
D-14	7.8	130	26	NA	Subsurface	pass	2 feet	Below hot spot criteria	
D-15	8.2	14	6.5	NA	Subsurface	pass	2 feet	Request for backfill	
D-16	8.4	220	2.9	NA	Subsurface	pass	2 feet	Request for backfill	
D-17	7.4	3.1	0.83	NA	Subsurface	pass	2 feet	Request for backfill	

- Notes: **Bold Italics** - Grid analysis failed, individual aliquots analyzed
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APPENDIX B
Logbook Notes

"Rite in the Rain"
ALL-WEATHER WRITING PAPER



ALL-WEATHER
ENVIRONMENTAL FIELD BOOK

Name

Address

Phone

Project

TAD

WO

Red Panther

START II on site

4W-02-07-13-007

12587.001.002.0155.00

This book is printed on "Rite in the Rain" All-Weather Writing Paper, a unique paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather. For best results, use a pencil or an all-weather pen.

Product of the Rite in the Rain Company

Page 1000

562-8811

404958328

CONTENTS

PAGE

REFERENCE

DATE

Katrina JONES EPA
Joe Capella START II Contractor
Bert Cole URS - Project Director
Donald Moore - HEP LO
Richard Aulon URS -
Steve Suster URS -

Reference Page Index

147	Error codes, Hazardous classifications, Container types
148	Sampling guidelines (Liquids)
149	Sampling guidelines (Solids)
150	Approximate Volume of Water in Casing or Hole, Ground Water Sampling Well
151	PIV Pipe Lacing Tables
152	Soil Classification
153	Soil Classification
154	Dimensions (Length, Weight, Volume, Temp, etc.)
155	Conversions (Celsius/Fahrenheit, Flow of Time, Velocity, Acceleration)
156	Maximum Concentration of Contaminants for the Toxicity Code Tables

Location

Project / Client Red Panther Site - IERD

START II on-site

AK

Date 11/12/02

250 - SE arranged on site +

ATTN: DE Katherine (Jung)

Box 100 DE Paper Revue

rearranged normally

URS case brought down on

site @ us 7 - Dick name

Northwest. Site site name

removed and not included

URS sub contract

during the phase

to be

Subcontracted and paid

arranged

Camp built on site

so built for dump. Road

to go to site for parking

1315

400 decided out 3. Truck

1420 samples from East Hill. Boxes

of data available + Sit

On the lot - the samples

Highly with one sample

by hand

Location

E. Labrador M. Co.

Date

Project / Client

500 - Brake see line in Altak
 - notes document contracts that
 one line seen in the other - stop
 work until the company is
 felt line of

1500 Paved to make break
 URS had moved to make break

1500 -
 URS had moved to make break

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 URS had moved to make break

11/12/02

4

Location Clarksdale Miss Date 11/13/02Project / Client Deal for the SiteSite is 50' x clear high uplandto be on -

0700 URS on site + held

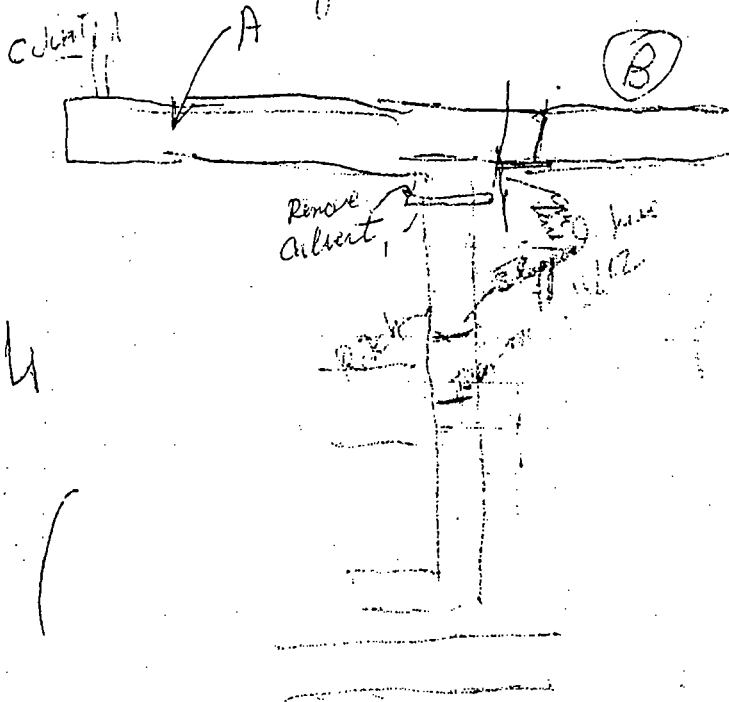
troubled meeting -

Will not excavate around

water line for fear it is

not located properly.

Treatment will follow.



5

Location Clarksdale Miss Date 11/13/02Project / Client Redneck0800 remove ^{upper} one foot
of soils in area A Diagram
page 4 --> Stockpile soils -
Continue to excavate.0820 Begin to excavate ditch in
area B Diagram page 4.0830 hit another gas line
at corner ~~of~~ Ditch B.
Locate was marked0900 Waiting for Gas Company
URS preparing to take composite
Samples.0930 - look at area for stockpiling
Soils - Near Tanks in back
Gas Company Arrived 11:00- first dump truck on site at 0930
Second arrived shortly after,
URS Preparing to load.

Location Clarkdale - Miss Date _____
 Project / Client Wednesday 11/15/02

0915 Begin to load trucks
 7 trucks on site.

A

0930 m/c-culvert showed up.
 MUG showed up to repair
 gas line.

1006 URS-HERO continued to
 load out trucks from Ditch.

1 + 2 and stopped at 1115

1115 Begin to excavate gas line for
 repairs - will replace about
 12 to 15' of pipe.

1200 URS Break for lunch -
 MUG Break for lunch -

1235 J.A. on site

1300 URS Returned from lunch.
 Begin excavate of Segment 7
 west side of Normandy.

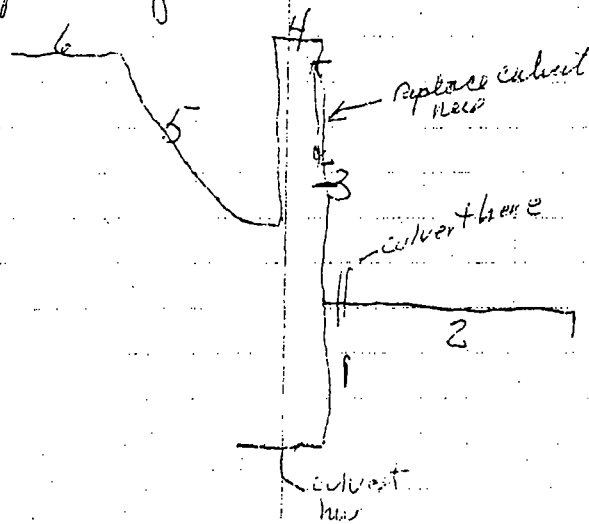
1500 Soil stabilized on pad with
 rebar all north end of Building.

Location Clarkdale Miss Date 11/13/02
 Project / Client Wednesday
 J.C.

1500 - truck that is being used
 to haul dirt to school is
 depositing soil residues on
 Tallahassee street. Avenue.
 Brought it to the attention
 of URS - they were aware +
 will clean it up.

1510 MUG still digging out
 damaged gas line.

Segment Map



8

Location Clarksdale Miss Date 11/13/02Project / Client J.C. Weaknessky
Clarksdale

1600 Began to clean track hole
and dump trash. Location
of Segment 4 of the ditch
had pink pipe and I
could not to cross contaminants
equipment needs to be
decontaminated.

1610 Excavate 1 foot of ditch
in Section 1.

1700 Load soil - transport. Sealant
soils - 1 truck.

MVE completes digging at 1600+
Departed site - will repair pipe
tomorrow.

URS is continuously taking
PID readings of all 4 backhoes
Soils and in the ditches during
and after operation.

1710 URS will collect 4 samples
Ditch 1, 2 - Samples 1, 2, 3, 4

9

Location Clarksdale Miss Date 11/13/02

Project / Client _____

1730 URS Departs site - J.C. Weaknessky

11/13/02

Location Clarksdale Miss Date 11/14/02
 Project / Client Thursday Red Panther
70-48 imp. hole 41" J.G. Start II.

0700 URS - Subs on site
 0715 toolbag meeting
 0720 Concrete culvert arrived
 0800 Unload concrete pipe
 0900 Begin to remove & replace
 culverts in Ditch Section 4
 URS measuring & staking
 sample points in section 1+4
 Hesper moving tall grass in
 Area of Section 5 Ditch so that
 fence contractor can install
 fence along that area.

1015 Culvert placement looks
 high - Suggested that
 Hesper get a transit &
 shoot some elevations
 to get drainage properly.
 A suggestion only? JG

1120 Hesper Sub will shoot ~~grade~~
 grade & elevation of drain

Location Clarksdale Miss Date 11/14/02
 Project / Client Red Panther - Thursday
Joe Capella STANTII-overcity

1125 Intersection of Ditch 5+4 is
 2.4 feet higher than the drain
 pipe across #9 from ditch 2.
 spot grade - each culvert shell
 slope 3/10 of con ~~fact~~ = 7 culverts.
 Survey in culverts at Ditch 4
 on the west side of the main body.

1200 URS - Hesper Breakfast lunch.

1200 J.C. Luncheon

1230 J.C. Back on Site

1300 URS Hesper Back on site.

Begin to speak culvert
 on Ditch 3.

1400 hit a water line on Ditch 3

fully 15' away from the marked
 line indicating water.

Called the public utility to report
 URS will send out 11 ditch samples
 and will take samples of
 the stacks.

1410 hit another gas line 16' from the
 water line on Ditch 3.

Not marked by the gas company.

Location

Chickadee Mts

Date

11/14/57

Project / Client

~~Chickadee~~ Red Bank Site

1445 Waiting for gas company to come

1530 Gas main repaired and
Hepaco will install Calvert
to the point of the gas
line rupture.

1600 Hepaco installation complete.

1700 Calvert installation complete
at Red Bank Site.

1730 in well done site.

Location

Chickadee Mts

Date

11/15/57

Project / Client

Chickadee Mts

Red Bank Site

700 - Ws on site along with
Hepaco & myself. Raining
steadily. will open ditch
on section 1 and down Red
water section 4+5 are
not complete and it appears
they will not work today because
of the rain water situation
Hepaco ordered 1500 gallon
plastic tank to use for
holding water from the ditch.

1100 everyone left site for the
day

Location

Project / Client

Date

Clarksdale Miss Date 11/19/02
 Tuesday 50° - high today 62° JH

1145 J on site - Traveled today

Start work 5 AM.

datuda Hepasco pumped
 water out from the ditch
 in Section 45 and put it into
 a holding tank. Volume

was to great so they stopped
 after filling one 1500 gal

plastic tank. Estimate were
 20 to 30,000 gal of water in the

ditches
 Monday they resumed work
 11:30 AM on the culvert. It

had rained again on
 Sunday night so water
 remained a problem in the
 ditches.

@ 11 AM on Tuesday they struck
 another water line. In the
 center of Patton street,
 at the intersection of path
 and Hamon - the utility
 company repaired that by

Location

Project / Client

Date

Clarksdale Miss Date 11/19/02

Clarksdale
 Monday JH

mon but not before the ditch
 was again filled with water

12:30 PM - Hepasco was returned
 from lunch and continued
 to replace the culvert across
 Patton. The utility company
 will run the water line over
 the culvert.

14:22 Utility dept. on site to repair
 water line. Hepasco backfilling
 culvert across Patton.

Surveys made to begin survey of
 property location in Section 4 to 345.
 Survey on W.M. Bault of Clarksdale.
 1000 Bault lot indicating that
 the analytical from the Bureau
 got showed 4:20 PM 11/19/02

The site is 5. He requested
 1000 approx to use with material
 to build Katona Jones and
 left a message - She called
 the call at 15:00 and indicated
 that it was OK to use

16

Location Clarksdale Miss Date 11/14/02Project / Client As of now thisstacking

that material as backfill.
 1530 awaiting load of rock to
 complete backfill of culvert
 across railroad.
 Fence post installation is complete.
 1600 Departed Site, JF

JF 11/14/02

17

Location Clarksdale Miss Date 11/21/02Project / Client Wednesday - 70° - 45° ClearHigh today 65° Clear.

- 0700 URS + Hepaco on site
 limestone delivered - will use
 to complete coverage of culverts.
- 0715 Telephone meeting URS Hepaco
 load out soils for disposal
 that were taken from culvert
 replacement areas.
- 0905 Del small concrete culvert
 in Ditch 2 on Patton Street.
 Surveyors on site to do survey
 of sample locations in ditch 1-23405
- 0935 Analyticals are back for ditch 2
 only - it failed throughout Delburn
 holes - But need to coverage all
 ditches and there is no data on
 other ditches yet. URS will need
 to stop work if analyticals are
 not back yet.
- 1045 A review of the space preliminary
 analyticals on ditch 1 & 2 indicates
 the there is a high potential
 for the source area to be the
 loading area on the property site
 behind the law office Building.

Clarksdale Miss Date 11/20/02

Red Panther

Wednesday

- Composite sample analysis identified as D1-C1 & should be high + D2-C2. should be high all others should fall within the limits set in the Phase I sample plan under PSUP.

Section 3 of the AOC page 6 and exhibit 1 - are interpreted to mean that averaging is acceptable method by But I OHS + use field.

1130 - Hepaco will break for lunch as analyticals are not yet here in total.

1300 Hepaco replacing 24" concrete culvert, this is the last culvert on Patton Street.

But will sample water for disposal that was taken from the ditches. Katrina indicated to him that sampling of that water was necessary. Had disposal trailer into the subs system.

1310 Tanager have completed their work & will depart Site 5.

Clarksdale Miss Date 11/20/02

Red Panther

Wednesday - Clear 6.2° Sunny. J.L.

1730 - URS concluded that they would bring a back tank on site - Pump the ditches & pump them to backfill. they would clear out the orange fence in the bottom of the ditch and backfill. If they had to go deeper they would take the backfill off to the level of the financing. that below that they could operate.

1600 Fed of picked up water sample - Hepaco is finished with last culvert -

1630 Hepaco left site
1645 URS + JC left site

[Handwritten signature]
11/20/02

Location Clarksdale Miss Date 11/21/62Project / Client Red Panther T° = 43°

Clean + Cool. High today 63°

- Thursday -

- 10700 UPSO + Hepaco on site
 0700 toulgall meeting
 0730 3 trucks loaded out with stockpile from ditch H 4.
 0800 Scrape area in septic drain field area to define limits of smudge pad found.
 0830 uncovered an area of yellow/green solid, and an area of purple - Purple may be dry manure - yellow/green is unknown - will dig it up and put it in a drum.
 0930 Last truck load of stockpiled soil was loaded out. UPSO + Hepaco will wet down dust on road with analyzed clean water from the ditches 3+4.
 1100 Hepaco delivered Free-tank on site for ditch water from 1+2.

Location Clarksdale Miss Date 11/21/62Project / Client Red Panther Thursday

- 1115 Hepaco UPSO begin excavation of one more foot from ditch H 2. Hepaco transfer water from ditch 2 to location by ditch 2 clean to no manure. They will then transfer water from there directly to free tank.
 1130 Ditch soils in ditch 2 - Too wet to move will bring in clean soil and blend prior to disposal.
 1200 UPSO Hepaco to Larch Drive more stayed to watch pumps - I stayed to observe
 1250 UPSO Hepaco return from lunch
 1400 clean fill arrived to mix with ditch soils for disposal. Hepaco wetting down Road Surface to dust control measure. all water pumped out of Ditch 2 01+2 sections.
 1430 Hepaco now using water to wash dirt off of streets - good dust control measure.

Location: Clarksdale Miss Date: 11/21/02Project / Client: Red Bank Thursday

1500 One truck of hay soils
moved off site.

1510 Fence is almost complete
decision on placing gate
at Normandy end of fence
there is a gate on the Grabe
side that will allow access.

1530 Second truck loaded
pumping water into Fiac tank
from Normandy end of Ditch

1600 I.E. Departed Site

JG 11/21/02

Location: Clarksdale Miss Date: _____Project / Client: Red Bank 12/3/02

Tuesday - T° = 41°. Overcast. Cold

1045 Arrived on site and
discussed URS activities
with Steve Suster. URS
was on site Monday and
advanced several DPT
bores to determine Depth to water.
No pipe placed in hole and
stratigraphic logs from 5' to 9' BWS
WL BORE is the sub-contractor
installing the DPT art.
Two (2) borings had already
been advanced today outside
the fence in the Grabe project.
Lithology is silty sand to
3' grading to silty clay to clay
at 10' 3 samples were taken and
2 intervals would be sent
to the lab for analysis.

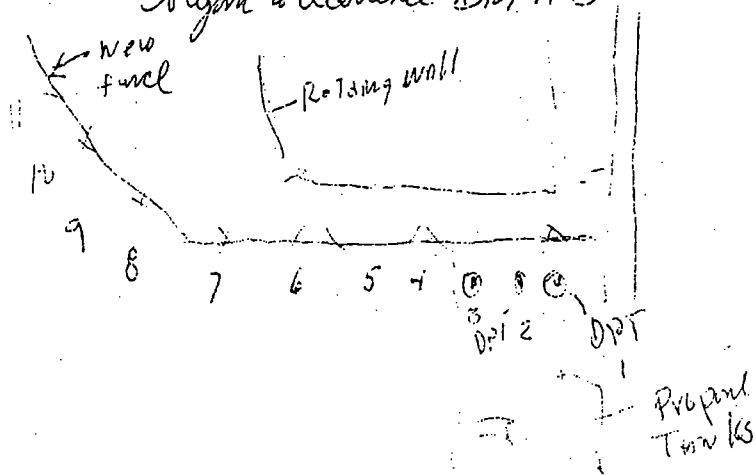
A review of the work completed
on the ditch indicates that
the ditch 1-2-3-4-5 was
backfilled and graded.

Location Charlestown Mass Date 12/3/02Project / Client P.D. WalkerTuesday

A red expanded plastic fencing was found in debris 1 + 2 ft prior to backfilling to delineate the excavation depth. Backfill was placed on top of that fence so that should further excavation be needed the plastic fencing would define the level at which excavation needed to begin.

1200 URS + BRUCE crews meet for lunch.

1300 URS + BRUCE crews returned + began to advance DPT # 3 -

Location Charlestown Mass Date 12/3/02Project / Client P.D. WalkerTuesday JF

1530 - Continue to advance DPTs

- Collect samples

Brent + Wallace probe area inside. Attention will be define extent of concrete cover. May have found Septic Tank. URS Decided to get a Backhoe loader to assist in taking samples - Stone + gravel cause to back to dig in. DPT will not go through that stuff.

BC Trucks are to be loaded out for sampling. BRUCE engineering has provided a grid survey map of the areas to be sampled. (Septic area)

1600 - DPT sampling continues

@ dpt 7 + 8 a layer of soils white in color appear at 2' depth and is about 1" thick.

URS Belives this is the area where high Arsenic was detected earlier in characterization.

The groundwater in this area appears to be @ 5' BLS or less.

MOST LIKELY A punch AREA

26

Location Clarksdale, Miss Date 12/3/02Project / Client Red Panther SiteTuesday 12/31700 - URS to stop drilling +
cleanup equipment

1730 URS + BRUCE depart site

JL

MM

27

Location Clarksdale, Miss Date 12/4/02Project / Client Red Panther SiteWednesday: Raining + Cold0730 - J.C. on site no pipes for
URS or BRUCE on site.

③

0906 - No one has shown up due
to rain + cold weather will
leave site soon.

JL

28

Location Clarksdale Date 12/05/02
 Project / Client Red Panther - undrill 22°
Thursday - T° = 31° - Circumst. JG

- 0730 - On site - No one is here?
 0745 - Burle engineering personnel showed up on site to set up equipment.
 0815 URS was here apparently they were in the office building preparing their equipment.
 0900 I observed the DPT operation on ~~mon~~ Tuesday 11-3 and the borings advanced ~~in the~~ on the Graber site wells 1 through 6 or so seemed to hit water at 5', the borings were advanced through 10' and were very wet. In some cases water was poured out of the DPT tubes taken from 6' depths. This may well cause cross contamination of samples on the DPT as usually taken in 4 increments & it takes 36 complete a 10' hole. I feel the sample taken below 15' are suspect. JG.

29

Location Clarksdale Miss Date 12/05/02
 Project / Client Red Panther
Thursday - J Capella Weston 5MT II

The waters are most likely a PERCHED area source. However, they will contain the contaminants.

- 0930 - Drums containing yellow substance shoveled from concrete in the septic tank area have not been labeled. Brought this to URS attention @ 0845. as well as prior to departure on 11-28-02 JG.

1100 Standard Complained of Sewer Stoppage - Said we crushed sewer pipe URS called Hepaco to correct any problems. Continue to ADVANCE DPT - Borings to collect samples -

1138 BURLE Decontaminated Equipment & prepare to go to lunch.

1200 Lunch for lunch URS - BURLE

1300 Return from lunch URS - BURLE

Location Clarksdale Miss Date 12/5/02Project / Client Red PantherThursday High today 39°

1315 Hopped on site to Repair
 Sewer line damaged during
 ditch cleanout. Ditch #3.
 #1400 line located + repairs begin.

1500 DPTs continue - the presence
 of water at 5-7' is definitely
 causing the last DPT to
 be cross contaminated.

Took photo of slives, -
 *No labels on drums yil.?

1640 - Stopped drilling + prepared
 to clean up.

1700 Departed Site.

JG 12/05/02

Location Clarksdale Date 12/06/02Project / Client Red PantherFriday -7° = 22° - high today 39°

0830 Arrived site they are
 just beginning to take DPT samples.
 URS + BRK on site.
 Still too much water in Ditch to
 take samples.

1100 - DPT Sampling continues. Soils
 at 3-4' feet have strong destructive
 odor - petroleum like odor.

1145 Crew Break for lunch - No so
 they are going to work through lunch
 and depart early.
 Rec'd equipment - pick up clean
 pad. Bag waste + clean clean water.

1330 - prepare sample take clay wash
 for shipment via Fed Ex.

1430 Departed Site.

JG 12/06/02

Location Colasbuck Miss Date 12/9/02Project / Client Red Panther SiteMonday Clear Cold -34° - JG

0730 - On site no one is expected until 10AM or so.

1015 Brent from URS arrived and reviewed sample grid layout.

1120 URS began layout of surface sample grid in B area.

1145 BRUB new - come one site + prepared equipment to advance DPTs.

1200 Lunch

1300 Balance of URS Team arrived and began preparation for sampling DPTs.

1320 BRUB + URS began sampling via DPT in area B. John S

1500 DPT sampling continues

Location Colasbuck Miss Date 12/9/02Project / Client Red Panther SiteMonday -

1600 - URS provided layout guide and sampling points for area D-1.

1700 - Depart site

JG 12/9/02

Location Clarksdale Miss Date 12/10/02Project / Client Red Panther38⁰ - Tuesday - JP

0730 URS & BRUE on site &
begin equipment set up.

0930 Capital Concrete Cutting
on site to core holes in
concrete -
First hole in area D¹⁰ in
what appears to be siphon tank
or sump drain.

Drill through lid shows
sump is full of river rock.
Photo taken.

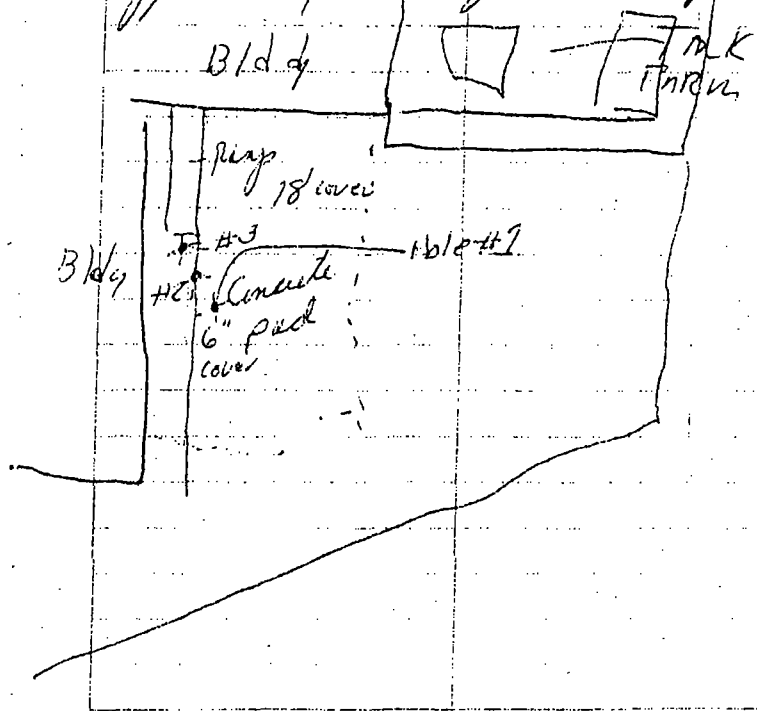
1000 Move to area B to drill
holes in concrete.

1100 Core Drill began at B6.
as drilling started the cutting
water was yellow. It appears
that the chemicals penetrated
the upper inch or so of concrete
and the staining material solidified
in the drill cutting water coolant.
concrete was 8" thick.

Location Clarksdale Miss Date 12/10/02Project / Client Red PantherTuesday

1130 - begin digging hole at
points are surface sample
was grid marked

It appears that there is a small
pad anywhere from 6" to 18" below
the stone cover. This pad
appears to extend to full the diagonal



36

Location Charlestown Miss Date 12/10/02Project / Client Red PantherJL Tuesday

1266 Lunch Break

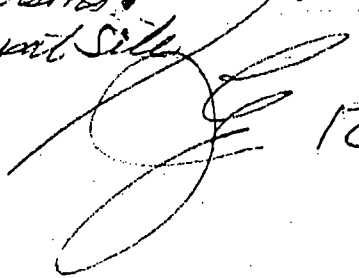
1300 Continue Core Drilling & Backhoe excavation of potential sample locations in area D.

1400 HEPACO is digging hole at grid areas for surface soil sampling.

1600 HEPACO unearthed a burnt pit in DG-8 - there are metal rings from fiber drums, metal drums - rusted, tires, bricks, wood & general debris. soils appear rust stained indicating that this could well be a buried area for a burnt building that has been studied to by local persons.

1730

Depart Site



12/10/02

37

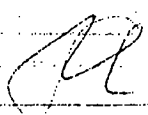
Location Charlestown Miss Date 12/11/02Project / Client Red Panther T° = 42° OvercastWednesday

6730 - VRS & BURLE on site - Hepaco. no well.

0900 - Begin DPI Sampling in DG Area.

Hepaco has a few small surface holes to dry. They are awaiting arrival of tanks to remove water from 2500 tanks sitting in area B6. Water is contaminated and will be moved by Excell of Memphis.

0915 - Core driller drilled concrete in B6 area for surface & DP samples - 3 cores produced the yellow cutting indicative of concrete contaminated with some type of pesticide. The water lay in depression areas near the drilling point. The obvious contamination will be left on the surface to dry. I recommended that no one drive over the area -



Location Clarkdale Miss Date 12/11/02
 Project / Client Red Panther Site
Wednesday - J.C.

1015 Eyal arrived on site to remove water from the 2200[±] gallon tank cut from the #5 frac tank.

1100 I photographed the chemical staining of the concrete & the core cutting water as it stood in puddle around the Core cell.

1200 Lunch

1300 Return to Site

1315 URS had concluded that the burn pit area in D68 would be covered and left for another sampling time. They changed their mind and decided to take a soil sample at 3' on D68.

1330 HEPACO Dug to 3' at D98 with a backhoe. The dig area had fiber drum drums made of metal. A rotted 56 gal drum - unburnt fiber cardboard from the drums - yellow red green

Location Clarkdale Miss Date 12/11/02
 Project / Client Red Panther
Wednesday J.C.

electrical wire - tree roots & no tree in the area).

A coke material was present and was grey green in color - Very distinctive from the other conglomerates. Chunks of black soft material, glass-ambered wood & ash. It appears that this was NOT a burn pit but a burial pit for burnt material.

1335 URS had an out of 83 bottles for sample collection & were awaiting a supply of bottles for Burke.

1400 The Central core cutting person had advanced 4 borings on the tomb farm area in D68. He said he would leave early as he had some personal business to attend to.

1515 BRC showed up with sample pack & the DPT sampling resumed in area D68.

40

Location Clarkdale Miss Date 12/11/08Project / Client Red PantherWednesday

1600 Sampling continued in the DG Area

1600 UR- bad pay -1700 URS + BURC begin to shut
down for the day1700 Depot Site

41

Location Clarkdale Miss Date 12/12/08Project / Client Red PantherThursday snow 35°0730 URS + Bull resumed DPT sampling
in the DG area.1130 Concrete Coring was completed
and the subcontractor departed site.1300 Almond Sun Truck + Resumed
sampling1450 - DG area sampling complete
move to area B6 + Railroad tracks.1500 JE departed site / URS + BURC
still sampling on tank farm pad.
Chuck will take schedule of
open excavations surface samples
by Friday morning

JL 12/12/08

Location Clarksdale Date 12/16/08Project / Client Red PantherMonday

1200 - arrived on site - URS +

Burke are here + are getting ready to sample at bank from pack railroad. that is where they left off on Friday.

- Judy URS + Burke were on site and drilled holes for DPT samples. apparently it rained they slipped away.

1300 A-OR -

1500 Begin Sampling along Railroad track spur on Tallahachee ave. side. No sample taken under 2" feed line that runs under loading dock. Not sure why??

1600 Sample from Sats Sunday ready for FedEx - Pick up before 5:30.

1730 off Site

JA

Location Clarksdale Miss Date 12/17/08Project / Client Red PantherTuesday Cloudy. 48° JG

0800 - URS + Burke - begin DPT Sampling at Railroad Siding CP area.

1100 Picked up Photos from Halmont + begin labeling

12:30 URS Burke - Lunch. Remained on site to complete photos.

1:30 completing DPT @ Rail/pond

4:50 De mcken cleanup

5:30 Departed Site -
Go home tomorrow -JG
12/17/08

Location Clarksdale - MS Date 2/9/04Project / Client Red Panther

^{ms}
~~07~~ 1400 Martin Smith (KEVRIG/START 2) departs
 Mobile, AL for Pensacola Airport.
 1515 MS arrives at airport.
 2030 MS arrives at hotel in Clarksdale, MS.

MS

Location Clarksdale - MS Date 2/9/04Project / Client Red Panther

0900 MS departs hotel for Wal-Mart to
 purchase a disposable camera and
 Sharpies.
 1000 weather is overcast, light rain, temperature
 50° F. Forecast is rain throughout the day
 temperature 30-50° F.
 1015 MS arrives at Red Panther site.
 1045 MS calls Steve Sustan (URS). SS
 informs MS that they are running late
 and to take an early lunch meeting
 at the site at 12:30.
 1225 MS arrives at the site. Steve
 Sustan and Michel Allard (URS)
 (URS - Atlanta) and Don Cox and ^{Louis} ~~Louis~~ Piani
 (Hepaco - Memphis) onsite.
 1235 Walk site and discuss sample
 collection locations. Will be collecting
 11 TCLP soil samples and up to 8 waste
 samples from the ASTs.
 1300 Hepaco begins using backhoe to clear
 gravel from sample locations.
 1305 URS prepares equipment and containers for
 sampling and sets up dem area.
 1330 MS takes photo 1 of a sample trench.

MS

Location Clarksdale - MS Date 2/9/04
 Project / Client Red Panther

Photo Log

No	Dir	By	Description
1	W	MS/SS	sample trench
2	S	MS/SS	Sampling TCLP grid 10

[Signature]
2/9/04

Location Clarksdale - MS Date 2/9/04
 Project / Client Red Panther

grid 10.
 1415 Encounter a concrete slab in
 TCLP grid 3. ~~Contact~~ URS pm Brent
 Jacobs contacted, he contacts Warner Golden
 (Newfields Birmingham). Decision made by
 WG to move the TCLP grid 3 samples
 away from the pad, samples now are
 in a line instead of a square.
 1430 URS begins collecting sample from
 TCLP grid 10.
 1435 MS takes photo 2 of sample
 collection at TCLP grid 10.
 1450 URS completes sample collection at
 TCLP grid 10. TCLP samples to be analyzed
 for VOCs, TCLP, SVOC pesticides and metals.
 1457 Move to TCLP grid 3 to collect
 soil sample.
 1500 Sample from TCLP grid 10 was a
 4 point composite collected @ 1' bls
 with a steel shovel that had been
 deconed.
 1520 Collect soil sample from TCLP
 grid 3, 4 point composite, same parameters as
 TCLP grid 10.

[Signature]

Location Clarksdale - MS Date 2/9/04
 Project / Client Red Panther

1530 URS/Hepaco breaks because rain becomes heavy.

1620 URS calls off days activities due to continuing rain.

1630 MS departs site for hotel.

1645 MS arrives at hotel.

[Signature]
2/9/04

Location Clarksdale - MS Date 2/20/04
 Project / Client Red Panther

0745 MS departs hotel for site.

0800 MS arrives at site. Weather in the 40's, high in the 40's, light rain.

Steve Suster and Michel Allard (URS) are onsite prepare equipment for sampling.

0815 Dan Cox and Louis Pirani (Hepaco) arrive onsite.

0825 Hld health and safety meeting. Cover physical hazards, slips, trips and falls. Cover safety around heavy equipment. Cover proper level of ppe. Cover safety around ASTs with care while using ladders.

0830 Conclude meeting. Move to TCEP grid 4 and begin using ^{MS} track backhoe to uncover sample locations.

0845 MS takes photo 1 of backhoe removing gravel from a sample location in TCEP grid 4.

0900 MS takes photo 2 of sludge leaking from AST #4.

0908 Begin opening and gauging ASTs. ASTs #5 and #7 contain salt sludges approximately 1-foot thickness on the bottoms of the tanks. AST #6 cannot be gauged or sampled due to the ~~water~~ _{water}.

50

Location Clarksdale - MS Date 2/10/04
Project / Client Red Panther

No	Dir	By	Description
1	N	MS/SS	Removing gravel cover, grid 4
2	N	MS/SS	Sludge leaking from AST #4
3	W	MS/SS	Sluffs formed on AST #2 valve
4	N	MS/SS	Sampling AST #8
5	W	MS/SS	Sampling AST #5
6	W	MS/SS	Product from AST #7
7	E	MS/SS	Sample location marker

[Signature]
2/10/04

51

Location Clarksdale - MS Date 2/10/04
Project / Client Red Panther

placement of the manway flange against AST #5. AST #4 manway bolts cannot be removed therefore it will not be sampled. Through a small vent pipe it appears that AST #4 is empty of contents. AST #3 contains 4-6 inches of solids on the bottom of the tank. ASTs #5 and #7 also contained a few in liquids on the bottom of the tanks. AST #2 contains approximately 1 foot of liquid. AST #1 contains 2-3 feet of solids with a small amount of liquid in one depression in the solids, depression is approximately 3 feet in diameter.

0920 MS takes photo 3 of sluff formed in fill valve of AST #2

0932 Steve Spurlin (EPA) arrives on site and is briefed by Steve Suster on site activities.

0933 AST #8 contains approximately 1 foot of what appears to be waste oil. AST #8 is leaking contents onto the ground.

1000 Clarksdale Public Utilities representative shows up onsite to make sure that no more markets

[Signature]

Location Clarksdale, MS Date 2/10/04
 Project / Client Red Panther

of utilities needed this week. Employees
 name was Buddy Bennett.
 1023 During walk around, Michel Allard collected
 TLLP samples from TLLP grids 2 and 4.
 1036 URS decons equipment.
 1100 URS prepares to collect a sample from
 AST #8.

1105 Samples from ASTs will be collected by
 attaching a plastic ^{ms} or glass plastic pitcher or
 glass jar to the end of a PVC pipe and dipped
 into the product. The pitchers/jars will be
 dedicated, one per tank. Begin sampling AST #8.
 1120 MS takes photo 4 of the sampling of AST
 #8.

1137 Steve Spurlin offsite. Spurlin request
 START 2 to call him at end of each workday
 with an update of the days activities.

1145 Break for lunch, all offsite.

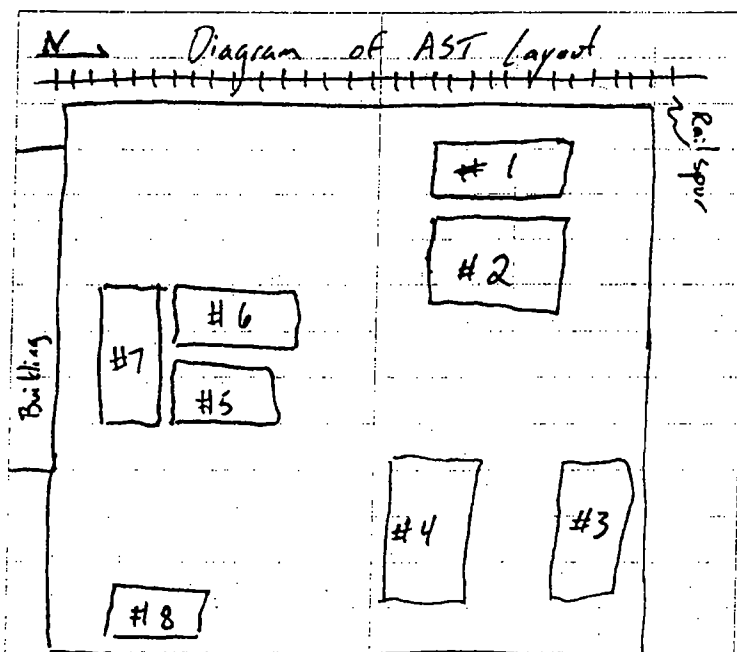
1300 Return from lunch. Prepare to continue
 sampling ASTs.

1305 Prepare to sample AST #5.

1310 MS takes photo 5 of sample collection from
 AST #5.

1330 Complete sample collection from AST #5.
 MS

Location Clarksdale, MS Date 2/10/04
 Project / Client Red Panther



Concrete secondary containment well
 ~ 10 inches

- ASTs #5, 6 and 7 are laying on their sides.
- AST #8 is a portable trailer mounted unit.
- AST #6 will not be sampled.
- AST #4 will ~~not~~ be sampled.

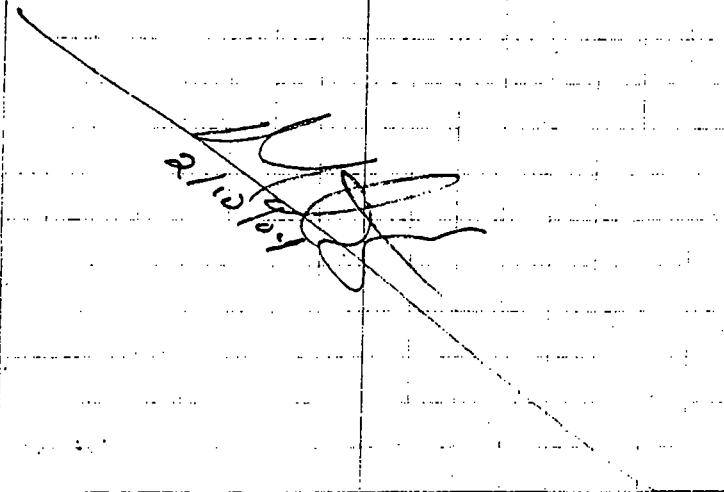
Michel Allard
 2/10/04

Location Charlesdale - MS Date 2/10/04
 Project / Client Red Panther

- 1340 Collect sample from AST #7. ———
 1345 MS takes photo 6 of the product from AST #7. ———
 1400 Phillip Weathersbee and Richard Ball (MDEER) arrive onsite. ———
 1405 Complete sample collection of AST #7. ———
 1430 Gain access to AST #4. AST #4 contains approximately 6 inches of sludge. Attempt to collect sample from AST #4. ———
 1455 Complete collection of sample from AST #4. ———
 1500 Begin collection of sample from AST #3. ———
 1520 Complete collection of sample from AST #3. ———
 1525 Begin collection of sample from AST #2. ———
 1530 AST #2 contents are liquid. A TCLP sample will not be collected. ———
 1538 Complete sample collection from AST #2. Begin collecting sample from AST #1. ———
 1600 Complete sample collection from AST #1. ———
 1610 Begin collecting gravel sample from number 11. ———
 1611 Gravel samples will be 2-point composites
 what's

Location Charlesdale - MS Date 2/10/04
 Project / Client Red Panther

- run for same analysis as TCLP 10. ———
 1620 Hoped^{MS} of Hepco offsite. ———
 1630 MDEER offsite. ———
 1635 MS takes photo 7 of a sample location marker. ———
 1715 Complete collection of gravel sample TCLP 11. ———
 1720 URS decons equipment and prepares for tomorrow's effort. ———
 1730 MS offsite for the day. ———
 1745 MS calls Steve Sporkin and updates him on day's activities. ———
 1750 MS arrives at hotel. ———



Location Clarksdale - MS Date 2/11/04
 Project / Client Red Panther

- 0715 MS departs site^{MS} for hotel for site. —
 0730 MS arrives at site. —
 0735 URS arrives onsite. Prepare equipment for sampling. —
 0820 Set up to sample TCLP grid 12 located at the north portion of the railroad dock area. Sample will be collected from 4 points approximately 25 feet apart. —
 0825 Begin collecting sample TCLP 12. Sample will be analyzed for same parameters as TCLP 10. —
 0836 MS takes photo 1 of a sample location from TCLP grid 12. —
 0845 Steve Spurlin (EPA), Richard Bell and Phillip Weatherbee (MDEQ) arrive onsite. —
 0905 MS takes photo 2 of filling jars for TCLP 12 sample. —
 0915 Surveyors, W. L. Burle Engineers, arrive onsite. Steve Siston shows them survey locations. —
 0920 Complete sampling TCLP 12 and set up to sample TCLP 13, south side of rail loading dock. —
 0930 MS takes photo 3 of an area of obvious contamination under the south side rail loading dock. —
 MS 2

Location Clarksdale - MS Date 2/11/04
 Project / Client Red Panther

No	Dir	By	Description
1	E	MS/SS	Sample location, TCLP 12
2	N	MS/SS	TCLP 12, filling jars
3	E	MS/MT	Contaminator under south loading docks
4	W	MS/SS	AST area
5	E	MS/SS	Ditch 5
6	S	MS/MA	Graeber property sampling

~~MS~~
 2/11/04

Location Clarksdale-MS Date 2/11/04
 Project / Client Red Panther

- 1015 Complete TCLP B sample collection. —
 1020 Move to TCLP 1 sample location, 4-point composite from ditch 5. Analysis will be same parameters as TCLP 10. —
 1025 MDEQ and EPA offsite. —
 1100 Complete collection of Sample TCLP 1. Steve Sustan leaves site to obtain offsite access from Graeber. —
 1101 MS takes photo 4 of the AST area. MS takes photo 5 of the ^{MS} Ditch 5. —
 1120 Steve Sustan offsite heading to Memphis airport. —
 1125 MA and MS proceed to Graeber property to collect hand Auger samples. Permission was granted by SHD with Graeber. —
 1135 MS takes photo 6 of hand auger sample collection from the Graeber property. —
 1140 Begin collecting DPT-7B. Sample is a composite from the interval of 0-2' bts from one boring. Sample will be analyzed for total arsenic. —
 1150 Complete collection of DPT-7B. —
 1200 Decon hand auger and set up on DPT-8B. —
~~MS~~

Location Clarksdale-MS Date 2/11/04
 Project / Client Red Panther

- 1210 Complete sample collection at DPT-8B. Decon hand auger. —
 1220 Set up on DPT-9A. —
 1235 Complete collection of sample DPT-9A. All Graeber property samples are to be analyzed for ~~As^{III}~~ total arsenic only. —
 All Graeber property samples were collected from 0-2 foot bts and were a composite of the 0-2 foot bts interval. ~~MS~~ —
 1245 Break for lunch. —
 1345 Return from lunch. Decon equipment, prepare samples for travel and clean up area. —
 1400 MS leaves site for hotel in Memphis, TN. —
 1530 MS arrives at hotel in Memphis, TN. —

~~MS~~
 2/11/04

Location Clarksdale - MS Date 2/12/04

Project / Client Red Panther

0800 MS departs hotel for Memphis airport. —

0930 MS boards flight to Pensacola, Florida. —

1130 MS arrives in Pensacola, FL. —

~~1300 MS ^{MS} arrive~~

1200 MS breaks for lunch. —

1245 MS returns from lunch and drives to Mobile, Alabama. —

1400 MS arrives in Mobile, Alabama. —

~~Handwritten signature and date 2/12/04~~

Location Clarksdale ^{MS} MS Date 2/13/04

Project / Client Red Panther ^{MS}

~~Large empty grid area with handwritten signature and date 2/13/04~~

62

Location CLARKSDALE, MS Date 4 OCT 04Project / Client RED PANTHER

1100 DAVID BROOKS OF HAPCO
(SUB TO URS) CONDUCTED
DAILY SAFETY BRIEFING &
WORK PLAN FOR THE DAY.
WESTON - TIM MAHER
EPA - STEVE SPURLIN
MDEQ - ROBERT HUCKABY

1115 COMPLETE DAILY SAFETY
BRIEFING.

1130 BRETT GROSS OF URS ON SITE

1200 BREAK FOR LUNCH

1300 RETURNED FROM LUNCH

CHERYL CARONARD OF EPA ON SITE.
ROBERT BALL OF MDEQ ON SITE.
HAPCO BEGAN REMOVING
CONCRETE PAD NEXT TO
RAILSPUR (SECTION C) WITH
JOHN DEERE HOE RAKE.

1600 DITCH 1 SECTION B, SOIL
STACKPILE SAMPLED

63

Location CLARKSDALE, MS Date 4 OCT 04Project / Client RED PANTHER

1740 LEL METER USCB TO TEST
INTERIOR AIR OF TANK #7
IN PREPARATION FOR CUTTING
TANK

1750 BEGAN CUTTING END OF OF
TANK #7.

1815 BOTTOM OF TANK #7 REMOVED
(ACCESS HOLE)

1830 OFF SITE FOR THE DAY.

TSM
4 OCT 04

64

Location CLARKSDALE, MS Date 05 OCT 04Project / Client RED PANTHER

0700 ON SITE

0715 CONDUCT DAILY SAFETY BRIEFING.

DISCUSSED DANGERS OF CONTAMINANTS (ARSENIC) PEOPLE PPE WHEN CUTTING & CLEANING TANKS.

0730 EXCLUSION ZONE SET UP IN PREPARATION FOR DECON OF AST'S

0800 MSD&Q ON SITE

0845 CITY OF CLARKSDALE PUBLIC WORKS DEPT ON SITE TO INSPECT AREA C IN PREP FOR FUTURE EXCAVATION. ALOH COLLEY.

0900 CITY ELECTRIC OUT TO LOOK AT POWER POLES IN AREA C FOR TEMPORARY BRACING.

0920 RICHARD BULL OF MSD&Q OFF SITE.

0950 FIRE STARTED IN VACUUM TANK. FILTER BAGS CAUGHT

Location CLARKSDALE, MS Date 05 OCT 04⁶⁵Project / Client RED PANTHER

* OUT OF SEQUENCE

WHEN TRYING TO CUT TOPS OF HANGERS.

1010 FIRE OUT. LOCAL FIRE DEPT. ARRIVED ON SCENE. POLICE CHIEF AND COUNTY EMERGENCY MANAGEMENT ON SITE.
1020 CALLED STEVE SPURLING

NOTE: ROBERT HUCKABY OF MSD&Q RETURNED TO SITE WHEN HE SAW THE SMOKE PLUME.

1200 OFF SITE FOR LUNCH

1230 RETURN FROM LUNCH
CARLTON GIBSON OF WASTE MANAGEMENT ON SITE TO DISCUSS BEST WAY TO CONTAMINATED RESIDUE.

1440 APPEARS TO BE EXCESSIVE SMOKE FROM AST CUTTING OPERATION. STOPPED ACTIVITIES TO DISCUSS FIRE SAFETY AND WAYS TO REDUCE SMOKE

* 1300 MISSISSIPPI GAS OUT TO LOCATE MAIN IN AREA C

Location CLARKSDALE, MS. Date 5 OCT 04
 Project / Client RED PANTHER

- 1540 B & D TRUCKS AND RECOVERY
 ON SITE TO DELIVER VAC TANK
- 1610 TOOK SAMPLE OF RESIDUE
 IN TANK #6 (FULL TANKS)
- 1700 TOOK COMPOSITE SAMPLE
 FROM TANK #'S 1, 3, 5 & 7.
- 1830 OFF SITE FOR THE DAY.

TANK #6
 05 OCT 04

Location CLARKSDALE, MS Date 6 OCT 04
 Project / Client RED PANTHER

- 0700 ON SITE. GATES STILL LOCKED.
 BRETT JACOBS (URS) ON SITE.
- 0730 HERCO CREW ON SITE
- 0735 CONTRACT DAILY SAFETY
 BRIEFING. DISCUSSED
 DUST CONTROL FOR VACUUM
 OPERATIONS. GAS LINE
 SHUTOFF EXCAVATION.
 FIRE SAFETY FOR COMPLETING
 TANK CUTTING.
- 0815 MISSISSIPPI VALLEY GAS ON SITE
 TO OVERSEE GAS LINE EXCAVATION
 AND TO CUT & CAP 1" LINE
 UNDER LOADING DOCK.
- 0840 BEGAN GAS LINE EXCAVATION.
 BEGAN VACUUM OPERATION.
- 0930 PR MEETING WITH LOCAL
 STEVE & COUNTY OFFICIALS.
 SPURLIN - GAS LINE FOUND @ 18"
 ON SITE EXCAVATION CAUSED MINOR
 LEAK IN LINE. M.V. GAS
 WORKING TO CAP GAS LINE.
- 1145 CONCLUDE PR MEETING
 WITH LOCAL & COUNTY OFFICIALS

Location CLARKSDALE, MS Date 6 OCT 04
 Project / Client RED PANTHER

- 1200 BREAK FOR LUNCH
 1230 RETURN FROM LUNCH
 STARTED WORKING ON LOADING DOCK IN AREA C.
 1315 LABELLED DRUMS USED FOR CONTENTS OF TANK #8.
 1445 COMPLETED TRIPLE WASH & DEMO OF TANK #8.
 PRESSURE WASHED CONTAMINANTS FROM PAD UNDER TANK #8.
 VACUUMED RINSEATE INTO CONTAINER FOR PROPER DISPOSAL (ALL CONTENTS & RINSEATE FROM TANK #8 IN 55 GAL. STEEL DRUMS)
 1505 FIRST LOAD OF SCRAP METAL TAKEN TO MARTIN BROS SCRAP METAL, CLARKSDALE.
 1530 SECOND LOAD OF SCRAP METAL TO MARTIN BROS.
 1540 STARTED VACUUMING TANK #3
 1610 STOPPED WORKING ON TANK #3. LARGE CHUNKS OF SOLIDS HINDERING PROCESS OF

Location CLARKSDALE, MS Date 6 OCT 04
 Project / Client RED PANTHER

- LOADING MATERIAL INTO VACUUM BOX.
 1615 MOVED EQUIPMENT TO STREET OF TANK #2. CONTENTS PRIMARILY LIQUID.
 1625 QUESTIONS RAISED ABOUT CONTENTS OF TANK #2. TESTED PH. WAS FOUND TO BE 14+. DELAYED CONTENTS REMOVAL TO CHECK REACTIVITY WITH MATERIAL ALREADY IN VAC TANK
 1645 MOVED VACUUM OPERATION TO TANK #7. BACKHOE USED TO LOOSEN MATERIAL INSIDE TANK
 1700 MATERIAL IN TANK #2 FOUND TO BE NON-REACTIVE. VACUUM OPERATION RETURNED TO TANK #2
 1815 FINISH REMOVING MAJOR SOLIDS FROM TANK #2
 1830 OFF SITE FOR THE DAY.
- [Signature]*

70

Location CLARKSDALE, MS Date 7 OCT 04Project / Client RED FATHER

- 0730 ON SITE
- 0735 CONDUCT DAILY SAFETY BRIEFING. SLIPS, TRIPS & FALL, REVIEWED EXCLUSION ZONE, OVERHEAD POWERLINES IN AREA.
- 0745 CONCLUDE DAILY SAFETY BRIEFING.
- 0750 MOVED SOLIDS ROLL OFF CLOSER TO HOT ZONE TO PREVENT SPREADING CONTAMINATION
- 0815 BEGAN DECON OF AST #3
- 1020 CARLTON GIBSON OF WASTE MANAGEMENT ON SITE TO DISCUSS MATERIAL PROFILES & MOST EFFICIENT SHIPPING.
- 1030 NES ON SITE FOR RENTAL EQUIPMENT MAINTENANCE.
- 1140 AST #'S 2 & 3 DECONNED & READY FOR DEMOLITION
- 1200 BREAK FOR LUNCH
- 1230 RETURN FROM LUNCH SET UP TO START DEMOLITION

71

Location CLARKSDALE, MS Date 7 OCT 04Project / Client RED FATHER

OF AST #3

1250 BEGAN REMOVING SOLIDS FROM AST #7

TEST RESULTS FROM SOIL STOCKPILE (ALL RESULTS IN PPB)

TOXAPHENE	8,730,000
DDT	413,000
DDE	32,900
DDT	984,000
DIBEN	308,000
CHLORDANE	2850
ENDRI	84,300
ENDRI KETONE	93,700
HEPTACHLOR EPOXIDE	5,600
ALDRIN	25,700

1430 WARNER COLDEN OF NEW FIELDS (STRATEGIC PLANNING) WORKING WITH URS.

1500 BRENT JACOBS OFF SITE

1700 COMPLETE & CUTTING & FOLDING AST #3

~~1830 OFF SITE FOR THE DAY~~

TJ M 7 OCT 04

72

Location CLACKSDALE, MS Date 7 OCT 04Project / Client RED PANTHER

- 1730 FINISHED CUTTING AST #2
IN HALF
- 1745 AST #2 STAGED FOR REMOVAL
AT THE EDGE OF THE EXCLUSION
ZONE. HEPA CO WILL CHECK WITH
MARTIN BROS. TO SEE IF THEY
CAN TAKE AST HALVES WITHOUT
FOLDING.
- 1800 AST #9 STAGED AT EDGE OF
EXCLUSION ZONE FOR CUTTING
& REMOVAL
- 1830 OFF SITE FOR THE DAY

NOTE: HEPA CO PLANS TO DEMO
AST #5 AND REMOVE AST #'S
2, 3, 7 & 9 TOMORROW. ALSO
WESTON WILL BE OFF SITE
FOR THE WEEKEND, RETURNING
11 OCT 04.

TJ M

73

Location CLACKSDALE, MS Date 11 OCT 04Project / Client RED PANTHER

- 1030 WESTON ON SITE. HEPA CO
CREW ON SITE AT ARRIVAL
AST #'S 1, 4, 5 & 6 STILL TO
BE DEMONED & DEMO'D
AST #'S 2, 3 & 7 AND DUST
COLLECTOR OFF SITE.
- 1100 MICHAEL HEARD OF UPS
ON SITE. BEGAN REMOVING
CONTENTS OF AST #5. BEGAN
CUTTING END OF AST #1
IN PREPARATION FOR DEMO.
- 1200 BREAK FOR LUNCH
- 1230 RETURN FROM LUNCH
- 1300 DAVID BROOKS OF HEPA CO
ON SITE. RECEIVED PRELIMINARY
RESULTS FROM LAB FOR AST #6.
METALS & VOC'S INDICATE
ARSENIC. WAITING FOR PESTICIDE
RESULTS.
- 1315 PES ON SITE FOR REPRES
TO TRACK AEE. WOULD NOT
START THIS MORNING.
EPA ID # MS 5000272385
FOR CONTAINER LABELS & MAX FETS

74

Location CLARKSDALE, MS Date 11 OCT 04Project / Client RED PANTHER

- 1330 NEW SLUDGE BOX PLACED FOR
CONTENTS OF AST #4 (PHENOL)
- 1400 AST #5 DECONED & FOLDED
FOR REMOVAL FROM SITE.
- 1430 FIRST LOAD OF CONCRETE FROM
LOADING DOCK READY TO LEAVE.
- 1435 BEGAN REMOVING CONTENTS
OF AST #4 INTO DEDICATED
SLUDGE BOX.
- 1530 BEGAN RINSING AST #4.
- 1600 TEST RESULTS BACK FROM THE
LAB. AST #6 AND COMPOSITE
SAMPLE CAME BACK BDL
FOR PESTICIDES. AST #'S 1 & 6
CAN SHIP UNDER SAME WASTE
PROFILE AS AST #'S 2, 3, 5 & 7.
- 1650 AST #4 RINSED & READY FOR DEMO.
- 1715 BEGAN REMOVING THE CONTENTS
OF AST #6.
- 1840 AST #6 RINSED & READY FOR DEMO.
- 1900 OFF SITE FOR THE DAY.

Tim 11 OCT 04

75

Location CLARKSDALE, MS Date 12 OCT 04Project / Client RED PANTHER

- 0700 WESTON ON SITE. NES
ON SITE FOR REPAIRS TO
TRACKHOE.
- 0730 HEATED CREW & MICHAEL
ALLARD (URS) ON SITE.
- 0735 CONDUCT DAILY SAFETY
BRIEFING & REVIEW
ACTIVITIES FOR THE DAY.
- 0745 CONCLUDE SAFETY BRIEFING.
- 0800 MOVE DRUMS OF SOIL CUTTINGS
& DECON WATER FROM PREVIOUS
SITE SAMPLING ACTIVITIES TO
BE COMBINED WITH OTHER
MATERIAL FOR REMOVAL FROM
THE SITE.
- 0830 BEGIN DECON AST #1
- 0940 AST #6 OFF SITE TO MARTIN BROS.
- 1020 AST #5 OFF SITE TO MARTIN BROS.
- 1030 START DECON OF SOIL DRUMS
& EQUIPMENT.
- 1050 CARLTON GIBSON OF WASTE
MANAGEMENT ON SITE. SOIL
STACKPILE PROFILE APPROVED.
SHOULD HAVE TRUCKS THURSDAY.

76

Location CLARKSDALE, MS Date 12 OCT 04Project / Client RED PANTHER

- 1050 VAC TRUCK & SLUDGE BOXES (3)
TO SHIP TO EMELLE, AL.
STOCKPILED SOIL TO SHIP TO
LAKE CHARLES, LA. CONCRETE
FROM LOADING DOCK SHIPPED
TO TUNICA, MS. AS CONSTRUCTION
DEBTS.
- 1100 SLUDGE BOXES READY TO SHIP.
- 1200 BREAK FOR LUNCH
- 1230 RETURN FROM LUNCH.
- 1235 BEGIN CUTTING BOTTOM END
OF ABT #1
- 1300 BEGIN LOADING CONCRETE FOR
REMOVAL FROM SITE.
- 1345 FIRST CONCRETE LOAD OFF SITE.
- 1440 MATTHEWS TRUCKING (2-20yd dump)
ON SITE TO HAUL CONCRETE
- 1515 MADE REPAIRS TO FACIL &
SOFFIT ON OFFICE BUILDING
DAMAGED BY CRANE WHEN
MOVING DUST COLLECTOR FROM
AREA D.
- 1550 FIRST 20yd. LOAD OFF SITE

77

Location CLARKSDALE, MS Date 12 OCT 04Project / Client RED PANTHER

ABT #8	LN 2902	6 DUMPS
	PROFILE NO VB 2771	
ABT #4	LN 2902	SLUDGE BOX
	VB 2771	5507
ABT #'S 1, 2, 3, 5, 6 & 7		2 SLUDGE BOX
	LN 2759	5509
	VB 0423	798
VAC BOX	?	
	VB 22692	(VAC BOX NO.)
1630	SECOND 20yd LOAD OFF SITE	
1830	OFF SITE FOR THE DAY	
<i>Handwritten signature</i> 12 OCT 04		

78

Location CLACKSALL, MS Date 13 OCT 04Project / Client RED PANTHER

- 0700 WESTON ON SITE
 0730 HEPACO & URS ON SITE
 0735 CONDUCT DAILY SAFETY BRIEFING & REVIEW ACTIVITIES FOR THE DAY.
 0740 CONCLUDES SAFETY BRIEFING
 0800 AST#4 OFF SITE TO MARTIN BROS.
 0830 FIRST HALF OF AST#1 TO MARTIN BROS.
 0900 MISSISSIPPI VALLEY GAS ON SITE TO PUT A PERMANENT CAP ON GAS MAIN IN AREA C. MATTHEWS TRUCKING ON SITE TO CONTINUE LOADING CONCRETE.
 0940 SECOND HALF OF AST#1 TO MARTIN BROS.
 1050 FIRST MATTHEWS TRUCK OFF SITE
 1105 LOADING SECOND TRUCK.
 1330 SECOND MATTHEWS TRUCK OFF SITE
 1345 BREAK FOR LUNCH
 1430 RETURN FROM LUNCH.
 1630 GAS COMPANY BACK FILLING HOLE
 1640 HEPACO RETURNS TO PULLING UP TRUCK
 1830 OFF SITE FOR THE DAY
 TMR 13 OCT 04

79

Location CLACKSALL, MS Date 14 OCT 04Project / Client RED PANTHER

- 0700 WESTON ON SITE.
 0730 HEPACO ON SITE.
 0740 URS ON SITE. CONDUCTED DAILY SAFETY BRIEFING & REVIEWED ACTIVITIES FOR THE DAY.
 0745 CONCLUDES SAFETY BRIEFING.
 TRUCK ARRIVED TO TAKE STOCKPILED SOIL OFF SITE.
 0750 BEGIN LOADING TRUCK WITH STOCKPILED SOIL. (ROBERT D WOOD)
 0800 START WORK ON FINISHING TRACK REMOVAL.
 0920 STOCKPILED SOIL TRUCK OFF SITE
 HAZ WASTE MANIFEST:
 WASTE CODES D002, D012, D015
 RQ, HAZARDOUS WASTE, SOLID,
 NOS, 9, NA 3077, III
 TOXAPHENE & EDDRIE
 HANDLING CODE H132(B10)
 STATE MANIFEST DOCUMENT NO.
 LA A 6806117
 MANIFEST DOCUMENT NO.
 101244

Location CHARLESTON, MS Date 14 OCT 04Project / Client RED PANTHER

THIS WAS THE ONLY TRUCK AVAILABLE TODAY. THE REST OF THE SOIL, THE SLUDGE BOXES AND THE VAC-BOX WILL BE SHIPPED NEXT WEEK. HEPAKO & URS ARE WORKING OUT THE DETAILS OF THE TRUCK SCHEDULING TO MAKE IT CONVENIENT FOR ALL PARTIES.

1200 BREAK FOR LUNCH

1330 RETURNED FROM LUNCH

1400 DAVID BROOKS (HEPAKO) REQUESTED A CONFIRMATION LETTER REGARDING THE COMBINATION OF AST#S 1, 2, 3, 5, 6 & 7 INTO SLUDGE BOXES 5509 AND 798. STEVE SPURLIN OF THE EPA WAS CONTACTED. STEVE AND BRENT JACOBS (URS) INDICATED THAT NO LETTER WOULD BE DRAFTED.

1530 OFF SITE FOR THE DAY
RETURNING TO ATLANTA
TOMORROW.

TJM 14 OCT 04

Location _____ Date _____

Project / Client _____

Location CLARKSDALE MS Date 4/12/05Project / Client RED FANTHER

0730 DEPART HOTEL FOR JOB SITE.

0740 ARRIVED AT SITE.

0800 WRITING STEEL CREW

ON SITE TO BEGIN
DEMOLITION OF BUILDINGS

OVER BREEZEWAY.

1130 BREAK FOR LUNCH

1230 RETURN FROM LUNCH

1315 MEET IN CONFERENCE ROOM

TO DISCUSS SITE LAYOUT
AND SAFETY.

1600 CONCLUDED MEETING.

TOPICS DISCUSSED:

SITE SECURITY

ACTION LEVELS

DECON STATIONS

PPE LEVELS

PUBLIC RELATIONS

DAMAGE ALLEGING

BACKFILL REQUESTS.

1800 DEPART SITE FOR THE DAY

1810 ARRIVE BACK AT HOTEL

TIMPLocation CLARKSDALE MS Date 4/13/05Project / Client RED FANTHER

0750 DEPART HOTEL FOR JOB SITE

0800 ARRIVED ON SITE.

0900 CONVENED MEETING WITH
LOCAL AUTHORITIES.

TOPICS COVERED:

- SITE OVERVIEW

- APPROVED TRAFFIC PLAN

- FLAMMABLE MATERIALS AND
WHAT THEY ARE USED FOR.- EQUIPMENT DECON OF
LOCAL AGENCY NEEDS TO
ENTER THE SITE- EMERGENCY RESPONSE
DURING NON-BUSINESS
HOURS.- SITE SECURITY AND
EVACUATION PLAN

- SCHEDULE OF ACTIVITIES

- TRUCK ROUTES / ROAD USE

- GAS LINE LOCATION AND
PRECAUTIONS- WHY NEED'T ALL BUILDINGS
BEING REMOVED.

* REMAINING IMMEDIATE

Location CLARKSDALE, MS Date 4/13/05
 Project / Client RED ANOTHER

CONTAMINATION THREAT

- MAY BE INVESTIGATED
 FURTHER IN THE FUTURE.

- 1015 MEETING APPROVED
 1200 DEPART FOR LUNCH
 1300 RETURN FROM LUNCH
 1345 URS TOOK COMPOSITE
 SAMPLE FROM DRAINAGE
 DITCH AT SOUTH END OF
 PROPERTY FOR DISPOSAL
 PROFILING
 1430 URS TOOK COMPOSITE SAMPLE
 FROM IN FRONT OF REAR
 STORAGE BUILDING NEXT
 TO LOADING RAMP FOR
 DISPOSAL PROFILING
 1700 DEPART SITE FOR THE DAY
 1715 ARRIVED AT HOTEL

TJMO

Location CLARKSDALE, MS Date 4/14/05
 Project / Client RED ANOTHER

- 0730 DEPARTED HOTEL
 0740 ARRIVED ON SITE
 1030 CLARKSDALE ELECTRIC
 DEPARTMENT WAS ON SITE
 TO DISCONNECT POWER
 TO BUILDINGS AT THE
 REAR OF THE PROPERTY.
 (CLARKSDALE PUBLIC UTILITIES)
 DID A WALK THROUGH WITH
 CARRY PROVINCE TO IDENTIFY
 HAZARDS POSED BY POWER LINES
 - BOTTOM LINE 120 VOLT
 - NEXT UP NEUTRAL
 - 3 STOP HIGH VOLTAGE
 1215 DEPART FOR LUNCH
 1315 RETURN FROM LUNCH
 1345 COMPASS PUT DOWN 6 MIC
 PLASTIC BEHIND BREEZE WAY
 SO THAT WEIGHT STEEL COULD
 ACCESS THE REAR OF THE
 BUILDING WITHOUT SPREADING
 CONTAMINATION INTO THE ROAD.
 1700 DEPARTED SITE FOR THE DAY
 1710 ARRIVE AT HOTEL

TJMO

Location CLARKSBURG, MS Date 4/15/05Project / Client RED PANTHER

- 0750 DEPART HOTEL
 0800 ARRIVE ON SITE. COMPASS HAS FLAMMABLE STORAGE BUILDING IN SOUTHWEST CORNER OF PROPERTY DISMANTLED AND IS WORKING ON REMOVING THE WINDOW DOCK BEHIND FROM EAST SIDE OF BUILDING, BEHIND THE OFFICE
 1000 MOVED EXCAVATOR TO NORTH END OF PROPERTY TO BEGIN DEMOLITION OF AST SUPPORTS AND CONTAINMENT PAD.
 1145 DEPART FOR LUNCH.
 1245 RETURN FROM LUNCH.
 1330 COMPASS BEGINS DEMO OF SWAMP LID AND CONCRETE IN PARKING AREA AT NORTH END OF THE PROPERTY.
 1530 DEPART SITE FOR THE WEEKEND

————— TTM —————

Location CLARKSBURG, MS Date 4/15/05Project / Client RED PANTHER

- 0750 DEPART HOTEL
 0800 ARRIVE ON SITE. COMPASS FINISHING CONCRETE DEMO ON NORTH END OF PROPERTY.
 0900 COMPASS BEGINS ASSEMBLING ROAD CLOSED SIGNS AND BARRICADES.
 0940 MET WITH DAVID DELANEY OF URS AND CALLED BRENT JACOBS ABOUT ACTION LEVELS FOR CONFIRMATION STALPES.
 BRENT INDICATED THAT A COPY OF THE WORK PLAN FROM NEWFIELDS SHOULD ARRIVE TODAY.
 1045 FEDEX ARRIVED WITH NEWFIELDS WORK PLAN.
 1130 DEPART FOR LUNCH
 1230 RETURN FROM LUNCH
 COMPASS HAS CPU COME OUT TO RESTORE WATER AND ELECTRIC TO BUILDING AT SOUTH OF PROPERTY

————— TTM —————

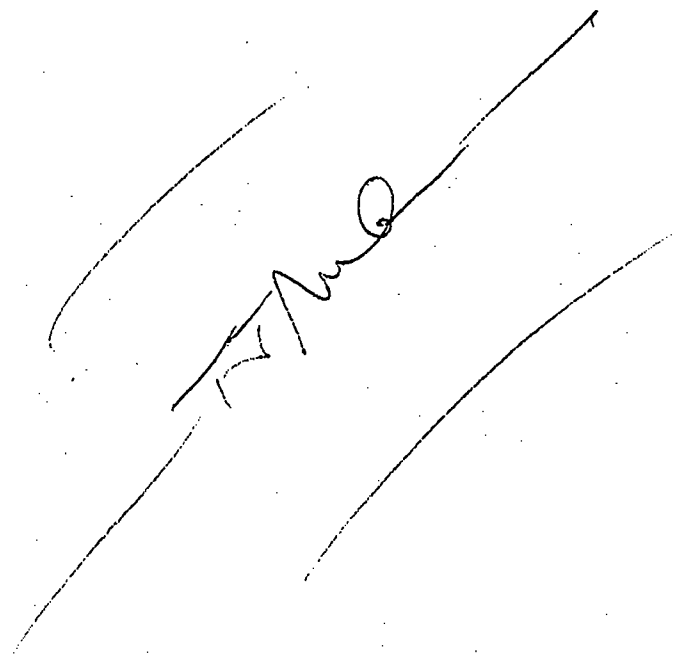
Location CLARKSDALE, MS Date 4/13/05Project / Client RED PANTHER

Parallel to S888 ST.
THE TRUCK DECON PAD
IS SET IN THIS LOCATION.

1400 REVIEWED FINAL DESIGN
WORK PLAN PROVIDED BY
URS.

1700 DEPARTED SITE FOR THE DAY.

1710 RETURNED TO HOTEL

Location CLARKSDALE, MS Date 4/14/05Project / Client RED PANTHER

0820 DEPART HOTEL

0830 ARRIVE ON SITE. COMPASS
ON SITE WORKING ON
MODIFICATIONS TO DECON PAD.

0900 ROAD CLOSED SIGNS PUT
IN PLACE AT TALLAHATCHIE
RVE. ROAD IS NOW CLOSED TO
THROUGH TRAFFIC

1000 CPA WORKING ON UTILITIES
TO STORAGE BUILDING AT
SOUTH END OF PROPERTY
PERT TO DECON PAD

1145 DEPART FOR LUNCH

1245 RETURN FROM LUNCH

1300 ELECTRICIANS ON SITE TO
FIX OUTLET IN UTILITY ROOM
WITH FRIDGE. FOUND A
BREAKER THAT WAS OFF.
WHEN TURNED ON, A STRANGE
BURNING SMOEL WAS NOTICED.
WATER FOUNTAIN CONDENSER
IN HALL WAS FOUND TO BE
SHORTING OUT. POWER WAS
DISCONNECTED TO WATER FOUNTAIN

— TJM —

Location CLARKSDALE, MS Date 4/19/05Project / Client RED PANTHER

- 1400 SECURITY GATE AT SOUTH
END OF PROPERTY IN PLACE
(WRIGHT STEEL)
- 1500 SECURITY GATE AT SHAFER
ST AT WEST OF PROPERTY
IN PLACE
- 1630 DEPART SITE FOR THE DAY
- 1640 RETURNED TO HOTEL

TJMO

Location CLARKSDALE, MS Date 4/20/05Project / Client RED PANTHER

- 0800 DEPART HOTEL
- 0810 ARRIVE ON SITE. INTERNET
CONNECTION STILL DOWN.
REROUTED HOOKUP TO OLD
PHONE LINE. INTERNET RESTORED.
- 0900 CPU ON SITE INQUIRING ABOUT
WHICH FIRE PUMP WILL BE USED
FOR THE WATER TRUCK. A
METER WILL BE CONNECTED
TO PUMP IN SOUTHWEST
CORNER OF PROPERTY.
- 0915 WRIGHT STEEL ON SITE
WORKING ON GUTTERS TO
BUILDINGS ON SOUTH SIDE
OF PROPERTY, AND REMOVING
OLD FENCE ALONG TALLAHATCHIE
- 1145 DEPART FOR LUNCH
- 1245 RETURN FROM LUNCH.
- 1400 COMPASS BEGINS DIGGING
TEST PITS TO LOCATED THE
HIGH PRESSURE GAS MAIN
AT THE REAR OF THE
PROPERTY.
- 1600 OFF SITE FOR THE DAY

TJMO

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Location Clarksdale, MS Date 4/21/05
 Project / Client Red Panther

- 0820 DEPARTED HOTEL
 0830 ARRIVED ON SITE. WRIGHT
 STEEL WORKING ON GUTTERS
 AND PERIMETER FENCE.
 COMPASS CONTINUING TEST
 PITS TO LOCATE GAS LINE
 1000 W.L. BURLE ENGINEERING
 ON SITE TO BEGIN SURVEY
 AND SET UP EXCAVATION
 GRIDS.
 1145 DEPART FOR LUNCH.
 1245 RETURN FROM LUNCH
 1400 COMPASS FINISHED DIGGING
 TEST PITS FOR FINDING
 THE GAS MAIN AT THE REAR
 OF THE PROPERTY.
 1630 DEPART SITE FOR THE DAY
 1640 RETURNED TO HOTEL.

T. M. Q.

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Location Clarksdale, MS Date 4/22/05
 Project / Client Red Panther

- 0800 DEPART HOTEL
 0810 ARRIVE ON SITE. COMPASS
 WORKING ON REMOVING
 RAILROAD TIES FROM REAR
 OF PROPERTY.
 0900 WRIGHT STEEL ON SITE TO
 CONTINUE INSTALLING
 GUTTERS
 0910 W.L. BURLE ENGINEERING
 ON SITE TO CONTINUE
 SURVEYING EXCAVATION
 BOUNDARIES AND FIND
 INITIAL ELEVATIONS BEFORE
 EXCAVATION BEGINS.
 1300 DEPART SITE FOR ROTATION
 HOME. TARA ROWLAND
 WILL BE ON SITE FOR THE
 NEXT TWO WEEKS

T. M. Q.

Location Clarksdale, MS Date 04/25/05
 Project / Client Red Panther

- 0630 - Depart hotel for site. _____
 0710 - Arrive onsite, begin to find office and read note that Tim left. START-2 (Rowland) onsite for the next 3 weeks. _____
 Rowland signs HASP and begins to read over NewFields' final design work plan. _____
 0830 - Wright. Steel continuing to work on gutters and perimeter fence. Compass continued to remove the R/R ties. _____
 1000 - Break for lunch. _____
 1100 - Back from lunch. _____
 1300 - Rowland takes a ride with Dave Delaney from URS to go around the site. Rowland takes two photos. _____
 1700 - Depart site for the day. _____

Janet Rowland
 End of Day

Location Clarksdale, MS Date 04/26/05
 Project / Client Red Panther

- 0700 - START-2 (Rowland) departs hotel for site. _____
 0745 - Rowland arrived onsite. Rain for Rent has arrived onsite to hookup filters to frac tanks. Rowland was informed that there will be 2 trucks running today back & forth to Tunica disposing of the concrete. _____
 1000 - Two (2) trucks arrived onsite for the concrete, will come back for two (2) more loads after the 1st two (2) are disposed. _____
 1200 - Lunch break. _____
 1230 - Back from lunch break. _____
 1600 - Rowland discusses the need for her to get a copy of those manifests so that Rowland could put them into a spreadsheet, or at least put them in the log book. URS (Delaney) signed the manifests. Will get weights tomorrow, along with a copy of the manifests. _____
 1700 - End of Day. _____

Location Clarksdale, MSDate 04/27/05Project / Client Red Panther

0700 - START-2 (ROWLAND) depart hotel
for site.

0745 - ROWLAND arrives onsite.

0815 - COMPASS Environmental informs ROWLAND that they will be disposing of more concrete today. Two trucks have been loaded out so far.

0915 - COMPASS Environmental gives ROWLAND a copy of yesterday's ton total will file in drawer. COMPASS said they will give us a copy everyday.

1000 - Brent Jacobs (URS) arrives onsite.

1045 - Delaney gives ROWLAND a copy of the spreadsheet info he has collected from yesterday. ROWLAND put info into a spreadsheet.

1230 - Break for lunch.

1330 - Lunch break is over.

1445 - ROWLAND takes a site walk and takes photos.

1530 - ROWLAND re-reads the Newfields project work plan.

1630 - Brent Jacobs comes by and says that he just got off the phone with Steve Spurlin (EPA) about the

Location Clarksdale, MSDate 04/27/05Project / Client Red Panther

confirmation sample standards & that everything turned out to be O.K. as far as the standards with the exception of the toxaphene standard, in which Brent was going to tell the lab to fax or email Denise their lab info. Brent then invites ROWLAND into the meeting with him, the URS, COMPASS, & the Lab guys. During this meeting they discuss the following things:

- Which area COMPASS may want to start digging in. (Pros & Cons) of each way to do it. Having the trucks come in on SHSSE St. is an option. COMPASS would like to dig along the way of AREA C but would like to leave the road in along C. So they will talk to Steve about leaving that in. They also mentioned going ahead and trying

Location Clarksdale, MS Date 04/27/05Project / Client Red Panther

to get a sample from the C5 and on down for a profile to be made. So that they will know how deep they have to go on C8.

- Also they talked about the bracing of the gasoline near the C2 near the building. Gas people said that the lines need to be braced every 25'. Compass had thought about digging it out along both sides of the pipe, but if it rained the soil would give way.

- Tomorrow's meeting will begin @ 11am.

- Also, Compass hopes to begin hauling non-haz soil, tomorrow.

1730 - Meeting adjourned.

1800 - Rowland departs site for hotel.

John P. [Signature]

End of Day

Location Clarksdale, MS Date 04/29/05Project / Client Red Panther

0730 - Steve - 2 (Rowland) departs hotel for site.

0815 - Rowland arrives onsite, and goes for a site walk to see what areas they are excavating & where have start on the area of C7 & C8 & Area D with the 2' foot excavation, and are loading trucks, with non-hazardous soil, & continue on the concrete (non-haz)

1000 - The two (2) representatives from NEWFIELDS arrive onsite.

1030 - OSC (Spurlin) arrives onsite and Rowland & Spurlin sit and talk about any concerns or questions that she has about the site, and they discuss some things that Brent Jacobs (URS) said that he saw onsite that he didn't like and Rowland in return pointed some things out to Brent. And the list is as follows:

1. Barb wire along the top part of fence, to be fixed by Wright Steel and also they need to fix

Location Clarksdale, MSDate 04/28/05Project / Client Red Panther

the gutters.

2. No smoking in Hot Zone Excavation area and in Building.

3. Tarping the trucks.

4. Decouring trucks that leave the site.

5. Expanding the "Caution" tape around the site to keep the cotton trucks from exiting the site, along SASSE St.6. Hanging ^{more} up keep out signs.

7. Set air perimeter monitoring stations

1100 - Meeting with USEPA, Weston, URS, NEWFIELDS, and ECCS.

The following were discussed:

1. Each individual aliquot will be held by the onsite lab in case one of the composite samples come back high, each individual aliquot is analyzed.

2. Each Grid is 60x60
~ Broken into (4) - 30x30 aliquots

3. Grid composite sample should be 24 hr. turnaround.

* Still need to decide when to run MS/MSD, equipment blanks

Location Clarksdale, MSDate 04/28/05¹⁰¹Project / Client Red Panther

4. Data will be given in Excel format, COC (.pdf).

5. There will be a May 12th meeting between NEWFIELDS & PRP and they will explain to the PRP's of the possible financial increase if Compass has to dig deeper

6. Q: How many grids may be opened at one time?

A: There maybe four (4) grids open at one time instead eight (8). The grids are (60x60).

7. Q: What happens if you get to the end of the digging of an Area and it blows your Performance Standards?

A: The Performance Standards will have to be adjusted accordingly because it must meet the overall average for the grids.

8. If you had 15ND and 1 Hot Spot (1500) then your overall average is ok but if you had another one above 1500 then you would have to dig that up

Location Clarksdale, MSDate 04/28/05Project / Client Red Panther

9. Monitor the excavation of grids to correct depth, make sure it goes to correct DF.
10. If there is visible contamination - NEWFIELDS would like for it to be sampled
 - Steve indicated that he would like for us not worry about the usual until we get to the vertical depth of 2' - 6' - 10'.
11. 0-2' will be analyzed for Total Chlorinated Pesticides
~~Any~~ Any depth greater than 2' is considered subsurface soils.
12. Surface samples will be analyzed on a point by point analysis
13. Teraphene standard & calibration data to Denise in Athens by onsite ETC & ECCS.
14. Steve said that Mike (Compass Environmental) could come 3ft. off curb and a 6ft berm for the 500' hill

Location Clarksdale, MSDate 04/28/05¹⁰³Project / Client Red Panther

- to sit on.
15. Mike (CE) said that per Waste Management that Mississippi does not have to have tarps on their trucks.
16. There are now 14 air monitoring points twice a day. Steve wants 3 of those stations to be monitored with mini-rain on an 8hr interval. URS will take care of the monitoring.
17. Will cover excavation with plastic while open.
- 12:30 - Meeting adjourned.
- 13:30 - Rowland, Spurlin, Feb Jacobs, Delaney, walk around site.
- 15:30 - Spurlin departs site.
- Spurlin informs Rowland that he would like for START-2 to do a POURP at least once a month, also that he wants START-2 to take pictures of new developments

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Location Clarksdale, MS Date 04/28/05
Project / Client Red Panther

you don't have to take pictures
everyday, watch the contractors
make sure they don't get too
related.

1730 - Rowland departs for hotel.

Jan Rowland

04/28/05

Location Clarksdale, MS Date 04/29/05¹⁰⁵
Project / Client Red Panther

0715 - START-2 (ROWLAND) departs
hotel for site.

0800 - START-2 (ROWLAND) arrives
onsite, begins look at the
loading ~~begin~~ being done
onsite. Then starts logging
notes into log book and on
spreadsheet.

1000 - Rowland sends u. sample POLREP
request to Tim Mahor.

1100 - Tim sends a copy of one
back.

1130 - Rowland off site, to depart to hotel.
* Steve Sparlin did not come by
the site today.

Jan Rowland

End of Day

Location Clarksdale, MS. Date 05/02/05
 Project / Client Red Panther

- 0815- START-2 (ROWLAND) arrived onsite.
 0845- ROWLAND takes a site walk through and takes pictures.
 0900- Site walk through is complete. Wright Steel is onsite to put barb wire on top of fence.
 1030- Brent Jacobs (URS) onsite, begins onsite air monitoring.
 1130- URS' air monitoring mini-rac arrived onsite.
 1300- URS onsite monitoring did not have any high reading < 0.02 .
 1500- Onsite perimeter was evaluated twice today.
 1745- Compass loaded out 40 trucks today with non-haz soil & debris and concrete.
 800- Rowland departs for hotel.

John Rowland
 End of Day

Location Clarksdale, MS Date 05/23/05
 Project / Client Red Panther

- 0730- START-2 (ROWLAND) arrived onsite.
 0815- ROWLAND arrived at the site. Rowland takes a site walk through.
 ~ Wright Steel is working to complete the barb wire along the top of the fence, and working to complete the guttering system.
 ~ Compass is continuing to load the trucks with non-haz soil.
~~0800~~ - Compass began excavating the (0-2') in the D6, D5, B5 & B6 areas. Compass hit a water in the D6 excavation area. CPU came out to shut off water. Compass pumped the water to the frac tanks.
 URS began measuring off the sample grid points in the D' Area.

108

Location Clarksdale, MS Date 05/03/05
 Project / Client Red Panther

URS began air monitoring at selected monitoring stations. None of the stations reported an elevated reading.

1300 - 1320 Lunch break

1500 - The entrance w/it driveway along Tallahatchie Avenue in the B5 Area collapsed, so Compass will be forced to have the trucks enter through the entrance along Normandy Ave.

1700 - began fixing the water line
 1800 - 1830 - water line fixing is complete.

1800 - Rowland offsite headed to hotel.

John Rowland

end of Day

109

Location Clarksdale, MS Date 05/04/05
 Project / Client Red Panther

0730 - Rowland departs hotel.

0815 - Rowland onsite.

~ Wright Steel are onsite completing gutters & dismantling the building over the breeze way.

~ Compass is continuing loading with non-hazardous soil.

1030 - URS sampled grids D12 & D13. URS, also, will sample all of the grids with Type IV soil to be sent to the offsite lab.

1300 - Lunch break.

1330 - Lunch break over.

Compass' excavator got stuck in the mud, URS received results that were high for D12 grid.

1700 - Compass still onsite completing bagging sandbags. Rowland has just received data. Will input data.

1800 - Rowland departs site for hotel.

John Rowland

end of Day

1 110

Location Clarksdale, MSDate 05/05/05Project / Client Red Panther

0730 - ROWLAND departs hotel for site.

0815 - ROWLAND arrived onsite. ROWLAND

then begins a site walk through

- Compass is excavating the non haz soil
of B11, & B10, & I96~ 2 loads of hazardous concrete were
shipped offsite to Emelle~ 1 load of arsenic mixed soil was
shipped to- Wright Stell is still dismantling
breeze way.

1300 - ROWLAND breaks for lunch.

1430 - Brent Jacobs (URS) departs site,
will return on Tuesday.ROWLAND continues to enter data
into spreadsheet.

1400 - ROWLAND departs site for hotel.

Lana Polak
End of Day

Location Clarksdale, MS Date 05/05/05¹¹¹Project / Client Red Panther0700 - ROWLAND departs hotel for
site.

0745 - ROWLAND arrived onsite.

~ Compass Environmental began
excavating the ~~the~~ area along
the B1 & B2 area (along the
concrete divider), then excavation
plans are to pull up the concrete
and Compass also excavated
the ~~the~~ some more of C Area
along Tallahatchie Ave.0930 - Wright Stell is onsite
to continue dismantling the
building over the breeze way.

1200 - Break for lunch.

1230 - Back from lunch.

~ Receive email from Brent
(URS) about the Aliquot
results from 12. The
results show that aliquots
D-12C & D-12D have
a high contamination result.

TAQ

112

Location

Clarksdale

Date

05/06/05

Project / Client

Red Panther

1345 - Receive an email from Charlene Rivard (Newfields) replies that the ave. values of all (4) 30-ft grids in grid 12 continue to cause the 954CL to exceed the performance standards.

Sampling grids C & D will have to be excavated an add'l foot to make sure we have excavated all of the contamination.

1630 - Rowland responded by saying please proceed with 1' of add'l excavation in quadrants 10C & 12D of grid D-12. These quadrants are above the max allowable hot spot criteria; in addition they cause a CS failure.

1700 - Depart site for hotel to finish daily report.

1745 - Arrive at hotel.

1830 - Rowland has completed report.

Location

Clarksdale, MS

Date

05/09/05

Project / Client

Red Panther

0730 - Rowland arrives onsite.

~ Compass is excavating the rest of unexcavated area in D12 & D11 near the building.

~ Wright Steel has completed the dismantling of the building over the breezeway. They are now removing the installation and siding and loading it.

~ Rowland takes site walk. There is a stockpile of soil in the B Area, along with a stockpile of concrete.

~ Compass is completing clearing & loading out of soil along Area C.

1000 - Rowland begins to enter data into spreadsheet.

1200 - Compass has excavated the left excavation of Grid 12.

1300 - Rowland takes a break.

1400 - Rowland lunch break is over.

1830 - Rowland departs the site.

- JAR

114

Location Clarksdale, MS Date 05/10/05Project / Client Red Panther

0800- START-2 (ROWLAND) onsite.

~ Compass is leading haz & non-haz soils. Only 2 trucks for haz can go out at a time, but the trucking company has sent (4). The other (2) will spend the night at a local hotel.

~ Compass is excavating soil in "C" & "B" Areas.

~ Wright Steel is removing the installation & siding from the building.

~ Compass still has two stockpiles onsite: 1 - haz soil 1 - non-concrete

1000- Project Manager for Compass arrived

1100 - Michel (URS) arrives onsite. He will collect samples from the D-12 C & D-12 D grids.

1200- Break for lunch.

1230- Back from lunch.

1400- Compass & URS have conference about excavation.

End of Page

Location Clarksdale, MS Date 05/10/05¹¹⁵Project / Client Red Panther

1630- URS has collected samples.

* Compass had the Survey crew onsite to survey the "D" Area.

1830- ROWLAND departs site for hotel.

Janet Rowland

End of Day

Location Clarksdale, MS Date 05/11/05
 Project / Client Red Panther

0800 - Rowland arrives onsite.

Talked to Mich and he said that he sampled D6 Grid Composite & D5 Grid Composite yesterday along with 12D & 12C resamples. Are awaiting results for all. Will start sampling the C & B Areas.

1128 - Received the results from DGS-12C & DGS-12B & DGC-5. Warner decided that to go one foot deeper 12D & DGC-5. Michel (URS) has taken the samples.

200 - Rowland (STARF2) breaks for lunch.

245 - Rowland back onsite.

400 - Rowland was informed that the PRP61 will be onsite tomorrow. Also after grid 5D was excavated an extra foot (URS) noted the smell that could possibly be still contaminated, so URS decided to a TCLP SAMPLE of the soil before they took it out because as of right now it is labeled "non-haz"

Location Clarksdale, MS Date 05/11/05 117
 Project / Client Red Panther

but they are not sure because of the same and how bad the sample had failed before. There will be a meeting with the PRPs & URS tomorrow.

1730 - Rowland off site.

Rowland
 End of Day

Location Clarksdale, MS Date 05/12/05Project / Client Red Panther

0730 - START-2 (RAWLAND) arrived onsite.

~ Compass is in the process of loading the following trucks.

-3 Trucks are going to Emmelle.

-2 Trucks are going to Onyx

-4 non-haz trucks

-1 concrete

~ URS took a TCLP sample on the 5D soil because of the odor and b/c it failed. Compass has stockpile all of this soil.

~ Compass has done general site housekeeping around the site.

After the (4) non-haz trucks had been loaded, Compass didn't have any more non-haz soil on site, at the moment.

1030 - Brent Jacobs (URS) arrived onsite.

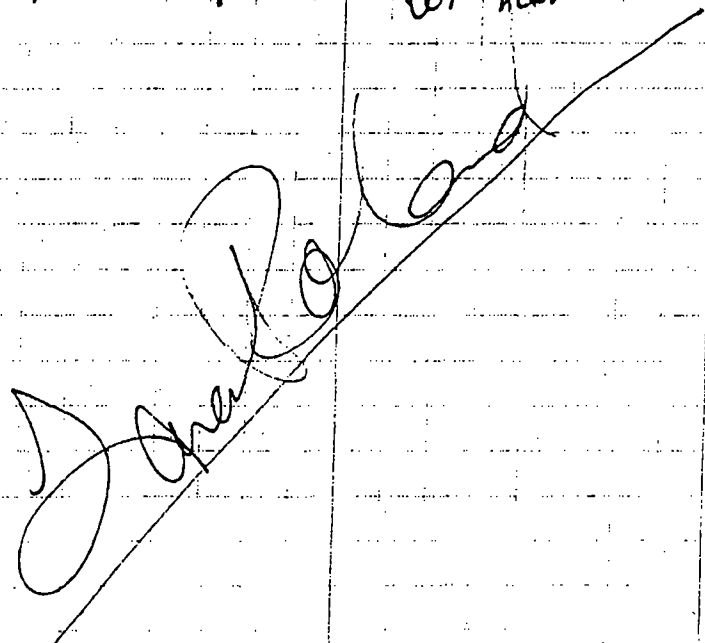
1100 - Everybody began to arrive for the meeting with the PR Ps.

1320 - Break for lunch.

1330 - Back from lunch break.

Compass did air monitoring in the B Area where the reddish-

Location Clarksdale, MS Date 05/12/05 119Project / Client Red Pantherpurple streaks were found in the soil. Compass determined that a respirator needed to be worn while excavation is ongoing. PR
1700 - Depart site for hotel.



End of Day

120

Location

Clarksdale, MS

Date

05/13/05

Project / Client

Red Panther

0745 Rowland arrives onsite.
 ~ Compass is excavating & loading Type II & Type III soil.

~ Rowland prepares the daily.
 Compass loaded out
 6 - Arsenic trucks
 1 - Concrete trucks

1030 - Warner Golden sent out an BF approval request.

1245 - Steve sent his etc. back for the backfilling to begin.

1230 - Rowland offsite.

Jan Rowland

end of Day

Location

Clarksdale, MS

Date

5-16-05

121

Project / Client

Red Panther

0650 START McHugh onsite. Compass loading out trucks. Note: these trucks are going to Emelle. Work started at 0600 so the trucks would be loaded out by 0900.

0730 START touring the site. Compass is loading out trucks from Area D and Area B. Compass also pumping rain water out of excavated area D.

0845 START reviewing HASP

0900 Compass has finished loading out trucks in Area B.

0945 Compass continues to pump water out of the excavated area D and load out trucks.

NOTE: 10 trucks were loaded out this morning from Area B (Arsenic) to Emelle. 2 pesticide trucks are scheduled to be loaded out still today.

1050 Evans Engineers on site to survey Area D before backfilling can begin.

1230 START breaks for lunch.

1300 START back on site. URS taking composite soil (surface) sample at the rear of the office building. Compass (over)

122

Location Clarksdale, MS Date 5/16/05Project / Client Red Panther

backfilling Area D.

[1325] START at Area B. Compass loading out 2 trucks (pesticides) heading to Onyx.

[1425] Compass continuing to backfill Area D and load out trucks.

[1515] Compass has finished loading out stockpile at Area D and has started loading out the stockpile west of the office building. ORS taking another surface soil sample southwest of the office building.

[1600] Compass stops loading non-hazardous trucks. Loaded out a total of 17 trucks. Compass covering stockpile with poly (stockpile west of office building).

[1610] Compass decanning bucket on Tractor.

[1700] START begins working on dailies.

[1725] Compass stops work for the day. They estimated ~20 trucks of backfill were brought in today.

[1845] START leaving site for the day.

123

Location Clarksdale, MS Date 5/16/05Project / Client Red Panther

Photo Log

ID	Time	D	TB	Subject
	0937	SE	LM	Water in excavated Area D
	0944	E	LM	Load out at Area D
	1112	SE	LM	Surveying Area D
	1309	N	LM	Sampling grid D-7 ⁱⁿ
	1312	SW	LM	Backfilling Area D
	1326	NW	LM	Loading out truck to Onyx from Area B.
	1500	N	LM	Backfilling Area D
	1523	N	LM	Load out and Sampling at Area D.
	1533	E	LM	Decanning truck
	1616	NE	LM	Backfilling Area D

NOTE: Time stamp on these photos are on EST time. Times documented in this log are correct.

Location: Clarksdale, MS Date 5/17/05Project / Client Red Panther

- 0650** START onsite. Compass holding safety meeting. Plan for the day: load out 10 trucks to Emelle, 2 trucks to Onyx and continue backfilling Area D. Weather: Sunny, high: 81°, low: 60°.
- 0745** START walking the site. Compass loading out trucks in Area D behind the office building, loading out Arsenic trucks to Emelle, backfilling the excavated hole in Area D.
- 0815** Compass is mixing backfill with standing water in the excavated hole in Area D.
- 0845** Compass loader removing railroad ties from Area C to be loaded out with soil.
NOTE: New Field reports that Grid D5 needs to be dug 1 foot deeper due to lab results.
- 0940** START at Area B. Compass expecting to load out one more truck from Area B today.
- 0950** Compass excavating in Grid D5 and continuing to backfill grids D11, D12, D13, D14.
- 1000** Evans Engineering on site to survey area D. Compass is grading backfill.
- 1030** Compass is excavating grid D8, TracHoe hit pipe and sprung a small water leak.
- 1110** Clarksdale Public Utilities on site to look at leaking pipe. They believe the line is dead and

Location: Clarksdale, MS Date 5/17/05Project / Client Red Panther

- (cont'd) just draining but will supply Compass with a clamp.
- 1130** Compass putting clamp on leaking section of pipe.
NOTE: Warner Golden to send out a backfill approval request this afternoon.
- 1200** START breaking for lunch.
- 1235** START working on gathering sampling data for Area B to give to EPA for backfilling approval.
- 1325** START at Area D. Compass continues to backfill grids D11-14 and excavate D8. Evans continues to survey D11-14.
- 1415** START and New Fields at Area B to visually inspect for contamination.
- 1520** Compass continues to backfill & excavate in Area D.
- 1540** URS sampling (surface soil) grid D5.
- 1545** EPA gives verbal approval for backfilling Area B tomorrow.
NOTE: EPA is ^{out} in the field and is therefore giving verbal approval to backfill until he is capable of giving written approval.
- 1710** Compass filling up equipment and switching

Location Clarksdale, MSDate 5/17/05Project / Client Red Panther

(Cont'd) water tanks. Compass waiting to load out 84 more trucks to Emelle yet today. 2 trucks were taken to Onyx, 14 taken to Tunica

1735 START working on dailies and photo logs

1855 START leaving site for the day.

Photo Log

ID	Time	D	TB	Subject
0748	SW	LM		Load out at Area D.
0753	NW	LM		Load out at Area B.
0754	NW	LM		Decon at Area B.
0810	N	LM		Mixing backfill with standing water in excavated hole in Area D.
0952	W	LM		Excavation of grid D5
1022	N	LM		Excavation + load out of D-8.
1037	W	LM		Excavation of D-5.
1039	SE	LM		Water pipe leak at D-8
1132	NE	LM		Leak repair at D-8
1327	SW	LM		Backfilling at Area D
1335	N/A	LM		Truck tires on backfill at Area D.

Location Clarksdale, MSDate 5/17/05 127Project / Client Red Panther

Photo Log (cont'd)

ID	Time	D	TB	Subject
1335	N/A	MV		Truck tires on backfill at Area D.
1336	N/A	MV		" "
1347	W	LM		Excavation of D-8.
1421	NW	LM		Excavated Area B.
1421	W	LM		" "
1444	W	LM		" "
1444	N	LM		" "
1445	NE	LM		" "
1623	SW	LM		Excavation of D-8.
1720	W	LM		Backfill at Area D.

0700 START on site. Trucks are waiting to be loaded out from Area B. Compass is excavating in grid D-8. Weather today: High: 87°, low: 65°, mostly sunny.

0745 Compass loading out trucks from D-8 and receiving backfill in Area D.

0755 Compass loading out arsenic trucks from Area B.

0910 Compass is preparing to filter the tanked water. URS is sampling the water.

1130 Compass continues backfilling Area D and excavating D-8. Compass working with Rent to hook up filters to water tank.

1230 START leaving site for lunch.

1250 START back on site.

1320 Compass filtering tanked water, excavating at D-8, and prepared to survey backfilled Area D.

1415 Compass is backfilling grid C-1.

NOTE: Sampling results from D7, D9, and D10 were above performance standards and will now need to be excavated.

1615 Compass done excavating for the day but

(Cont'd) Continue to backfill C1 and B5.

1640 START working on dailies and photo log.

NOTE: Compass began excavating the load out road section of D11 and D14.

1715 New Fields informs start that grid C-3D will need more excavation. Material will be stockpiled for TCLP sampling.

1725 START leaving site for the day.

Photo Log

ID	Time	D	TB	Subject
0748	SW	LM	LM	Load out of D8
0755	NE	LM		Load out of Area B
0909	NW	LM		Water tank sampling
1328	SW	LM		Water tank filtration

System

1349	W	LM		Backfilling of C1 and B5
1435	SE	LM		Excavation of D11 and D14 (load out road)
1503	N	LM		Backfill at C1
1617	S	LM		Completed excavation of D8
1618	SW	LM		Backfilled Area D.
1623	SE	LM		Backfilling C1 and B5

0700 START on site. Compass loading out trucks from Area B, excavating east portions of D11 and D14, and backfilling grids C1 and B5. —
 Weather today: Afternoon thunder storms, high: 88°, low: 68°, chance of rain: 40%. —

0940 Compass putting liner over grids D11, D12, D13, and D14. Liner is said to be for putting stockpile from Area C (haz. waste) on fire load out. —

NOTE: Compass loaded out 8 trucks to Emelle and 2 trucks to Onyx this morning. Will load out 1 more truck to Emelle today. —

1115 START spoke with START maher about backfill stockpiling excavated material on clean backfill. Maher spoke with URS as well. URS will continue with stockpiling on the clean backfill even though START is concerned with this practice. —

1210 Compass continues to backfill C1 and Area B, and collecting railroad ties and large concrete chunks from grid C-4. —

1245 START leaving site for lunch. —

1310 START back on site. —

1400 URS sampling grid D-8. —
 Compass loading out railroad ties from Area C. —

1415 Compass continues to backfill C1 and Area B and is working with Evans Engineering to survey this area. —

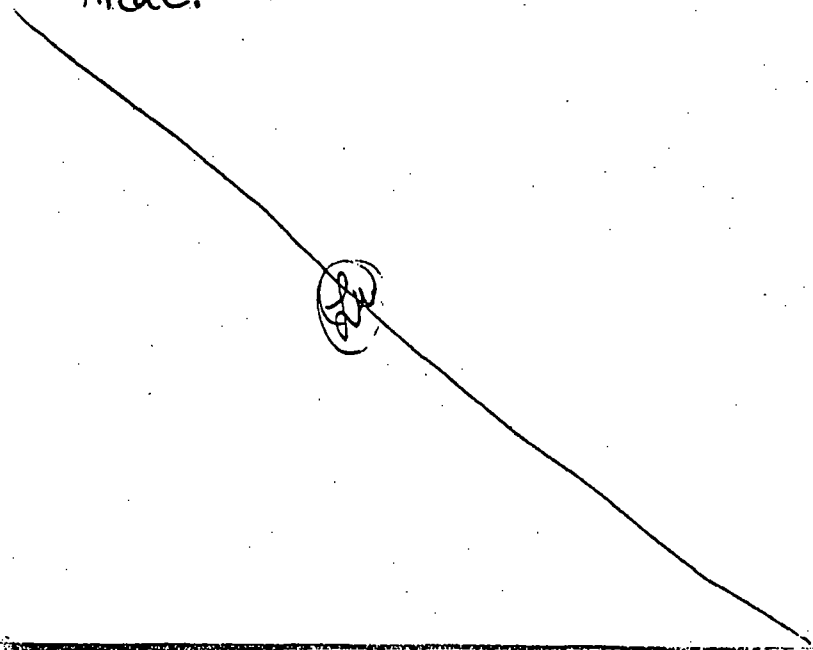
1530 Compass is removing concrete and metal from Area C. Load out of the east section of D11 and D14 is complete. Trachoe is smoothing out excavated area. —
 NOTE: URS sampled the water tank this morning. —

1700 START working on dailies and photo log. Compass is shutting down for the evening. —

1730 START leaving site for the day. —

Location: Clarksdale, MS Date 5/19/05Project / Client: Red PantherPhoto Log

<u>ID</u>	<u>Time</u>	<u>D</u>	<u>TB</u>	<u>Subject</u>
0739	- S -	LM	-	Load out of D11 and D14
1035	- SW -	LM	-	Liner on Area D
1037	- SW -	LM	-	" " "
1402	- NW -	LM	-	Sampling of D8
1404	- S -	LM	-	Load out of railroad ties
1409	- E -	LM	-	" " "
1522	- NE -	LM	-	Backfill at Area B
1541	- NE -	LM	-	Removal of debris from Area C.

Location: Clarksdale, MS Date 5/20/05Project / Client: Red Panther

0650 START onsite. Weather today: High 90°, low: 64°, 40% chance of thunderstorms. One truck waiting to be loaded out.

0745 Compass backfilling grids C1, B1, B5 and B6 and removing railroad ties and concrete from Area C.

0815 Compass loading out trucks from Area B.

0900 Compass begins to excavate grid C7. No air monitoring is being performed.

1005 Evans Engineering Surveying backfilling areas in grid B5.

NOTE: Compass loaded out 4 trucks to Emelle this morning, and are checking into getting more trucks today. Load out of Onyx trucks will start again on Sunday.

1330 Compass setting up liner for stockpiling on Area D.

They continue excavating Area C and backfilling Area B.

1500 Compass has stockpile area set up on backfilled Area D and continues backfilling C1 and Area B.

Location Clarksdale, MS Date 5/20/05
 Project / Client Red Panther

- 1515 Sky to the north is getting dark.
 1530 Starting to sprinkle rain.
 1600 START working on dailies and photo log.
 1710 START McHugh leaving site for the day.
 McHugh will be demoing tomorrow 5/21/05
 and START Maher will be in on Monday
 5/23/05.

Photo Log

ID	Time	D	IB	Subject
0801		SE	LM	Backfill in Area B
0801		E	LM	" "
0903		SE	LM	Excavation of grid C7
1047		N	LM	Excavation of Area C.
1347		N	LM	Liner on Area D
1411		NE	LM	Excavation of Area C.
1412		N	LM	" "
1504		SE	LM	Liner on Area D
1525		SE	LM	Backfilling Area B

END

Location Clarksdale, MS Date 5/23/05
 Project / Client RED PANTHER

- 0700 START (TUNING) ON SITE
 0730 BEGAN SITE WALK THROUGH.
 COMPASS LOADING TRUCKS
 FROM STOCK PILE IN AREA B
 GOING TO PORT ARTHUR, TX
 CONTINUING TO BACKFILL
 APPROVED AREAS IN B
 AND C1 & C2.
 CONTINUING EXCAVATION OF
 AREA C LOADING TO TUNICA
 1000 JOHN TOLLY OF WES ON SITE
 FOR THE WEEK TO PERFORM
 SAMPLING ACTIVITIES. JOHN
 INDICATED THAT WALTER
 GOLDS SHOULD BE ON SITE
 SOMETIME TODAY.
 1145 BREAK FOR LUNCH.
 1245 RETURNED FROM LUNCH.
 1300 REVIEW DAILY REPORTS &
 CORRESPONDENCE FILES TO
 CHECK IF ANY UPDATES ARE
 NEEDED.

J. J. D.

136

Location Clarksdale, MS Date 5/23/05Project / Client Red Another

- 1310 COMPASS EXCAVATING AREA
D GRIDS 6 & 7 BEHIND
OFFICE BUILDING. ———
- 1630 FINISHED EXCAVATING AREA D
FOR THE DAY. ———
- 1700 FINISHED EXCAVATING AREA C
FOR THE DAY. ———
- 1720 LAST LOAD OF BACKFILL IN
AREA B FOR THE DAY. ———
- 1800 OFF SITE FOR THE DAY. ———

TJ/ME

137

Location Clarksdale, MS Date 5/24/05Project / Client Red Another

- 0730 START (T. MAYER) ON SITE.
- 0735 BEGIN SITE WALK THROUGH.
TRUCKS (4) WITH BACKFILL
FOR AREA D BEHIND THE
OFFICE ARE STAGED AND
READY TO DUMP. TRUCKS
ARE ON SITE (5) FOR LOADING
OF MATERIAL FROM AREA B.
COMPASS WILL CONTINUE
EXCAVATING AREA B. THE
STOCKPILE WILL BE USED
TO DISPOSE OF WATER
PRESENT IN 10' EXCAVATION
IN GRIDS B6 & B7.
TRUCKS ARE STAGED ALONG
EAST TAIL HATCHIE FOR
HAULING MATERIAL FROM
AREA D. ———
- 0930 COMPASS IS SWITCHING BACKFILL
OPERATIONS BETWEEN D546
AND ~~D1114~~ TO KEEP
BACKFILL TRUCKS RUNNING.

TJ/ME

138

Location Clarksdale, MS Date 5/24/05Project / Client RED PANTHER

- 1030 COMPASS SET UP A SUMP PUMP FOR REMOVING THE CONTAMINATED WATER FROM THE 10' EXCAVATION IN GRID B7. THEY ARE DISCHARGING THE WATER INTO THE CONTAMINATED STOCK PILE FROM AREA B FOR REMOVAL WITH THIS MATERIAL.
- 1150 BREAK FOR LUNCH
- 1250 RETURNED FROM LUNCH
COMPASS BEGAN BACKFILLING 10' EXCAVATION IN GRID B7. WORK PROGRESSING ON EXCAVATION OF GRIDS D8 & D9.
- 1430 JOHN JOLLY OF URS TOOK CONFIRMATION SAMPLE OF GRID D-1.
- 1500 URS TOOK SAMPLE OF GRID C4 AFTER ADDITIONAL EXCAVATION DUE TO HIGH ANALYTICAL RESULTS. COMPASS IS STOCK PILING MATERIAL FROM AREA C IN AREA D.
- 1730 OFFSITE FOR THE DAY
TJM

139

Location Clarksdale, MS Date 5/25/05Project / Client RED PANTHER

- 0730 START (T. MAHER) ON SITE
COMPASS IS LOADING TRUCKS FROM THE STOCK PILE IN AREA B, EXCAVATING AND DIRECT LOADING FROM AREA D.
- 0945 STOPPED EXCAVATING AREA D AND BEGAN REMOVING EXCAVATED MATERIAL FROM AREA C INTO STOCK PILE.
- 1015 MIKE VAILS FROM COMPASS INDICATED THAT THE GAS LINE WAS HIT WHILE WORKING IN AREA C.
- 1030 CLARKSDALE PUBLIC UTILITIES AND AMOS ON SITE TO INVESTIGATE. HIGH PRESSURE VALVE USED IN REPAIR FROM DAMAGE IN OCTOBER WAS BROKEN.
- 1150 DEPART FOR LUNCH
- 1215 DAVID DELANEY IN CHARGE THAT THE GAS LINE WAS REPAIRED
TJM

140

Location Clarksdale MS Date 3/25/05
 Project / Client RED PASTOR

- 1300 RETURN FROM LUNCH --
 1340 OBSERVED WATER PERKING UP
 OUT OF THE GROUND IN
 GRID 6A BEHIND THE OFFICE.
 INFORMED MIKE VAILE OF THE
 PROBLEM.
- 1350 MIKE VAILE EXPOSED 8" PIPE
 JUST BELOW THE SURFACE OF
 THE EXCAVATED AREA. ODOOR
 FROM THE WATER MIGHT
 INDICATE A SEWER LINE.
- 1530 SEWER LINE WAS EXCAVATED
 WHERE REPAIRS ARE NECESSARY.
- 1700 COMPASS FINISHING SITE
 PREP FOR THE DAY.
- 1730 OFF SITE FOR THE DAY

[Handwritten signature]

Location CLARKSDALE MS Date 5/26/05
 Project / Client RED PASTOR

- 0800 START (T. MATHER) ON SITE.
 COMPASS LOADING TRUCKS
 FROM STOCKPILE IN AREA B.
 STARTED CLEANUP OF EAST
 TALLHATCHIE AVE.
- 1000 WRECKER GLOVER OF NEW FIELDS
 ARRIVED ON SITE FOR A
 MEETING WITH THE PRP'S
- 1045 COMPASS MADE REPAIRS TO
 BROKEN SEWER LINE BEHIND
 THE OFFICE. DAVID DELANEY
 OF UES INDICATED THAT THE
 OTHER END OF THE PIPE IN
 GRID D5 WAS PLUGGED --
 BECAUSE THEY WEREN'T SURE
 WHAT IT WAS. THIS END OF
 THE LINE WILL BE UNCOVERED
 AND REPAIRED.
- 1100 COMPASS BEGAN SECURING
 THE SITE FOR THE HOLIDAY
 WEEKEND.
- 1215 MOST OF THE COMPASS CREW
 DEPARTED FOR THE WEEKEND.
 3 REMAIN TO COMPLETE WORK
- [Handwritten signature]*

CONTENTS

PAGE REFERENCE DATE

EPA OSC STEVE SPURLIN

START II TIM MATHER

TARA ROWLAND

URS BRENT JACOBS

MICHEL ALLARD

JOHN FOLLY

NEW FIELDS WARDER GOLDEN

CHARLES RIVARS

URS SITE MANAGER

DAVID DELANEY

COMPASS ENVIRONMENTAL

MIKE VALES

"Rite in the Rain"
ALL-WEATHER WRITING PAPER



ALL-WEATHER
FIELD BOOK

Name _____

Address CLARKSDALE, MS

Phone _____

Project RED PANTHER

12587.001.002.0155.00

This book is printed on "Rite in the Rain" All-Weather Writing Paper - A unique paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather. For best results, use a pencil or an all-weather pen.

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Left Page	Right Page	Polydura Cover	Fabrikoid Cover
Columnar	1/4" Grid	Item No. 350N	Item No. 350NF

CLARKSDALE, MS. 6/1/05

RED PANTHER

2

0800 START II (TANNER) ON SITE.
NOTE: SITE WAS IN GOOD
SHAPE AFTER THE HOLIDAY
WEEKEND. TARPS WERE STILL
IN PLACE ON STOCK PILES AND
RAIN WATER WAS CONTAINED
ON SITE.

COMPASS LOADING TRUCKS
FROM STOCKPILE IN AREA B
GOING TO EMELLE, AL.

0830 BEGAN SITE WALK THROUGH A
TO CHECK SITE CONDITION
CLOSER.

0900 COMPASS BEGAN EXCAVATING
DITCH IN AREA D. DIRECT
LOAD INTO TRUCKS.

1030 MICHEL ALLARD OF UPS
PREPARING TO TAKE SAMPLES
OF GRIDS C5 & C6.

1200 SAMPLES OF GRIDS C5 & C6
WERE TAKEN AND GIVEN TO
MOBILE LAB

1215 DEPART FOR LUNCH

1315 RETURN FROM LUNCH

RTM

CLARKSDALE, MS

6/1/05

RED PANTHER

3

1330 COMPASS BEGAN EXCAVATING
GRID B14.

1500 COMPASS MAKING A HAUL
ROAD WITH CONTAMINATED
SOIL. SPOKE WITH DAVID
DELANEY AND MIKE VAILS
ABOUT CROSS CONTAMINATION.
THEY DISAGREED WITH THE
OPTIONS OFFERED.

1530 ENMIL DRAFTED TO BRENT
JACOBS VOICING CONCERNS
ABOUT THE HAUL ROAD AND
NEW STOCKPILE LOCATION.

1615 COMPASS BEGAN DISCHARGING
TREATED WATER FROM FRAC
TANK INTO SANITARY SEWER.
MICHEL ALLARD TOOK SAMPLE
OF DISCHARGE FOR TESTING.

1700 DISCHARGE OF FRAC TANK
COMPLETE.

1730 OFF SITE FOR THE DAY.

RTM

CLARKSON, MS. 2 JUNE 05
RED PANTHER

- 0800 START (T.M.H.) ON SITE.
COMPASS IS LOADING TRUCKS
FROM STOCKPILE IN AREA B
GOING TO EMELLE, AL. ALSO
LOADING NON-HAZ FROM DITCH
IN AREA D GOING TO TUNICA.
- 0900 RECEIVED A PHONE CALL FROM
STEVE SPURLEN REGARDING
ROAD TO NEW STOCKPILE IN
AREA B. HE WILL CONTACT
BRENT JACOBS AND iron out
THE DETAILS OF SAMPLING AND
REMOVAL OF POSSIBLE CROSS
CONTAMINATION
- 0910 COMPASS PUTTING DOWN
WASHED STONE FOR ROAD
TO NEW STOCKPILE. NO
LINER PLACED BENEATH
THE STONE.
- 1200 DEPART FOR LUNCH
- 1245 RETURN FROM LUNCH
- 1330 COMPASS FINISHED WITH
DRAINAGE DITCH IN AREA D
AND MOVED EXCAVATOR TO

T.M.H.

CLARKSON, MS
RED PANTHER

6/2/05

- 1330 GRID D2 TO BEGIN DIRECT
LOADING THIS MATERIAL TO
TUNICA.
- 1545 MICHAEL ALLARD OF URS
QUESTIONED THE EXTENT OF
THE DRAINAGE DITCH EXCAVATION
WHEN ATTEMPTING TO SURVEY
THE SAMPLE POINTS.
- 1630 DRAWINGS INDICATE FURTHER
EXCAVATION IS NECESSARY AT
THE EAST AND WEST END OF
THE DRAINAGE DITCH.
- 1730 OFFSITE FOR THE DAY.

T.M.H.

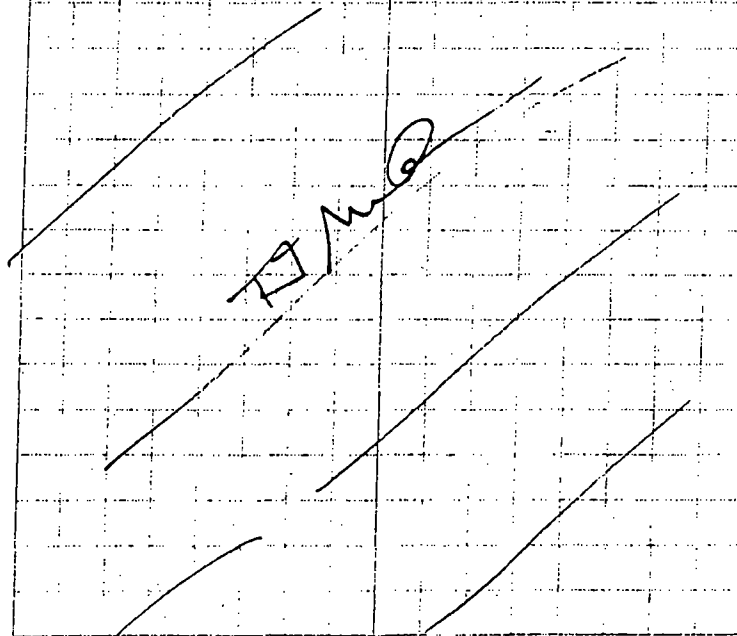
Clarksdale, Ms. 6/3/05
 Rex Panther

- 0800 START (T.M.H.R.) ON SITE.
 COMPASS LOADING TRUCKS
 FROM STOCKPILE IN AREA B
 GOING TO ENELLE, AL. —
 COMPASS BEGAN CORRECTING
 EXCAVATION OF DRAINAGE
 DITCH IN AREA D.
- 0930 COMPASS THROUGH WITH
 TRUCKS TO ENELLE FOR THE
 DAY. BEGAN DIRECT LOAD
 OF NON-HAB MATERIAL FROM
 AREA B. (B13, 14 & 15)
- 1000 SENT A SUMMARY OF DATA
 RESULTS FOR D 5, 7, 8, 9
 & 10 AND C3 TO STEVE
 SPURLEN FOR BACKFILL
 APPROVAL.
- 1150 BREAK FOR LUNCH
- 1235 RETURNED FROM LUNCH.
- 1330 MICHAEL HUBBARD OF CRP
 TOOK TCLP SAMPLES OF
 GRIDS C5 & C6 FOR WASTE
 PROFILING.

— R.M.H. —

Clarksdale, MS 6/3/05
 Rex Panther 7

- 1535 TRUCKS STOPPED LOADING
 FOR THE DAY. WILL RESUME
 MON AM. COMPASS BEGAN
 SECURING THE SITE FOR
 THE WEEKENDS — —
- 1630 COMPASS OFF SITE FOR THE
 WEEKENDS.
- 1700 START DEPARTS SITE FOR
 THE WEEKENDS.



CLARKSDALE, MS
RED PANTHER

6/6/05

8

- 0800 START (T.MAYER) ON SITE.
COMPASS LOADING TRUCKS
FROM STOCKPILE IN AREA
B GOING TO ENELLE.
0900 BACKFILL OF AREA D
RESUMES.
0930 DIRECT LOAD OF MATERIAL
FROM GRIDS D2 & D4 -
CONTINUES
1045 COMPASS CONTINUES EXCAVATION
OF DRAINAGE DITCH IN AREA B.
1200 DEPART FOR LUNCH
1245 RETURN FROM LUNCH.
1430 COMPASS LOADING OUT CONCRETE
AND DEBRIS FROM BUILDING
DEAD IN AREA D.
1540 MICHEL ALLARD TOOK A
COMPOSITE SAMPLE OF
GRID D17.
1615 UPDATED AIR MONITORING
DATA IN EXCEL SPREADSHEET.
1730 OFFSITE FOR THE DAY.

T.Mayer

CLARKSDALE, MS
RED PANTHER

6/7/05

9

- 0800 START (T.MAYER) ON SITE.
COMPASS LOADING TRUCKS
FROM STOCKPILE IN AREA B
GOING TO ENELLE. WORK
IS CONTINUING ON BACKFILLING
GRIDS D7, 8, 9 & 10.
0930 COMPASS LOADING TRUCKS
FROM STOCKPILE IN AREA
D GOING TO FORT WETHER, TX.
1045 COMPASS DIRECT LOADING
TRUCKS FROM AREA B WITH
SOIL AND DEBRIS GOING TO
TUNICA, MS.
1145 DEPART FOR LUNCH
1245 RETURN FROM LUNCH.
1330 CHECKED WITH COMPASS
ABOUT COMPACTION TEST
ON FIRST LIFT IN AREA D.
ENGINEER WAS ON SITE
THIS MORNING. THREE
TESTS TAKEN, ALL ABOVE
100% COMPACTION.
1500 NOTICED WATER LEAK
IN D8B. SLOW LEAK WILL

T.Mayer

10

CLACKSDALE, MS
RED PANTHER

6/7/05

1800 (cont) BE REPAIRED TOMORROW.

1700 DEPART SITE FOR THE DAY

~~TIME~~

CLACKSDALE, MS

RED PANTHER

6/8/05 11

0800 START (MATER) ON SITE.

COMPASS LOADING TRUCKS
FROM AREA B STOCKPILE
GOING TO BOWELLE, AL.

0930 COMPASS LOADING CONCRETE
FROM AREA B GOING TO
TUNICA, MS.

1015 COMPASS LOADING TRUCK
FROM AREA D STOCKPILE
GOING TO FORT ARTHUR TR.

1030 GRID B11 PARTIALLY BACKFILLED
AND NOT YET TESTED.
COMPASS REMOVING EXCESS
BACKFILL.

1045 CLACKSDALE PUBLIC UTILITIES
ON SITE. GAS LINE PLUG IN
GRID D5 HAS SLOW LEAK.

1210 DEPART FOR LUNCH.

1310 RETURN FROM LUNCH.

1315 COMPASS HAS WATER
LEAK IN D8B REPAIRED
STARTING REPAIRS TO
SEWER LINE BEHIND
OFFICE BUILDING

~~TIME~~

12

CLACKSDALE, MS
RED PANTHER

6/8/05

- 1330 ASKED COMPASS TO MOVE MATERIAL TAKEN FROM GRID 11 B. MATERIAL WAS PLACED ON GRID YET TO BE SAMPLED. GRID 11 B IS HALF SUBSURFACE AND HALF SURFACE. THE MATERIAL WAS PLACED WHERE SURFACE SAMPLE WAS NECESSARY.
- 1430 COMPASS BEGAN EXCAVATING SEWER LINE BEHIND OFFICE BUILDINGS TO EFFECT REPAIRS.
- 1730 OFFSITE FOR THE DAY.

~~TJMP~~

CLACKSDALE, MS
RED PANTHER

6/9/05

13

- 0800 START (T.MAYER) ON SITE. COMPASS IS LOADING TRUCKS FROM STOCKPILE IN AREA B GOING TO ENRICH, AL. WORK CONTINUING ON SEWER LINE REPAIR.
- 0900 GRID A4 ANALYTICAL CAME BACK HOT SO THE SEWER LINE WAS CLEARED TO THE STORAGE BUILDING ON THE WEST SIDE OF THE PROPERTY.
- NOTE: DAVID DELANEY WANTED TO LEAVE A 1 FOOT SHELF OF CONTAMINATED MATERIAL UNDER THE SEWER LINE. HE WAS TOLD THIS IS NOT ACCEPTABLE. BRENT JACOBSON WAS CALLED BUT CURRENTLY UNAVAILABLE TO ADDRESS THIS ISSUE.
- 0920 FIRST TRUCK GOING TO PORT ARTHUR LOADED OUT OF AREA D.

TJMP 5

Clarksdale, MS. 6/9/05
Red Panther

- 1140 SECOND TRUCK GOING TO
FORT ARTHUR TR. LOADED
FROM AREA D STOCKPILE.
NOTE: MARK LA ROUC WAS
CONSTRUCTED ABOUT EXCAVATOR
BEING TRACKED FROM A
HAZARDOUS AREA TO A
CLEAN AREA WITHOUT BEING
DECONDED. HE INDICATED
HE WOULD HAVE A MEETING
WITH HIS CREW TO PREVENT
THIS FROM OCCURRING AGAIN.
- 1220 DEPART FOR LUNCH
- 1320 RETURNED FROM LUNCH
- 1330 COMPASS PUMPING WATER
OUT OF GRID C3 (STARTED
IN THE MORNING.)
- 1415 LIGHTNING FROM PASSING
THUNDERSTORM SUSPENDED
SITE ACTIVITIES.
- 1545 WORK RESUMED ON REPAIRS
TO SEWER LINE.
- 1815 OFF SITE FOR THE DAY

TJM

Clarksdale, MS 6/10/05¹⁵
Red Panther

- 0830 START (TRUCK) ON SITE.
COMPASS IS LOADING TRUCKS
FROM STOCK PILE IN AREA B
GOING TO EUREKA, AL. —
CONTINUING TO BACKFILL
AREA WHERE SEPTIC LINE
HAS BEEN REPAIRED, BUT
NOT COMPLETED. —
- 0900 COMPASS BEGINS TO BACKFILL
DITCH AT SOUTH END OF
AREA D. —
- 1015 COMPASS BEGAN EXCAVATING
GRID D4 AN ADDITIONAL
FOOT PER NEWFIELDS —
- 1230 BREAK FOR LUNCH
- 1315 RETURNED FROM LUNCH.
- 1330 COMPASS OPERATOR (BB)
INDICATED THAT THE SEWER
LINE WOULD BE LEFT OPEN
UNTIL EXCAVATION IS D4
WAS COMPLETE. SPOKE WITH
MICHAEL ALLRED (URS) AND
MARK LA ROUC (COMPASS). THE
SEWER LINE REPAIRS WILL

TJM

16

CLARKSBURG, MS.

RED ANTHONY

6/10/05

1330 (cont) BE COMPLETED BEFORE THE
SITE IS SECURED FOR THE
WEEKEND

1540 REPAIRS TO SEWER LINE
COMPLETED.

1600 COMPASS STILL WORKING ON
SOUTH DITCH AREA D
BACKFILL. (ONLY 1 TRUCK)
BEGIN SECURING SITE FOR
THE WEEKEND.

1630 START (TRUCK) OFF SITE FOR
THE WEEKEND. COMPASS
STILL WORKING.

06/13/05¹⁷

0900 - START-2 (ROWLAND) onsite

~ Begin printing the results and
reviewing recent activities.

1000 - Rowland out onsite noting
that there appears to be
no decon area on the South
side of site. There is dust
suppression ongoing. Compass
wants to make certain:

1. Every truck departing the site
gets deconned.
2. Know exactly where to excavate
and not guess where to start
& how deep to go.

1100 - Compass began to excavate
the Area in "C" to approx.
4 ft. From (2-4) the
soil is going to Tunica

1210 - Break for lunch.

1310 - Lunch break complete.

1325 - Compass is continuing to
excavate the Area "C" &
"B"

14²⁵₃₀ - The last non-hay truck

(Mon) 06/13/05

arrives onsite to pick up soil from Area "C". Mike Vails (Compass) informs his crew that they can get off work once the loading of this last truck is complete.

1510- Compass began to depart the site.

Rowland continues to work on daily
1600- Dave Delaney (URP) comes by the office and asks how everyone left for the day & Rowland replies "yes" & Delaney asks well how is Rowland gonna lock the door & Rowland states that Mike Vails (Compass) showed her where the security guard keys were & he said that I didn't have to stay until the security guard got there that I could leave whenever I got ready, it would be "OK to leave the door unlocked." Rowland informed Delaney of such and his response was "what kind of sense does that

06/13/05 (Mon)¹⁹

make and Rowland replied "I am just telling you what Mike told me & you can call him and ask him." Delaney response was "what kind of sense does that make." Rowland's response was "I am just telling you what they told me". Delaney response was "Well pack shit & let's go". Rowland didn't think that that kind of language was appropriate but just decided to let it go. So Rowland went to the room and decided to try to complete some work.

~~1615~~¹⁶¹⁵ Rowland departs site for hotel.

1625- Rowland arrives at hotel. Beggs starts to work on daily.

1730- work completed will finish tomorrow.

Jared Rowland
end of Day

(Tues. 06/14/05)

0815 - START-2 (ROWLAND) arrives onsite.

Compass is excavating soil in Area "C"
5' x 8'0845 - Hertz arrives to put the straight edge metal plate on the end of the excavator.
Welding

1020 - Hertz has completed the welding of the straight to the excavator

1000 - Compass began excavating B11
Loading out for waste disposal in TunisiaArea "C" 4 - 4 Grid 2-4 ft
While out the Compass began excavating one foot off B11.

11:00 - Brent Jacobs (was) & Warner Golden (NEWFIELDS) arrive at the site. Brent informs Rowland that the lab headed a part that won't be here until tomorrow for arsenic analysis.

1215 - Rowland takes lunch break.

1315 - lunch break over.

1330 - Compass is still watering down the roads, & loading out Area "C".

Tues. 06/14/05²¹1440 - Brent Jacobs (was) began sampling Grid D2. Brent said they should be sending results out sometime today. Brent also indicated that he will be sampling C7 - C4 today. Brent remains hopeful that he will be able to get a backfill request for C & D this week & maybe B the next. Brent & David indicated that there was no tube between D2 & D4. Brent indicated that he had received ^{12:45} the water sample collected last week.

1515 - Compass has departed the site.

1630 - Brent collects the sample from Area "C".

1730 - Depart site

Jana Rowland

End of Day

Wed. 06/15/05

0800 - Rowland arrives onsite.

Compass is excavating the rest of C4 grid
is loading the soil from stockpile B.

0915 - The PRPs begin to arrive for a

- onsite meeting with URS & NEWFIELD.

1100 Compass has reduced their work

force by 1 person, so unofficially we
have 4 field people.Compass is now excavating GRID 13B
Alignments 14B & 14C.Compass was also able to find
a company to take the soil from
the "D" stockpile going to Port
Arthur, TX. The trucking company
is called STRANCO.

URS (DD) sampled Grid 4C.

1230 - Rowland breaks for lunch. PRP meeting over.

1330 - Lunch break complete.

Compass is excavating Grid 15B, dust
suppression, marking grids
edges off.

1500 - Compass off site.

1700 - START-2 Rowland off site.

John Rowland
Lead of Day(Thurs. 06/16/05)²³

0730 - START-2 onsite.

Compass is loading trucks with soil
going to Emelle, AL & Tunica, MS.

0845 - Clarkdale Public Utilities is onsite

to fix a water line that was broken
yesterday afternoon. Only a little water
got out.0900 - Compass is rearranging stockpile in
Area "B", refueling an excavator.0915 - ^(BB) Compass is now continuing to excavate
B15.0930 - Both excavators are now excavating
grids in the "B" Area.1100 - Compass is still excavating the grids
in the "B" Area.Took pictures of white arsenic stuff
6ft out in Area "B".

B14 Materials: Toluene

B14 White material (began removal)

91A - B8A 12A & 12B

B3 - Sampled this week ^{next} in next.

1245 - Break for lunch.

1315 - Lunch break over.

Compass is continuing excavate B15.

(Thurs.) 06/16/05

1340 - URS arrives to collect samples from
 B4^{1/2} CB B-8A B-12^{1/2} B
 * B11 & B14 - will fail (so it looks)
 still to sample B3 & B15.

Compass has stockpiled all the
 visual arsenic contamination in Area
 "B". URS (DD) is suppose to check
 behind Compass to make sure all
 of visual is gone. There is one small
 stockpile of soil that has a green tint
 to it, that Compass & URS have noted
 to be Toxaphene. This soil will be transported
 from Area "B" to Area "D" stockpile.

This pile really smells.

1400 - URS have collected the samples into
 the bags & will now go to the
 office to mix them up. Brent
 Jacobs says that he will be leaving
 this afternoon to return on Friday Monday.
 BJ said that the results should be
 back on Friday.

1452 - URS received the results for B-11
 B-14 still for Arsenic.

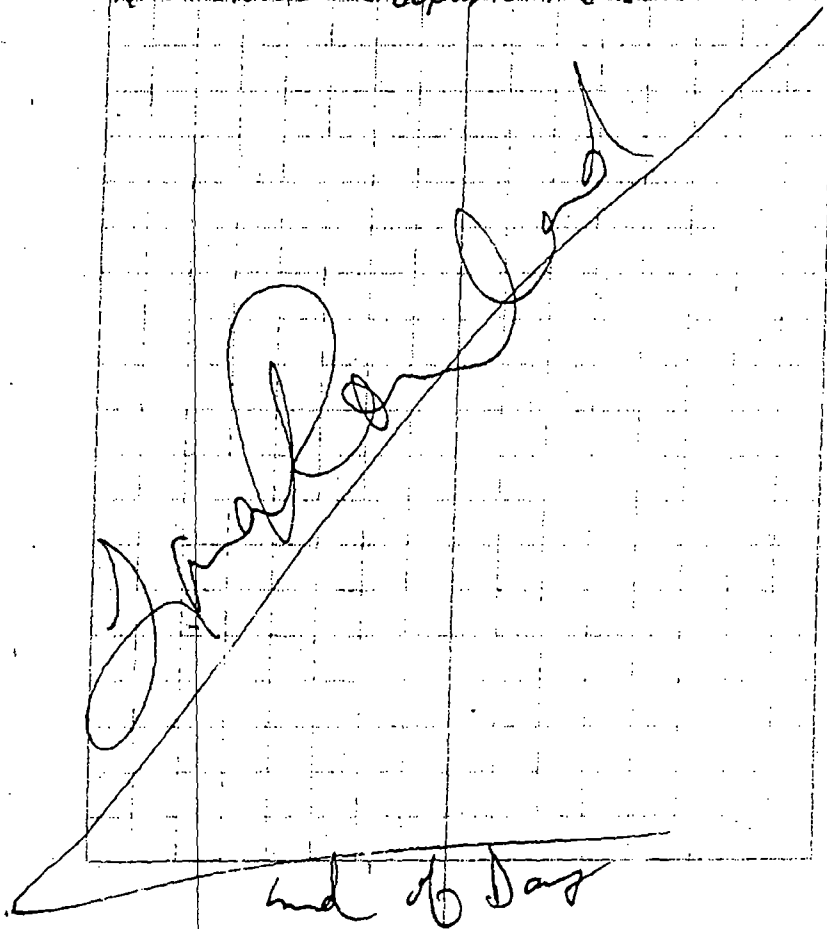
1500 URS began the Compass began

06/16/05

departing the site.

1545 - Compass had (2) workers arrive
 to wait on one of the trucks to load
 out for Port Arthur, TX.

1630 - Rowland departs the site.



(FRI. 06/17/05)

0800 - START-2 (ROWLAND) onsite.

Compass is in the process loading trucks of soil from B15.

0930 - Compass takes the greenish-gold colored soil from "B" to "D" stockpile.

- Compass is taking the smaller excavator to the decom pad to decom it b/c Hertz w suppose to pick it up to day.

- Compass is trying repair a door on the bldg next to Area "D".

1020 - Two (2) trucks arrive to load soils to be transported to Port Arthur, TX.

1100 - Compass comes back to work on the door.

1200 - Rain sprinkles begin to fall.
- BB is sent home today because Compass don't have much work to do, most of the excavation is complete.1400 - 2 ~~me~~ members of Compass staff depart the site.

1500 - Compass & Weston depart site. Rowland heads to hotel to finish

FRI. 06/17/05

daily report & send out email.

1500 - ROWLAND completes report & sends out email

John Rowland

end of Day

06/20/05 MONDAY

0800- START-2 (ROWLAND) onsite:

- Compass loading trucks and are in the process of backfilling Area "C"
- The 200LC has been decaned and is awaiting pick up.
- Compass has repaired the door on the bldg.
- One of the trucks going to Post Arthur was too heavy, so the driver had to turn back around to off load some of the soil.
- Backfill is being dumped in "c"
- Ben Rodgers is now doing manifests & Russ will be using the dozer to push the back fill in. Mike Vails is doing it temporarily.
- Compass is excavating a foot off of B11 & B14
- Backfill trucks appear to be coming every 20 mins, 2 trucks at a time
- 0930 - Russ is now backfilling. Dnst suppression begins.
- 030- Brent Jacobs arrives, Warren Golden arrives @ 20 mins.

(06/20/05 MONDAY)

before hand.

- 1130- Brent Jacobs, WG, DD, & TR head out the Area "B" to collect samples from B-15, Surface sample from triangle soil near B/5, awaiting to collect sample from B11, & still need to clean up B3 more before it is ready to sample.
- 1300- Breaks for lunch.
- 1400- Lunch break over
- 1445- BJ & WG measure ditch in front of Admin building.
- 1500- Compass is loading trucks for Enelle & Tunica (next) & backfilling in Area "c" B11 & B14 (debris, plastic)
- 1730- Compass departs the site.
- 18:22 - Received results from Lab about Grid B11 & B/5.
- 1800 - Brent has sampled B/5 Ditch 1 & is in the process of sampling Ditch 2 (getting the rest laid out)
- 6-Enelle 8-Tunica 1-Post Arthur
- 18:55 - START-2 offsite.

James Rowland

06/21/05 TUESDAY

0800 - START-2 (ROWLAND) onsite.

- Compass is loading out several trucks to Enelle & 2 are awaiting to be loaded to Port Arthur.

- Compass continues to backfill.

- BJ & WG are sampling DITCH 3.

- Yesterday BJ was still onsite @ 1815 sampling DITCH 2.

0925 - Compass begins to load the Port Arthur trucks.

- Will suggest to BJ to make sure that Compass does a surface scrape to make sure no contaminated soil is lying around.

1030 - Ditch sampling is complete. Are awaiting the results.

1200 - As do now Compass has had (2) Tunica, (1) Enelle, (2) Port Arthur.

1245 - Rowland breaks for lunch.

1315 - Rowland returns from lunch.

- Compass is scraping the bottoms of Grid B2 & B3.

- Brent & Warner Sample B12

- Compass (R & K) continues with the backfilling & roll compacting of Area "C"

06/21/05 Tuesday

1520 - Two more trucks arrive for non-haz soil to go to Tunica. Compass is still backfilling.

- Brent Jacobs (URS) Departs site for the week.

1646 - Compass is still onsite doing dust suppression and backfilling. Compass is still cleaning up grid B-3 of any of the straggling soil.

Compass began 1st part of B14. Warner will sample B3, 1/2 B13, & 1/2 B14 tomorrow.

1730 - Compass offsite.

1740 - Warner Golden

1750 - Rowland departs site for hotel.

Jana Colind
end of Day

(Wednesday 06/22/05)

0800 - START-2 (ROWLAND) onsite, Compas is in the process of loading trucks and back filling Area C.

- (AM) is loading out Port Arthur, Emella and Tumica trucks while.

- KS is doing dust suppression & backfill compaction.

- RD is dozing the backfill in Area "C"

- BR is doing weight station / manifest & onsite for monitoring.

1100 - Data Ditch results are in. It appears that Compas will be excavating part of Ditch 1 & Ditch 3 & 4.

1230 - WG departs the site. He has sampled B3 & B14.

1400 - Mike Vails & Kevin S. come to stake at the ditches

1440 - Compas (RD & AM) are still backfilling Area "C"

1500 - Mike Vails begins excavate DITCH 1

1600 - Mike Vails clips an old gas line that is no longer in use. The gas company comes out.

Wed 06/22/05 33

Dave Delaney approached ROWLAND about the culverts in Ditch 3 & 4. Dave wants to know do or if they should take the culverts up or will Steve allow them to leave them in place b/c he said there isn't anything in them. I told him that I would check with Steve.

1700 - Rowland calls Steve about the culverts & Steve says that he wants to know:

1. Measurements
2. How much sediment is in each of them

Steve said that he had considered leaving them in place if they could clean them out.

Rowland informed Steve that she would let him know the information that he requested.

1745 - Compas offsite.

1835 - Rowland offsite.

Joe Rowland
end of Day

(THURSDAY 06/23/05)

- 0830 - START-2 ROWLAND onsite.
 ~ Compass (MV) is continuing to excavate DITCH 1, & loading trucks to Emelle.
- 0930 - Compass will begin re-excavating B-3. DD has staked his sample points. ~~At the~~ MV is awaiting the arrival of Tunica non-haz trucks.
- 0945 - Compass began loading out non-haz soil from the DITCH 1 with Tunica trucks.
- 1030 - David just took a sample from DITCH 1 @ 6'.
 David Delaney also informed ROWLAND that if the city had a sewer cleaner then it would be fine to use that to clean the culvert but otherwise they would have to take the culverts out, especially the 60' one.
- Compass has begun to excavate the backfill area "D" behind the Admin Bldg.
- 1500 - Compass awaited the second round of Tunica trucks.

(THURSDAY 06/23/05)

- 1330 - An Emelle truck arrived onsite.
- 1345 - Trucks for Tunica arrive.
- 1600 - Compass is surveying the site.
 Evans Engineering
- Compass is also scraping the rest of the stockpile in "B".
- Compass is still backfilling "D".
- Compass will not be loading any more trucks for the day.
- 1617 Backfill is still being unloaded.
- 1650 - Compass begins to depart.
- 1700 - START-2 (ROWLAND) offsite.

John Rowland

end of Day

(FRIDAY 06/24/05)

- 08 - START-2 (ROWLAND) onsite
- Compass is currently loading trucks for Truca & accepting backfill.
 - Compass has lifted the liner from under stockpile "B" & scraped across it.
- 1100 - Dave Delaney comes to sample under the former stockpile.
- Compass is in the process of backfilling "B".
 - Compass may have one truck load left to go to Emelle.
 - Dave Delaney of URS said that @ 1700/1730 yesterday Steve Spurlin gave a verbal ok for backfilling of "B". He also said that that is when Steve said dig 1ft deeper on 63-Dalignot. Dave Delaney said that Compass had taken the one foot out (I saw it) and has sampled.
- 1120 - Compass begins to load out soil DITCH1.
- 1400 - Compass is still backfilling

06/24/05 37

Area "B"

1430 - Compass will not be excavating any more today, but will continue to backfill Area "B". (Compass will depart 1500)

START-2 (ROWLAND) departs site for the day.

Janet Rowland

end of Day

6/27/05

- 0930 START II (T. MAYER) ON SITE
COMPASS HAS DITCH 1 EXCAVATED
AND IS BEGINNING EXCAVATION
OF DITCH 4. DATA FROM DITCH
2 INDICATED NO EXCAVATION
WAS NECESSARY IN THIS AREA.
BACKFILL OPERATIONS IN
AREA B ARE CONTINUING.
PART OF STOCKPILE IN 3
WAS TAKEN DOWN 6" TO
INSURE ANY CONTAMINATION
WAS REMOVED. DAVID DELANEY
TOOK COMPOSITE SAMPLE
(URS) FOR ANALYSIS. —
- 1200 BREAK FOR LUNCH —
- 1300 RETURNED FROM LUNCH —
- 1330 CLACKSALL PUBLIC UTILITIES
ON SITE WITH A SEWER
CLENEX TO CLEAN OUT
CULVERTS IN DITCHES 3 & 4.
- 1500 LAST TRUCK GOING TO TUNICA
LOADED FOR THE DAY. —
2 TRUCKS TO BAYLOR H.
& 12 TRUCKS TO TUNICA

T. Mayer

6/27/05

- 1315 TALKED TO MIKE VAHLS
OF COMPASS ABOUT
REMOVING MATERIAL IN
AREA B AND STOCKPILE
IN AREA D. THIS MATERIAL
WILL BE HAULED OFF AS
SOON AS TRUCKS ARE
AVAILABLE. (AREA B SHOULD
BE BY WEEK'S END. —
LIVE UNDER AREA D
STOCKPILE TO TUNICA AS
NOW HAS TOP 6" OF MATERIAL
UNDER STOCKPILE TO PORT
ARTHUR, TX PER BRENT
JACOBS OF URS. —
- 1400 DAVID DELANEY SAMPLED
D4-SC1 & D4-SC2 FOR
SUBSURFACE ANALYSIS.
- THU 530 ~~START OFF SITE FOR THE~~
DAY. COMPASS FINISHED
FOR THE DAY.
- 1700 START OFF SITE FOR
THE DAY. —

T. Mayer

6/28/05

- 0800 START II (TURNER OFF SITE)
COMPASS IS LOADING MATERIAL
FROM DITCH 4 GOING TO TUNICA
- 0900 COMPASS BEHIND EXCAVATION
OF DITCH 3
- 0945 SPOKE WITH BRENT JACOBS
OF URS. HAD QUESTIONS ABOUT
BACKFILL AUTHORIZATION IN
AREA B. TOLD COMPASS
TO CONTINUE BACKFILL
OPERATIONS AFTER REVIEWING
DATA AND REQUEST THAT
BACKFILL REQUESTS BE
UPDATED BY CLOSE OF
BUSINESS DAY.
- 1000 ANALYTICAL SPLIT CAME
BACK FROM OFF SITE LAB.
LARGE DISCREPANCY BETWEEN
OFF SITE RESULTS FOR
GRID B-2. GRID IS TO BE
EXCAVATED AN ADDITIONAL
FOOT, RESAMPLED AND ANOTHER
SPLIT SAMPLE SENT FOR
ANALYSIS

TJ/MS

6/28/05

- 1145 COMPASS FINISHED LOADING
MATERIAL FROM DITCH 3.
SEWER LINE WAS ENCOUNTERED
AND DAMAGED. COMPASS
INDICATED THAT REPAIRS
WOULD BE MADE TODAY.
- 1200 BREAK FOR LUNCH.
- 1300 RETURNED FROM LUNCH.
COMPASS WORKING ON
GRID B-2 EXCAVATION.
- 1545 COMPASS FINISHED LOADING
TRUCKS GOING TO TUNICA.
EXCAVATION OF GRID B-2
IS COMPLETE BUT THERE IS
STILL SOME SOIL REMAINING
TO BE LOADED OUT. MICHEL
ALREADY OF URS SAMPLES
GRID B-2 FOR ON SITE AND
SPLIT ANALYTICAL.
- 1700 COMPASS IS PUTTING CHURN
TAPE AROUND DITCHES 1, 3 & 4
- 1730 OFFSITE FOR THE DAY

TJ/MS

6/29/05

0800 START II (T.MATTER) ON SITE.

COMPASS IS LOADING OUT THE
REMAINDER OF THE MATERIAL
FROM GRID B-2. BACKFILLING
OF EXCAVATED AREAS IN B
ARE CONTINUING. —————

JASON WARR OF EVANS -
ENGINEERING IS ON SITE TO
PERFORM COMPACTION TESTING
ON BACKFILL OPERATIONS IN
AREA B.

0900 REVIEWED SAMPLE DATA FROM
DITCHES 1, 3 & 4. DATA CAME
BACK BELOW PERFORMANCE
STANDARDS. CALLED STEVE
SPURLO FOR OK TO BACKFILL.
STEVE WAS UNAVAILABLE.
T. MATTER GAVE COMPASS OK
TO BACKFILL DITCHES SO THEY
MIGHT BE DONE BEFORE THE
LONG WEEKEND. —————

1200 BREAK FOR LUNCH —————

1300 RETURNED FROM LUNCH. —————

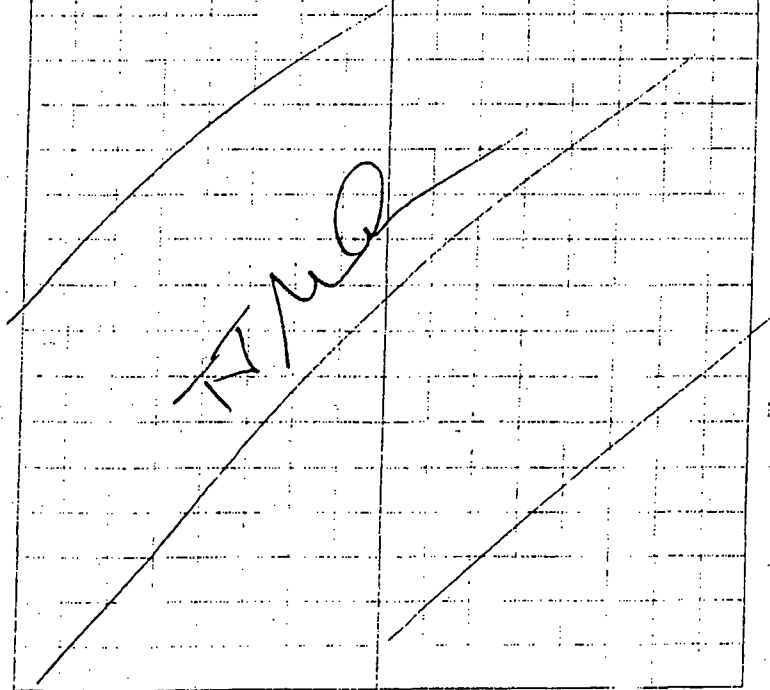
STEVE SPURLO AND —————

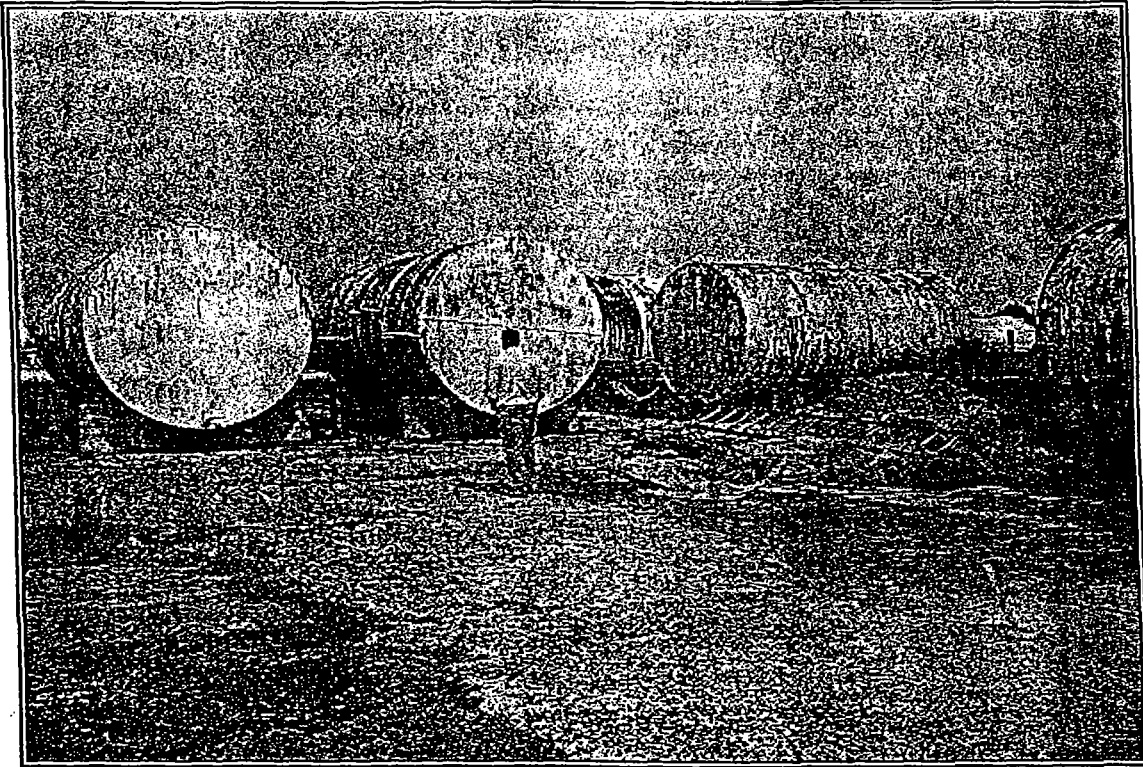
————— T.M. —————

6/29/05

CHERYL CARBONARO ON SITE
FOR SITE INSPECTION AND
PUBLIC RELATIONS.

1430 T.MATTER OFF SITE FOR
HOLIDAY. COMPASS CONTINUED
TO BACKFILL. MOBILE LAB &
URS DEMOBING EQUIPMENT.





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 1**

Subject: Aboveground Chemical Storage Tanks in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: October 4, 2004

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 2**

Subject: Tank end removal to access residual material and decontaminate.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: October 6, 2004

Orientation: West

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 3**

Subject: Demolition progress after triple-rinse decontamination .

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: December 8, 2004 **Orientation:** North

Photographer: Timothy Maher, START-2 **Witness:** David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 4**

Subject: Aboveground chemical storage tank cut in half.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

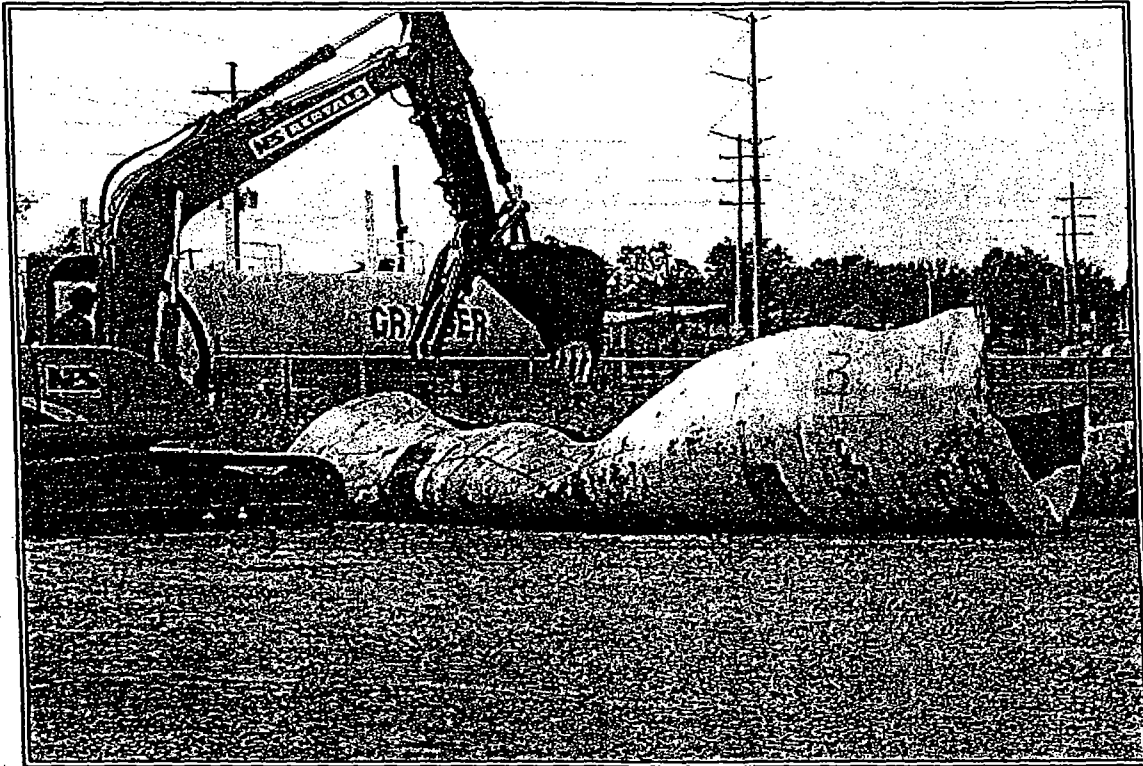
Date: October 7, 2004

Orientation: Northwest

Photographer: Timothy Maher, START-2

Witness: Watty Campbell, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 5**

Subject: Folding of storage tank halves for shipment to the scrap yard.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

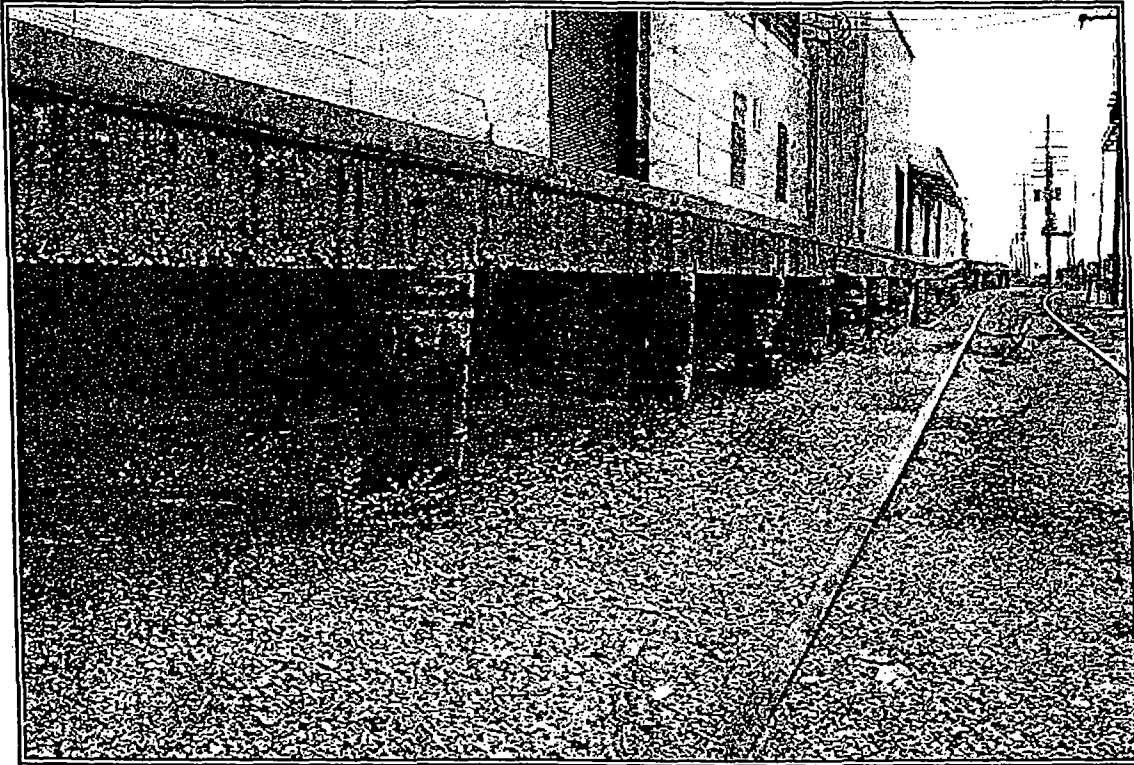
Date: October 7, 2004

Orientation: Northwest

Photographer: Timothy Maher, START-2

Witness: Watty Campbell, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 6**

Subject: Loading dock and rail spur in Area C.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

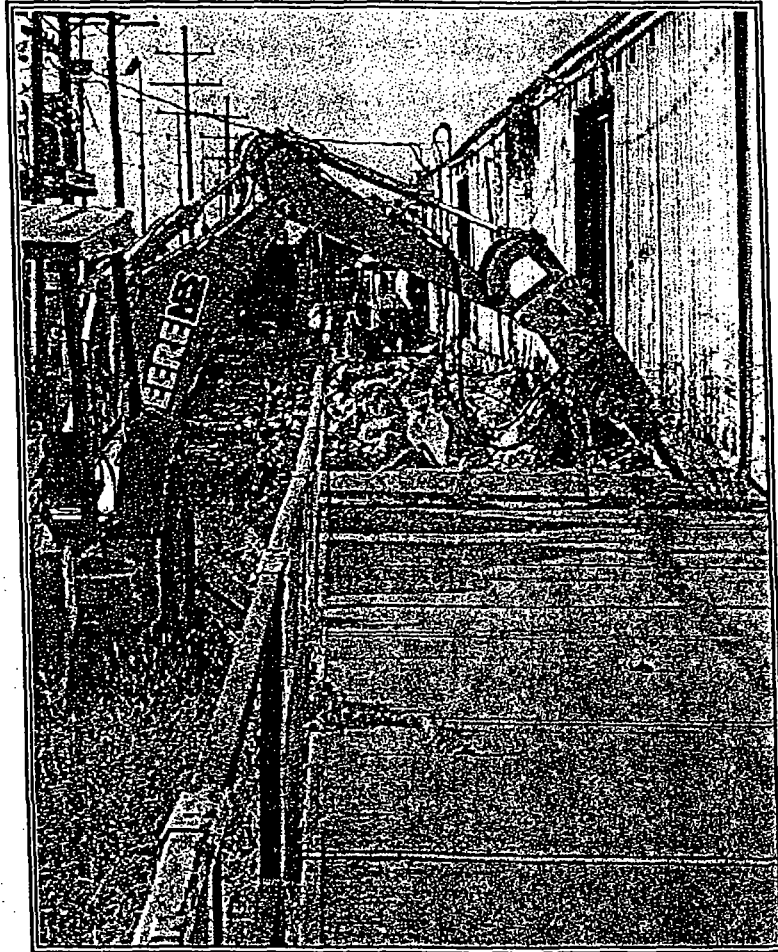
Date: October 4, 2004

Orientation: South

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 7**

Subject: Removal of loading dock in Area C.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

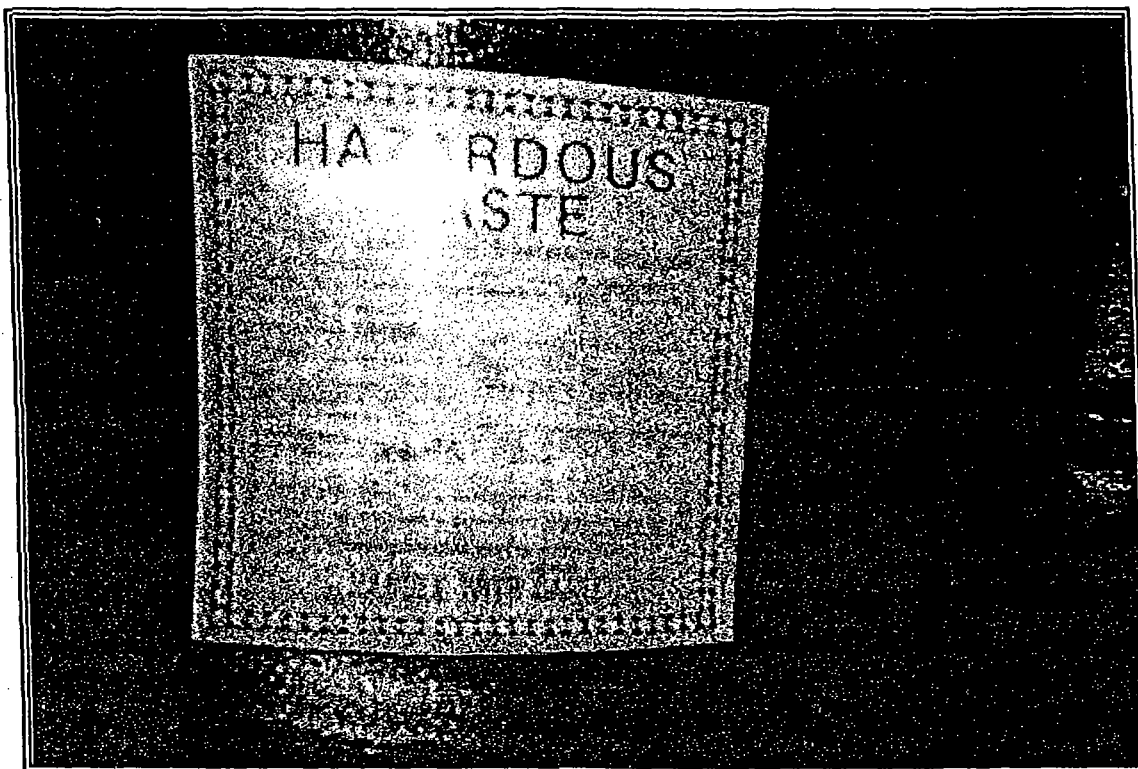
Date: November 5, 2004

Orientation: North

Photographer: Timothy Maher, START-2

Witness: Charles Ivey, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 8**

Subject: Hazardous Waste label on drum containing contents of AST 8.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: December 8, 2004

Orientation: Northwest

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 9**

Subject: Vacuum box for rinsate water from decontamination.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

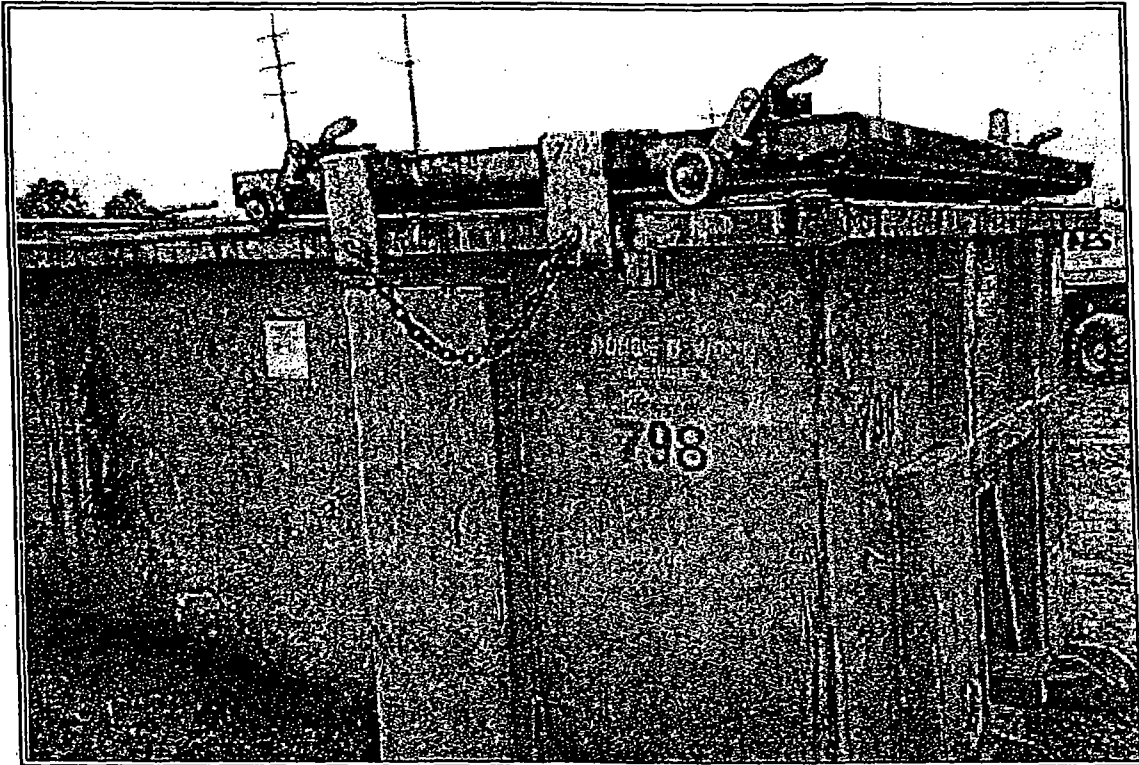
Date: December 8, 2004

Orientation: Northwest

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 10**

Subject: Sludge box for residual material removed from storage tanks.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

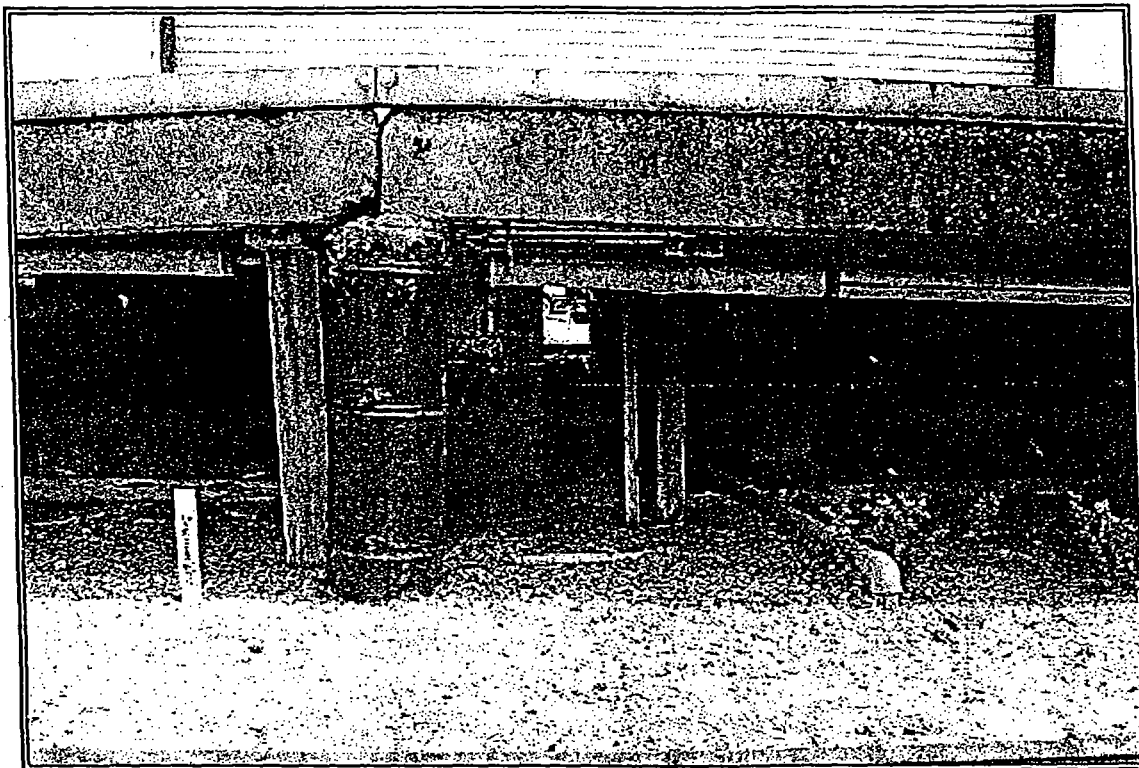
Date: December 8, 2004

Orientation: Northwest

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 11**

Subject: Breeze-way from Area C to Area D under metal storage building.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

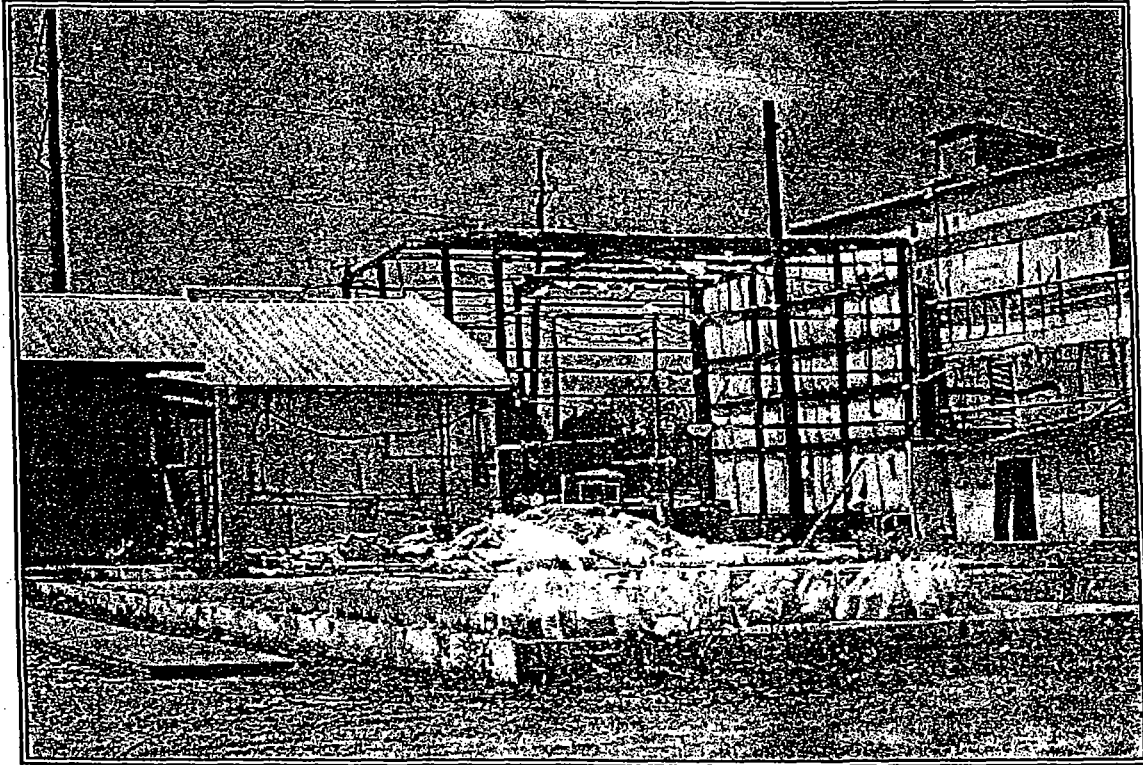
Date: October 4, 2004

Orientation: East

Photographer: Timothy Maher, START-2

Witness: David Brooks, HEPACO

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 12**

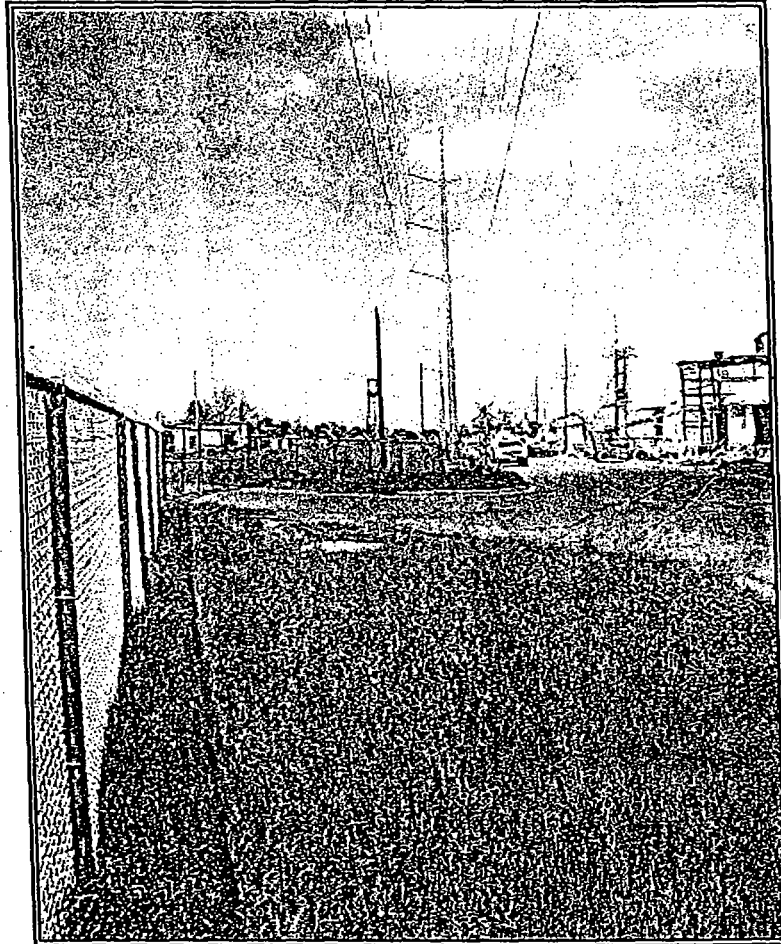
Subject: Demolition of metal storage building above the breeze-way.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No: 4W-02-07-B-007

Date: April 21, 2005 **Orientation:** West

Photographer: Timothy Maher, START-2 **Witness:** Brent Jacobs, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 13**

Subject: Perimeter security fence at west side of East Tallahatchie Street.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

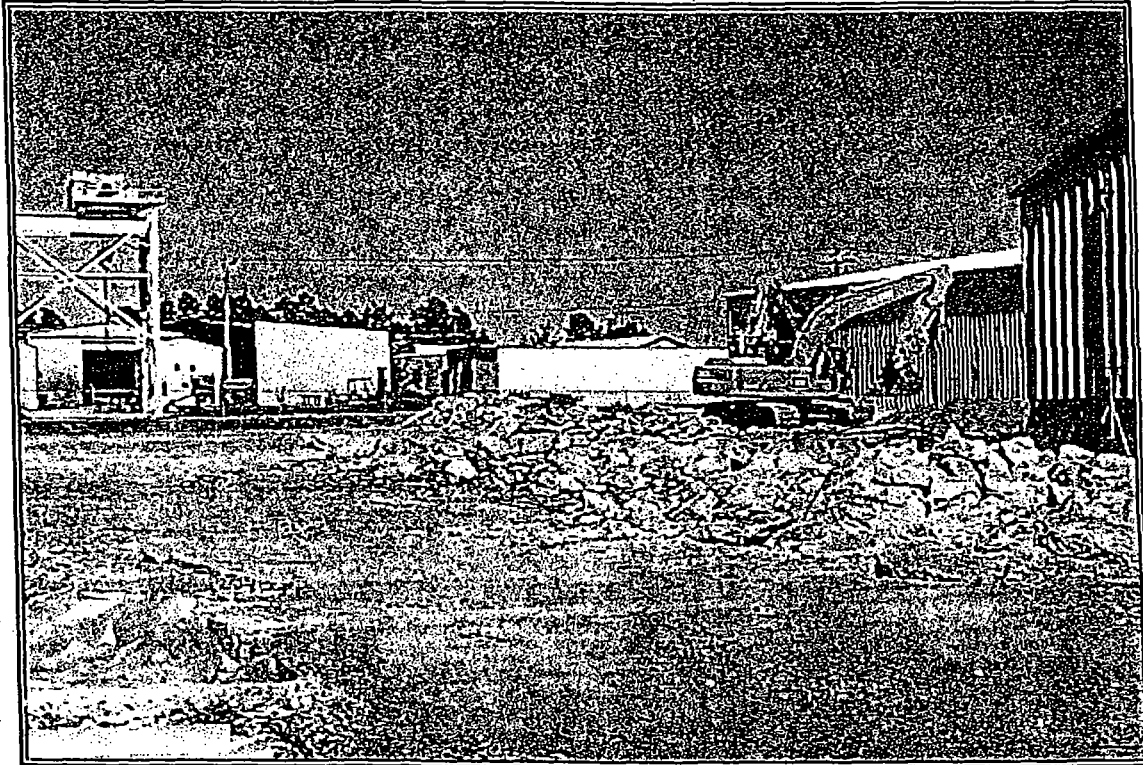
Date: April 21, 2005

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 14**

Subject: Demolition of concrete pads in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

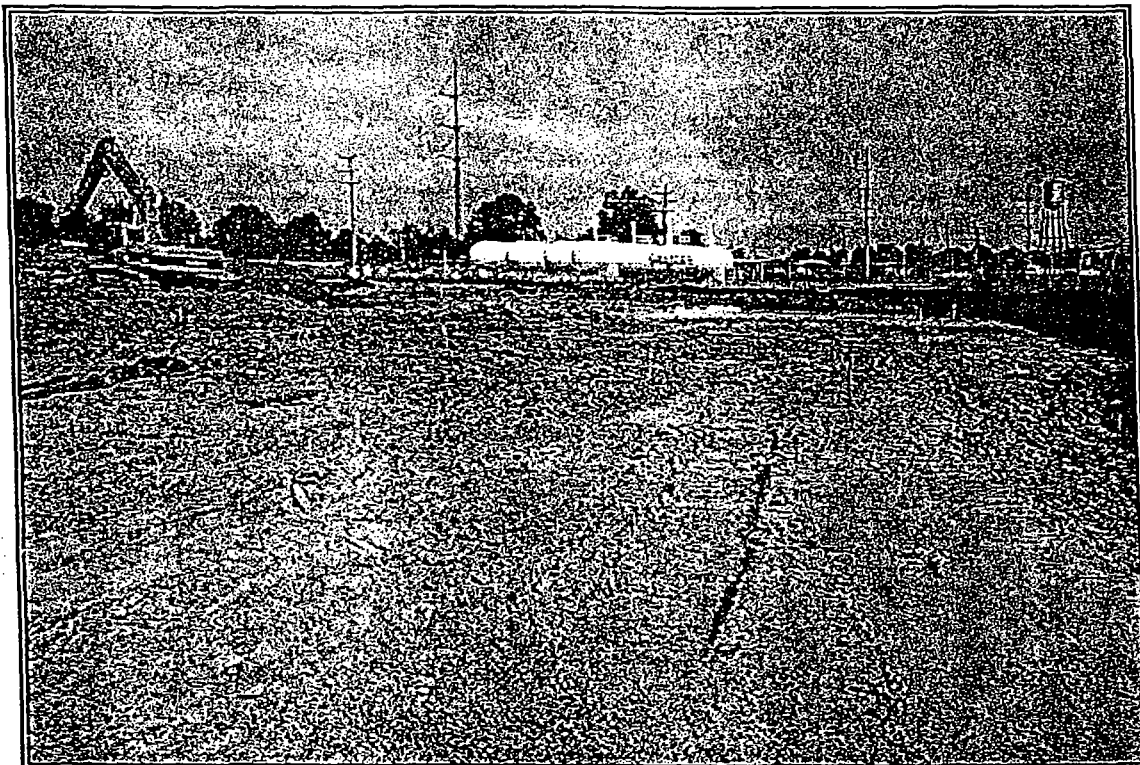
Date: April 27, 2005

Orientation: East

Photographer: Tara Rowland, START-2

Witness: Mike Vails, Compass

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 15**

Subject: Grid layout for excavations in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: June 16, 2005

Orientation: Northwest

Photographer: Tara Rowland, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 16**

Subject: Excavation of Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: June 27, 2005

Orientation: Northeast

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 17**

Subject: Excavation of Area C.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

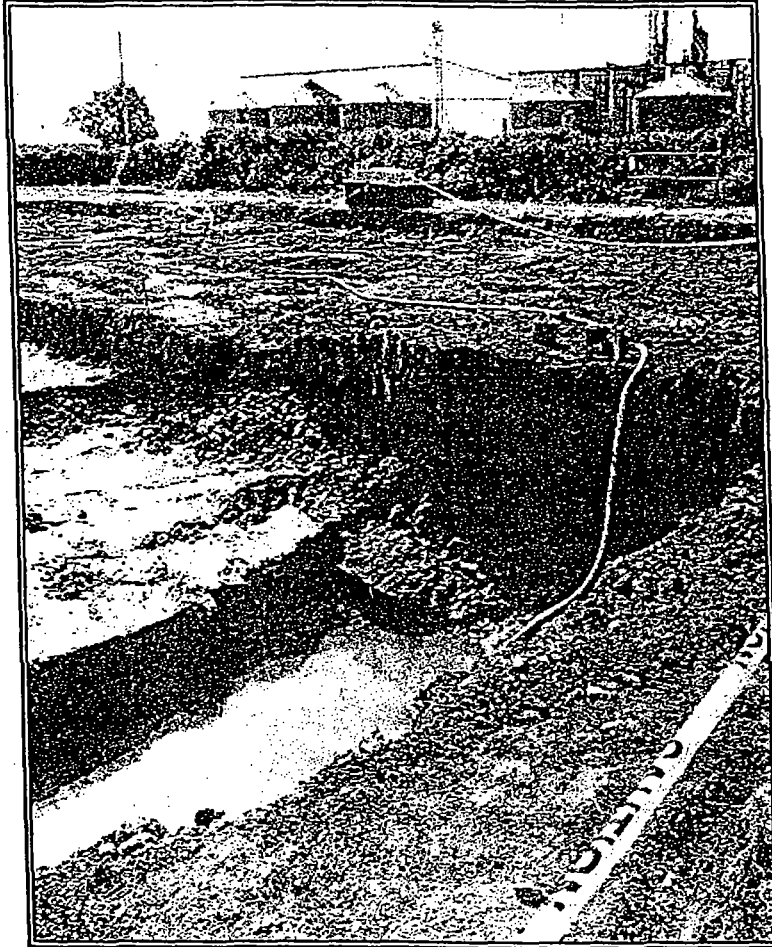
Date: June 16, 2005

Orientation: Southeast

Photographer: Tara Rowland, START-2

Witness: Mike Vails, Compass

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 18**

Subject: Removal of stormwater from excavation in Area D.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: May 16, 2005

Orientation: Southeast

Photographer: Leann McHugh, START-2

Witness: Mike Vails, Compass

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 19

Subject: Backfill operations in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: May 20, 2005

Orientation: East

Photographer: Leann McHugh, START-2

Witness: Mike Vails, Compass



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 20**

Subject: Backfill operations in Area C.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

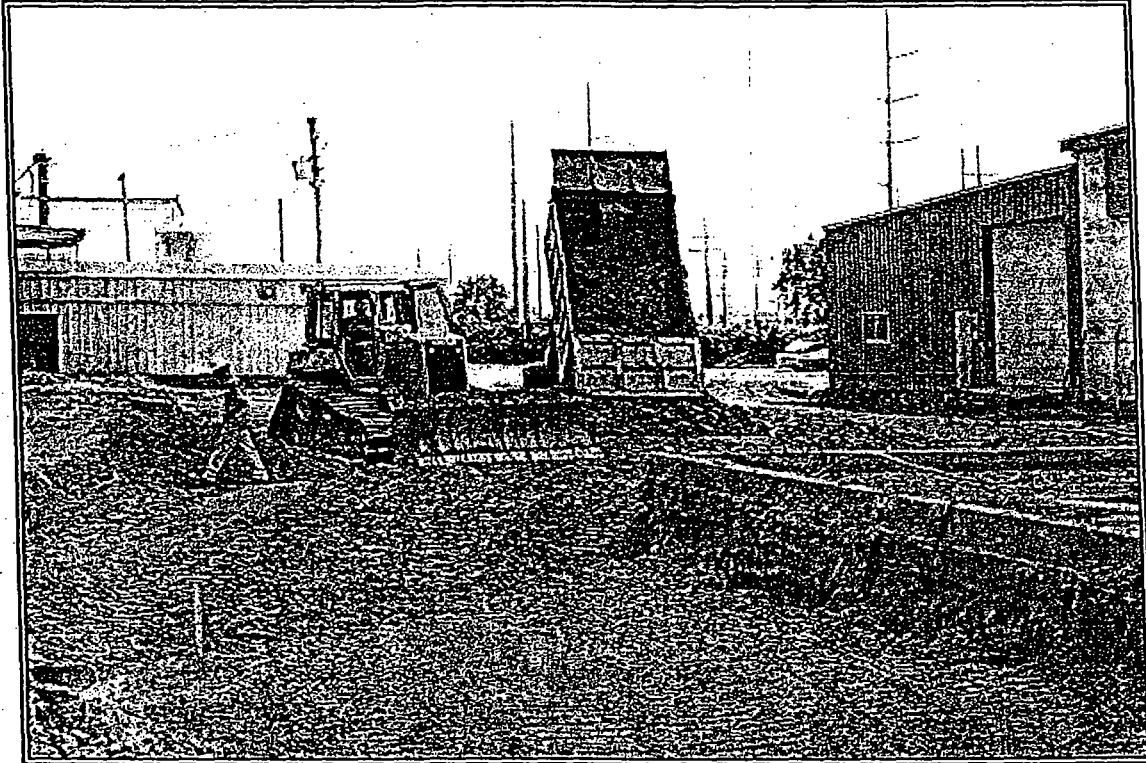
Date: June 23, 2005

Orientation: Southeast

Photographer: Tara Rowland, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 21**

Subject: Backfill operations in Area D.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

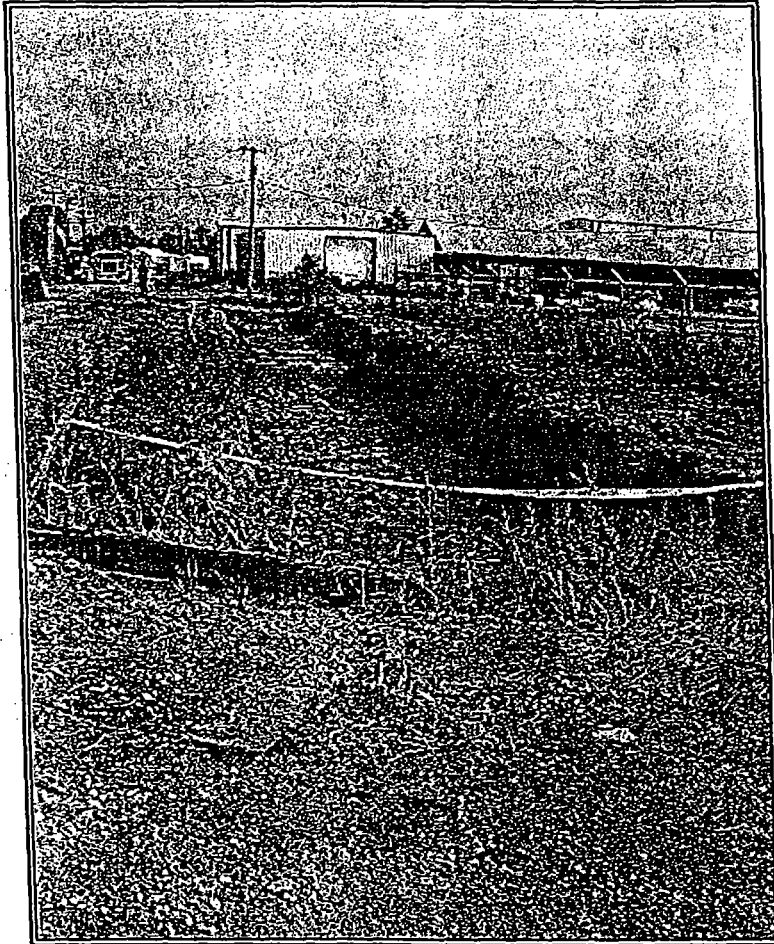
Date: June 6, 2005

Orientation: South

Photographer: Timothy Maher, START-2

Witness: Mike Vails, Compass

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 22**

Subject: Excavation of Ditch 1 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

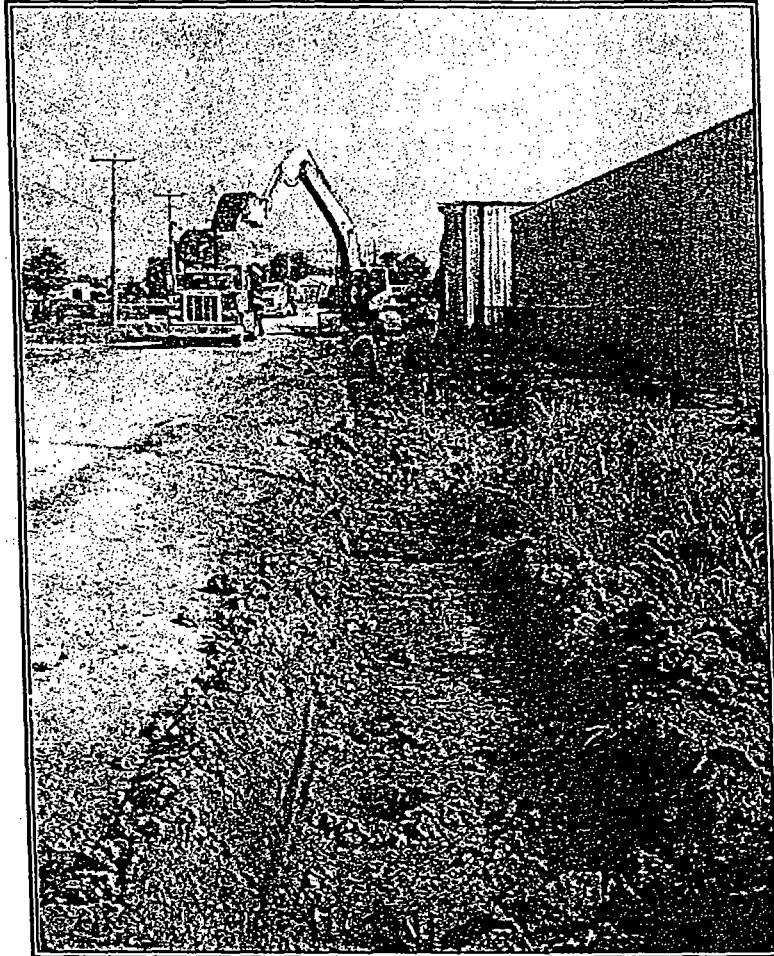
Date: June 27, 2005

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 23**

Subject: Excavation of Ditch 3 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: June 27, 2005

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 24**

Subject: Excavation of Ditch 4 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

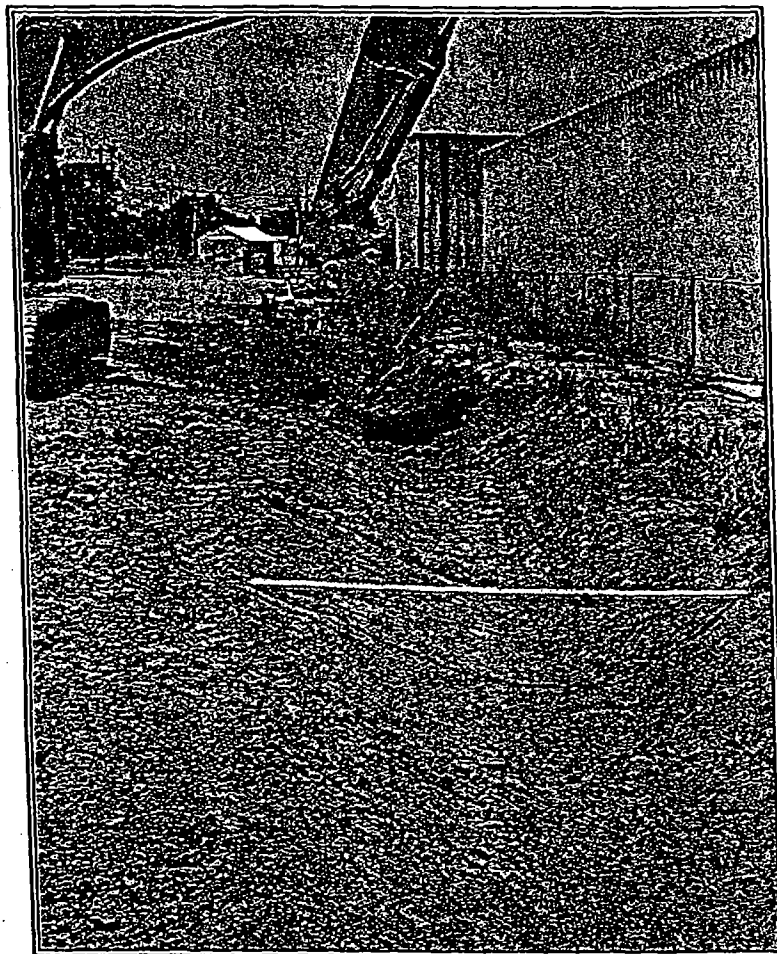
Date: June 16, 2005

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 25**

Subject: Backfill and restoration of Ditch 3 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: June 28, 2005

Orientation: North

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 26**

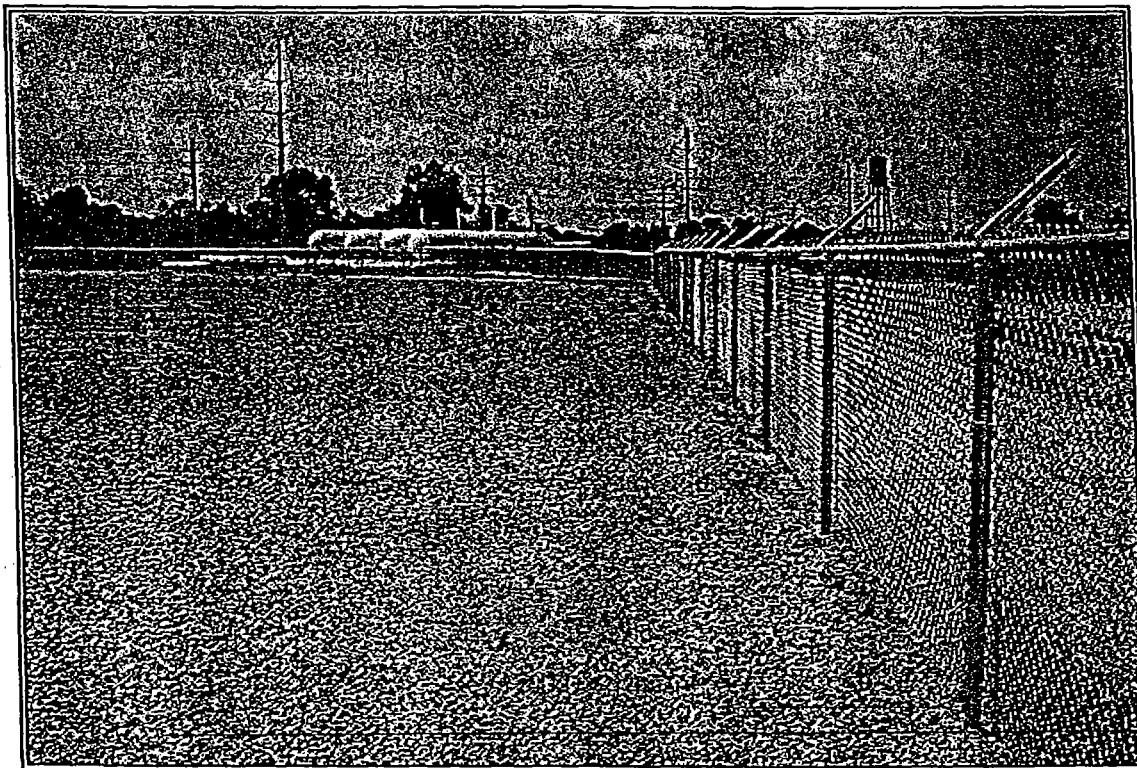
Subject: Site restoration of Ditches 5 and 6 in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: August 11, 2005 **Orientation:** Northwest

Photographer: Timothy Maher, START-2 **Witness:** David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 27**

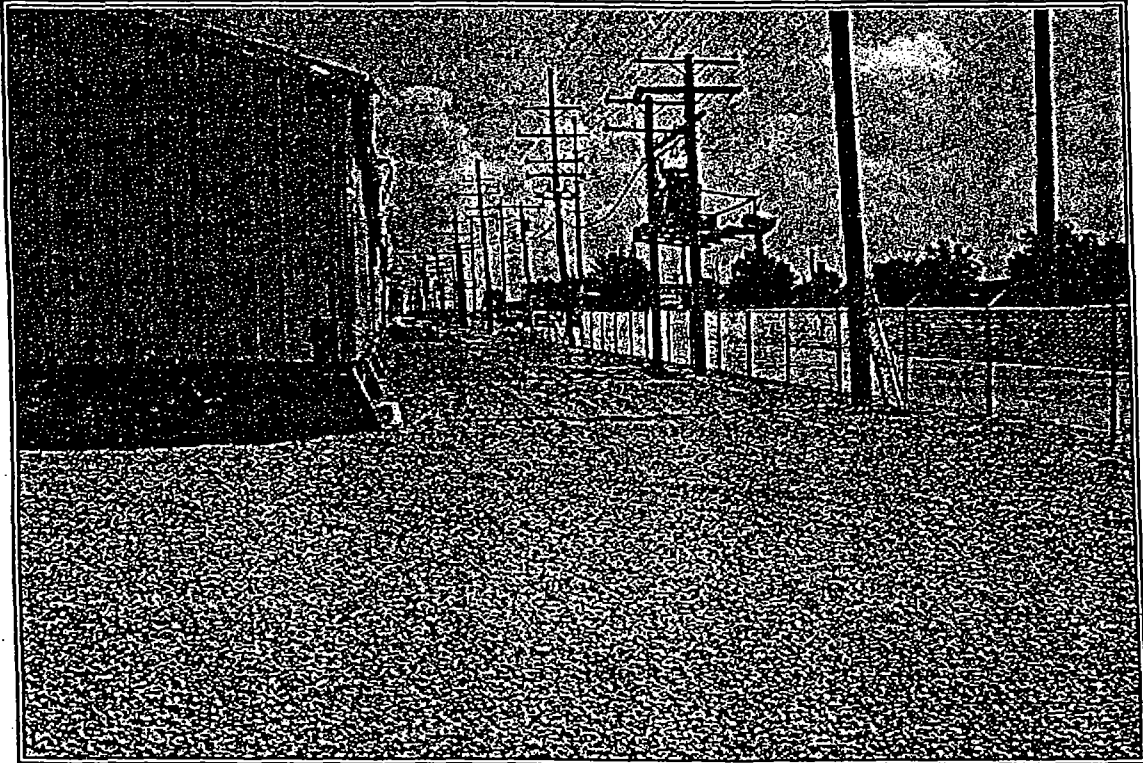
Subject: Site restoration and new perimeter fence in Area B.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: August 11, 2005 **Orientation:** Northwest

Photographer: Timothy Maher, START-2 **Witness:** David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 28**

Subject: Site restoration and new perimeter fence in Area C.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: August 11, 2005 **Orientation:** South

Photographer: Timothy Maher, START-2 **Witness:** David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 29**

Subject: Site restoration in Area D.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

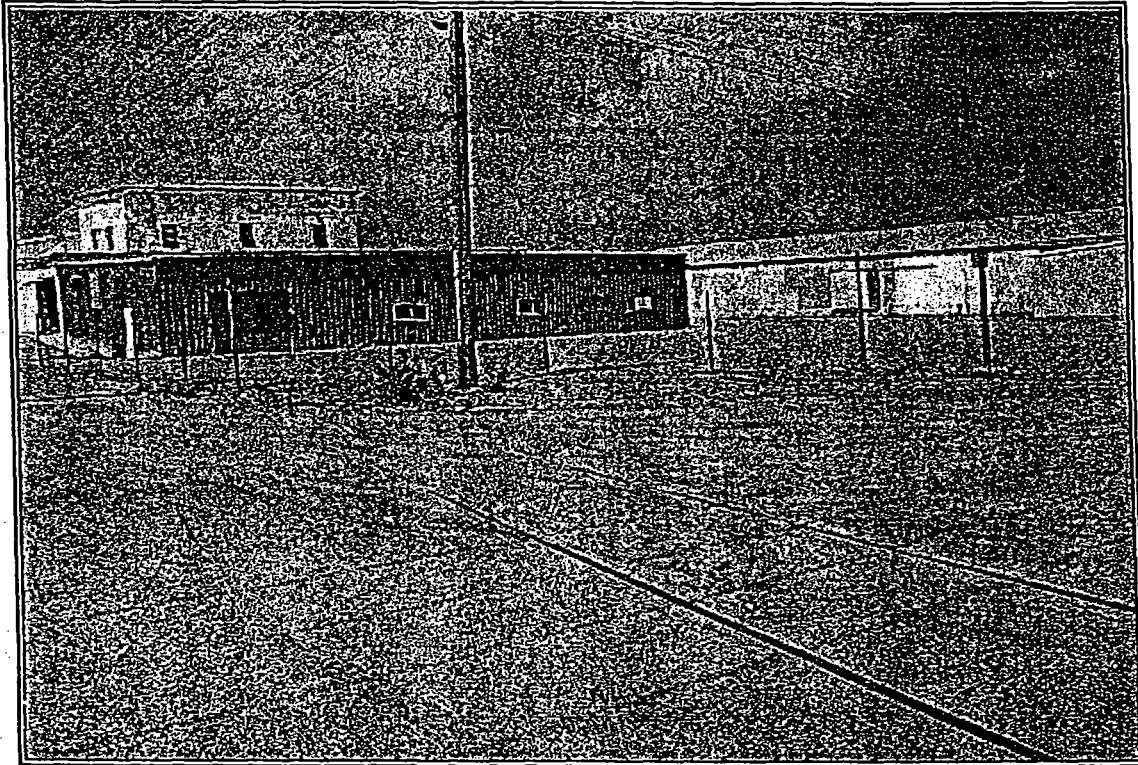
Date: August 11, 2005

Orientation: Southwest

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 30**

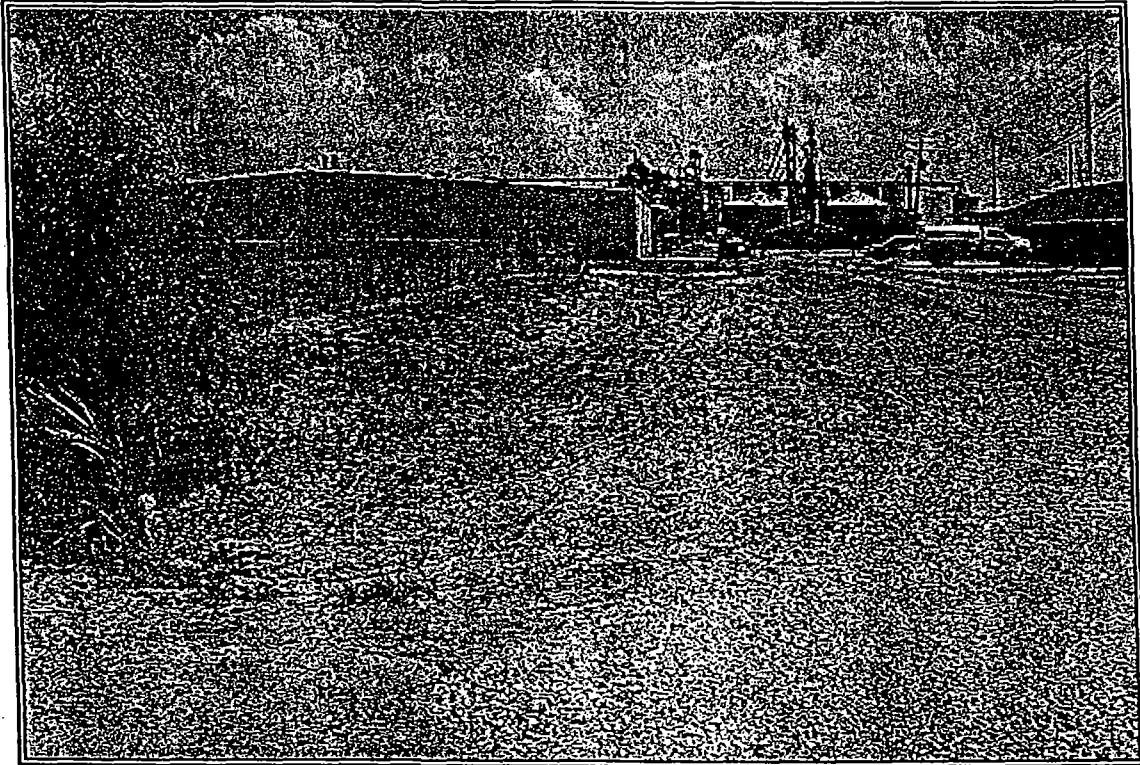
Subject: Site restoration and installation of new perimeter fence in Area D.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: August 11, 2005 **Orientation:** Northeast

Photographer: Timothy Maher, START-2 **Witness:** David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 31**

Subject: Restoration of Ditch 1 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

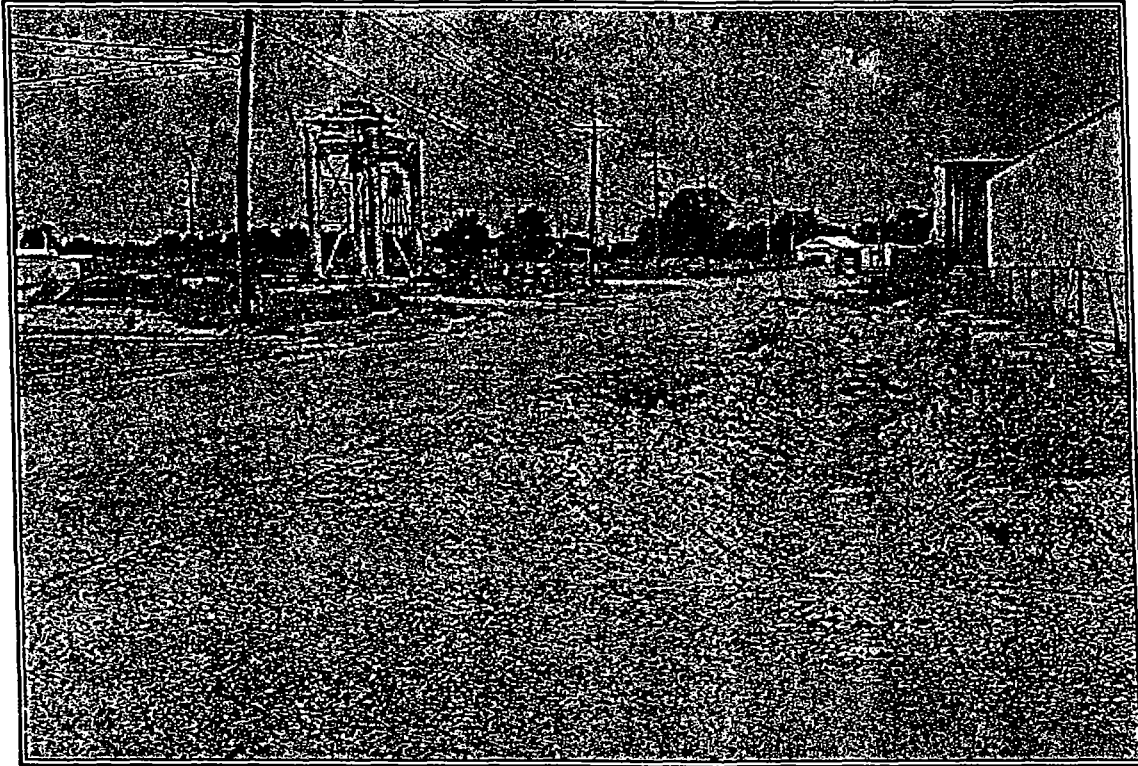
Date: August 11, 2005

Orientation: South

Photographer: Timothy Maher, START-2

Witness: David DeLaney, URS

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SITE PHOTOGRAPH 32**

Subject: Restoration of Ditches 3 and 4 in Area A.

Site: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi
TDD No. 4W-02-07-B-007

Date: June 28, 2005

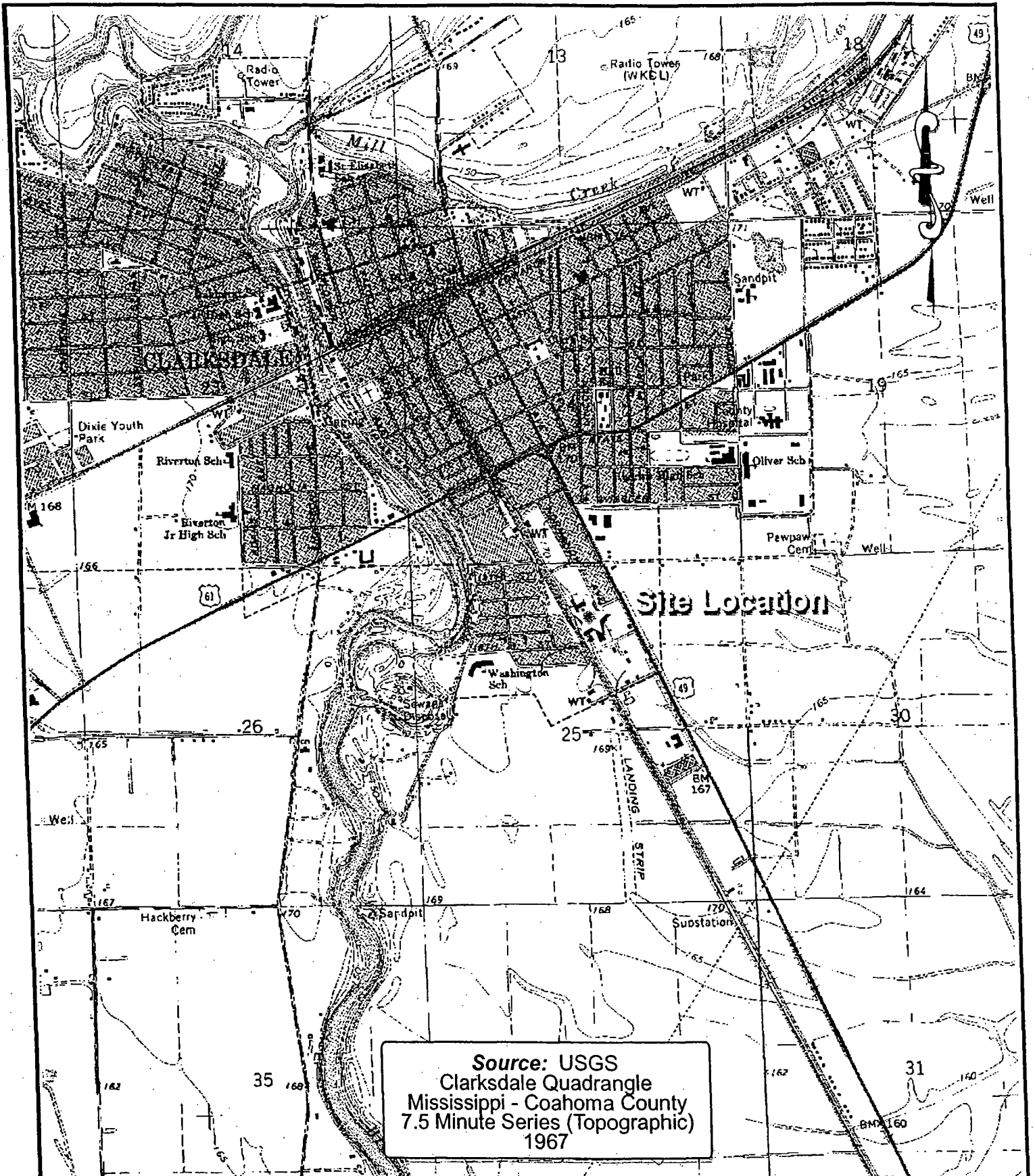
Orientation: Northwest

Photographer: Timothy Maher, START-2


Witness: David DeLaney, URS

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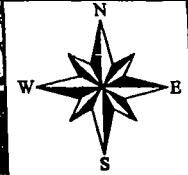
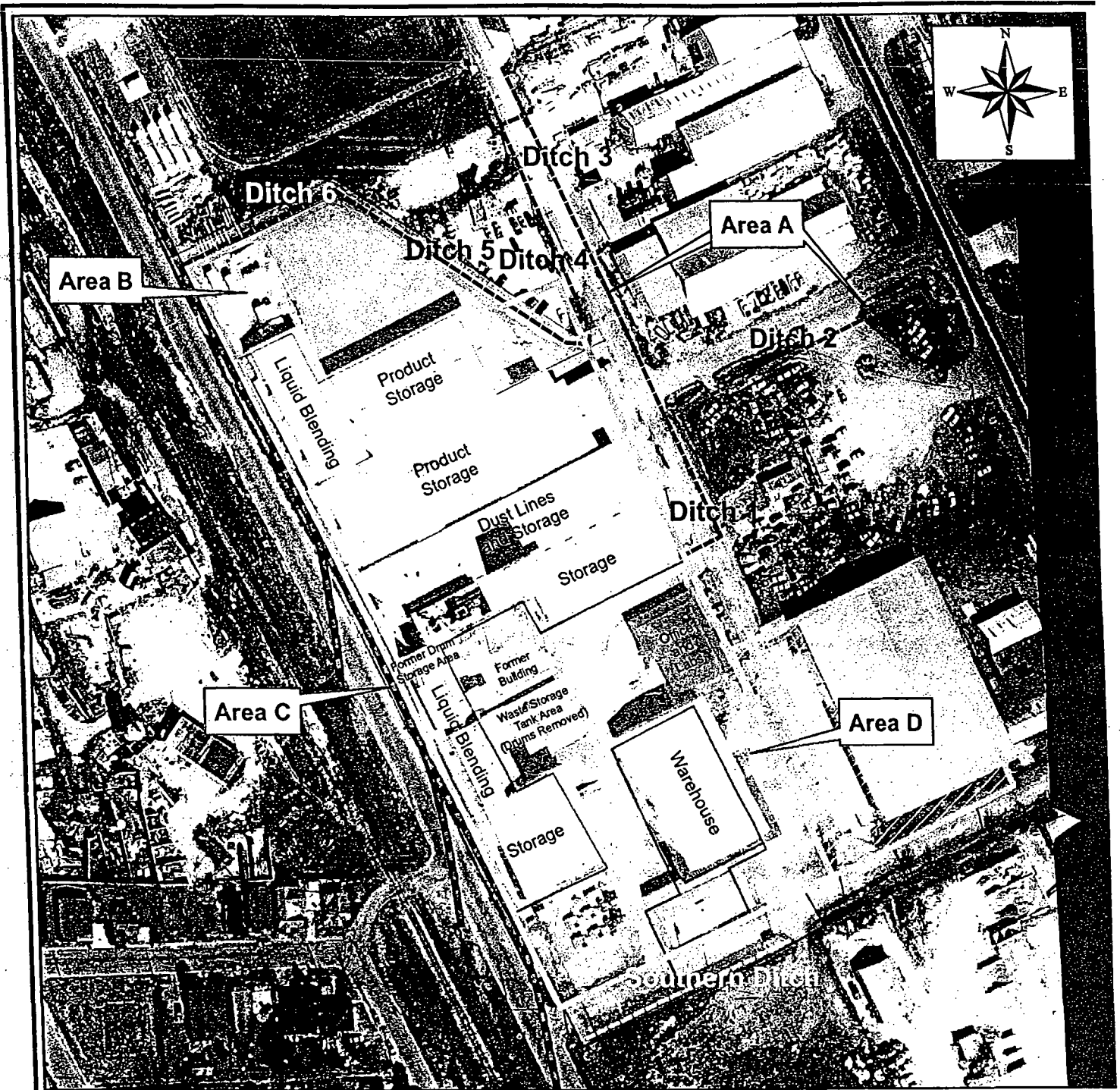
ATTACHMENT 1
URS Figures



Source: USGS
 Clarksdale Quadrangle
 Mississippi - Coahoma County
 7.5 Minute Series (Topographic)
 1967

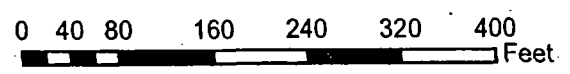
CLIENT: Alston and Bird		TITLE: Site Location Map	
PROJECT: Red Panther Soil Characterization Report			
DATE: 02/18/2003	DESIGNED BY:		
SCALE: Approximate Scale 1" = 2000'	DRAWN BY: J. Anderson		
FILE: H:\Projects\Red Panther\Soil Characterization\SiteMap.ai	CHECKED BY: B. Jacobs		
			PROJ NO.: 37778-010
			TASK: 1405
			FIGURE: 1

ATTACHMENT 2
NewFields Figures



Legend

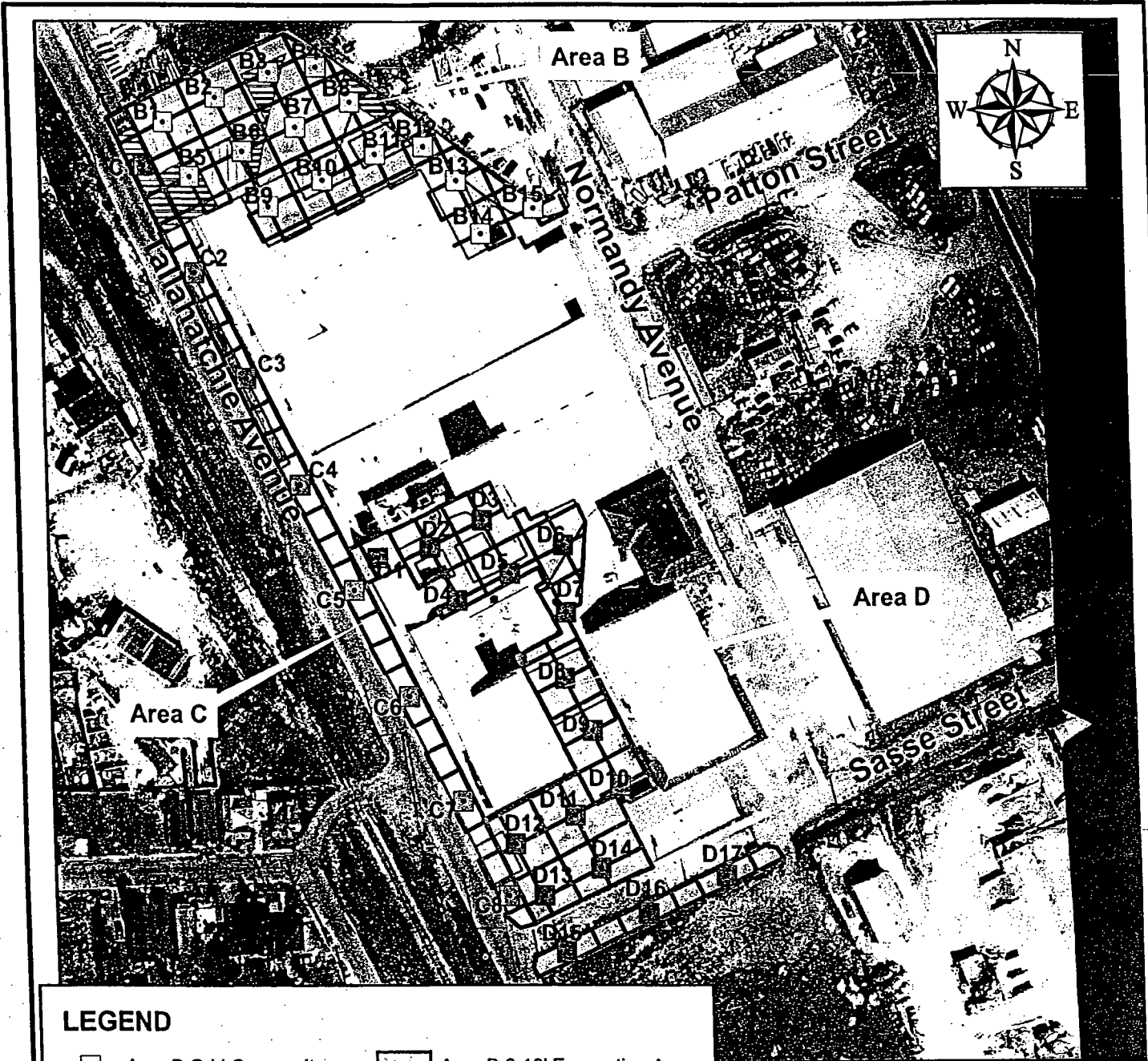
Site Boundary	Area D
Area A - Drainage Ditches	Former Settling Basin
Area B	Adjacent Red Panther Property
Area C - Railroad Spur	Site Buildings
Area D - Southern Ditch	



1349 West Peachtree Street - Suite 2000
 Atlanta, Georgia 30309
 Phone: (404) 347-9050 - Fax: (404) 347-9080
 www.newfields.com

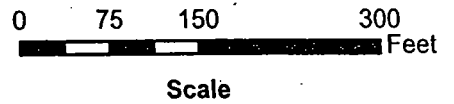
Red Panther Site
 Clarksdale, Mississippi
 Sampling and Analysis Plan
 March 2005

Figure 1
 Containment Areas



LEGEND

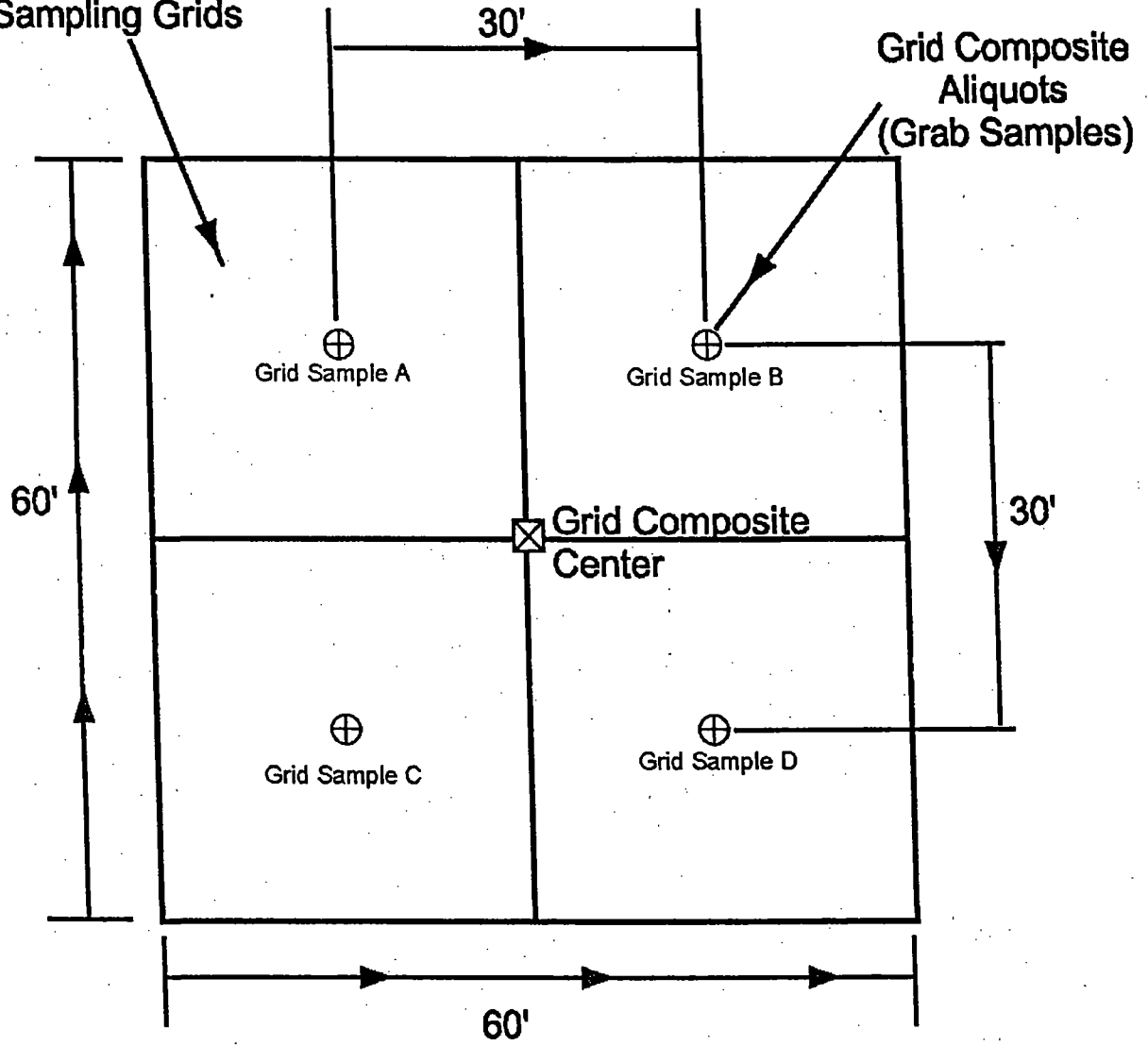
- | | | | |
|--|-----------------------------|--|------------------------------|
| | Area B Grid Composites | | Area B 6-10' Excavation Area |
| | Area C Grid Composites | | Area C 0-2' Excavation Area |
| | Area D Grid Composites | | Area C 2-6' Excavation Area |
| | Area B Grid Divisions | | Area C 6-10' Excavation Area |
| | Area C Grid Divisions | | Area D 0-2' Excavation Area |
| | Area D Grid Divisions | | Area D 6-10' Excavation Area |
| | Area B 0-2' Excavation Area | | Site Boundary |
| | Area B 2-6' Excavation Area | | |



**Red Panther Site
Clarksdale, Mississippi
Sampling and
Analysis Plan
March 2005**

**Figure 2
Confirmation
Sample Locations**

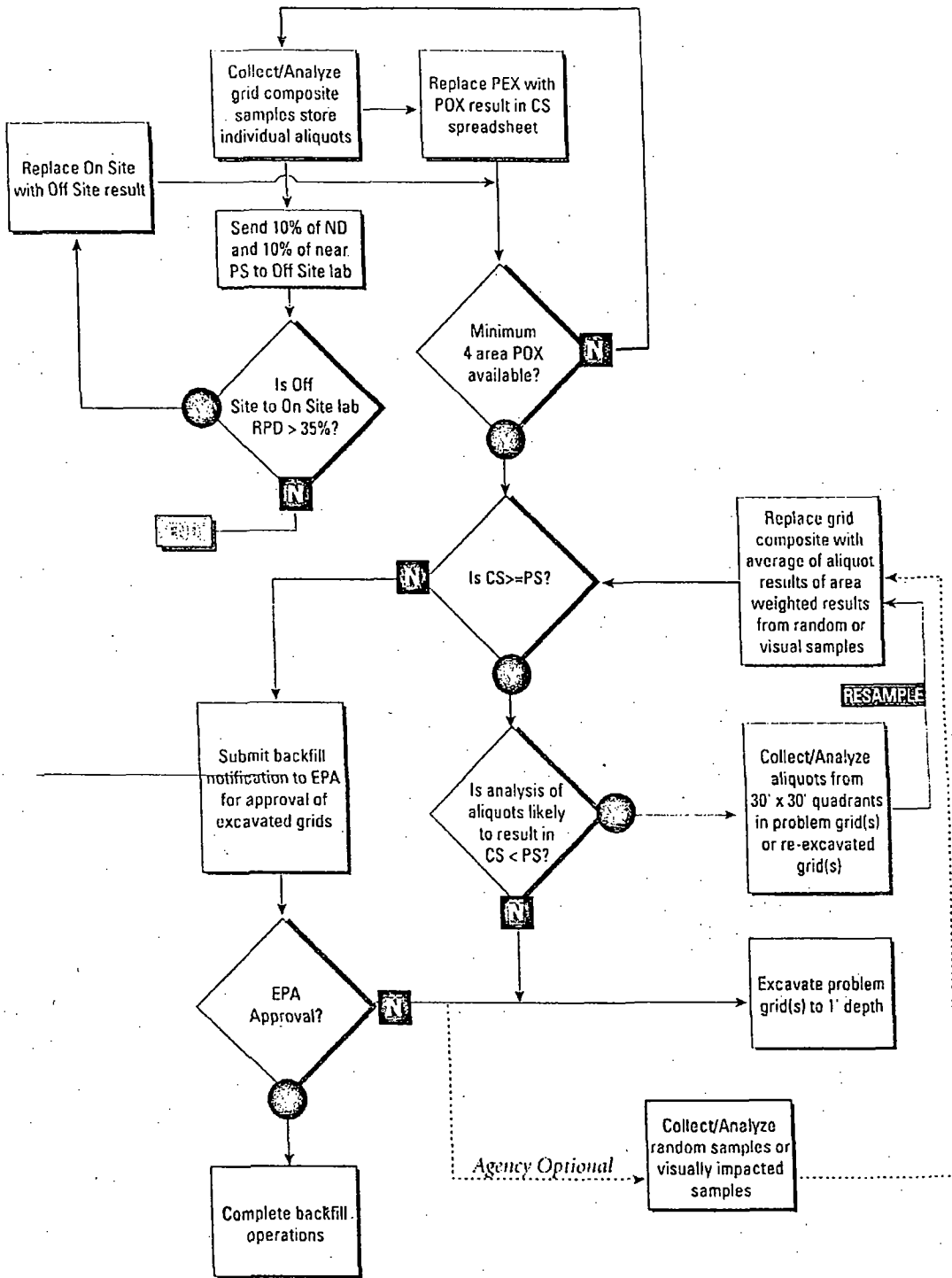
30' X 30'
Sampling Grids



NEWFIELDS

Red Panther Site
Clarksdale, Mississippi
Sampling and
Analysis Plan
March 2005

Figure 3
Confirmation
Sampling Grid
Detail



NOTES:

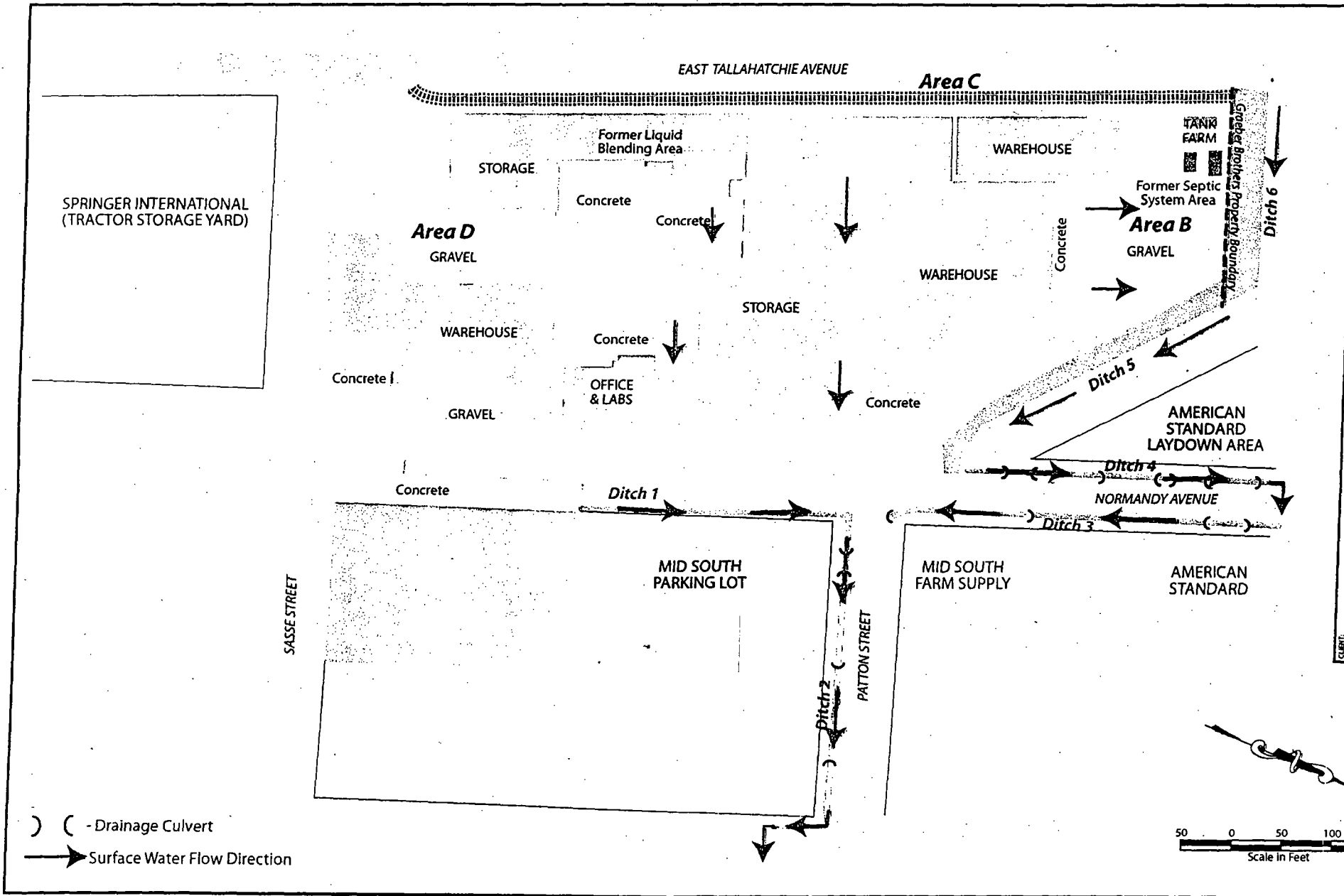
PEX – Pre excavation estimate of concentration at base of excavation.

POX – Post excavation grid result.

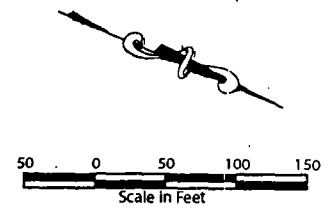


**Red Panther Site
Clarksdale, Mississippi
Sampling and
Analysis Plan
March 2005**

**Figure 4
Confirmation
Sampling Decision
Tree**

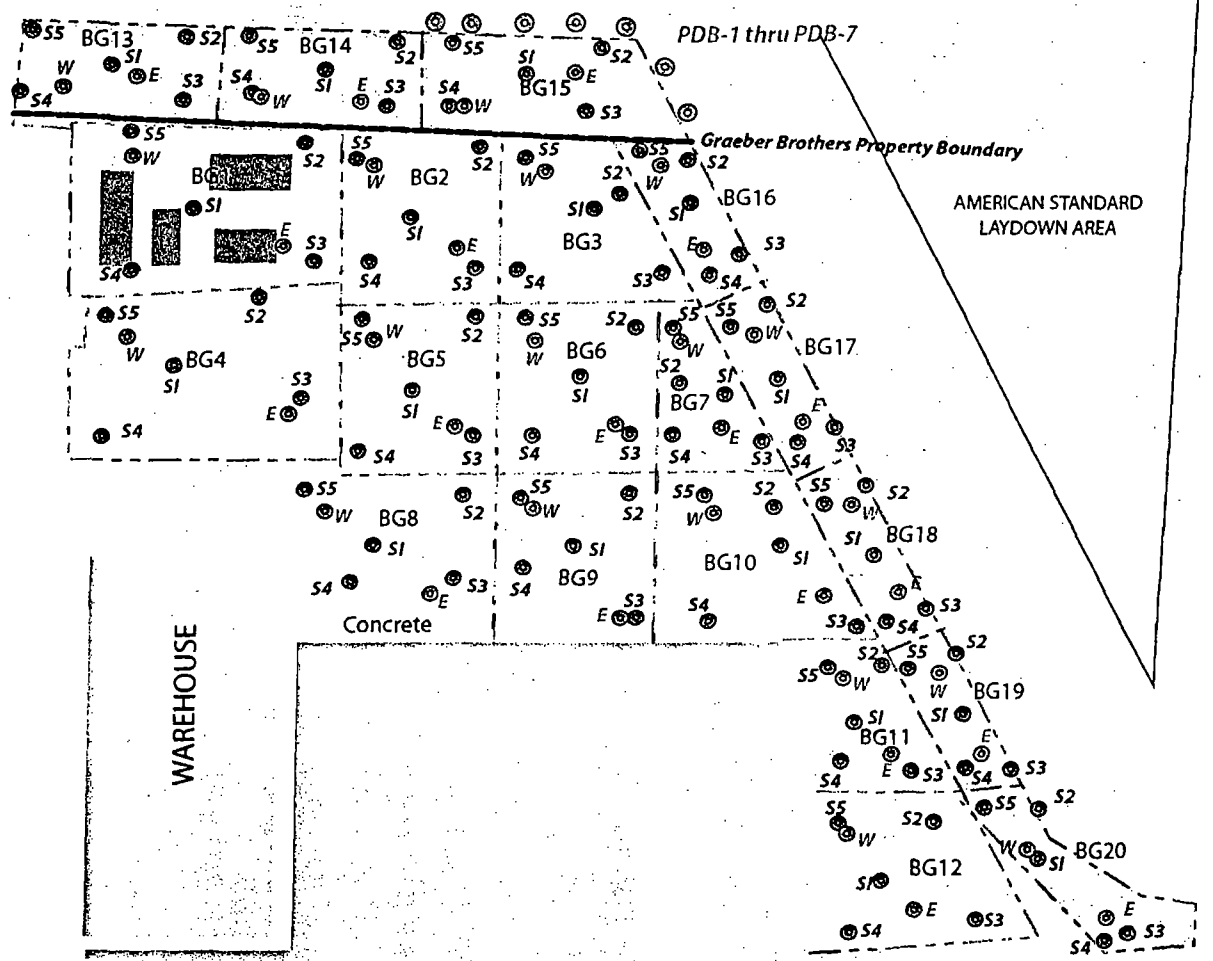


) (- Drainage Culvert
 → Surface Water Flow Direction



CLIENT: Alston & Bird PROJECT: Red Panther Phase I Removal Action Report DATE: 01/30/2003 SCALE: AS SHOWN FILE: R:\proj\RedPanther\Drawings\Site\Site.dwg		TITLE: Site Diagram DESIGNED BY: J. Anderson DRAWN BY: J. Anderson CHECKED BY: R. Parshke	
PROJ NO.	3775-01	DWG	2
DATE	01/30/03	SCALE	AS SHOWN
FILE	R:\proj\RedPanther\Drawings\Site\Site.dwg	CHECKED BY	R. Parshke





AMERICAN STANDARD

NORMANDY AVENUE

AMERICAN STANDARD
LAYDOWN AREA



MID SOUTH
FARM SUPPLY

EAST TALLAHATCHEE AVENUE

WAREHOUSE

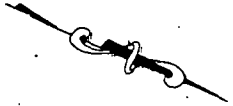
WAREHOUSE

LEGEND
 SI ⊙ - Surface Soil Sample Aliquot Location
 E ⊙ - DPT Boring Location
 PDB-1 ⊙ - Visual Waste Delineation DPT



CLIENT:	Alston & Bird	TITLE:	Area B Sampling Locations
PROJECT:	Red Panther Soil Characterization Report	PROJ. NO.:	3773-010
DATE:	02/18/2003	DESIGNED BY:	
SCALE:	As Shown	DRAWN BY:	J. Anderson
FILE:	H:\Project\Red Panther\Soil Characterization\Area B Samp Loc	CHECKED BY:	B. Jacobs
		FIGURE:	3





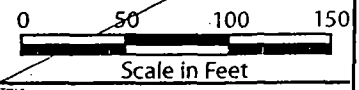
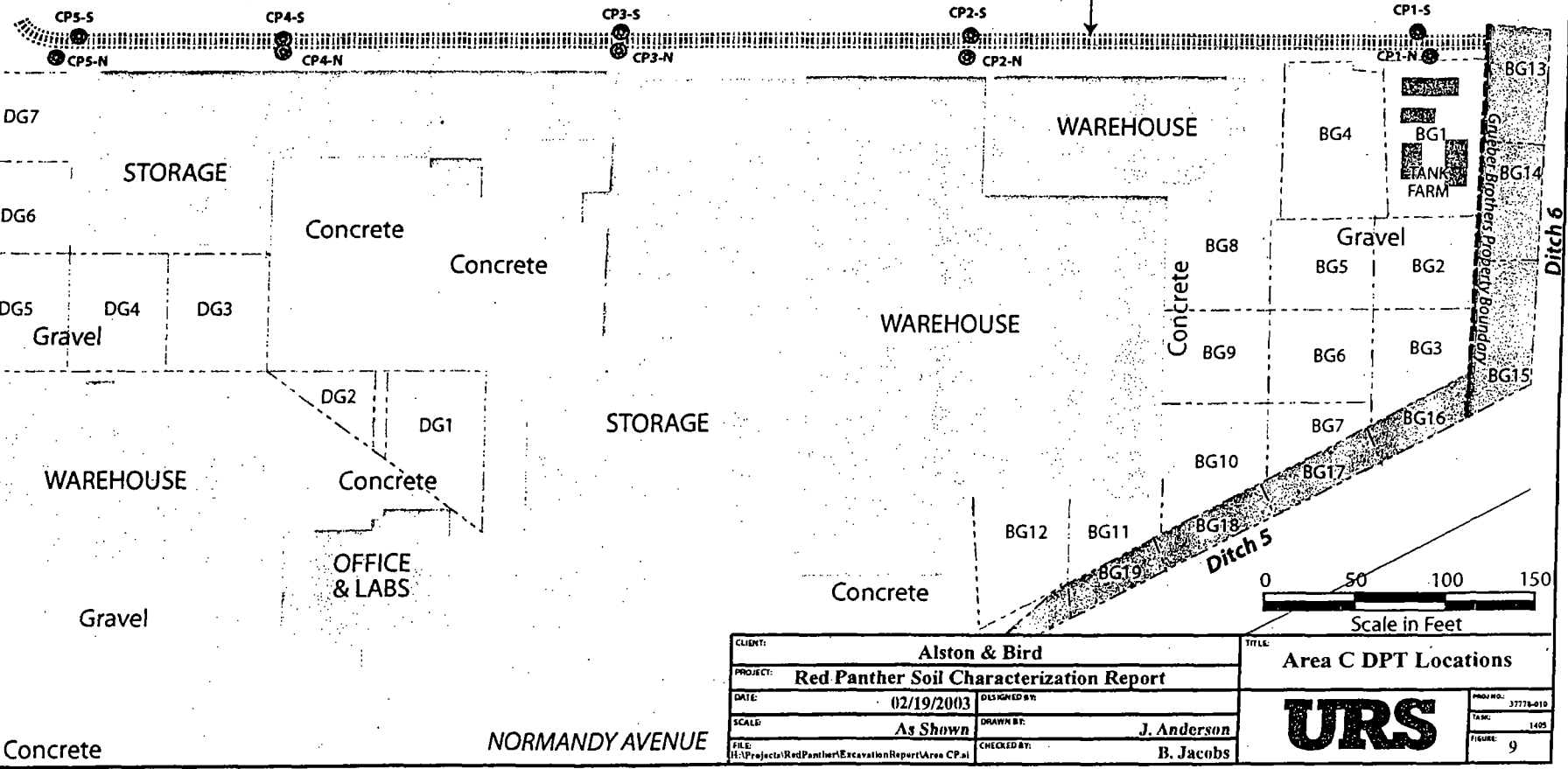
SHAFFER ST.

EAST TALLAHATCHIE AVENUE

AREA C

SASSE STREET

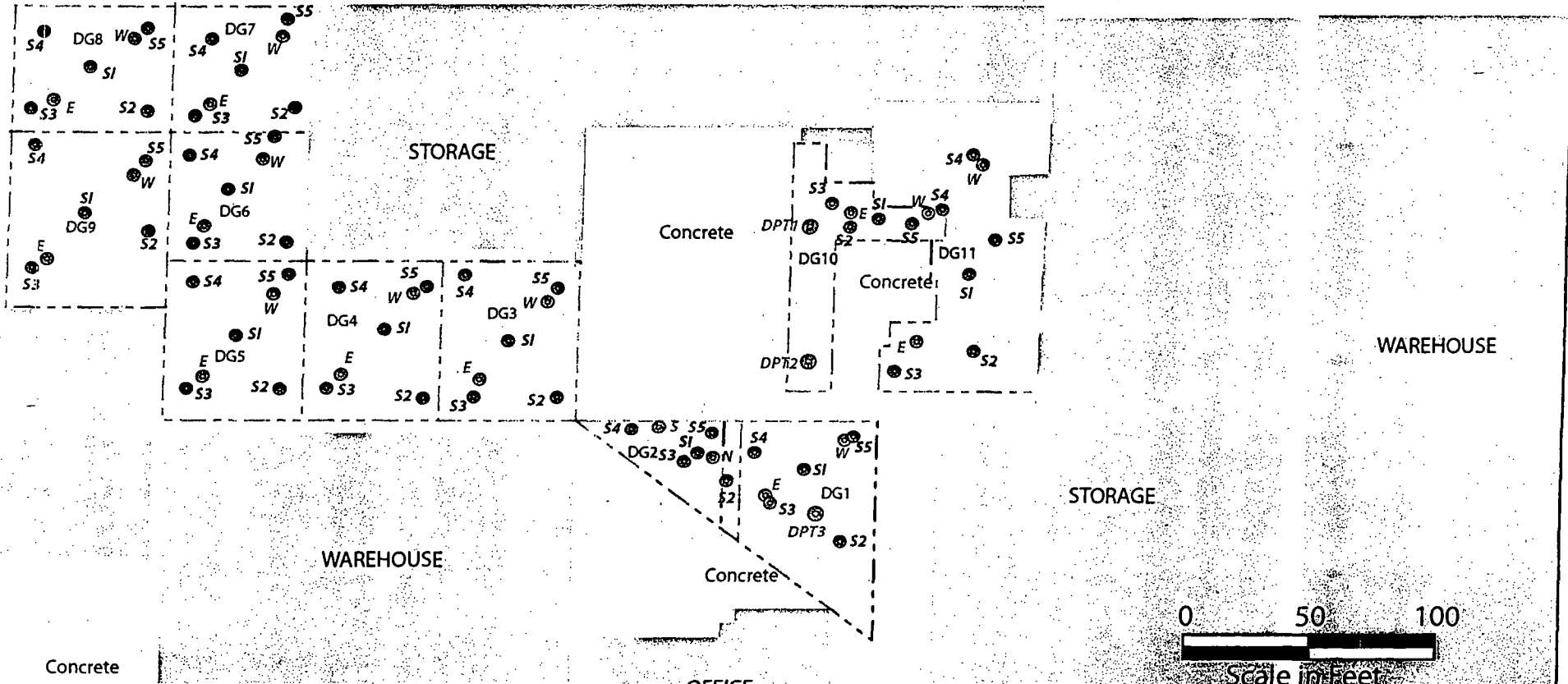
NORMANDY AVENUE



CLIENT:	Alston & Bird		TITLE:	Area C DPT Locations	
PROJECT:	Red Panther Soil Characterization Report		INDU. NO.:	37778-010	
DATE:	02/19/2003	DESIGNED BY:	TASK:	1405	
SCALE:	As Shown	DRAWN BY:	J. Anderson		
FILE:	H:\Projects\Red Panther\Excavation Report\Area CP.a		CHECKED BY:	B. Jacobs	
			URS		
			FIGURE: 9		

EAST TALLAHATCHIE AVENUE

SASSE STREET



LEGEND

- SI ● - Surface Soil Sample Aliquot Location
- E ● - DPT Boring Location
- ⊙ - DPT for Settling Basin

CLIENT:	Alston & Bird	
PROJECT:	Red Panther Soil Characterization Report	
DATE:	02/19/2003	DESIGNED BY:
SCALE:	As Shown	DRAWN BY:
FILE:	U:\Projects\RedPanther\SoilChar\Area D Samp Loc.dwg	CHECKED BY:
		J. Anderson
		B. Jacobs

TITLE:	Area D Sampling Locations
PROJ. NO.:	37718-010
TASK:	1405
FIGURE:	11

URS

Reference 3

A
PRELIMINARY ASSESSMENT REASSESSMENT (PAR.)
REPORT FOR
RED PANTHER CHEMICAL COMPANY
MSD000272385
CLARKSDALE, MISSISSIPPI

1 9 0001

SITE:	Ken Whitten
BREAK:	1.9
OTHER:	

PREPARED FOR:

Brian Farrier
Site Investigation and Support Branch
Waste Management Division - Region IV
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

10095290



PREPARED BY:

Ken Whitten
Hazardous Waste Division
Mississippi Bureau of Pollution Control (BPC)
P. O. Box 10385
Jackson, Mississippi 39289

REVIEWED AND EDITED BY:

Jim Hardage (BPC)

February 22, 1990

This Preliminary Assessment Reassessment (PAR) Report Includes:

1. Introduction
2. Background
3. Site Description
4. Sampling History
5. Waste Description/Containment
6. Groundwater/Geology
7. The Aquifer of Concern
8. Precipitation
9. Surface Water
10. Sensitive Environments
11. Conclusions and Recommendations
12. Appendix
 - (a) HRS II Checklist
 - (b) References

Introduction

The following report is a preliminary assessment reassessment (PAR) of Red Panther Chemical Company in Coahoma County, Clarksdale, Mississippi. The original preliminary assessment was performed by the Bureau of Pollution Control (BPC) in June of 1984. A follow-up sampling inspection was performed in August of 1984.

County Code 027

Congressional District: 01

Coordinates: Latitude: 34° 41' 20"
Longitude: 90° 33' 45"

Location: SW1/4 NW1/4 NE1/4 S25 T27N R4W

Directions to Site: Red Panther Chemical Company is reached by traveling south on Hwy 49 from the intersection of Hwy 61 & Hwy 49. Travel about 1/2 mile to SASSE Street. Take SASSE Street and travel west about .15 of a mile. Red Panther Chemical Company is adjacent to the street on the right side.

Contact Official: Jim Thomas
Red Panther Chemical Company
P. O. Box 550
Clarksdale, Mississippi 38614
601-627-4731

Corporate Headquarters: John Duff, President
Red Panther Chemical Company
P. O. Box 550
Clarksdale, Mississippi 38614
601-627-4731

Background

Red Panther Chemical Company is a pesticide formulating plant. The facility has been engaged in the formulation of liquid and powdered herbicides, insecticides, and fungicides since 1949. Former owners are Coahoma Chemical Company (the original owner), Riverside Chemical Company, and MFC Services (Reference 1).

In 1980, Red Panther filed a RCRA notification for storage of wastewater and dirty solvents in drums and tanks. These wastes are generated from cleaning the process equipment. The wastewater contains pesticide and solvent residues. The dirty solvents contain pesticide residues (References 3 and 18).

In November of 1984, Red Panther obtained a RCRA Part B permit from the BPC for storage of the above mentioned wastes.

In November of 1986, Red Panther's storage permit was terminated because Red Panther lost its liability insurance coverage that is required for long-term storage of hazardous wastes. At that time, Red Panther reverted to the status of a hazardous waste generator with short-term (less than ninety day) storage only.

In November of 1985, there was a fire at one of the Red Panther warehouses. Contaminated runoff resulting from the fire-fighting effort caused a fish kill in the nearby Sunflower River. The contaminant was Lorox, a slightly toxic herbicide. A large volume of contaminated water was contained on site and later shipped to a commercial hazardous waste disposal facility.

During the investigation and cleanup after the fire, 382 old fiber drums were discovered in the crawlspace below the warehouse. Two hundred and eighty-seven of the drums were empty. These drums were crushed and sent to the local municipal landfill. Ninety-five of the drums contained trace residues of technical grade dieldrin and were disposed of at a commercial hazardous waste facility.

At various times in the past, wastewater from the formulating process has apparently been discharged either directly to a ditch off-site or into an underground septic tank and drainfield on-site. Red Panther was issued a "no discharge" permit in 1984 by the BPC (References 1, 4, and 11).

Red Panther is currently classified as a hazardous waste generator (Reference 2).

Site Description

Red Panther Chemical Company is located in Clarksdale, Mississippi. The facility is fenced in and is not accessible to non-employees (Reference 18). The facility is bordered on the west by the Illinois Central Railroad tracks. Further west is a housing district. The rest of the facility is surrounded by commercial property (Reference 27).

The facility is approximately 6 1/2 acres in size. A septic tank and drainfield is located on the north side of the property. Three above ground hazardous waste storage tanks with total capacity of 33,000 gallons are located on the south side of the property (References 3 and 7). A small wastewater settling basin is located on the east central side of the property (Reference 8). Drums containing absorbent used for cleaning up process spills may also be buried on-site but the location is unknown (References 1 and 11).

Sampling History

In August, 1984, the BPC performed a sampling inspection at Red Panther Chemical Company (Reference 15). Environmental samples were collected around the site to determine and characterize any hazardous substances present. Two composite soil samples were taken from the off-site ditch along Normandy Street and Patton Street. One water sample was taken where wastewater leaves the property and discharges into the off-site ditch. One subsurface composite soil sample was collected around the septic tank and drainage field. All these samples were analyzed for pesticides and total arsenic (References 12 and 17).

The test results of the soil and sediment samples indicated elevated levels of several pesticides and arsenic.

In November, 1985, due to the warehouse fire, a sample of contaminated runoff resulting from the fire-fighting effort was collected and analyzed for pesticides. None were detected (Reference 16).

Waste Description/Containment

Red Panther Chemical Company generates wastewater and spent solvents from the formulating process. The total annual quantity of hazardous waste reported in the Red Panther 1980 RCRA hazardous waste notification is approximately 6318 kilograms. The estimated waste quantity is 259,044 kilograms (285 tons) based on a forty-one year history of operations (References 1 and 3).

In the past, contaminated wastewater has been discharged to an off-site drainage ditch and also to an on-site underground septic tank and drainfield with little or no containment. The depth of deposited waste is unknown, so a depth of six feet is assumed.

The hazardous substances of concern include arsenic, toxaphene, and dieldrin. Arsenic has a severe toxicity rating and is highly persistent (References 9 and 30).

Groundwater/Geology

Clarksdale is located in northwestern Mississippi in the Mississippi Delta. The stratigraphic units in this part of the state in descending order are as follows:

Mississippi River Valley Alluvium, Cook Mountain, Sparta, Zilpha, and Winona, Tallahatta, Meridian-Upper Wilcox, Lower Wilcox.

The Mississippi River Valley Alluvium (Alluvium Aquifer) is primarily a water table aquifer. The formation dips gently to the south and is exposed at the surface over its entire area of occurrence (Reference 19). The Alluvium Aquifer is one of the most prolific and widespread aquifers in northwestern Mississippi. Alluvial deposits blanket and underlie the entire Mississippi Delta (Reference 20).

The upper surface of the Alluvium Aquifer is the land surface and the base of the alluvium averages about 140 feet lower. Geophysical logs of wells in the site area indicate that the Alluvial Aquifer extends to a depth of approximately 125 feet below the land surface (References 21 and 25). The lower part of the Alluvial Aquifer consists of coarse sand and gravel which grades upward through coarse sand, fine sand, silt, and clay. Results from aquifer tests indicate hydraulic conductivities of 170 to 190 ft/day or 6.7×10^{-2} cm/sec (Reference 22):

The Cook Mountain is composed of clay and shale with an estimated permeability of 10^{-5} cm/sec. In some areas of northwestern Mississippi, the Cook Mountain confines the underlying Sparta aquifer. However, geophysical logs of wells in the vicinity of the site suggest that the Cook Mountain is approaching a stratigraphic pinch-out in the Clarksdale area. Therefore the Alluvial Aquifer and the Sparta are likely hydraulically connected in this area.

The Sparta is composed of rounded, well-sorted quartz grains in two or three thick beds separated by beds of clay. Regionally, water in the Sparta moves from east to west. The unit dips to the west at about 25 feet per mile. Lithologic data and geophysical logs of wells in the surrounding area indicate that the Sparta Aquifer is approximately 500 feet in thickness and occurs at a depth of approximately 155 feet below the land surface in this area. The average hydraulic conductivity of the Sparta is 67 ft/day (References 19, 21, and 25).

The Zilpha and Winona occurs approximately 655 feet below the land surface and underlies the Sparta Aquifer. The Zilpha consists of dark-brown clay which overlies the Winona and prevents movement of water between the Winona and the Sparta. The Winona consists of glauconitic fossiliferous sands and clays (References 19, 20, 22, and 25).

The Tallahatta is hydraulically connected with the overlying Winona. The Tallahatta contains several thick to very thin sand beds that are separated by clay. The aquifer dips to the west and southwest. The aquifer tests on wells in the Winona-Tallahatta Aquifer indicate a hydraulic conductivity of 6.7 ft/day. The base of the Winona-Tallahatta Aquifer is approximately 1120 feet below the land surface (References 19, 21, 22, and 25).

The Meridian Sand of the Tallahatta, together with uppermost sand beds of the Wilcox Group, is an aquifer throughout the area. These units are regarded as one aquifer because they are hydraulically connected.

The Meridian Sand is a massive unit consisting of fine-to-coarse micaceous sand. The Upper Wilcox Aquifer consists of a less permeable sandy clay that dips west to southwest at 28 to 40 ft/mile. The configuration of the top of the Meridian-Upper Wilcox Aquifer occurs approximately 1120 feet below the land surface and is approximately 300 feet in thickness. Hydraulic conductivity of the aquifer ranges between 30 to 68 ft/day (References 19, 21, 22, and 25).

The Lower Wilcox is the deepest aquifer underlying the region. The Lower Wilcox consists of a thick sand unit containing over 60 percent sand. The aquifer dips about 50 ft/mile to the southwest in the southern part of the region. Multiple clay beds in the overlying part of the Wilcox hydraulically separate the Lower Wilcox Aquifer from overlying aquifers. The Lower Wilcox Aquifer occurs approximately 1900 feet below the land surface and extends to a depth of approximately 2100 feet in the site area. Hydraulic conductivity of the aquifer ranges from 29 to 64 ft/day (References 19, 21, 22, and 25).

Aquifer of Concern

The Mississippi River Valley Alluvium and Sparta are apparently hydraulically connected in the site area and therefore are considered as one aquifer, the aquifer of concern (AOC). The depth to the water-bearing unit of the Alluvium is approximately 30 feet below the land surface. The Alluvium is composed of silt, clay, and loam in the upper part and coarse sand and gravel in the lower part. The estimated permeability of the unsaturated zone of the Alluvium is 10^{-4} cm/sec (References 20, 22, and 28).

The AOC provides drinking water for 24,700 people within a three-mile radius of the site. This is based on eleven public water supply wells (nine of which are in the three-mile radius) and numerous irrigation wells. All eleven of the public wells are connected, i.e., they provide water to the same distribution system (References 24 and 28).

The nearest drinking water well in the AOC is a public well located about 1100 feet south of the center of the site. This well is identified as J-102 on the USGS printout and overlay sheet (Reference 28).

Precipitation

Northwestern Mississippi has a humid subtropical climate influenced by the Gulf of Mexico. Mean annual precipitation is approximately 51 inches of which about one-third runs off and about one-third seeps into the ground. Evapotranspiration accounts for the remaining third. Most of the water that seeps into the ground is later released to the streams. Approximately less than 5% of the rainfall goes into storage in the aquifers. January is the wettest month and October is the driest (Reference 19).

The mean annual lake evaporation for the area is approximately 42 inches. The net annual precipitation of the area is about 9 inches. The one-year, twenty-four-hour rainfall is approximately 3.5 inches (Reference 9).

Surface Water

The site and surrounding area is flat with a slight gradient to the east. The site slope is about 0.6% and the slope of the intervening terrain is about 0.1%. The nearest perennial surface water is the Sunflower River (Reference 27).

Some surface runoff and/or discharge from the facility probably drains into a roadside ditch east of the site. The ditch flows inter-mittently in an easterly and southerly direction and intersects an intermittent stream approximately 22,440 stream feet southeast of the site. The intermittent stream flows in a westerly direction for approx-imately 3,960 stream feet before entering the Sunflower River, the nearest perennial surface water. The Sunflower River is located approx-imately 26,400 stream feet from the site and flows in an southerly direction (Reference 27). The Sunflower River is used for irrigation, industrial and/or commercial purposes, and recreation (Reference 26).

Environmental Concerns

There are no national wildlife refuges, critical habitats of federal endangered species, or wetlands within one mile of the site along the surface water migration pathway (References 27 and 29).

Conclusions and Recommendations

A site screening investigation is recommended on a medium priority basis.

REFERENCES

1 9 0009

1. Potential Hazardous Waste Site Preliminary Assessment of Red Panther Chemical Company, Prepared by Mississippi Bureau of Pollution Control, April, 1984.
2. EPA HWDS Database List of RCRA Hazardous Waste Generators in Mississippi.
3. RCRA Hazardous Waste Part A Permit Application for Red Panther Chemical Company, October, 1980.
4. State of Mississippi Water Pollution Control "No Discharge" Permit, Issued August 1, 1984.
5. Letter Submitted to Mississippi Department of Natural Resources From Red Panther Chemical Company, April 4, 1986, Concerning Ongoing Issues at Red Panther Chemical Company.
6. 1987 Hazardous Waste Biennial Report by Red Panther Chemical Company.
7. Site Diagram of Red Panther Chemical Company.
8. Mississippi Manufacturers Association Committee on Air & Water Quality Questionnaire Completed by Red Panther Chemical Company for the Mississippi Bureau of Pollution Control.
9. EPA HRS Guidance Manual.
10. Not Applicable
11. Investigation Report by Mississippi BPC August 1975.
12. Potential Hazardous Waste Site Inspection Report and Field Notes Concerning Red Panther Chemical Company.
13. Not Applicable.
14. Article from the Clarion Ledger/Jackson Daily News, December 1, 1986, Concerning Fish Kill in Sunflower River.
15. Letter of August 14, 1984, From Mississippi Bureau of Pollution Control, Jim Hardage, to Red Panther Chemical Company, Concerning Sampling Inspection.
16. Laboratory Results from November 1985, Sampling Concerning Warehouse Fire at Red Panther.
17. Laboratory Results from the Mississippi BPC Sampling Investigation in 1984.
18. RCRA Permit Inspection Checklist Part I, September 26, 1985, by Jim Hardage, Mississippi BPC.

19. Water for Industrial and Agricultural Development in Coahoma, DeSoto, Panola, Quitman, Tate, and Tunica Counties, Mississippi, By G. J. Dalsin and J. M. Bettendorff, 1976, pp. 3, 4, 8, 9, 10, 11, 15, 41, 42, 43, 44, 45, 46, 47, 48, and 49.
20. Water Resources of Mississippi, Bulletin 113, by Thad N. Shows, Mississippi Biological, Economic, and Topographical Survey, 1970, pp. 18, 19, 20, 21, 77, 78, 79, 84, 85, 86, and 87.
21. Sources for Water Supplies in Mississippi, by B. E. Wasson, 1986, 18, 19, 20, 21, 48, 49, 50, 51, 52, 53, 60, 61, 62, 63, 64, and 65.
22. Gandl, L. A., Characterization of Aquifers Designated as Potential Drinking Water Sources in Mississippi, Jackson, Mississippi, 1982, pp. 11, 12, 12, 21, 32, 33, 34, 41, 42, 43, 44, and 45.
23. Information on Groundwater and Surface Water Use from the Mississippi Bureau of Land and Water Resources, Jackson, Mississippi.
24. Collection Log, Water Supply Division, Mississippi State Department of Health.
25. Geophysical Logs of Wells Near Red Panther Chemical Company Site, Clarksdale, Mississippi.
26. Information of Groundwater and Surface Water Use from the Mississippi Bureau of Land and Water Resources, Jackson, Mississippi.
27. Composite Topographic Map of Red Panther Chemical Company:
 - Clarksdale Mississippi Quadrangle 7.5 Minute Series,
 - Sabino, Mississippi Quadrangle 7.5 Minute Series,
 - Sherard, Mississippi Quadrangle 7.5 Minute Series.
28. Printout and Overlay Sheet from U. S. Geological Survey Data Base of All Wells Within a Four-mile Radius of Red Panther Chemical Company.
29. U. S. Fish and Wildlife Service, Vicksburg Office, Species List by County and Endangered Species Maps.
30. Integrated Risk Information System (IRIS).

PROPERTY OF

MISSISSIPPI

**WATER FOR
INDUSTRIAL AND
AGRICULTURAL DEVELOPMENT
IN**

**Coahoma, De Soto, Panola, Quitman
Tate, and Tunica Counties, Mississippi**

A COOPERATIVE STUDY SPONSORED BY THE
U. S. GEOLOGICAL SURVEY
and the

Mississippi Research and Development Center

JACKSON, MISSISSIPPI

1976

study of the Mississippi River valley alluvial aquifer. Vestal (1956) included a discussion of the ground-water resources in his geologic report on Panola County. Earlier reports on public and industrial water supplies (Lang and Boswell, 1960; Wasson, 1965; Callahan, 1973) include data on some or all of the six counties. Reports of ground-water studies made in the Memphis, Tenn., area (Criner, Sun, and Nyman, 1964; Nyman, 1965; Bell and Nyman, 1968) describes aquifers that extend into the northern part of the study area. The results of regional water-resources investigations that include all six counties are published in reports of the U.S. Geological Survey (Cushing, Boswell, and Hosman, 1964; Speer and others, 1964; Hosman and others, 1968; Boswell and others, 1968; Cushing and others, 1970). A report by the Lower Mississippi Region Comprehensive Study Coordinating Committee (1974) includes additional data. Several statewide and areal reports on low flow of streams and on floods include data in the project area. Useful among these are low-flow reports by Golden (1960) and Skelton (1961). U.S. Geological Survey annual water-resources data reports for Mississippi and Tennessee and Corps of Engineers annual reservoir and streamflow data reports are also helpful sources of surface-water information in the study area.

Location and Population of the Area

The six counties comprise an area of 3,084 mi² (7,988 km²) in northwestern Mississippi (fig. 1).

The 1970 population of the six-county area was 149,447 (U.S. Census). Although the total population of the study area declined approximately 4 percent, De Soto County, which includes part of the Memphis metropolitan area, increased 50 percent during the 1960-70 period. There are no major population centers in the six counties; however, in 1970 there were 16 communities having more than 1,000 inhabitants.

Batesville (3,796)	Lambert (1,511)
Clarksdale (21,673)	Marks (2,609)
Coldwater (1,450)	Olive Branch (1,513)
Como (1,003)	Sardis (2,391)
Crenshaw (1,271)	Senatobia (4,247)
Friars Point (1,177)	Southaven (8,931)
Hernando (2,499)	Tunica (1,685)
Jonestown (1,110)	North Tunica (1,325) ^a

^aUnincorporated

The 1970 population of Shelby County, Tenn., where Memphis is located, was 722,014; this county showed a population increase of 15 percent from 1960 to 1970. It can be expected that further growth of Memphis will add more stress on the ground-water resources in De Soto County and, to a lesser extent, the entire six-county study area.

Approximately 55 percent of the six-county population is served by public water systems.

HYDROLOGIC SETTING

Climate

Northwestern Mississippi has a humid subtropical climate influenced by the Gulf of Mexico. Mean annual precipitation in the study area ranges from 50 to 53 in (1,270 to 1,350 mm) of which about one-third runs off, about one-third seeps into the ground, and evapotranspiration accounts for the remainder. Most of the water that seeps into the ground is later released to the streams. Probably less than 5 percent of the rainfall goes into storage in the aquifers. January is the wettest month and October the driest. The table below shows mean monthly and mean annual precipitation by State climatic divisions, namely, the Upper Delta and the North Central. Coahoma, Quitman, and Tunica Counties are in the Upper Delta climatic division. De Soto, Panola, and Tate Counties are part of the North Central climatic division.

Temperatures only occasionally exceed 38°C (100°F) or drop below -12°C (10° F). The mean maximum temperature is 12°C (53°F) in January and 34°C (93°F) in July; the mean minimum temperature is 1°C (34°F) in January and 22°C (71°F) in July. The mean length of the growing season is about 240 days, from March to November. The mean annual air temperature is 17°C (63°F) and the temperature of shallow ground water is approximately the same. The mean annual relative humidity is 70 percent.

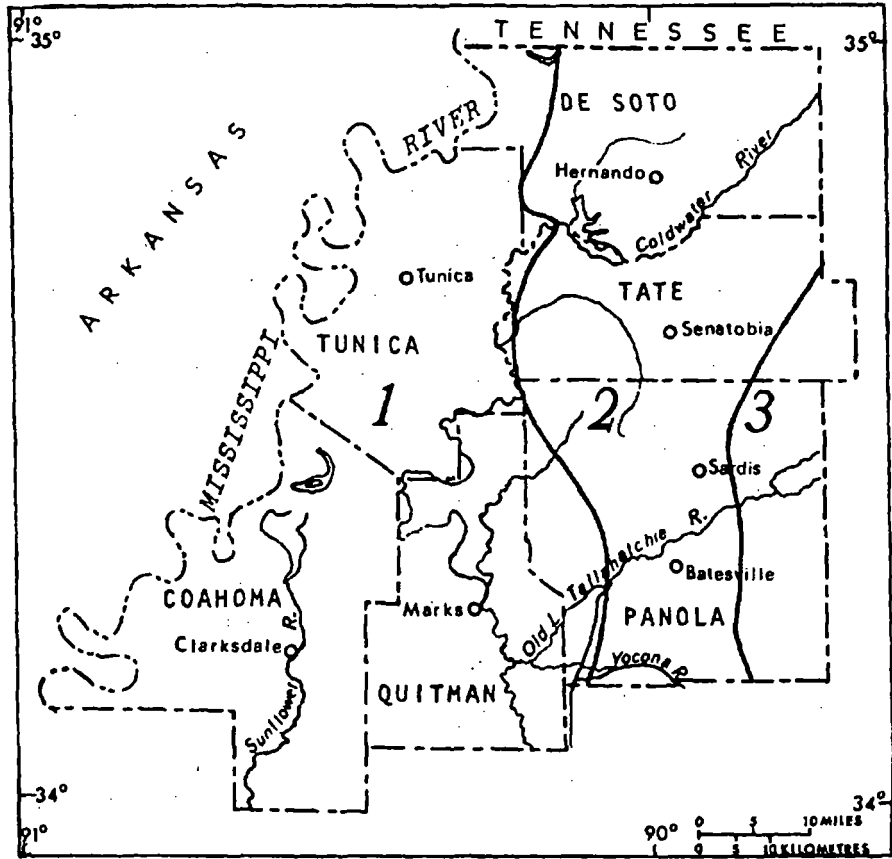
Topography and Drainage

The study area contains parts of three physiographic districts (fig. 2). The Mississippi Alluvial Plain in the

Mean monthly precipitation, in inches¹

Climatic division	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Upper Delta	6.33	4.89	6.07	4.74	4.08	3.34	3.75	2.38	2.53	2.44	4.24	5.10	49.89
North-Central	6.27	5.14	6.15	4.90	4.06	3.56	4.25	3.14	2.96	2.65	4.53	5.30	52.91

¹From U. S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service.



EXPLANATION

- 1. Mississippi Alluvial Plain
- 2. Loess Hills
- 3. North-Central Hills

Figure 2.--Physiographic districts.

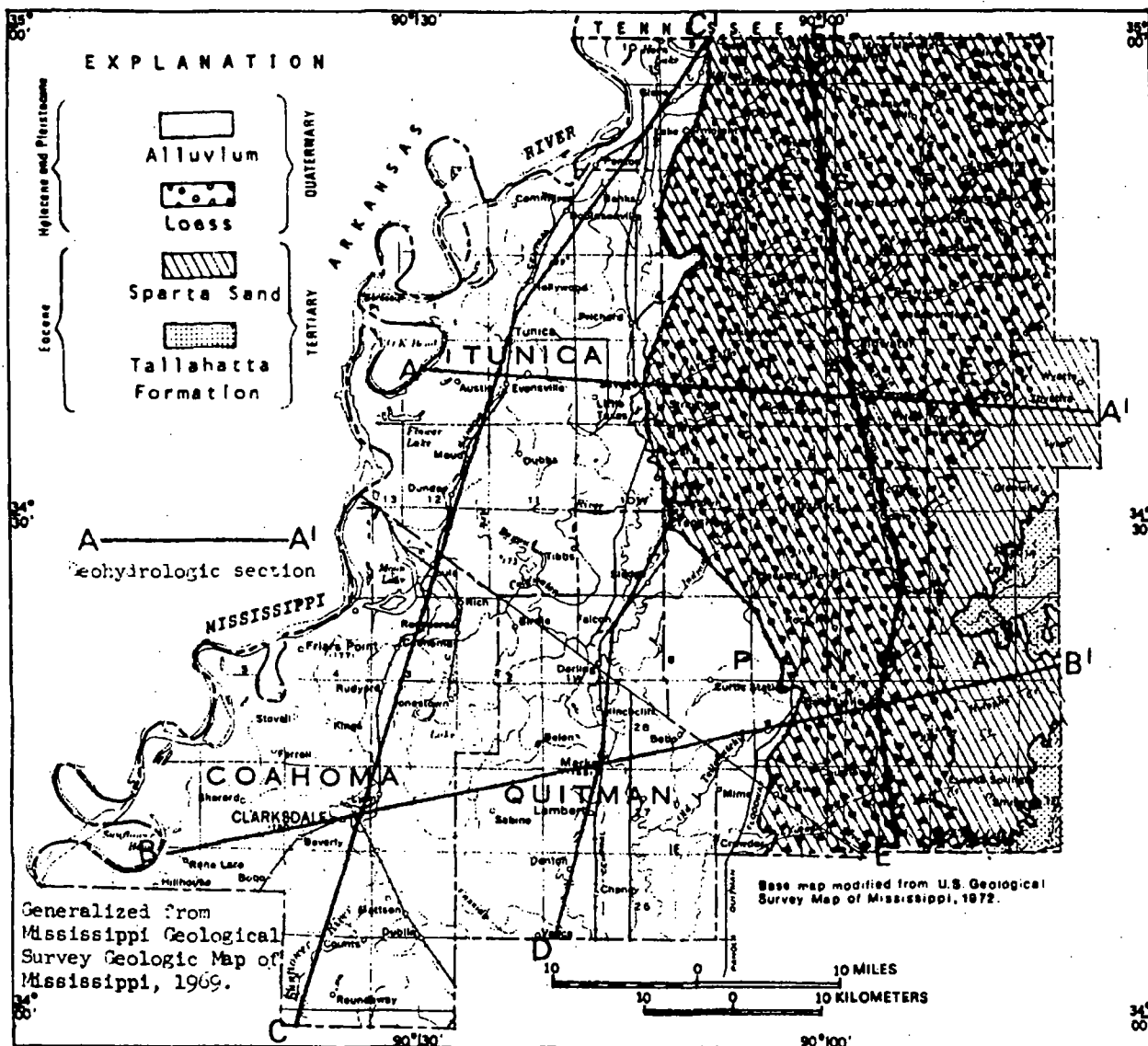


Figure 5.--Areal geology and location of geohydrologic sections.

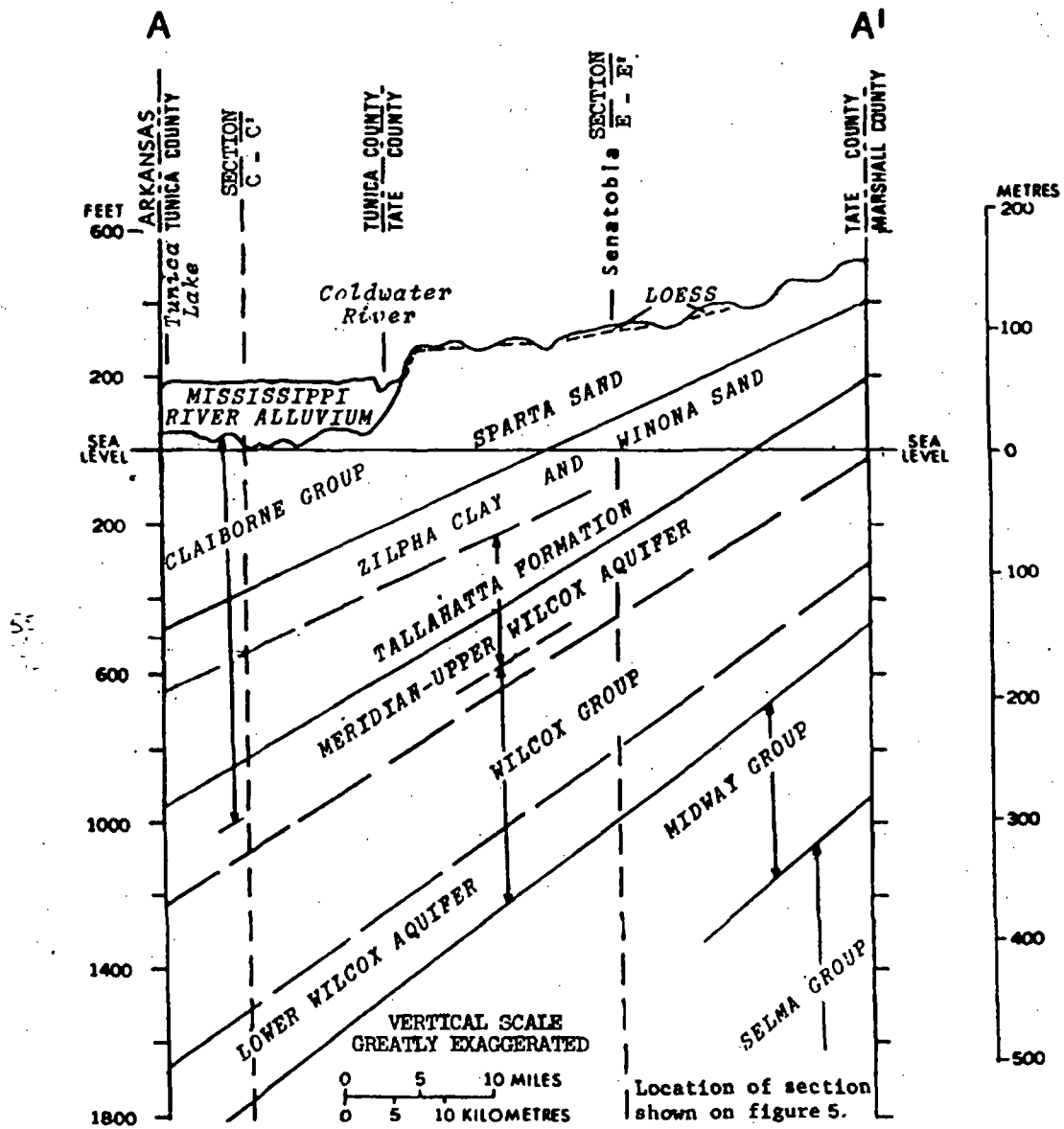


Figure 6. -- Geohydrologic section across Tunica and Tate Counties.

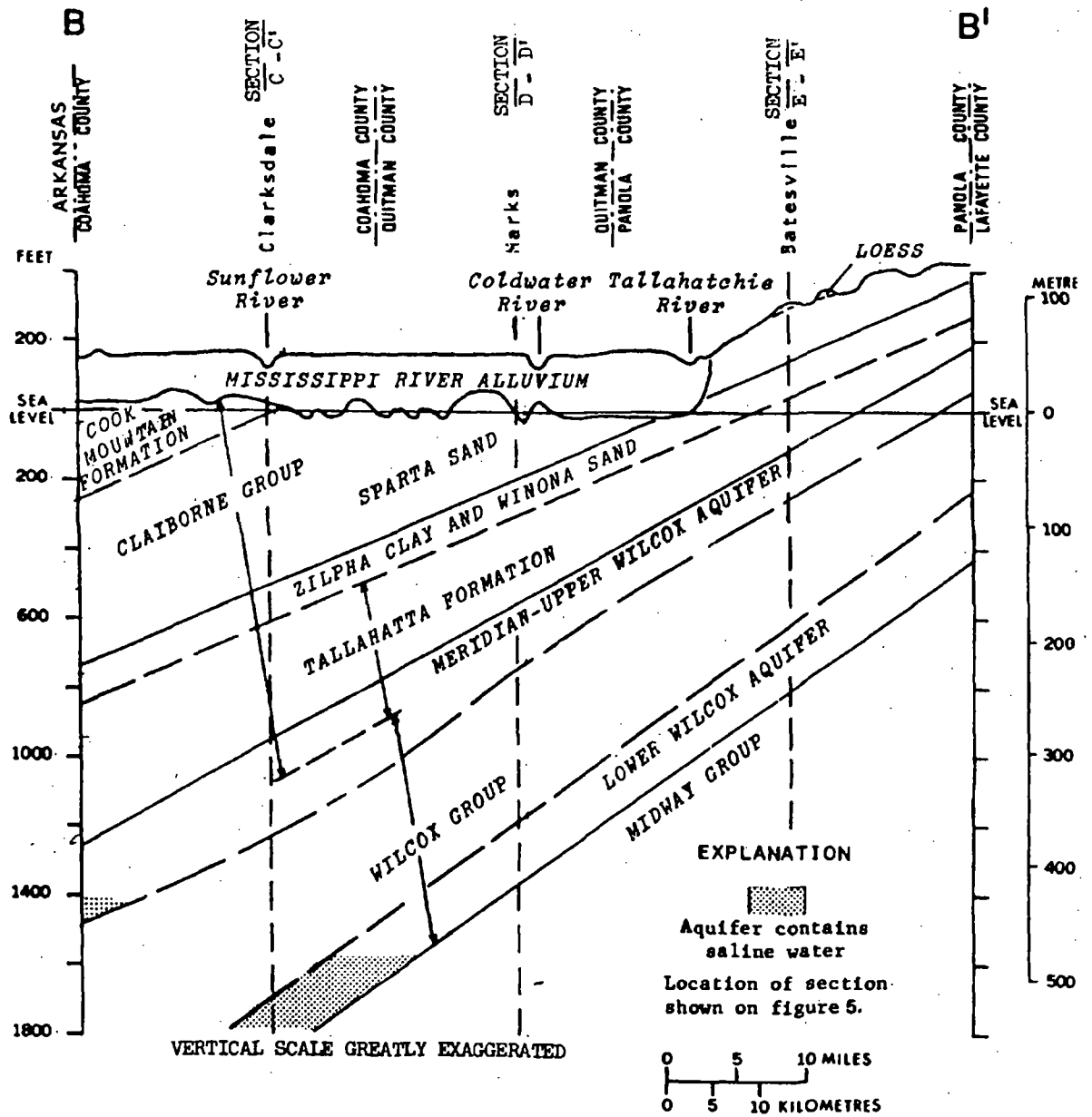


Figure 7. -- Geohydrologic section across Coahoma, Quitman, and Panola Counties.

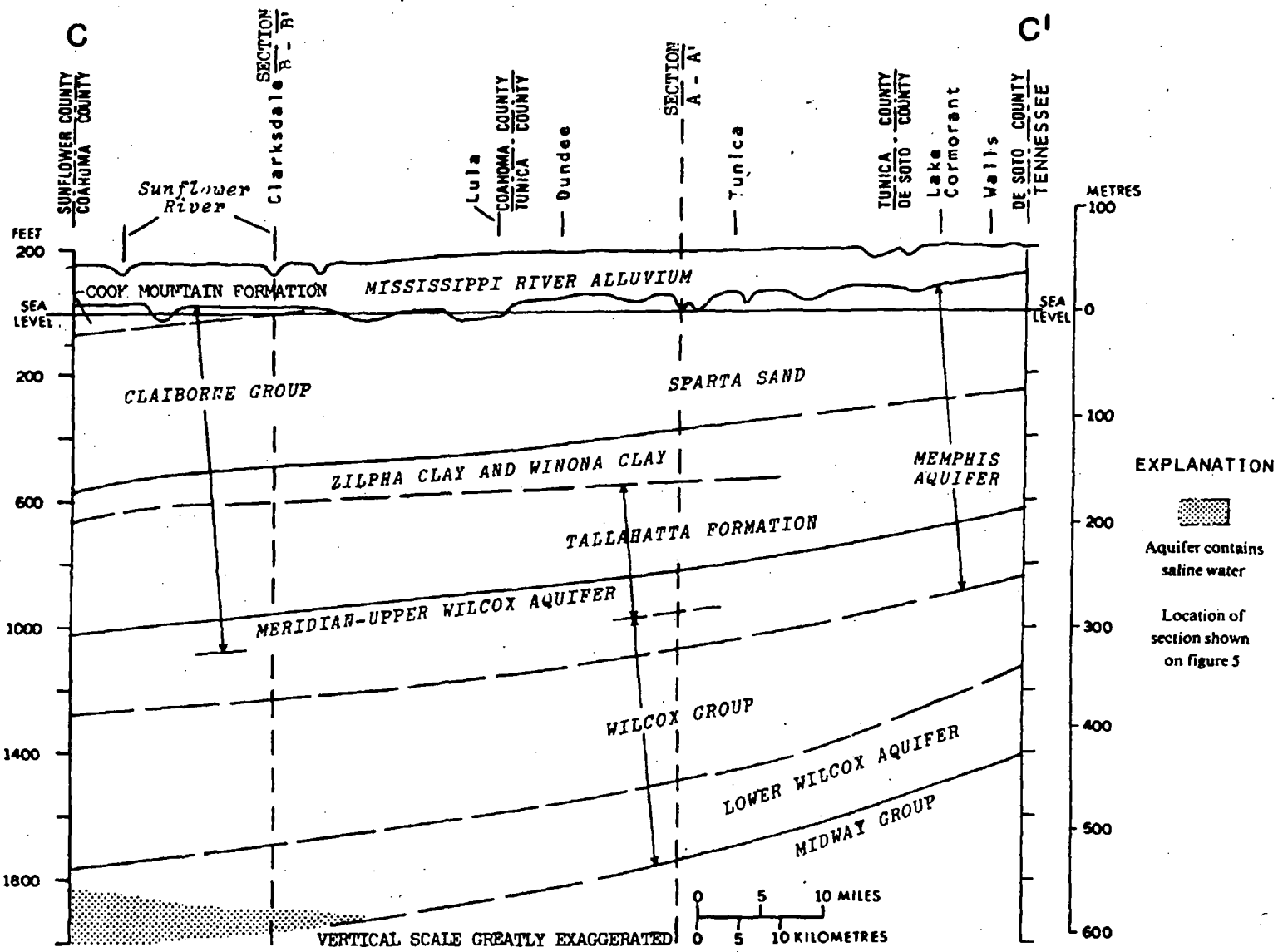


Figure 8.—Geohydrologic section across Coahoma, Tunica, and De Soto Counties.

Table 1. -- Stratigraphic units and their water-bearing character

Era- them	System	Series	Group	Stratigraphic unit	Thickness (ft)	Water-bearing character		
Cenozoic	Quaternary	Holocene and Pleistocene		Flood-plain deposits (other than Mississippi River alluvium)	0-60	Small water supplies available from shallow wells.		
				Mississippi River alluvium	0-200	Water is hard and contains iron. The principal source of water for irrigation and cooling. Yields up to 5,000 gal/min to irrigation wells.		
				Loess	0-30	Not an aquifer.		
				Terrace deposits	0-120	Wells with yields up to 100 gal/min could be developed in some places where these deposits are present.		
	Tertiary	Eocene	Claiborne	Cook Mountain Formation	0-200	Not an aquifer.		
				Sparta Sand	0-800	A principal aquifer in Coahoma, De Soto, Panola, and Tate Counties. Yields up to 3,000 gal/min to industrial wells. Potential aquifer in Quitman and Tunica Counties. Iron and pH are problems locally.		
				Zilpha Clay	0-120	Not an aquifer.		
				Winona Sand	0-40	Not a major aquifer in study area.		
				Tallahatta Formation	150-500	Not generally used in study area. A potential aquifer in parts of Quitman, Tate, and Tunica Counties. Source of water for wells in eastern part of Panola County.		
				Meridian Sand Member		50-350 feet thick. A principal aquifer in Coahoma and Quitman Counties. Potential source of water in Panola, Tate, and Tunica Counties. Iron and low pH are problems locally.		
				Paleocene	Wilcox	upper part	450-950	Minor aquifers in the middle part of the Wilcox are local sources of water in Panola County and potential major sources in Quitman County.
						middle part		
						lower part		
Midway	Undifferentiated	550-900	No aquifers.					
Mesozoic	Cretaceous	Upper Cretaceous	Selma	Ripley Formation and Coffee Sand, undivided	900-1,200	No wells. These formations are the only Cretaceous aquifers that contain fresh water in eastern De Soto and northeastern Tate Counties. Saline in Coahoma, Panola, Quitman, Tunica, and most of Tate and western De Soto Counties.		
Paleozoic				Undifferentiated		Not known to contain aquifers in study area.		

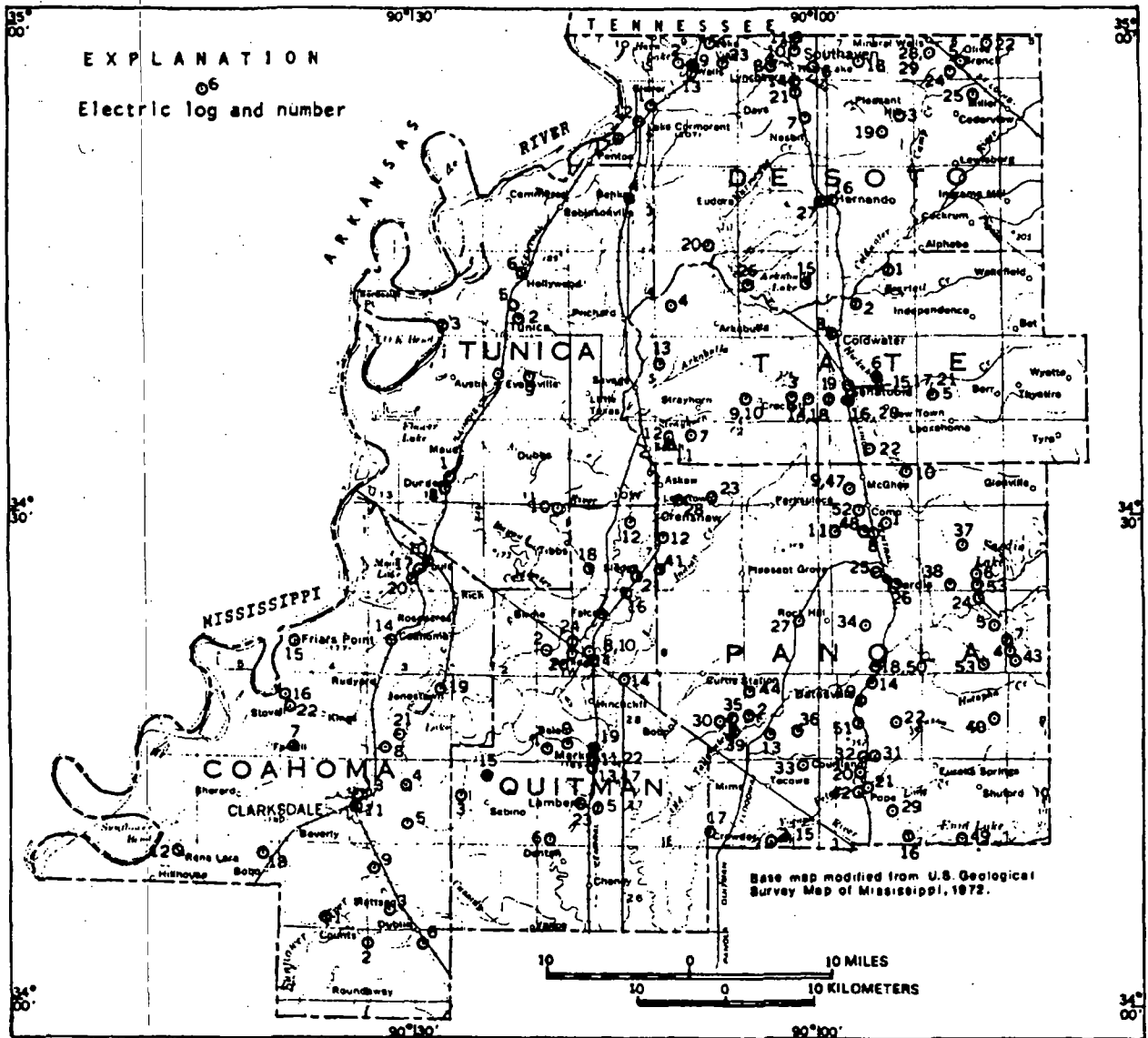


Figure 17.--Locations of electric log sites.

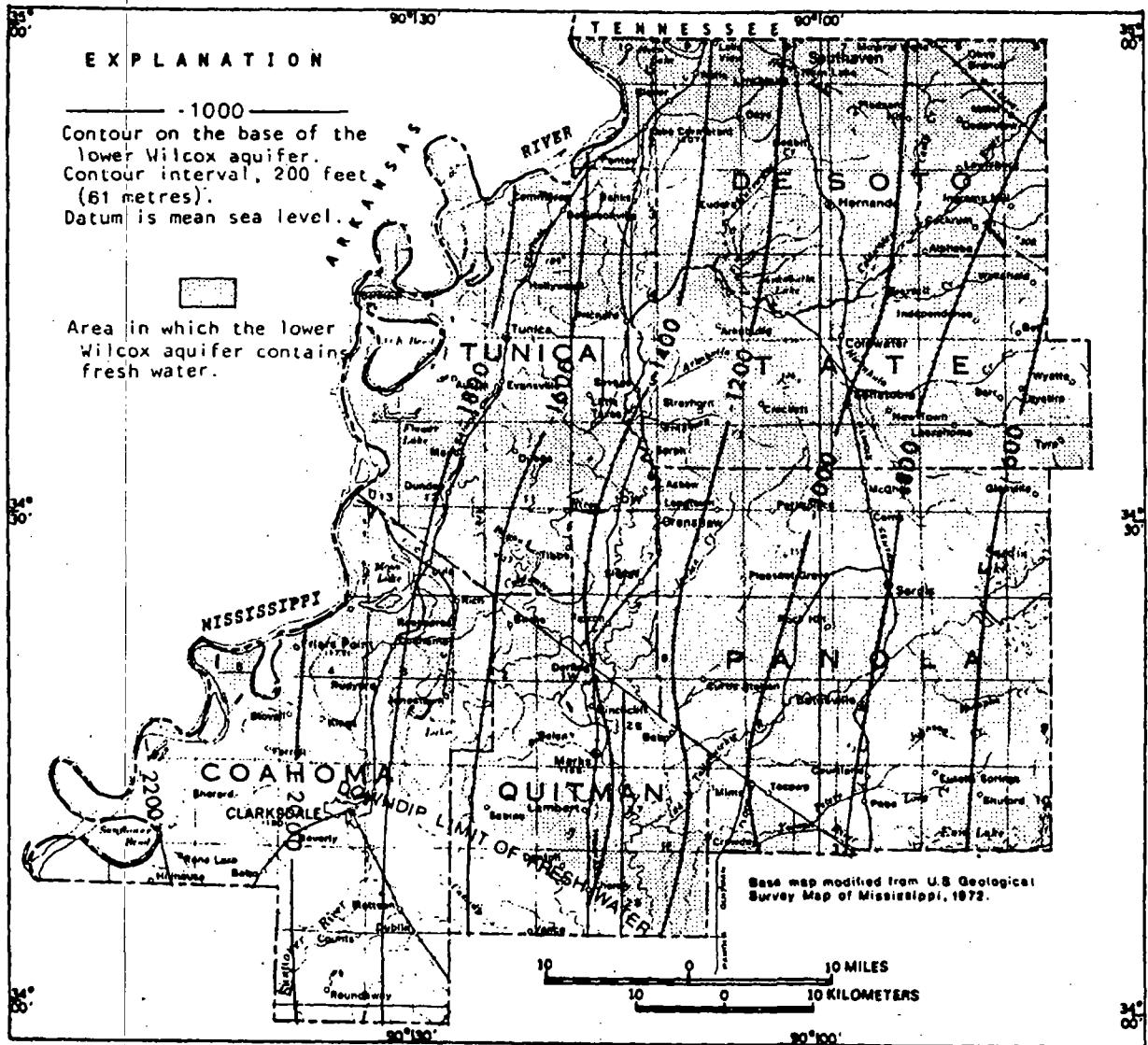


Figure 18.--Fresh-water occurrence in the lower Wilcox aquifer.

The thickness of the lower Wilcox aquifer ranges from 50 to 360 ft (15 to 110 m) in the area where it contains fresh water. Individual sand beds supplying water to major wells are indicated by electric logs to range in thickness from about 50 to 140 ft (15 to 43 m) with 100 ft (30 m) as the average. Sand beds thicker than 250 feet (76 m) in northwestern De Soto County have been reported on driller's logs; thicknesses of at least 180 ft (55 m) have been noted in northern Quitman County (table 1).

The movement of water in the lower Wilcox aquifer is westward. Altitudes of potentiometric surfaces range from about 200 ft (61 m) above sea level in eastern Panola and Tate Counties to less than 190 ft (58 m) in the remainder of the study area. Many lower Wilcox wells still flow in the parts of Coahoma, Panola, Quitman, and Tate Counties that are in the Mississippi Alluvial Plain; however, pumps are now used on most wells because of substantial losses of artesian pressure associated with increasing water withdrawal during the past several years. Water levels of nonflowing wells in the Mississippi Alluvial Plain range from 0 to about 30 ft (0 to 9 m) below land surface, which is at an altitude of 140 to 210 ft (43 to 64 m). Water levels in wells outside the Mississippi Alluvial Plain range from 50 to 180 ft (15 to 55 m) below land surface, which is at an altitude of 200-580 ft (61 to 177 m).

Most of the major wells now producing water from the lower Wilcox are in Panola, Quitman, Tate, and Tunica Counties. Wells in these counties produce 100 to 1,000 gal/min (6 to 63 l/s); however, the aquifer is capable of much larger yields in many places. Measured specific capacities¹ range from 4.5 to 27 (gal/min)/ft, or 1-6 (l/s)/m, of drawdown--the average is 15 (gal/min)/ft, or 3 (l/s)/m.

Several pumping tests in the area indicated transmissivity² (transmissibility) values ranging from 3,300 to 8,000 (ft²/d)/ft, or 306 to 740 (m²/d)/m. Hydraulic conductivity (permeability) values, as indicated by these tests, range from 29 to 64 (ft³/d)/ft², or 9 to 20 m/d, and average 41 (gal/d)/ft², or 13 m/d.

Water from lower Wilcox wells in the area is a sodium bicarbonate type. Hardness does not exceed 21 mg/l. With the exception of several wells in Coahoma and Quitman Counties, the dissolved-solids concentration

¹Specific capacity is given for a 1-day period of pumping, the data projected if the pumping period is less than 1 day.

²The term "transmissivity" replaced "transmissibility" in U. S. Geological Survey terminology in 1972. At that time the units expressing the parameter were changed from gallons per day per foot to cubic feet per day per foot. Similarly, "hydraulic conductivity" replaced "permeability" and the units were changed from gallons per day per square foot to cubic feet per day per square foot. Hydraulic conductivity is calculated by dividing transmissivity by aquifer thickness.

is not greater than 300 mg/l. Chemical analyses show iron in solution ranging from 0.01 to 0.90 mg/l but generally less than 0.3 mg/l. The pH is 7.2 to 8.7. There is little or no color to the water, and water temperature ranges from 20° to 28°C, depending on the depth of the well.

Minor Wilcox Aquifers

Several discontinuous beds of sand occur between the Meridian-upper Wilcox aquifer and the lower Wilcox aquifer. These sand beds, which average about 50 ft (15 m) in thickness, are 40 to 100 (12 to 30 m) and 25 to 60 ft (8 to 18 m) thick in Panola and Quitman Counties, respectively. Elsewhere, the sand beds may be represented by a few to several beds 10 to 20 ft (3 to 6 m) in thickness.

A few large-capacity wells in Panola County tap the minor Wilcox aquifers. These wells range from 823 to 966 ft (251 to 294 m) in depth and yield 80 to 750 gal/min (5 to 47 l/s); the higher yields are in Panola County. Water levels outside the Mississippi Alluvial Plain are 255 and 200 ft (78 and 61 m) above sea level at Sardis and in the Pope-Courtland area, respectively. A well at Crowder, in the Mississippi Alluvial Plain, flows. Analysis of a pumping test in Panola County indicated a transmissivity of 800 (ft²/d)/ft, or 75 (m²/d)/m; the hydraulic conductivity was 19 (ft³/d)/ft², or 6 m/d. Measured specific capacities for wells in these aquifers were 16 and 22 (gal/min)/ft, or 3.5 and 4.5 (l/s)/m.

Water from wells in the minor Wilcox aquifers in Panola County is a sodium bicarbonate type. Hardness is not over 35 mg/l, and the iron concentration is less than 0.3 mg/l. Dissolved-solids concentration is less than 400 mg/l. pH is 7.2 to 8.4, and there is little or no color to the water. Water temperature is 20° to 23°C.

Meridian-Upper Wilcox Aquifer

The Meridian Sand Member of the Tallahatta Formation, together with the uppermost sand beds of the Wilcox Group, is an aquifer throughout the area. The Meridian-upper Wilcox aquifer, ranging in thickness from 50 to 350 ft (15-107 m), is used as a source of water in Coahoma, Quitman, and Panola Counties. In the northern half of De Soto County, the Meridian-upper Wilcox aquifer combines with the lower part of the Claiborne Group to form the Memphis aquifer ("500-foot" sand), which is the principal source of ground water in northern De Soto County and the adjacent Memphis, Tenn., area. The base of the aquifer ranges from near sea level in southeastern Panola County to more than 1,400 ft (427 m) below sea level in western Coahoma County (fig. 19).

The average thickness of the Meridian-upper Wilcox aquifer in the study area, determined from electric logs

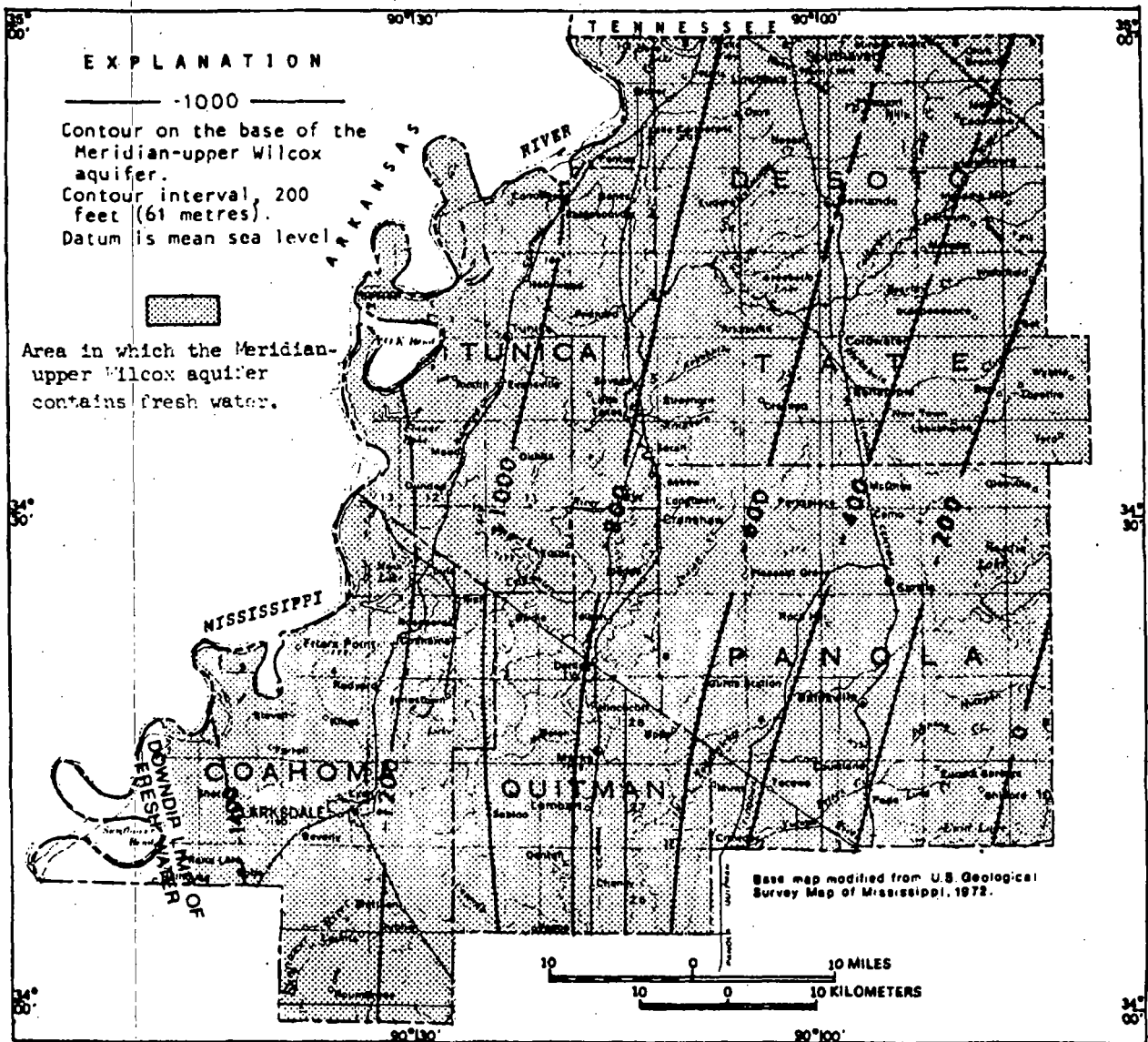


Figure 19.--Fresh-water occurrence in the Meridian-upper Wilcox aquifer.

and driller's logs, is about 220 ft (67 m). The average thickness in Coahoma, De Soto, Panola, and Quitman Counties is about 160 ft (49 m), and in Tate and Tunica Counties it is about 300 ft (91 m). Individual sand beds supplying water to major wells range in thickness from about 45 to 160 ft (14 to 49 m) and the average is 90 ft (27 m). At some locations, discontinuous sand beds are thin and numerous and are separated by thin clay lenses.

The regional movement of water in the Meridian-upper Wilcox aquifer is westward. The potentiometric surface is more than 200 ft (61 m) above sea level in Tate and eastern Panola Counties and between 150 and 200 ft (46 and 61 m) in the remainder of the study area. In turn, water levels in wells range from 13 ft (4 m) above land surface to 114 ft (35 m) below land surface, depending on location and topography. Some wells flow--most of these wells are in the Mississippi Alluvial Plain where land-surface altitudes are low.

Large-capacity wells yield 40 to 650 gal/min (3 to 41 l/s)--average yield is 230 gal/min (15 l/s); and the aquifer is capable of much higher yields in many places. Specific capacities ranging from 2 to 22 (gal/min)/ft of drawdown, or 0.5 to 5 (l/s)/m, have been measured, and the average is 6 (gal/min)/ft, or 1.5 (l/s)/m.

Pumping tests indicated transmissivity ranging from 2,900 to 4,700 (ft²/d)/ft, or 270 to 430 (m²/d)/ft, and hydraulic conductivity ranging from 30 to 68 (ft³/d)/ft², or 9 to 21 m/d. The average hydraulic conductivity elsewhere in Mississippi is about 53 (ft³/d)/ft², or 16 m/d.

Water in the Meridian-upper Wilcox aquifer is soft and may be either a sodium bicarbonate or calcium bicarbonate type. Dissolved solids exceed 500 mg/l in water from several wells deeper than 1,200 ft (366 m) in Coahoma County. Excessive iron and low pH are problems locally in public supplies-- iron concentration sometimes exceeds 1 mg/l, and pH is as low as 6.1. One chemical analysis indicates a fluoride concentration of 1.3 mg/l, which is 0.3 mg/l higher than the recommended maximum concentration (U.S. Public Health Service, 1962). There is little or no color in the water. Water temperature ranges from 19° to 27°C.

Tallahatta Formation

The Tallahatta Formation occurs throughout the study area. It is difficult to differentiate the Tallahatta from the overlying units in the Claiborne Group in the northern two-thirds of De Soto County, and it is hydraulically connected with the overlying Winona Sand throughout most of the project area. Thickness ranges from 50 to 400 ft (15 to 122 m), and the average thickness is slightly more than 200 ft (61 m). The Tallahatta Formation generally contains several thick to very thin sand beds that are separated by clay.

The thickness of most sand beds is less than 25 ft (8 m); however, in many places there are water-bearing sand beds 40 ft (12 m) to more than 100 ft (30 m) in thickness that are capable of large yields.

A few major wells produce water from the undifferentiated Tallahatta Formation. Depths of these wells range from about 300 ft (91 m) in eastern Panola County to more than 600 ft (183 m) in central Quitman County, and reported yields average 140 gal/min (9 l/s). Some wells in the Tallahatta flow in the Mississippi Alluvial Plain. Water levels in major wells in eastern Panola County are about 250 ft (76 m) above sea level.

Water in the Tallahatta Formation is soft and may be either a sodium-bicarbonate or sodium-calcium bicarbonate type. Chemical analyses of water from wells in Panola and Quitman Counties indicate a dissolved-solids concentration less than 500 mg/l. Iron concentration is less than 0.3 mg/l, but low pH causes corrosion problems locally. There is little or no color in the water. Water temperatures range from 17° to 20°C.

Sparta Sand

The Sparta Sand is the shallowest, or youngest, principal aquifer of Tertiary age. The Sparta crops out and receives its recharge in parts of De Soto, Panola, and Tate Counties where it is not covered by loess (fig. 5). The Sparta Sand contains fresh water throughout the study area, except where it is missing due to erosion in Panola and Quitman Counties. The base of the Sparta Sand ranges from about 200 ft (61 m) above sea level in the east to about 800 ft (244 m) below sea level in the west (fig. 20). The dip is about 20 ft/mi (4 m/km).

In most of De Soto County, the Sparta Sand is equivalent to the upper part of the Memphis aquifer and is difficult to differentiate from the underlying Tertiary and overlying terrace deposits, all of which are hydraulically connected. In the southern third of De Soto County the Sparta Sand and underlying Tertiary deposits undergo a lateral transition (facies change) to more distinct deposits of sand and clay. In the study area, the Sparta Sand in most of De Soto County also includes beds that may be equivalent to the Zilpha Clay, Winona Sand, and Tallahatta Formation. Highly permeable sands in these deposits are numerous and very thick. South of the transition zone in De Soto County, the Sparta Sand becomes a more distinct unit.

In western Coahoma County, the Cockfield Formation may be present between the Cook Mountain Formation and the Mississippi River valley alluvial aquifer, and in western Tunica County both the Cook Mountain and Cockfield Formations may be present between the Sparta Sand and the Mississippi River valley alluvial aquifer. These units also are difficult to distinguish from the Sparta Sand. The Mississippi River

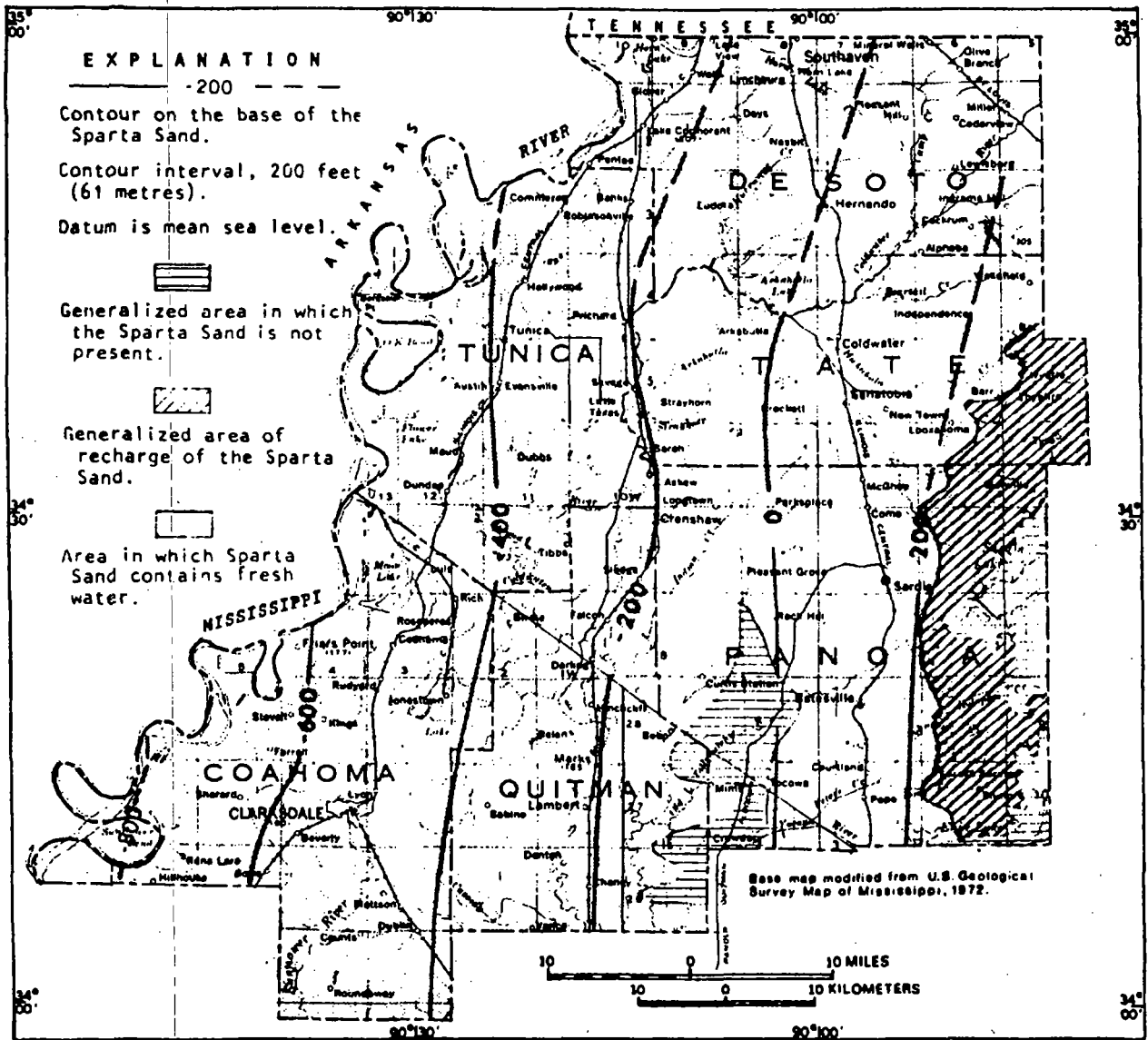


Figure 20.--Fresh-water occurrence in the Sparta Sand.

valley alluvial aquifer is in places hydraulically connected to the Sparta Sand.

Thickness of the Sparta Sand ranges from 240 to 800 ft (73 to 244 m) in De Soto County; 420 to 480 ft (128 to 146 m) in Coahoma County; 300 to 350 ft (91 to 107 m) in Tunica County; 100 to 350 ft (30 to 107 m) in Tate County, 0 to nearly 200 ft (0 to 61 m) in Quitman County; and 0 to 200 ft (0 to 61 m) in Panola County. Water-bearing sands in the Sparta Sand, many 100 ft (30.5 m) or more in thickness, are separated by varying thicknesses of clay.

The regional movement of water in the Sparta Sand is from east to west, as in most other aquifers of Tertiary age in the study area. However, heavy pumping in the Memphis metropolitan area (Tennessee and Mississippi) has caused the water level in the Sparta Sand to decline more rapidly in De Soto County than in other parts of the project area. In the Mississippi Alluvial Plain, water levels are 5 to 80 feet below land surface (2 to 24 m), and the average is 42 ft (13 m); the altitude of the potentiometric surface ranges from about 90 to 163 ft (27 to 50 m) above sea level. East of the Mississippi Alluvial Plain, water levels are 50 to 160 ft (15 to 49 m) below land surface, and the average is about 100 ft (30 m); the altitude of the potentiometric surface here ranges from about 170 to 280 ft (52 to 85 m) above sea level.

The most productive public and industrial water-supply wells in the six-county area are screened in the Sparta Sand. Most of these wells are in Coahoma and De Soto Counties; however, several large wells are in Panola and Tate Counties. Large wells made in the Sparta Sand produce 100 to 3,000 gal/min (6 to 190 l/s), and the average is about 800 gal/min (50 l/s). Some wells in De Soto and Coahoma Counties pump 1,000 gal/min (63 l/s) or more, and specific capacities are high, ranging from 18 to 65 (gal/min)/ft, or 4 to 14 (l/s)/m.

The estimated transmissivity for the total thickness of the Memphis aquifer in the Memphis area is 53,000 (ft²/d)/ft² or 5,000 (m²/d)/m, and the hydraulic conductivity is about 74 (ft²/d)/ft², or 22 m/d, according to Criner, Sun, and Nyman (1964). The Sparta Sand in De Soto County north of the zone of transition probably has transmissivity similar to that of the Memphis aquifer. The average hydraulic conductivity of the Sparta Sand in Mississippi is 67 (ft²/d)/ft², or 20 m/d; hence, under confined conditions a water-bearing sand 100 ft (30 m) thick would have a transmissivity of 6,700 (ft²/d)/ft, or 620 (m²/d)/m.

Water from the Sparta Sand in the area may be either a calcium-magnesium bicarbonate or a sodium bicarbonate type. Water from most wells does not exceed 60 mg/l in hardness, but in some areas of Coahoma and De Soto Counties the hardness ranges from 150 to 290 mg/l. Friars Point is the only place where water in the Sparta Sand has a dissolved-solids concentration greater than 500 mg/l. Excessive iron in

solution is a common problem locally in public supplies; low pH, which can cause corrosiveness and unsuitability of water for many industrial uses, is also common. There is little or no color in the water. Water temperature ranges from 16° to 22°C.

Mississippi River Valley Alluvial Aquifer

The Mississippi River valley alluvial aquifer, bordered on the west by the Mississippi River and on the east by steep, loess-covered hills, is the most productive aquifer in the six-county study area, although it is not as extensive areally as the other principal aquifers. It occupies slightly more than half of the study-area surface, including all of Coahoma, Quitman, and Tunica Counties, the western portions of De Soto and Tate Counties, and southwestern Panola County (fig. 5). A report by Harvey (1956) states that the alluvial deposits of the Mississippi River, consisting of clay, silt, sand, and gravel, are as much as 200 ft (61 m) thick and average 140 ft (43 m). The lower part of the Mississippi River valley alluvial aquifer consists of coarse sand and gravel which grades upward through coarse sand, fine sand, silt, and clay. In places, it is probably hydraulically connected to the underlying deposits of the Claiborne Group.

Precipitation (to a large extent), the Mississippi River, and probably in places in underlying Claiborne Group, all serve to recharge the Mississippi River valley alluvial aquifer. During most of the year, when ground-water levels are high, water from the aquifer seeps into streams. Water levels in nearby wells directly reflect the stage of the Mississippi River. Except near points of heavy pumping, water levels in wells are generally between 5 and 30 ft (2 and 9 m) below land surface.

Principal uses of water from the Mississippi River valley alluvial aquifer are for irrigation and industry. Large wells produce between 600 and 5,000 gal/min (38 and 315 l/s). Specific capacities of large wells are usually between 75 and 150 (gal/min)/ft, or 16 and 32 (l/s)/m.

Water in the Mississippi River valley alluvial aquifer is a hard, iron-rich, calcium magnesium-sodium bicarbonate type. Dissolved solids range from 150 to 400 mg/l. The iron concentration ranges from about 2 to 14 mg/l. Flouride ranges from 0.0 to 0.4. pH is 6.5 to 8.5—the average is 7.6. There is little or no color in the water. Water temperature, which may be affected somewhat by the seasonal fluctuations in air temperature, ranges from 16° to 19°C.

Water Wells

The hydraulic-rotary method is used to drill most of the wells in the project area. Industrial and municipal-supply wells, which are mostly made in the Tertiary aquifers, are constructed by casing the initial drill hole to the top of the aquifer. The annular space

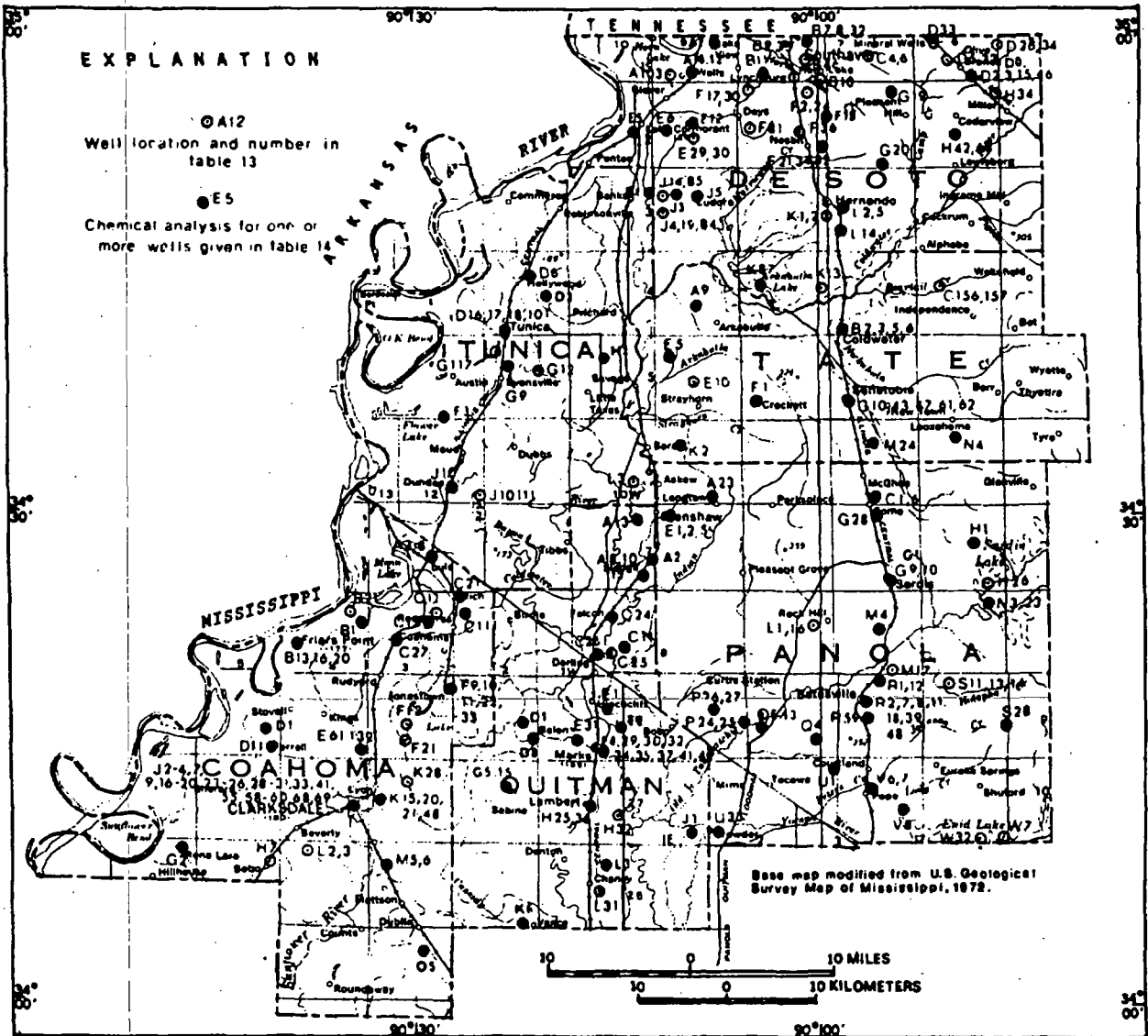


Figure 21.--Selected wells in the six-county project area.

between the drill hole and the well casing is commonly filled with cement. A screen of smaller diameter, either of the wire-wrapped or shutter type, is attached to a pipe, inserted through the well casing, and set opposite the aquifer. In many of these wells, a gravel fill is placed in the annular space between the drill hole and the screen. This is accomplished by enlarging the hole below the well casing before setting the screen. After setting the screen and before sealing the lap pipe to the casing, sorted gravel is placed into the reamed area to form a highly permeable zone around the screen. Usually, the lap pipe above the screen is sealed to the casing. Wells made in the Tertiary aquifers require screen materials capable of withstanding corrosion and other deterioration.

Irrigation wells are generally drilled by the reverse hydraulic-rotary method. Iron shutter-type screens or perforated pipe of the same diameter as the casing are generally used and the casing is not cemented. Gravel may be placed around the screen but often this is not necessary. The noncorrosive water in the alluvial aquifer permits utilization of the cheapest materials, yet the wells have a long life. Well depths seldom exceed 150 ft (45.7 m) and the pumping lift is commonly less than 80 ft (24.4 m). There are no sanitary requirements for irrigation wells.

Public and industrial water-supply wells now in use range in depth from 83 to 1,960 ft (25 to 567 m) and produce water from aquifers of Tertiary age. Wells screened in Tertiary aquifers are deepest in Tunica County and shallowest in De Soto County. Average yields for major wells in Tertiary aquifers are highest in Coahoma and De Soto Counties and lowest in Quitman County. The yields of these wells range from 30 to 3,000 gal/min (2 to 190 l/s). Irrigation wells screened in the Mississippi River valley alluvial aquifer range from 50 to 150 ft (15 to 46 m) in depth and have yields ranging from 600 to 5,000 gal/min (38 to 315 l/s). Selected wells are described in table 13 and their locations are shown on figure 21.

Well data may also include driller's logs and electric logs, which provide information on aquifer thickness and may be used in estimating hydraulic characteristics.

Water Levels and Pumping Effects

Knowledge of water levels is needed in planning water-supply development. Static (nonpumping) water levels affect the available drawdown. Shallow static water levels are desirable because deeper water levels cause an increase in the cost of construction and pumping. Water levels change regionally but are affected more by nearby pumping wells, either in the same aquifer or in hydraulically connected aquifers.

Water levels in observation wells reflect regional trends and local fluctuations in ground-water levels (figs. 22-24). Observation wells in the lower Wilcox aquifer show water-level declines ranging from 1 to

1½ ft. (0.3 to 0.5 m) per year in the study area. Water levels in the Meridian-upper Wilcox aquifer and in the Sparta Sand have declined about 1 ft (0.3 m) per year during the past 10 years. The present rate of water-level decline in the Memphis aquifer is about 1 ft (0.3 m) per year near the weighted center of pumping in the Memphis area and about 0.1 ft (0.03 m) per year at a distance of about 30 mi from this center (J. H. Criner, oral commun., 1975). Water levels in the Mississippi River valley alluvial aquifer, which change seasonally as a result of pumping as well as natural discharge and recharge, are lowest near the end of the irrigation season and highest in the spring just before the irrigation season.

Pumping from a well results in a decline of the water level in the well (drawdown) and in the aquifer. Pumping thus causes a cone of depression in the potentiometric surface around the pumping center and serves to induce into the area some of the water that would otherwise flow past it. The amount of drawdown in a well is a function of the rate of discharge, the transmissivity of the aquifer, and the well efficiency. A well is efficient when the pumping water level in the well is not much below the water level, or potentiometric surface, outside the well. Few wells are 100-percent efficient, but some approach that efficiency.

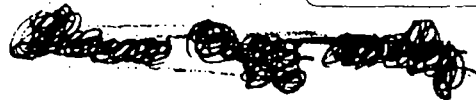
Predictions of water-level drawdown based on known or estimated transmissivities and for different pumping rates for wells tapping the aquifers described in this report are shown in figure 25. The drawdown will be increased proportionately where a well has an efficiency less than 100 percent.

A pumping well affects the water levels of nearby wells. The magnitude of the effect is a function of the rate of discharge, the time that has elapsed since pumping began, and transmissivity of the aquifer. If the transmissivity of an aquifer is known or can be estimated, the effect that pumping a well will have on other wells in the same aquifer may be calculated (fig. 26). Consideration of drawdown effects for various combinations of time and distance is necessary to planning well spacing and withdrawal rates. For example, for a 12-inch (305-mm) well which pumps 500 gal/min (32 l/s) from an aquifer having a transmissivity of 20,000 (gal/d)/ft, or 250 (m³/d)/m, the drawdown would be 50 ft (15 m) at the end of 1 day (fig. 25). After 100 days of pumping there would be about 25 ft (8 m) of drawdown at a distance of 500 ft (152 m) from the pumped well (fig. 26).

One of the principal problems with water wells is drawdown interference. Spacing wells over a large area will tend to minimize the interference between wells. If withdrawals can be distributed among two or more aquifers, as at Clarksdale, interference is further reduced.

Deterioration of water quality is a potential problem in wells screened near the fresh water-saline water

K. Whitten



**CHARACTERIZATION OF AQUIFERS DESIGNATED
AS POTENTIAL DRINKING-WATER SOURCES
IN MISSISSIPPI**

**U. S. GEOLOGICAL SURVEY
WATER RESOURCES INVESTIGATIONS
OPEN-FILE REPORT 81-550**

Prepared in cooperation with the
MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL

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Please return:

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Jackson, MS



mapping program. More detailed potentiometric maps prepared recently for several aquifers have been utilized here. Additional maps in the following section were completed using information from the files of the U.S. Geological Survey.

The following section describes the geologic and hydrologic characteristics of major aquifers in the state and delineates the downdip limits of fresh, slightly saline, and moderately saline water. Areas of current and potential use as a source of drinking water are described. The area of potential use is defined as extending to the 10,000 mg/L dissolved-solids line.

Mississippi River Valley Alluvial Aquifer

The Mississippi River valley alluvial aquifer is located along the western boundary of the state. North of Warren County it extends farther to the east in an area known as the "Delta" (fig. 5). The formation dips gently to the south and is exposed at the surface over its entire area of occurrence. It was deposited by the Mississippi River and extends into Arkansas, Louisiana, Kentucky, Tennessee, and Missouri. The alluvial aquifer ranges from less than 50 to more than 200 feet thick, averaging 140 feet thick (fig. 6). It is thickest where it has filled in old stream channels. The aquifer generally consists of three layers: a lower gravel and sand layer, a middle sand layer, and a discontinuous silty clay layer at the surface.

The Mississippi River valley alluvial aquifer is primarily a water-table aquifer. Water levels average 20 feet below land surface, but seasonally fluctuate from about 30 feet below land surface during summer and fall to near the land surface during spring (fig. 7). Generally, recharge is from rainfall directly on the aquifer, and water moves to the south and towards streams in the area. Some water moves into the underlying Sparta and Cockfield aquifers which subcrop below the alluvium in the Delta. The Cook Mountain Formation, which acts as a confining unit in most of the State is sandy where it subcrops in the Delta, and some water also moves into it. South of Warren County, water movement is into the underlying Oligocene and Miocene aquifers. Seasonally, some streams may recharge the aquifer.

Results from fourteen aquifer tests in the alluvial aquifer indicate transmissivities of 13,000 to 79,000 ft²/day, hydraulic conductivities of 170 to 190 ft/d, and specific capacities of 10 to 168 (gal/min)/ft of drawdown (Dalsin, 1978). Wells are from 60 to 260 ft deep with the deepest, screened in the basal gravel, producing 250 to 5,000 gal/min. Most large wells are irrigation wells although the aquifer also supplies municipalities and industries. Continued and increased use can be supported by the aquifer in future years.

Water from the alluvial aquifer is fresh in its entire area and contains less than 500 mg/L dissolved solids throughout most of its area. The water is a hard, generally alkaline, calcium-bicarbonate type that commonly has excessive iron.

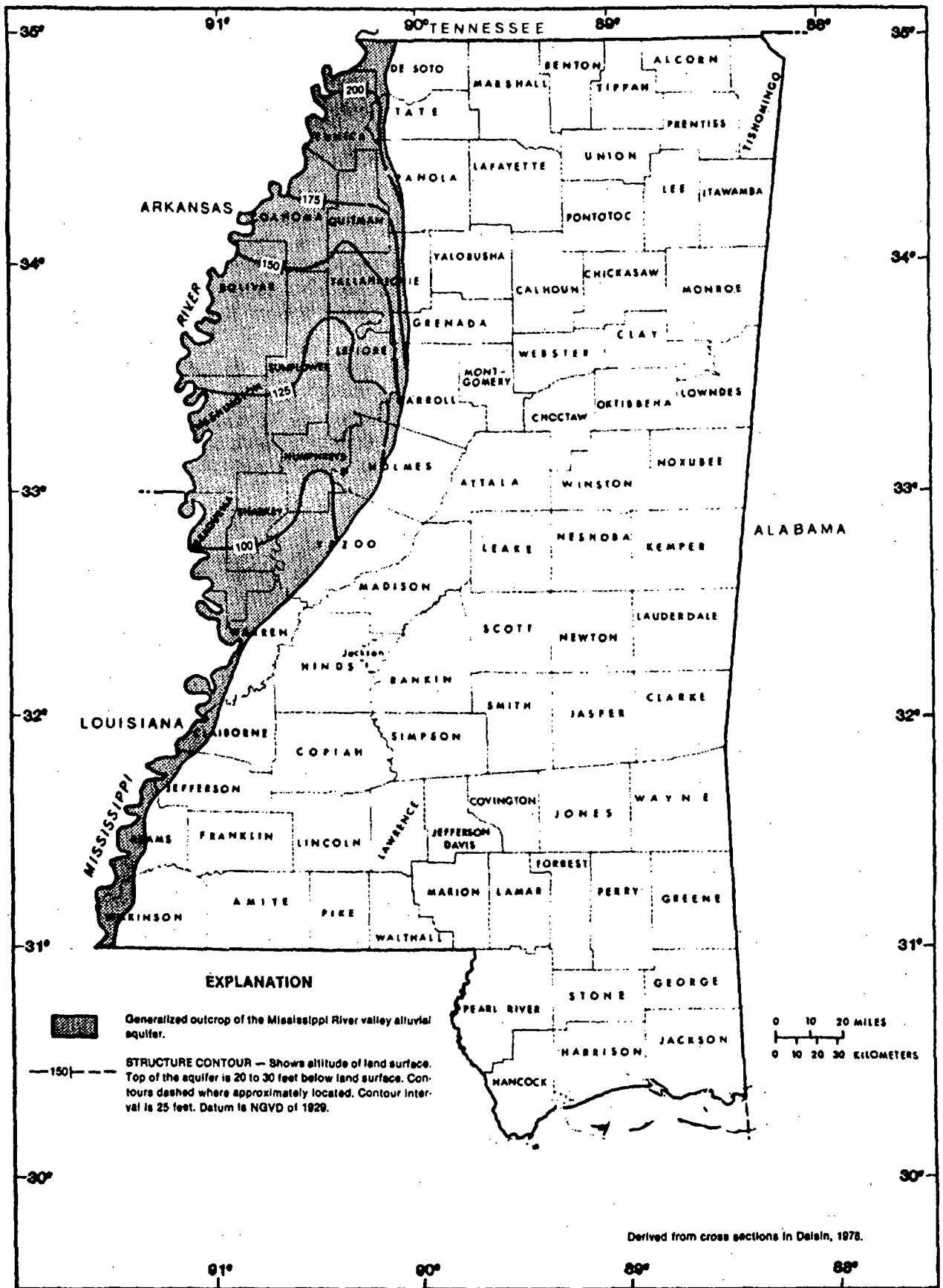


Figure 5. — Configuration of the top of the Mississippi River valley alluvial aquifer.

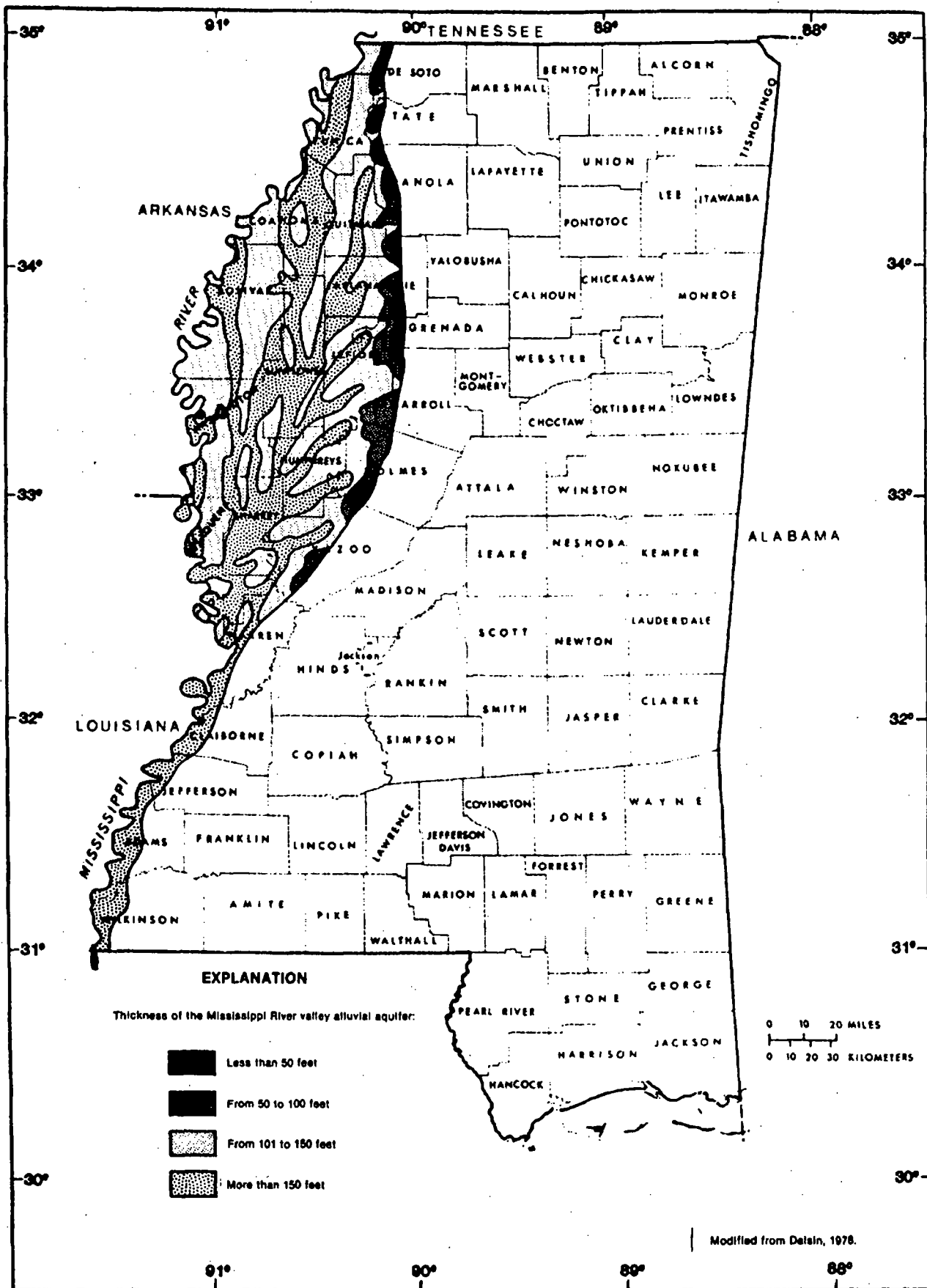


Figure 6. — Thickness of the Mississippi River valley alluvial aquifer.

Sparta Aquifer System

The Sparta aquifer system crops out in a curving band from Marshall to Holmes to Clarke County (fig. 20). In the northwest it subcrops beneath the alluvial aquifer and loess deposits. Figures 20 and 21 show structure contours on the base and top of the aquifer system, respectively. The Sparta dips to the west at about 20 ft/mi in the northwest, and it dips to the southwest at about 35 ft/mi in the south. The Sparta has been uplifted by the Jackson and Tinsley domes. The Sparta thickens downdip and exceeds 800 feet in thickness in the southwest (fig. 22).

The Sparta Sand is composed of rounded, well-sorted quartz grains in two or three thick beds separated by beds of clay. It contains more sand relative to overall thickness than any other aquifer in the state. To the northwest near Memphis, Tennessee, it combines with underlying sand beds of the Claiborne Group and is known as the Memphis aquifer.

Water levels in the Sparta range from 450 to 100 feet above sea level decreasing downdip from the outcrop (fig. 23). In the confined part of the aquifer, the water levels have been declining 1 to 2 ft/yr except near Jackson where, due to heavy pumping, the declines are at least 3 ft/yr. Recharge to the aquifer is by rainfall on the outcrop and in the northwest by infiltration from the overlying alluvial aquifer. Water moves downdip, except near areas of heavy pumping. Except in the northwest the Sparta is isolated by the overlying Cook Mountain formation and the underlying Zilpha Clay.

Aquifer test results indicate transmissivities of 330 to 13,000 ft²/d, hydraulic conductivities of 6 to 130 ft/d, and specific capacities ranging from 1 to 46 (gal/min)/ft of drawdown (Newcome, 1976).

The Sparta is utilized by industrial, municipal, and domestic users. The deepest wells are 1,400 feet deep and yields of 100 to 300 gal/min are readily available, although much greater yields are possible.

Water in the Sparta is a soft sodium-bicarbonate type, which is acidic in the outcrop area and the northern quarter of the area but alkaline elsewhere. It is commonly high in iron in the east and is high in fluoride and colored downdip near the freshwater limit. Figure 20 shows the limits of fresh, slightly saline, and moderately saline water in the Sparta. Downdip in the southeast, the formation contains little sand and is not considered an aquifer.

Natural gas has been found in small amounts in the Sparta, and lignite is available in the north in outcrop and subcrop areas. In the southwest the Sparta has been used for disposal of oil field wastes, sometimes in areas in which the water has less than 10,000 mg/L dissolved solids (Bicker, 1972).

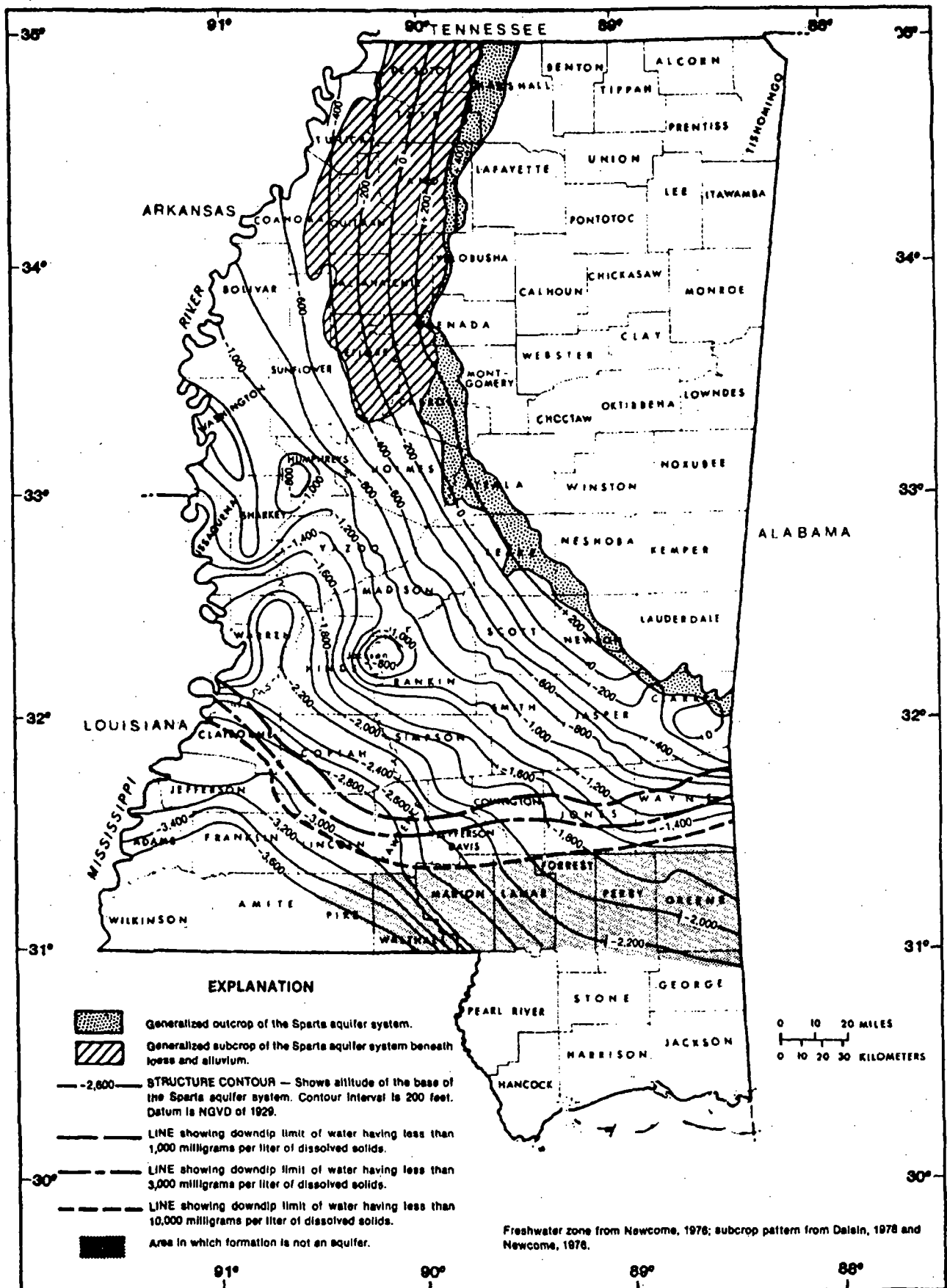


Figure 20. — Configuration of the base of the Sparta aquifer system.

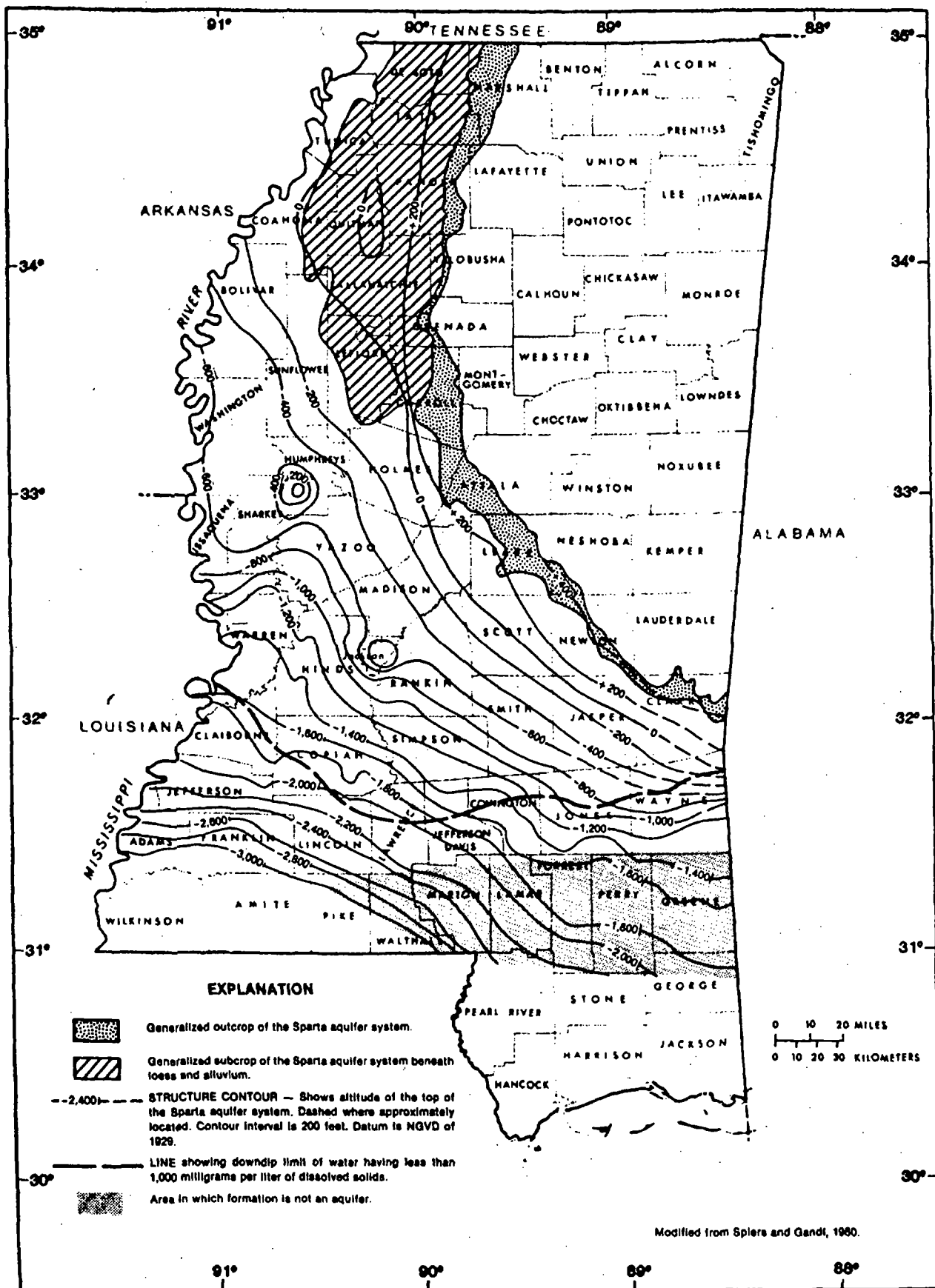


Figure 21. — Configuration of the top of the Sparta aquifer system.

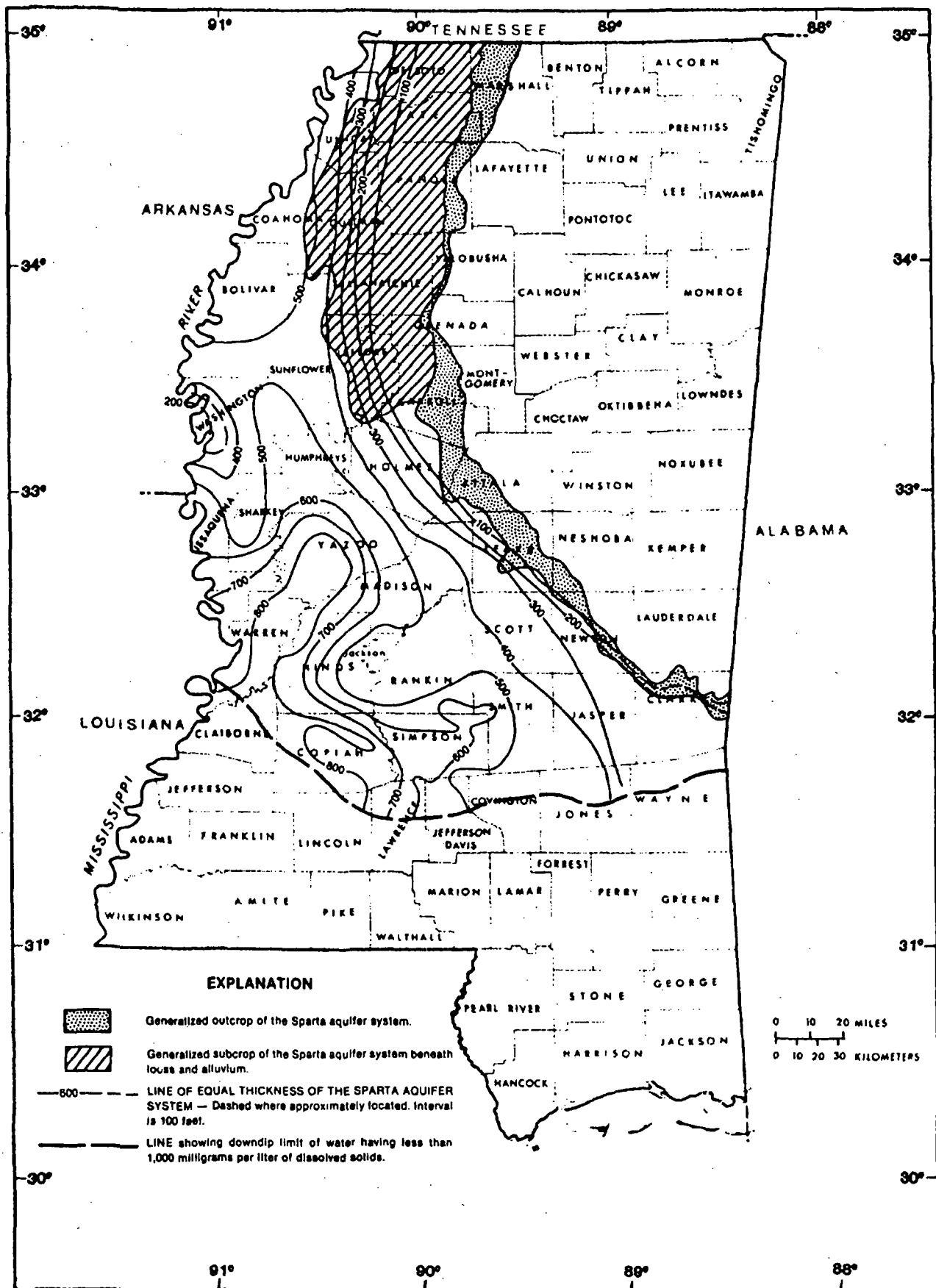


Figure 22. — Thickness of the Sparta aquifer system.

Meridian-Upper Wilcox Aquifer

The Meridian-upper Wilcox aquifer crops out in a narrow curving band from Benton County in the north to Montgomery and then to Lauderdale County (fig. 28). The aquifer consists of the Meridian Sand Member of the Tallahatta Formation and the uppermost sand beds of the underlying Hatchetigbee Formation of the Wilcox Group. They are regarded as one aquifer, because they are hydraulically connected. The structure contours on the base and top of the aquifer are shown in figures 28 and 29. The aquifer dips to the west and southwest at 28 to 40 ft/mi, thickening downdip to over 300 feet in the freshwater section (fig. 30).

The Meridian Sand Member is a massive unit consisting of fine-to-coarse micaceous sand. The upper Wilcox aquifers consist of irregular beds of fine-to-medium sand in the central and southern areas of occurrence and a less permeable sandy clay in the northern part of the state. The aquifer is separated from the overlying Winona-Tallahatta aquifer by the Basic City Shale Member, except where the shale's sandy. It's separated from the middle Wilcox aquifer by a several clay beds.

Water levels in the Meridian-upper Wilcox aquifer are high near the area of outcrop. In some areas of the state, particularly in the alluvial plain, water levels are above ground level, resulting in flowing wells (fig. 31). Water levels in the confined part of the aquifer have been declining by about 1 ft/yr, but flowing wells are still present in places.

Recharge is by rainfall on the outcrop. Water movement in the aquifer is downdip, particularly towards an area of large withdrawal in Leflore and Sunflower Counties. More than 15 aquifer tests indicate transmissivities of 150 to 17,400 ft²/d, hydraulic conductivities of 9 to 110 ft/d, and specific capacities of 0.7 to 29 (gal/min)/ft of drawdown (Boswell, 1976b).

Municipalities are the main users of water from the Meridian-upper Wilcox aquifer. The highest yield reported is 2,800 gal/min and the deepest wells are around 2,000 ft deep. Increased use of the aquifer will increase the rate of water-level declines, but levels are high enough that this will not be a problem in most locations; the Meridian-upper Wilcox can supply many more users.

Water in the deeper part of the aquifer is of a soft sodium-bicarbonate type and in some areas is colored. The water is corrosive due to low pH in the northern part of the area and in shallow parts of the aquifer near the outcrop. The downdip limits of fresh, slightly saline, and moderately saline water are shown in figure 28.

The Meridian-upper Wilcox aquifer may become contaminated near the limit of freshwater by heavy pumping resulting in upward movement of saline water into the freshwater zone (Boswell, 1976b). Injection wells have contaminated areas in the freshwater zone and in zones containing less than 10,000 mg/L dissolved solids in Jasper County (Bicker, 1972).

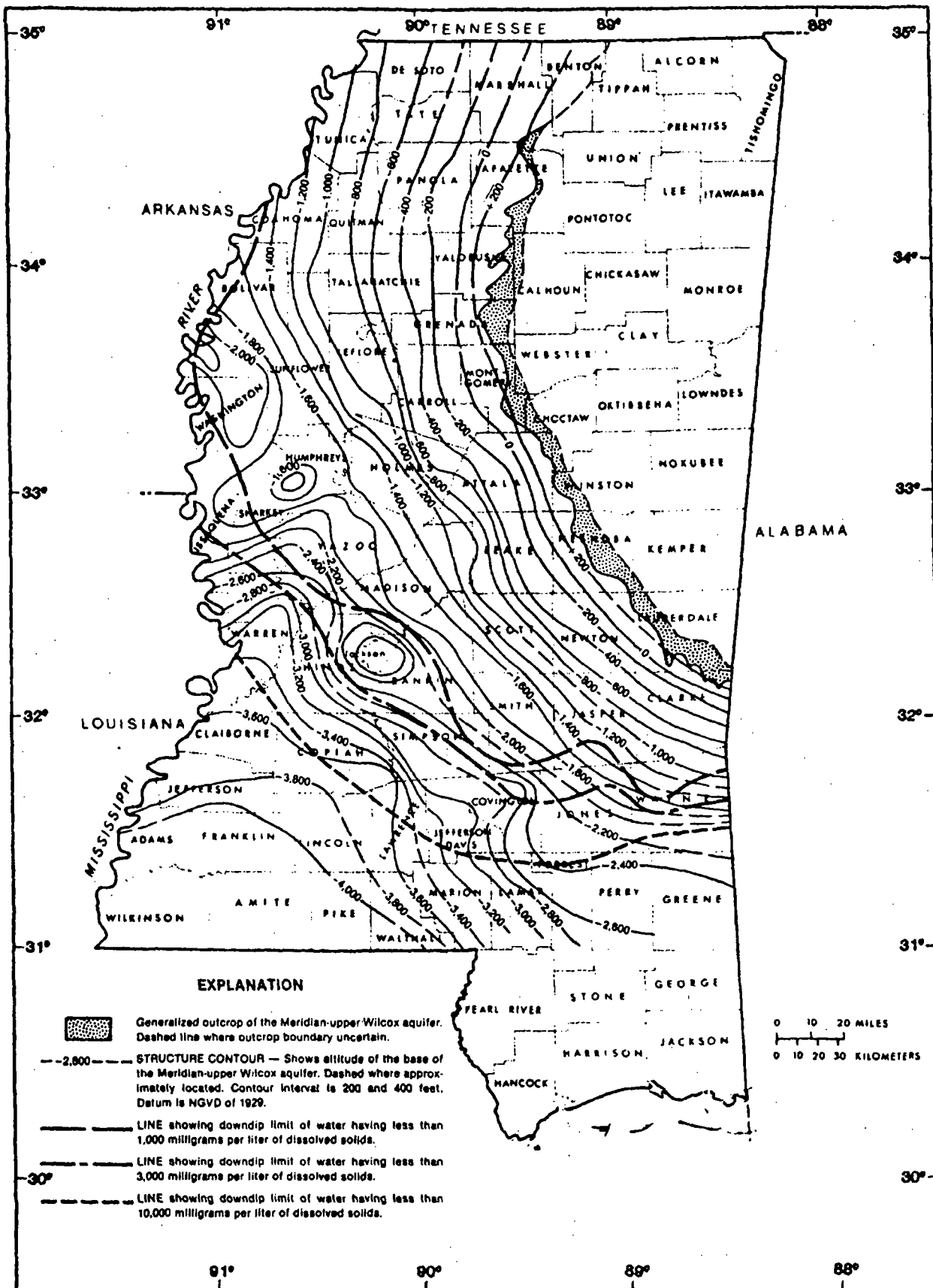


Figure 28. — Configuration of the base of the Meridian-upper Wilcox aquifer.

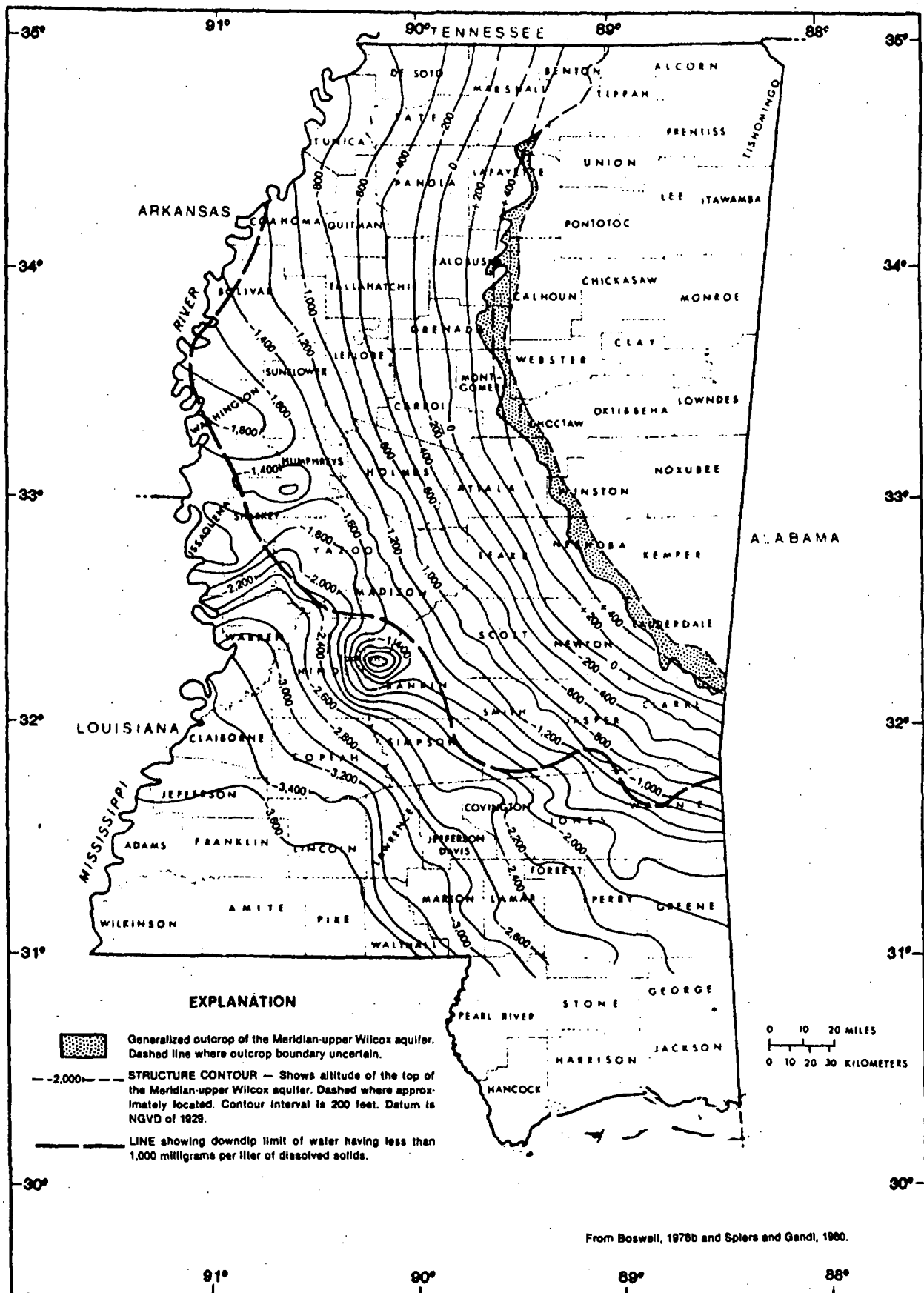


Figure 29. — Configuration of the top of the Meridian-upper Wilcox aquifer.

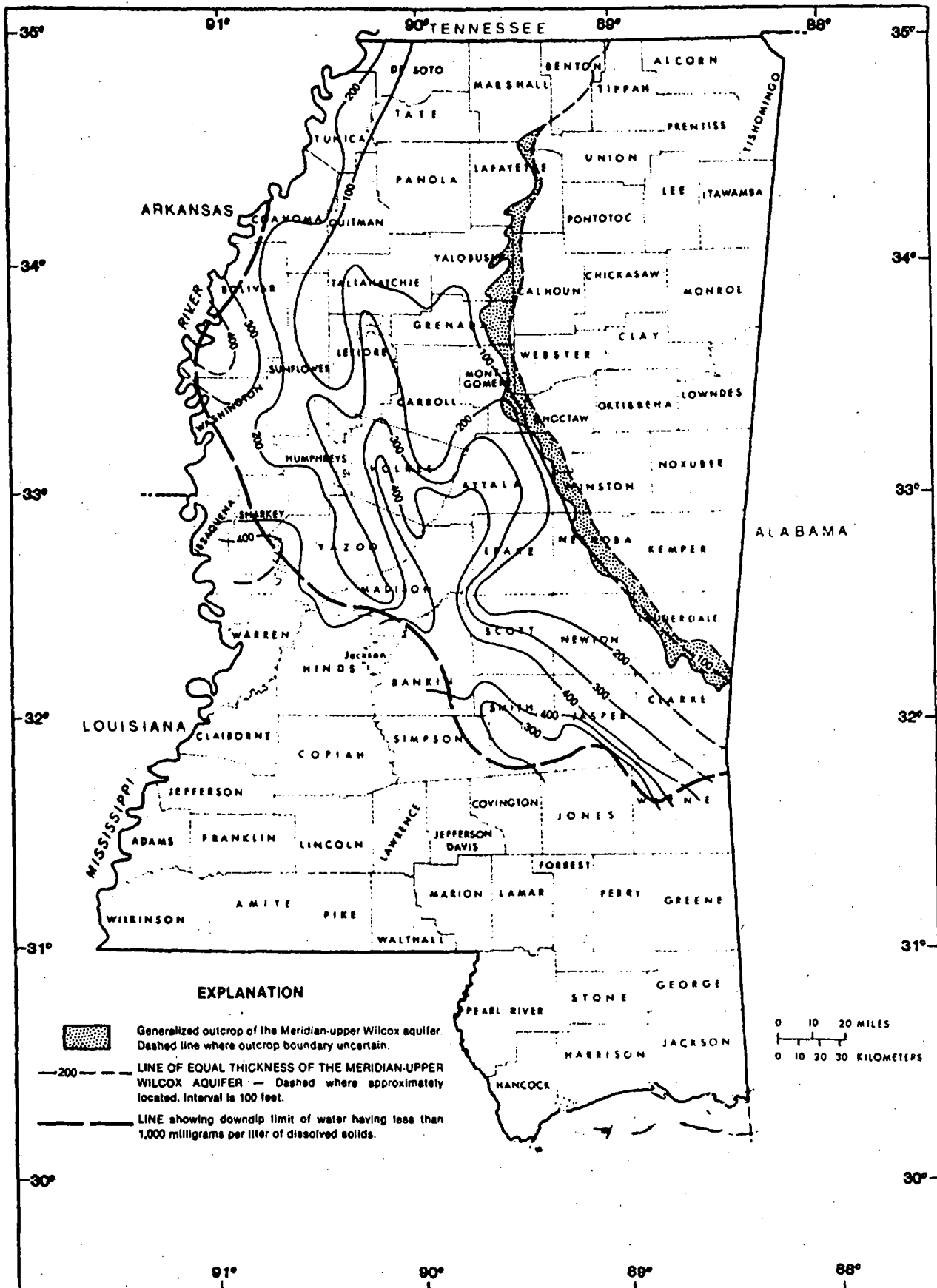


Figure 30. — Thickness of the Meridian-upper Wilcox aquifer.

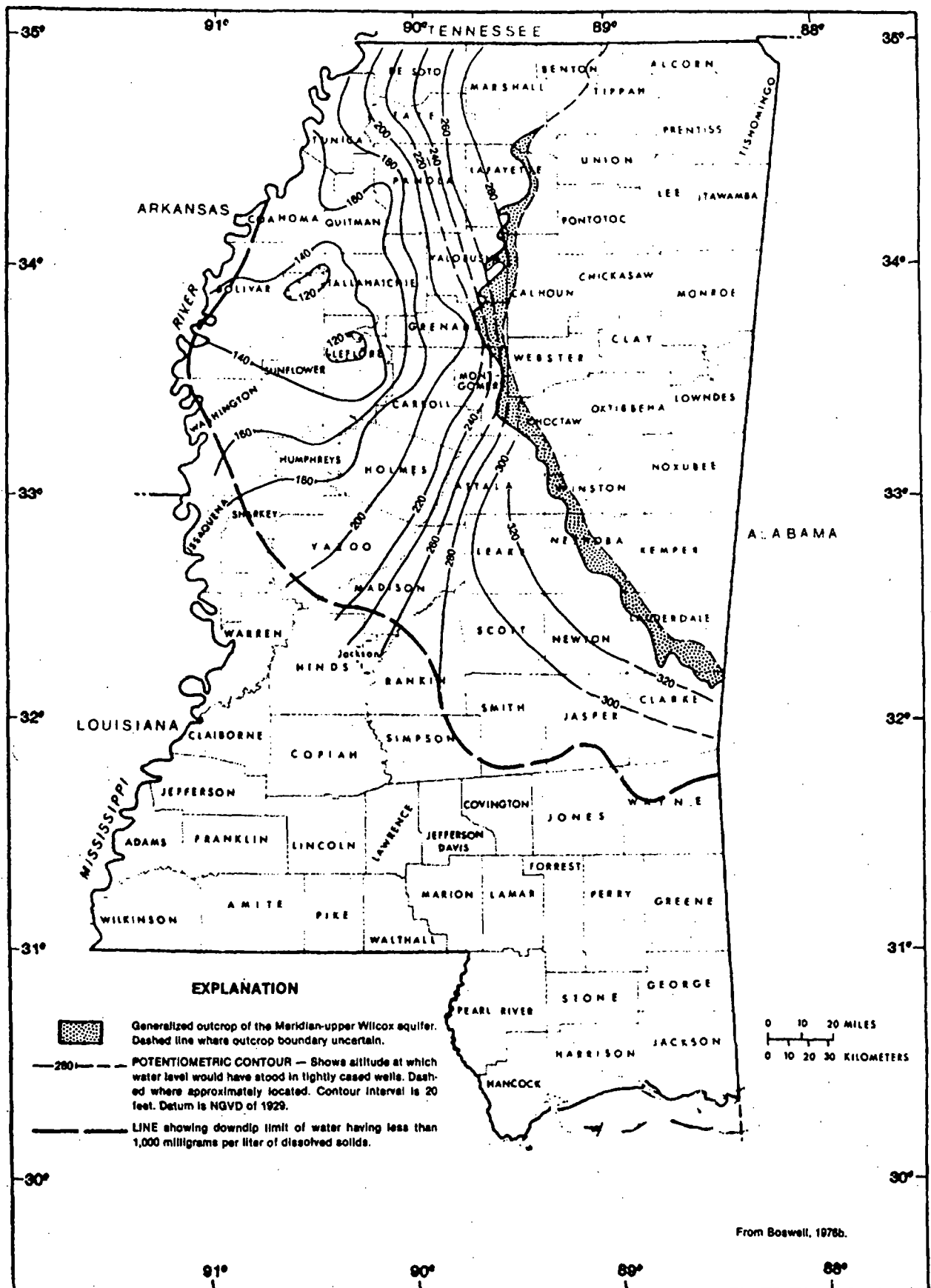


Figure 31. — Potentiometric surface of the Meridian-upper Wilcox aquifer.



GROUND WATER ATLAS of the UNITED STATES

Arkansas, Louisiana, Mississippi

HA 730-F

[Preview and download Mississippi embayment aquifer system figures--\(65 thru 83\)](#)

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MISSISSIPPI EMBAYMENT AQUIFER SYSTEM

INTRODUCTION

The Mississippi embayment aquifer system is the most extensive aquifer system in Segment 5, and parts of the system are discussed in Chapters C,D,G, and K (fig. 65) of this Atlas. The system underlies most of the East and West Gulf Coastal Plains and the Mississippi Alluvial Plain Sections of the Coastal Plain Province. The Mississippi embayment aquifer system merges eastward in Mississippi and in Alabama with the Pearl River aquifer that is part of the Southeastern Coastal Plain aquifer system (see Chapter G of this Atlas) and merges westward with the Coastal uplands aquifer system in Texas and Oklahoma (see Chapter E of this Atlas). A small area of equivalent rocks in southwestern Arkansas and northwestern Louisiana has been mapped as part of the Texas coastal uplands aquifer system in some reports but is considered to be part of the Mississippi embayment aquifer system in this Atlas.

The Mississippi embayment aquifer system extends eastward from Arkansas to northwestern Mississippi and comprises six aquifers that crop out as an arcuate band of poorly consolidated to unconsolidated, bedded sand, silt and clay (fig. 66). Geologic units of the aquifer system range from Late Cretaceous to middle Eocene in age. In southern Mississippi and central Louisiana, an extensive, thick, clay confining unit, the Vicksburg-Jackson confining unit, separates the Mississippi embayment aquifer system from the overlying Oligocene and younger water-yielding strata of the coastal lowlands aquifer system. In the embayed part of the Gulf Coastal Plain of eastern Arkansas, northeastern Louisiana, and northwestern Mississippi, the southward-dipping strata of the Mississippi embayment aquifer system are hydraulically connected to the Mississippi River Valley alluvial aquifer.

The geologic formations and groups that compose the Mississippi embayment aquifer system thicken greatly in southern Mississippi and Louisiana (fig. 67) where large volumes of sediment were deposited by streams that emptied into the ancestral Gulf of Mexico. The Mississippi embayment aquifer system ranges in thickness from a featheredge to more than 6,000 feet (fig. 67). The aquifer system thickens eastward and westward from its updip limits toward the axis of the Mississippi Embayment. The aquifer system is thickest in south-central Louisiana and southwestern Mississippi. Three of the system's six aquifers, the upper and the middle Claiborne and the lower Claiborne-upper Wilcox aquifers, become increasingly clayey and pinch out to the south (fig. 68). Some of the clayey confining units pinch out northward as they become increasingly sandy and more permeable.

A different perspective of the geologic and hydrogeologic units that make up the aquifer system is shown in a section that crosses the central part of the Mississippi Embayment (fig. 69). Some of the aquifers (for example, the lower Claiborne-upper Wilcox aquifer) thicken eastward across the embayment locally, the middle Claiborne, the lower Claiborne-upper Wilcox, and the middle and the lower Wilcox aquifers are in direct hydraulic contact near the western side of the embayment.

HYDROGEOLOGIC UNITS

The Mississippi embayment aquifer system is divided into nine hydrogeologic units-six regional aquifers and three regional confining units. Thick, regionally-extensive clay and shale confining units separate some parts of the aquifer system into distinct, regionally mappable aquifers that are largely homogeneous sand. Other parts of the aquifer system lack regional confining units, and the regional aquifers in these parts are defined on the basis of different geohydrologic characteristics. The contacts of many aquifers and confining units within the Mississippi embayment aquifer system conform well to the contacts of geologic units (fig. 70). For example, the Midway confining unit coincides exactly with the different geologic formations that compose the Midway Group, and the upper Claiborne aquifer is identical to the Cockfield Formation. For some hydrogeologic units, however, particularly those that include rocks of the Claiborne Group, there is little or no equivalency with geologic units. The conformance of aquifers and confining units with geologic units also departs markedly as the Mississippi embayment aquifer system merges eastward with the Southeastern Coastal Plain aquifer system, which is described in Chapter G of this Atlas.

The extensive Jackson-Vicksburg confining unit is formed by massive clay beds and separates the Mississippi embayment system from the overlying coastal lowlands aquifer system. The Midway confining unit within the Mississippi embayment aquifer system also consists of massive clay beds and separates the aquifers in sediments of Tertiary age from underlying aquifers of rocks of Cretaceous age. Although the uppermost aquifers of the Mississippi embayment aquifer system, the upper and the middle Claiborne aquifers, are bounded above and below by confining units in most places, the lower Claiborne-upper Wilcox aquifer and the middle and the lower Wilcox aquifers are not separated by confining units. Sandy strata of the Wilcox Group are more heterogeneous than other rocks of Tertiary age and consist of a highly variable sequence of massive to thinly bedded sand and thin clay beds that are part of the three aquifers. The middle Wilcox aquifer differs considerably from overlying and underlying aquifers because its thin beds of sand and clay result in lower hydraulic conductivity than that of the massive, more permeable strata that lie above and below it.

Of the six aquifers contained within the Mississippi embayment aquifer system, the middle Claiborne aquifer is the most heavily used. Consequently, the description of the Mississippi embayment aquifer system in this chapter principally focuses on the hydrogeologic, hydraulic, and hydrochemical characteristics of the middle Claiborne aquifer. The McNairy-Nacatoch aquifer of this system also is described because the ground-water flow system is quite different from that of the other aquifers in this aquifer system.

MIDDLE CLAIBORNE AQUIFER

The middle Claiborne aquifer comprises mostly the Sparta Sand but also includes the Memphis Sand in the northern part of the Mississippi Embayment. In this area, the Memphis Sand is equivalent to the Sparta Sand, the Cane River Formation, and the Carrizo Sand/Meridan Sand Member of the Tallahatta Formation (fig. 70). The aquifer is thickest in a large area of east-central Louisiana and southwestern Mississippi, and in a smaller area of southeastern Arkansas (fig. 71). Although its thickness is greater than 1,000 feet in Louisiana and Mississippi, the aquifer largely contains water with more than 1,000 milligrams per liter dissolved solids. Such highly mineralized water is considered to be unsuitable for most purposes. In most areas where water in the middle Claiborne aquifer contains smaller concentrations of dissolved solids, the thickness of the aquifer generally ranges from 200 to 800 feet.

Confining units separate the middle Claiborne aquifer from overlying and underlying aquifers in most places. These confining units comprise prodelta and marine shelf deposits of clay, mud, marl, and shale. The lower Claiborne confining unit (the Cane River Formation) which underlies the middle Claiborne aquifer, and the middle Claiborne confining unit (the Cook Mountain Formation), which overlies the aquifer, were deposited as a result of widespread marine invasions that interrupted progradation of clastic sediments into the Gulf Coast Basin. Clay and shale of the lower Claiborne confining unit coarsens northward and grades to sandy channel sediments (the Winona Sand and the Tallahatta Formation) deposited in a coastal margin delta system. The predominantly marine

clay facies of the lower Claiborne confining unit thus changes to an updip sand facies that forms part of the middle Claiborne aquifer. In Arkansas and northernmost Mississippi, where the lower Claiborne confining unit is missing, the middle Claiborne aquifer and the lower Claiborne-upper Wilcox aquifers function as a single aquifer, which is known locally as the Memphis aquifer.

Relation Between Geology And Permeability

Basinwide changes in geologic facies have been shown in preceding sections of this chapter to be a principal factor that controls the hydraulic character of the surficial and the coastal lowlands aquifer systems. A similar relation exists for the Mississippi embayment aquifer system. Aquifers of the Mississippi embayment aquifer system consist of an interbedded sequence of poorly consolidated fluvial, deltaic, and marine deposits in which diagenesis or postdepositional geochemical processes have not greatly altered the original pattern of permeability. The hydraulic conductivity of the unconsolidated to poorly consolidated sediments that compose the aquifers of the Mississippi embayment aquifer system does not appear to have been greatly reduced by cementation or compaction. Consequently, the distribution of hydraulic conductivity and transmissivity of the Mississippi embayment aquifer system can be inferred from maps of sediment lithofacies, if a direct correlation between sediment type and aquifer permeability is assumed.

The Sparta Sand that composes most of the middle Claiborne aquifer in Louisiana and Mississippi (fig. 72) was deposited within a constructional delta system. A constructional delta system is characterized by a large-scale complex of elongate and lobate deltas formed by rivers with large discharge and sediment loads; the delta progrades into ocean water. Constructive delta systems contain mostly fluvial and deltaic facies in which coarser sediment is concentrated in landward fluvial tributaries or meandering channels and as deltaic distributaries and delta front-sand bodies. Distributary channels that contain permeable sand are separated by less permeable interdistributary clay (fig. 54). In constructional delta systems, fluvially transported sand, silt, and clay are deposited near the coast at a rate that exceeds the rate at which they are removed by wave energy and longshore currents. The meandering fluvial channel facies is characterized by wide, uniform, multilateral sand bodies with little clay content. The distributary channel facies differs in terms of its sand content and pattern of sedimentation. Channel sand bodies within the delta plain show a distributary pattern of sedimentation and do not show extensive lateral migration. Distributary channels are effectively isolated by the weight of sandy channel sediment, which causes compactional subsidence. Eventually, channel progradation results in its overextension, and the distributary channel shifts position by abandonment and diversion of floodwaters to an area with a steeper gradient. Younger distributary channels may overlap older channels as the delta builds up thick sequences of complexly interbedded deposits.

Distributary deposits are in the middle Claiborne aquifer as elongate bodies separated by areas almost devoid of sand that represent interdistributary deposits (fig. 72). The distribution of sand in the middle Claiborne aquifer, expressed as a percentage of the total thickness of the aquifer, suggests that sand was deposited within a distributary channel facies of a constructive delta system. Distributary channels of the middle Claiborne aquifer area characterized by high concentrations of sand (50 percent or greater) that extend as narrow, slightly meandering, elongate sand bodies (fig. 73). Interdistributary deposits contain from 30 to 50 percent sand and consist primarily of silt, clay, and lignite. Distributary and interdistributary channel lithofacies grade gulfward to prodelta silt and mud, which contains small concentrations of sand (less than 30 percent). The sandy channel sediments represent the most permeable parts of the middle Claiborne aquifer in Louisiana and Mississippi. The predominant direction of the distributary channels is southward or southwestward. Comparison of sand percentage and the distribution of transmissivity in the middle Claiborne aquifer (Sparta Sand) suggests that the more transmissive parts of the aquifer correspond to its sandier parts, which are interpreted as distributary channel facies (compare figs. 72 and 74). In these areas, transmissivity is more than 13,000 feet squared per day generally and locally exceeds 27,000 feet squared per day. Less transmissive sediments appear to be associated with the interdistributary channel facies that contain smaller percentages of sand. In the poorly transmissive areas, transmissivity is reported to be less than 13,000 feet per day.

Well Yield

The middle Claiborne aquifer is capable of yielding water to properly constructed wells at a rate that ranges from 100 to 300 gallons per minute in Louisiana and Mississippi. Wells screened in the middle Claiborne aquifer in Arkansas are reported to yield from 300 to 1,000 gallons per minute. Yields of as much as 2,000 gallons per minute are obtained in northernmost Mississippi and eastern Arkansas where the middle Claiborne aquifer merges with the lower Claiborne-upper Wilcox aquifer and is known locally as the Memphis aquifer.

Ground-water Flow

Gravity is the principal driving force for ground-water movement within the Mississippi embayment aquifer system. Regional movement of water in the aquifer system is from aquifer recharge areas that range from 100 to 400 feet higher than the uniformly low, flat terrain of the Mississippi Alluvial Plain where water discharges. This difference in altitude provides the gravitational energy needed to drive the ground-water flow system.

Most of the precipitation that falls on the exposed part of the Mississippi embayment aquifer system is lost to streams and rivers as direct runoff, is returned to the atmosphere from plants and soil by processes of evapotranspiration, or discharges as baseflow to streams in the outcrop area. Before development of the aquifer, water that entered the deeper, regional flow system moved toward the center of the Mississippi Embayment (fig. 75). Water in the confined parts of the system was discharged by upward leakage into shallower aquifers, such as the Mississippi River Valley alluvial aquifer. Ultimately, ground water was discharged to streams and rivers that incised the shallower aquifers.

Development of the ground-water resources of the Mississippi embayment aquifer system has greatly modified the pre-development regional flow system. Large ground-water withdrawals in southern Arkansas and northern Louisiana have caused declines of the potentiometric surface and some changes in direction of regional predevelopment flow. Lows in the predevelopment potentiometric surface were located only in areas of natural ground-water discharge. The location of potentiometric lows has changed and now depressions are in areas with large withdrawals from wells. Pumping centers in northern Louisiana and southern Arkansas were the major sites of regional ground-water discharge from the middle Claiborne aquifer in 1980 (fig. 76). Within the middle Claiborne aquifer, large withdrawals have resulted in a long-term decline in water levels, which locally exceeds 100 feet, and have created cones of depression in several places. Declines in the potentiometric surface have helped to induce greater areal recharge and recharge from incised streams in outcrop areas. Ground water removed from storage also has contributed to the long-term decline in water levels within the aquifer. Large withdrawal rates from the middle Claiborne aquifer have induced downward leakage of water into the middle Claiborne aquifer from the upper Claiborne and the Mississippi River Valley alluvial aquifers.

Ground-water Quality

The middle Claiborne aquifer in Segment 5 contains water with less than 500 milligrams per liter dissolved solids over about one-half of its extent (fig. 77). However, the dissolved-solids concentration increases to more than 1,000 milligrams per liter where the aquifer underlies the junction of the Mississippi and the Ouachita Rivers, an area of natural ground-water discharge. The aquifer contains moderately saline water (3,000-10,000 milligrams per liter dissolved solids) in mid-dip areas, but contains brine in the deep surface.

The hydrochemical character of water in the Mississippi embayment aquifer system changes progressively down-gra-dient in a pattern that is consistent with the pattern of other aquifer systems in clastic Coastal Plain sediments. Chemical constituents in the ground water of clastic Coastal Plain aquifer systems are controlled, in

part, by solution of the minerals in the sediments that make up the aquifers; in part, by the exchange of ions between the water and the minerals in the sediments as the water moves down the hydraulic gradient; and in part, by mixing of freshwater and saltwater in deep parts of the aquifers. The major hydrochemical facies (the dominant cations and anions) in water from the Mississippi embayment aquifer system are calcium bicarbonate, sodium bicarbonate, and sodium chloride. Other hydrochemical facies are local in extent. Calcium bicarbonate and sodium bicarbonate waters dominate the exposed and shallow subsurface areas of the middle Claiborne aquifer (fig. 78). Sodium bicarbonate water is the major type in middepth subsurface areas, whereas sodium chloride water is in the deeply buried parts of the aquifer.

MCNAIRY-NACATOCH AQUIFER

The McNairy-Nacatoch aquifer (fig. 79) comprises sand of Late Cretaceous age. The aquifer crops out or subcrops in parts of northern Mississippi and eastern and southwestern Arkansas and is the lowermost aquifer of the Mississippi embayment aquifer system. The McNairy-Nacatoch aquifer (fig. 79) extends northward into southeastern Missouri, which is described in Chapter D of this Atlas, and northeastward into western Tennessee, southern Illinois, and southwestern Kentucky, which is described in Chapter K of this Atlas. Although Missouri, Illinois, and Kentucky are not within Segment 5, the pattern of regional ground-water flow within the McNairy-Nacatoch aquifer cannot be described without also describing intersegment ground-water movement. The hydrogeology of the entire McNairy-Nacatoch aquifer is, therefore, described in this chapter.

The McNairy-Nacatoch aquifer consists of the Nacatoch Sand in Arkansas and the McNairy Sand in Mississippi. The McNairy Sand is considered to be a member of the Ripley Formation in Mississippi but is of formational rank where it extends into Tennessee and the northern part of the Mississippi Embayment. The McNairy-Nacatoch aquifer crops out as a narrow band that extends northward from Mississippi into southern Illinois and as a second narrow band in southwestern Arkansas. The aquifer subcrops beneath the Mississippi River Valley alluvial aquifer in northeastern Arkansas, southeastern Missouri, and southernmost Illinois. A confining unit separates the McNairy-Nacatoch aquifer from part of the underlying Southeastern Coastal Plain aquifer system in Mississippi, but the McNairy-Nacatoch aquifer directly overlies the Ozark Plateaus aquifer system along part of the western margin of the Coastal Plain of Arkansas and Missouri. The McNairy-Nacatoch aquifer consists of glauconitic, clayey sand deposited in a deltaic to prodeltaic environment in Arkansas and Mississippi. The aquifer is interbedded with and grades into chalk and clay as it extends southward. Deltaic deposits of sand, minor gravel, and clay compose the aquifer where it extends northward into Tennessee, southeastern Missouri, and beyond.

Ground-water Flow

Water enters the McNairy-Nacatoch aquifer as precipitation that falls directly on the aquifer where it crops out in eastern Mississippi and the northern part of the Mississippi Embayment. Water in the aquifer moves westward from topographically high interstream areas on the northern and eastern sides of the Mississippi Embayment to a large area of regional discharge on the western side of the embayment (fig. 80). The discharge zone, which is identified by a low area of the potentiometric surface, encompasses some of the places where the McNairy-Nacatoch aquifer directly underlies the Mississippi River Valley alluvial aquifer in northeastern Arkansas and southeastern Missouri. The discharge zone also includes a large area where the McNairy-Nacatoch aquifer is confined by clay and shale of the Midway confining unit. Discharge of ground-water from the McNairy-Nacatoch aquifer does not coincide with any surface drainage features, but does correspond closely to an area subject to large ground-water withdrawals. The discharge area also is nearly coincident with the western margin of the Reelfoot Rift. Hydrochemical data and simulation of ground-water flow suggest that fractures and a tensional fault, both of which were caused by deep-seated, periodic crustal rifting in northeastern Arkansas, enhance vertical upward leakage of water from the Ozark Plateaus aquifer system and the McNairy-Nacatoch aquifer to shallower aquifers of the Mississippi embayment aquifer system.

Ground-water Quality

The concentration of dissolved solids in water from the McNairy-Nacatoch aquifer increases in a southwesterly direction (fig. 81). Dissolved-solids concentrations are generally lowest in areas where the aquifer crops out and where it is buried only to shallow depths. In northeastern Arkansas, dissolved-solids concentrations generally are greater than 500 milligrams per liter. Concentrations of more than 1,000 milligrams per liter are present in a small area in southeastern Missouri apparently as the result of upward leakage of water from the Ozark Plateaus aquifer system. The McNairy-Nacatoch aquifer generally contains more than 3,000 milligrams per liter dissolved-solids concentration in its deepest parts. The aquifer is dominated by sodium bicarbonate water where it contains water with less than 2,000 milligrams per liter dissolved solids and by sodium chloride water where it contains water with more than 2,000 milligrams per liter dissolved solids.

FRESH GROUND-WATER WITHDRAWALS

Fresh ground-water withdrawals from the Mississippi embayment aquifer system are estimated to be 433 million gallons per day (fig. 82). Public supply use accounts for about 52 percent of the total water withdrawn from the aquifer system, or about 224 million gallons per day. Withdrawals for domestic and commercial use were about 23 percent of the total withdrawals, or about 99 million gallons per day. Agricultural withdrawals from the Mississippi embayment aquifer system averaged about 71 million gallons per day, or about 16 percent of the total ground-water withdrawn. Industrial, mining, and thermoelectric power users withdrew about 39 million gallons per day, or about 9 percent of the total withdrawals.

More water is withdrawn from the middle Claiborne aquifer than from any other aquifer of the Mississippi embayment aquifer system. In 1980, for example, about 308 million gallons per day was withdrawn from the aquifer principally from major pumping centers (fig. 83) in the cities of Stuttgart, Pine Bluff, El Dorado, and Magnolia, Arkansas; Ruston, Jonesboro, Monroe, and Bastrop, Louisiana, and Yazoo City and Jackson, Mississippi. Large withdrawals are also made by pumping centers in the Memphis, Tennessee area (Chapter K).

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<p>IN THE MATTER OF:</p> <p>RED PANTHER PESTICIDE SUPERFUND SITE Clarksdale, Coahoma County, Mississippi</p> <p>Respondents (see Attachment A)</p>	<p>) ADMINISTRATIVE ORDER ON</p> <p>) CONSENT FOR REMOVAL ACTION</p> <p>)</p> <p>) U.S. EPA Region 4</p> <p>) CERCLA</p> <p>) Docket No. CER-04-2001-3766</p> <p>)</p> <p>) Proceeding Under Sections 104, 106(a),</p> <p>) 107 and 122 of the Comprehensive</p> <p>) Environmental Response,</p> <p>) Compensation, and Liability Act, as</p> <p>) amended, 42 U.S.C. §§ 9604, 9606, 9607</p> <p>) and 9622</p>
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I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order on Consent ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the Respondents referenced in Attachment A ("Respondents"). This Order provides for the performance of the removal action by Respondents and the reimbursement of response costs incurred by the United States in connection with the Red Panther Superfund Site ("Site") located at 550 Patton and Leflore in Clarksdale, Coahoma County, Mississippi. This order requires Respondents to conduct the removal action described herein to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances, at or from the Site.

This Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622, as amended ("CERCLA"), and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-A, 14-14-C, and 14-14-D, to the Director, Waste Management Division by EPA Region IV Delegation No. 8-14-13, and to the Chief, Emergency Response and Removal Branch, Waste Management Division by EPA Region 4 Delegations. EPA has notified the State of Mississippi ("State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

Respondents' participation in this Order shall not constitute or be construed as an admission of liability or of liability or of EPA's findings or determinations contained in

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this Order except in a proceeding to enforce the terms of this Order. Respondents agree to comply with and be bound by the terms of this Order. Respondents further agree that they will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

This Order applies to and is binding upon EPA, and upon Respondents and Respondents' heirs, successors and assigns. Any change in ownership or corporate status of Respondents including but not limited to, any transfer of assets or real or personal property shall not alter Respondents' responsibilities under this Order. Respondents are jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondents with any provision of this Order shall not excuse or justify noncompliance by any other Respondents.

Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Order and comply with this Order. Respondents shall be responsible for any noncompliance with this Order.

III. FINDINGS OF FACT

For the purposes of this Order, EPA finds that:

- A. The Red Panther Chemical Company Site is located in Clarksdale, Coahoma County, Mississippi. The facility occupies 6.5 acres of Normandy and Patton Street, east of the City of Clarksdale.
- B. Liquid and dry herbicides, insecticides, and fungicides were formulated at the facility between 1949 and 1996.
- C. The remains of a tank battery which stored technical grade pesticides is located west of the former formulation building.
- D. Nineteen buildings remain on the property, including the north warehouse, the south warehouse, and the office. The southern warehouse was historically used for the formulation of liquid insecticides. Current use of the facility is storage of seed and farm supplies.
- E. Before ownership by the Red Panther Chemical Company, the facility was owned by Coahoma Chemical Company, Riverside Chemical Company, and MFC Services.
- F. High concentrations of toxaphene, chlordane, and DDT has migrated off the property via drainage ditches.

- G. Chemicals used in the formulation of insecticides by Red Panther Chemical Company include: toxaphene, methyl parathion, chloropyrifos, 2,4-D, malathion, carbaryl, diazinon, methoxychlor, disodium methanearsonate (DSMA), monosodium acid methanearsonate (MSMA), chlorothalonil, and parathion.
- H. Toxaphene contaminated soils are present on site in concentrations up to 120,000 mg/kg. DDT and its degradation products were detected in soil samples in concentrations up to 1,400 mg/kg. Arsenic was detected in soil samples in concentrations up to 339 mg/kg. Aldrin was detected in soil samples in concentrations up to 680 mg/kg. Endrin was detected in soil samples in concentrations up to 44 mg/kg. Endosulfan II was detected in soil samples in concentrations up to 42 mg/kg. Chlordane was detected in soil samples in concentrations up to 270 mg/kg. Dieldrin was detected in soil samples in concentrations up to 200 mg/kg. The sampling data indicates that a release of multiple hazardous contaminants has occurred at the site.
- I. The contamination at the Site poses a threat to public health and welfare. Elevated levels of pesticide residues have migrated off the facility via surface erosions. Occupants of the nearby facilities and area residents may be subject to exposure via direct contact and/or inhalation to elevated concentrations of pesticide residues.

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

1. The Red Panther Superfund Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
2. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
3. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
4. Each Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the Site as defined by Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

6. The conditions present at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment. Factors that may be considered are set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300 ("NCP").
7. The actual or threatened release of hazardous substances at or from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
8. The removal actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP or CERCLA.

V. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondents shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

1. Designation of Contractor, Project Coordinator, and On-Scene Coordinator

Respondents shall perform the removal action required by this Order (themselves) or retain a contractor(s) to perform the removal action. Respondents shall notify EPA of Respondents' qualifications or the name(s) and qualification(s) of such contractor(s) within twenty (20) business days of the effective date of this Order. Respondents shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the removal action under this Order at least twenty-one (21) days prior to commencement of such removal action. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondents, or of Respondents' choice of itself (themselves) to do the removal action. If EPA disapproves of a selected contractor or the Respondents, Respondents shall retain a different contractor or notify EPA that it will perform the removal action itself within twenty (20) business days following EPA's disapproval and shall notify EPA of that contractor's name or Respondents and qualifications within twenty (20) business days of EPA's disapproval.

Within ten (10) days after the effective date of this Order, Respondents shall designate a Project Coordinator who shall be responsible for administration of all the Respondents' actions required by the Order. Respondents shall submit the designated coordinator's name, address, telephone number, and qualifications to EPA. To the greatest extent possible, the Project Coordinators shall be present on Site or readily available during Site

work. EPA retains the right to disapprove of any Project Coordinator named by Respondents. If EPA disapproves of a selected Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within ten (10) business days following EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by (all) Respondents.

EPA has designated De'Lyntoneus Moore of the EPA, Region 4 Emergency Response and Removal Branch as its On-Scene Coordinator ("OSC"). Respondents shall direct all submissions required by this Order to the OSC at 61 Forsyth St., SW, Atlanta, Georgia 30303. EPA and Respondents shall have the right, subject to the immediately preceding paragraph, to change its/their designated OSC or Project Coordinator. Respondents shall notify EPA, ten (10) business days before such a change is made. The initial notification may be orally made but it shall be promptly followed by a written notice.

2. Work to Be Performed

A. Respondents shall provide a project schedule to EPA within thirty (30) days after receipt of this Order. Respondents shall submit a draft Phase I Work Plan of activities required to comply with this Order to EPA for review and approval within thirty (30) days of receipt of this Order. Respondents shall complete within sixty (60) days after receipt of EPA comments on the draft work plan, the following measures, which shall be undertaken at the direction of EPA through its OSC:

1. Respondents shall submit a Final Phase I Work Plan of activities required to comply with this Order, containing the following:
 - (a) The Sampling and Analysis/Quality Assurance Project Plan shall contain all relevant information necessary to describe the sampling and analysis of on site soils. In addition, all information regarding laboratory analyses, including test methods and the Quality Assurance/Quality Control procedures to be followed must also be included in the document.
 - (b) The Field Health and Safety Plan shall provide all necessary information regarding the levels of personnel protective equipment to be used in the field and classified by discrete task to be performed. Respondents shall be responsible for ensuring that all personnel involved in field work at the site have been fully trained and certified in cleanup of hazardous waste sites, as specified under 29 CFR 1910.120. It should be noted that EPA does not "approve" the Respondents' Health and Safety Plan, but rather reviews it to ensure that all necessary elements are included, and

that the plan provides for the protection of human health and the environment.

- (c) Details of the proposed Phase I Work Plan, and methods to be employed while conducting the removal activities required by this Order. The plan should include, but not [be] limited to, a description on the equipment and personnel anticipated to be required for the project, a project performance schedule, and descriptions of likely transportation, treatment/and disposal options for categories of waste at the Site.
 - (d) Subsequent to EPA's review of the Phase I work plan, EPA shall notify Respondents in writing of EPA's approval or disapproval of the work plan or any part thereof. In the event of any deficiencies and any EPA recommended modifications regarding the work plan, within ten (10) business days of receipt of notification by EPA that the work plan requires modifications and revisions, Respondents shall amend and submit to EPA a revised work plan. In the event of subsequent disapproval of the work plan, EPA retains the right to complete the work or any portion thereof pursuant to its authority under CERCLA.
 - (e) Following completion of the Phase I work, a Phase II Work Plan will be submitted for EPA review and approval. The Phase II Work Plan will detail soil removal and disposal in accordance with the Performance Criteria defined herein.
- B. (1) Performance Standards. The work will be performed between Tallahatchie Avenue and Highway 49 in the general area shown in Exhibit 1. The extent of investigation/work will be expanded in the event distinct migration pathways from this site are identified beyond these areas. For the purpose of this order Performance Standards will be as described in the following paragraphs. Analysis for comparison of soil conditions with Performance Standards will be conducted with composite samples. Analysis of individual aliquots will be conducted as necessary to identify potential hot spots.
- (a) Surface Soils. Surface Soil Performance Standards are applied to the top 2 feet of soil. The Performance Standard for surface soil remaining after excavation and backfill will be a 95% Upper Confidence Level estimate of the exposure domain mean concentration of each substance listed below that is less than or equal to the following concentrations: Arsenic - 23 ppm; Toxaphene -39 ppm; Dieldrin- 3 ppm; Total Chlorinated pesticides- 100 ppm.

The exposure domain for surface soils outside of the Red Panther Property line is 0.25 acres or as defined in the work plan for the ditches. The exposure domain for surface soils in the Red Panther property line is shown in Exhibit 1.

- (b) **Subsurface Soils.** Subsurface Soil Performance Standards are applied to the soil from 2 to 10 feet below the ground surface. The Performance standard in subsurface soils will be a 95% Upper Confidence Level estimate of the mean concentration of each substance listed below over the vertical and spatial exposure domain that is less than or equal to the following concentrations: Arsenic – 270 ppm; Toxaphene –220 ppm; Dieldrin— 15 ppm.

The exposure domains for subsurface soils are shown on Exhibit 2.

- (c) The Phase I Work Plan shall provide for excavation and removal of surface soils in drainage ditches between the Red Panther property boundaries and Route 49 sufficient to meet the surface soil performance standards. The removal shall be confirmed by confirmation samples as specified in the Phase I Work Plan.
- (d) The work plan shall provide for temporary measures as appropriate to control potential exposures to soils within the site.
- (e) The Phase I Work Plan shall provide for characterization of on-site conditions sufficient to identify surface and subsurface soils that may require further action to protect human health and the environment. The characterization will be the basis for a Phase II Work Plan for removal or treatment of:
- i. surficial on-site soils (0-2 feet below ground surface) necessary to achieve surface soil performance standards;
 - ii. Investigation or removal of grids for hot spots will be conducted at any grid where a composite sample is above 190 mg/kg arsenic, 260 mg/kg toxaphene and 18 mg/kg dieldrin. Investigation, if conducted in lieu of removal will consist of analysis of individual aliquots. If the investigation identifies surficial hot spots, (500 square feet or greater) which exceed a value of 954 mg/kg arsenic, 1300 mg/kg toxaphene and 89 mg/kg dieldrin, then those areas will be included in the removal.
 - iii. subsurface on-site soils (2-10 feet below ground surface) necessary to achieve subsurface soil performance standards.

- (f) Respondents shall install a Cartesian coordinate grid system throughout the Site. The grid layout and size will be established in the Phase I Work Plan.
- (g) A sampling scheme shall be designed to uniformly distribute samples along the entire length and width of the railroad spur.
- (h) A sampling scheme shall be designed to uniformly distribute samples along the entire length and width of the drainage ditches.

The Phase II Work Plan shall be submitted and shall be subject to the same review process set forth herein for the Phase I Work Plan.

- C. Any excavated material removed during Phase I will either be stockpiled and secured on Red Panther property pending management under Phase II or transported and disposed of in a RCRA-approved subtitle C or subtitle D disposal facility as appropriate. Respondents shall characterize for disposal, utilizing TCLP analyses, the soils removed and stockpiled pursuant to this Order.
- D. A minimum of seven (7) days prior to implementation of soil disposal, written notice shall be given to EPA concerning all phases of disposal, including the name and address of the facility or facilities to which the hazardous substances are to be transported.
- E. Post-excavation sampling will be conducted in the excavated areas to assure that performance standards have been achieved.
- F. Respondents shall provide adequate verification and documentation, including copies of manifests, regarding all contaminated materials transported to a waste disposal facility in compliance with RCRA Subtitle C or D as appropriate.
- G. Respondents shall utilize a dust suppression method during active work to minimize the potential for contaminated dust particles to migrate from the facility.
- H. The Respondents shall provide for the decontamination of the transport vehicles, before departure from the facility.
- I. Respondents shall provide for the collection and treatment/disposal of all contaminated waters, rinses, and sediment accumulated as a result of the decontamination operation.
- J. To the extent they are legally able to do so, Respondents shall flag and sign the site and make best efforts to secure the ditches, any stockpiled materials, and areas of active work in such a manner as to prevent or minimize the access of unauthorized pedestrian traffic.

- K. Upon request by EPA, Respondents shall provide EPA with an opportunity to split samples of any samples collected in accordance with the requirements of this Order.
- L. All activities performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or other qualified professional with expertise and experience in hazardous waste site cleanup. Respondents shall notify EPA as to the identity of such engineer or other professional and of any contractors and subcontractors to be used in the implementation of this Order in advance of their work at the Site. EPA reserves the right to disapprove of any engineer or other professional selected by the Respondents.
- M. Respondents, or their designee, shall use quality assurance, quality control, chain-of-custody, and manifest procedures in accordance with applicable EPA guidance throughout all activities. Respondents shall consult with EPA in planning, sample collection, analysis, and transportation and disposal of the hazardous substances at the Site. Respondents shall provide a quality control report to EPA which certifies that all activities have been performed as approved by EPA.
- N. Respondents or their designee shall preserve all site records developed pursuant to the implementation of this Order for a period of at least six (6) years following completion of all work conducted by Respondents pursuant to this Order.
- O. Notwithstanding compliance with the terms of this Order, Respondents may be required to take further actions as necessary to abate the endangerment posed by conditions within the scope of this Order at the Site.
- P. In the event that the OSC determines that activities implemented by Respondents are not in compliance with this Order or that any other circumstances or activities are creating an imminent and substantial endangerment to the public health or welfare or the environment, the OSC may order Respondents to halt further implementation of this Order for such period of time as is necessary to abate the endangerment. Any OSC verbal order will be followed by the OSC's written notice describing the event and conditions to be addressed. In addition EPA may carry out all activities pursuant to this Order and such other activities as it deems necessary and consistent with the NCP.

3. Access to Property and Information

Respondents shall provide, and/or make best efforts to obtain, access to the Site and off-Site areas to which access is necessary to implement this Order, and provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, and representatives. Such access provided and/or obtained by Respondents shall permit them to move freely on-Site and at appropriate off-Site areas

in order to conduct actions which EPA determines to be necessary. Respondents shall submit to EPA, upon request, the results of all sampling or tests and all other data generated by Respondents or their contractors, or on the Respondents' behalf during implementation of this Order.

Where action under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within ten (10) days after the effective date of this Order, or as otherwise specified in writing by the OSC. Respondents shall immediately notify EPA if after using their best efforts they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondents shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access.

4. Record Retention, Documentation, Availability of Information

Respondents or their designee shall preserve all documents and information relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for ten (10) years following completion of the removal actions required by this Order. At the end of this ten year-period and thirty (30) days before any document or information is destroyed, Respondents shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Respondents shall provide documents and information retained under this section at any time before expiration of the ten year-period at the written request of EPA.

Respondents may assert a business confidentiality claim pursuant to 40 CFR § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Order, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Respondents. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondents.

5. Off-Site Shipments

All hazardous substances, pollutants, or contaminants removed off-Site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, pursuant to Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the off-site rule at 40 CFR 300.440. EPA will provide information on the acceptability of a facility under Section 121(d)(3) of CERCLA and 40 CFR 300.440.

6. Compliance With Other Laws

Respondents shall perform all actions required pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e) and 40 CFR Section 300.415(i). In accordance with 40 CFR Section 300.415(i), all on-Site actions required pursuant to this Order shall, as determined by EPA, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. (See "The Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991).

7. Emergency Response and Notification of Release.

If any incident, or change in Site conditions, during the actions conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Respondents shall immediately take all appropriate actions. Respondents shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the OSC at 404/562-8756 or, in the event of his/her unavailability, shall notify the Region 4 duty officer at (404) 562-8700 of the incident or Site conditions. If Respondents fail to respond, EPA may respond to the release or endangerment and reserve the right to pursue cost recovery.

In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify EPA's OSC and the National Response Center at telephone number (800) 424-8802. Respondents shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section 103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.

VI. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

The OSC shall be responsible for overseeing the Respondents' implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this Order, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

VII. REIMBURSEMENT OF COSTS

Within sixty (60) days after the effective date of this Section VII of the order as provided for in Section XX, Respondents shall pay \$124,669.50, in the manner detailed below, for reimbursement of past response costs paid by the United States. Past response costs are all costs, including, but not limited to, direct and indirect costs and interest, that the United States, its employees, agents, contractors, consultants, and other authorized representatives incurred and paid with regard to the Site prior to May 19, 2001. In addition, EPA shall determine whether viable recalcitrant potentially responsible parties exist, and it will be in EPA's sole discretion to pursue these parties for past and future response costs in lieu of Settling Respondents.

Future costs are all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this AOC, verifying the Work, or otherwise implementing, overseeing, or enforcing this AOC after its effective date. Future response costs shall also include all costs, including direct and indirect costs, paid by the United States in connection with the Site between May 19, 2001, and the effective date of this AOC and all interest on the Past Response Costs from May 19, 2001, to the date of payment of the Past Response Costs.

On a periodic basis, EPA shall submit to Respondents a bill for future response costs that includes a SCORPIO Report and sufficient documentation, if requested, to allow Respondents to determine that the costs are not inconsistent with the National Contingency Plan. Respondents shall, within thirty (30) days of receipt of the bill, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund" to the following address:

U.S. EPA Region 4
Superfund Accounting
Post Office Box 100142
Atlanta, GA 30384
Attention: Collection Officer in Superfund

Payments shall be designated as "Response Costs-Red Panther Superfund Site" and shall reference the payor's name and address, the EPA site identification number A4S3, and the docket number of this Order.

Respondents shall simultaneously transmit a copy of the check to:

Paula V. Batchelor
EPA - Region 4
4WD-PSB / 11th Floor
61 Forsyth Street, S.W.
Atlanta, GA 30303

In the event that the payment for past response costs is required hereunder and is not made within sixty (60) days of the effective date of this Order or the payments for future response costs are not made within thirty (30) days of the Respondents' receipt of the a proper bill and associated documentation, Respondents shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA. The interest to be paid for Respondents' failure to make timely payments on Past Response Costs shall begin to accrue on the effective date of the Order. The interest for Respondents' failure to make timely payments on Future Response costs shall begin to accrue on the date of the Respondents' receipt of the bill. Interest shall accrue at the rate specified through the date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section.

Respondents may dispute all or part of a bill for Future Response Costs submitted under this Order, if Respondents allege that EPA has made an accounting error, or if Respondents allege that a cost item is inconsistent with the NCP.

If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondents shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondents shall simultaneously transmit a copy of both checks to the OSC. Respondents shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within seven (7) days after the dispute is resolved.

VIII. DISPUTE RESOLUTION

The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

If the Respondents object to any EPA action taken pursuant to this order, including billings for future response costs, the Respondents shall notify EPA in writing of their objections within seven (7) days of receipt of motion of such action, unless the objections has been informally resolved.

EPA and Respondents shall within ten (10) days from EPA's receipt of the Respondents' written objections attempt to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. EPA's decision regarding an extension of the Negotiation Period shall not constitute an EPA action subject to dispute resolution or a final agency action giving rise to judicial review.

Any agreement reached by the parties pursuant to this section shall be in writing, signed by both parties, and shall upon the signature by both parties be incorporated into and

become an enforceable element of this Order. If the parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Division Director level or higher will issue a written decision on the dispute to the Respondents. The decision of EPA shall be incorporated into and become an enforceable element of this Order upon Respondents' receipt of the EPA decision regarding the dispute, provided that nothing herein waives any defenses the Respondents may have in connection with such enforcement. Respondents' obligations under this order shall not be tolled by submission of any objection for dispute resolution under this section.

Following resolution of this dispute, as provided by this section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this section shall constitute a final agency action giving rise to federal judicial review prior to a judicial action brought by the United States to enforce the decision.

IX. FORCE MAJEURE

Respondents agree to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents including, but not limited to, their contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

Respondents shall notify EPA orally within twelve (12) hours after their knowledge of event, and in writing within three (3) days, after Respondents become or should have become aware of an event which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization, state the measures taken or to be taken to minimize delay; and estimate the timetable for implementation of the measures. Respondents shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall waive any claim of force majeure by the Respondents.

If EPA determines a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

X. STIPULATED AND STATUTORY PENALTIES

For each day, or portion thereof, that Respondents fail to perform, fully, any requirement of this order in accordance with the schedule established pursuant to this order, Respondents, from the date of notification from the EPA, shall be liable as follows:

<u>Period of Failure to Comply</u>	<u>Penalty Per Violation Per Day</u>
1 st through 14 th day	\$ 500.00
15 th through 44 th day	\$1000.00
45 th day and beyond	\$2000.00

Upon receipt of written demand by EPA, Respondents shall make payment to EPA within seven (7) days. Interest shall accrue on late payments as of the date the payment is due which is the date of the violation or act of non-compliance triggering the stipulated penalties.

Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Respondents of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondents' obligations to complete the performance of the work required under this Order.

Violation of any provision of this Order may subject Respondents to civil penalties up to twenty-seven thousand five hundred dollars (\$27,500) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondents may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondents violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

XI. RESERVATION OF RIGHTS

Except as specifically provided in this Order, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. EPA reserves the right to bring an action against Respondents under Section 107 of CERCLA, 41 U.S.C. § 9607, for recovery of any response costs

incurred by the United States related to this Order or the Site and not reimbursed by Respondents.

XII. OTHER CLAIMS

By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

Except as expressly provided in Section XIII (Covenant Not To Sue), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including, but not limited to, any claims of the United States for costs, damages and interest under Section 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a).

This Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. §§ 9611(a)(2). The Respondents waive any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XIII. COVENANT NOT TO SUE

Except as otherwise specifically provided in this Order, upon issuance of the EPA notice referred to in Section XIX (Notice of Completion), EPA covenants not to sue Respondents for judicial imposition of damages or civil penalties or to take administrative action against Respondents for any failure to perform removal actions agreed to in this Order except as otherwise reserved herein:

Except as otherwise specifically provided in this Order, in consideration and upon Respondents' payment of the future response costs specified in Section VII of this Order, EPA covenants not to sue or to take administrative action against Respondents under Section 107(a) of CERCLA for recovery of future response costs incurred by the United States in connection with this removal action or this Order. This covenant not to sue shall take effect upon the receipt by EPA of the payments required by Section VII (Reimbursement of Costs).

These covenants not to sue are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Order. These covenants not to sue extend only to the Respondents and do not extend to any other person.

XIV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondents for matters addressed in this Order, the Parties hereto agree that the Respondents are entitled to protection from contribution actions or claims to the extent provided by Section 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(f)(4). Nothing in this Order precludes the United States or the Respondents from asserting any claims, causes of action or demands against any person or persons not parties to this Order for indemnification, contribution, or cost recovery.

XV. INDEMNIFICATION

Respondents agree to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: A) arising from, or on account of, acts or omissions of Respondents, Respondent' officers, heirs, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this Order; and (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondents, and any persons for performance of work on or relating to the Site, including claims on account of construction delays. In addition, Respondents agree to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding paragraph.

XVI. INSURANCE

At least seven (7) days prior to commencing any on-Site work under this Order, Respondents will demonstrate by evidence satisfactory to EPA that the Respondents' contractor or subcontractor shall secure and maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of one million dollars, combined single limit. Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy.

XVII. MODIFICATIONS

Modifications to any plan or schedule required to attain compliance with this Order may be made in writing by the OSC or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within ten (10) days; provided, however, that the effective date of the modification shall be the date of the OSC's oral direction.

Any other requirements of the order may be modified in writing by mutual agreement of the parties.

If Respondents seek permission to deviate from any approved Work Plan or schedule, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed Work Plan modification and its basis.

No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XVIII. NOTICE OF COMPLETION

When EPA determines, after EPA's review of the Final Report, that all removal actions required by this Order or any amendment to this Order have been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, EPA will provide notice to the Respondents and this Order will be terminated. If EPA determines that any removal actions have not been completed in accordance with this Order, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the Work Plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Order.

XIX. PUBLIC COMMENT

Final acceptance by EPA of Section VII (Reimbursement of Costs) of this Order shall be subject to Section 122(I) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment, solely, on the cost recovery component of the settlement, and to consider comments filed in determining whether to consent to the proposed settlement. After consideration of any comments submitted during the thirty (30) day public comment period held pursuant to Section 122(i) of CERCLA, EPA may withhold consent to all or part of Section VII of this Order if comments received disclose facts or considerations which indicate that Section VII of this Order is inappropriate, improper, or inadequate. Otherwise, Section VII shall become effective when EPA issues notice to Respondents.

XX. SEVERABILITY

If a court issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this

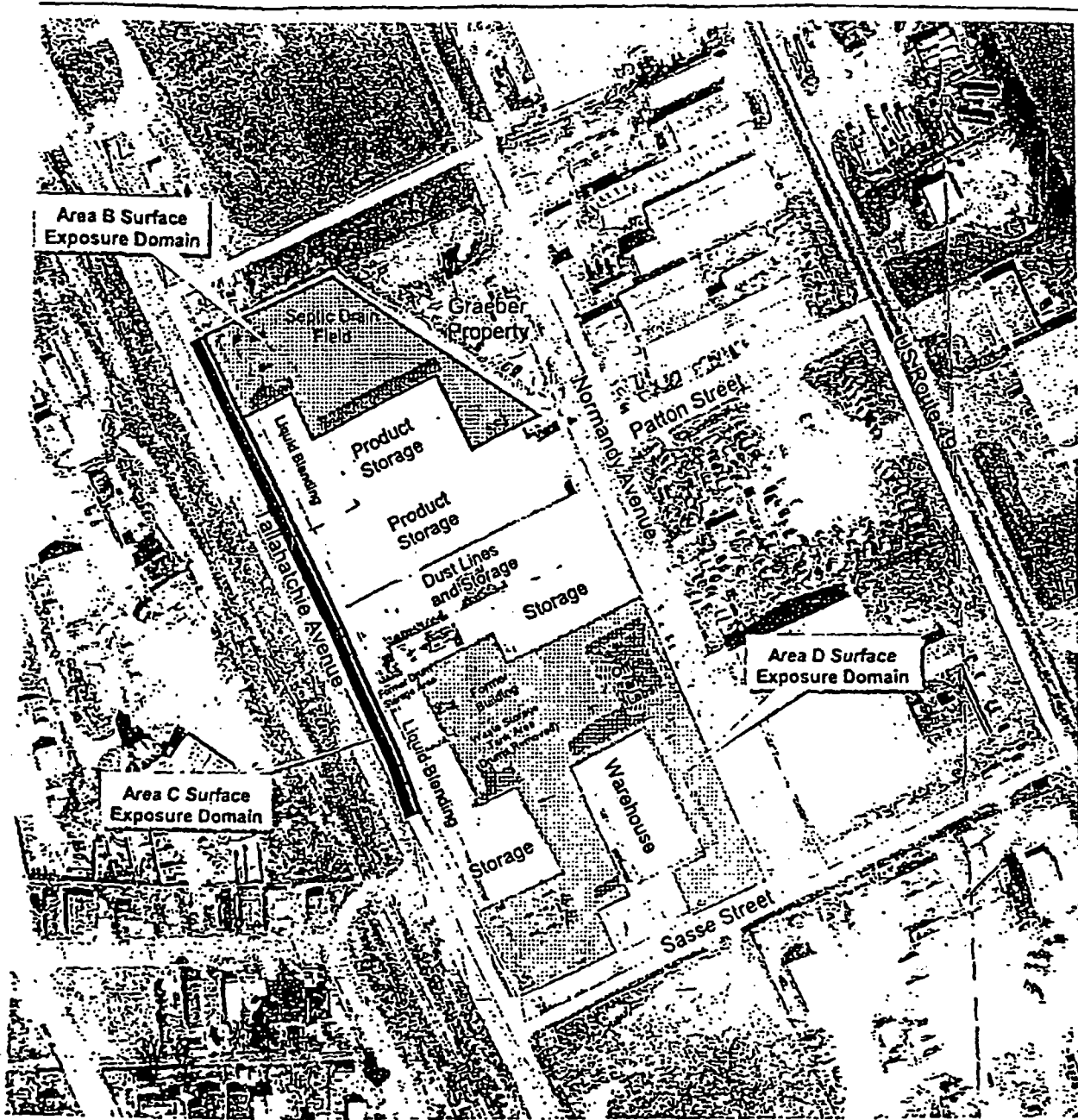
order, Respondents shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XXI. EFFECTIVE DATE






This Order for the Red Panther Superfund Site shall be effective three business (3) days after the Order is signed by the Chief or EPA, Region 4, Emergency Response and Removal Branch.

ATTACHMENT A

Aventis CropScience USA Inc. (formerly Rhone-Poulenc Ag Company, Inc.)
BASF Corporation on behalf of itself and American Cyanamid Co.
Bayer Corporation
Chevron Environmental Management Company and Chevron U.S.A. Inc.
Crompton Manufacturing Company, Inc.
The Dow Chemical Company, including Dow AgroSciences LLC and Union Carbide Corporation (subsidiaries of The Dow Chemical Company)
E.I. du Pont de Nemours and Company
Eli Lilly and Company
FMC Corporation
The Hartz Consumer Group, Inc. (as successor to the obligations of The Hartz Mountain Corporation)
Hercules Incorporated
Kalo, Inc., d/b/a Kalo Agricultural Chemicals, Inc. from and after April 20, 1981
Nor-Am Agro, L.L.P.
Novozymes North America, Inc.
Occidental Chemical Corporation (as successor to Diamond Shamrock Chemicals Company)
Pharmacia & Upjohn Company (as successor to TUCO Products, Inc.)
Rohm and Haas Company
Shell Chemical Co.
Syngenta Crop Protection, Inc. (on behalf of Ciba-Geigy Corporation and Fermenta/ISK Biotech)
Tenkoz, Inc.
United Agri-Products, Inc. and its subsidiaries including Loveland Industries, Inc. and Platte Chemical Co., Inc.
Universal Cooperatives, Inc.
U.S. Borax Inc.
Velsicol Chemical Corporation



LEGEND

-  Area B Surface Exposure Domain
-  Area C Surface Exposure Domain
-  Area D Surface Exposure Domain
-  Site Boundary
-  Study Area

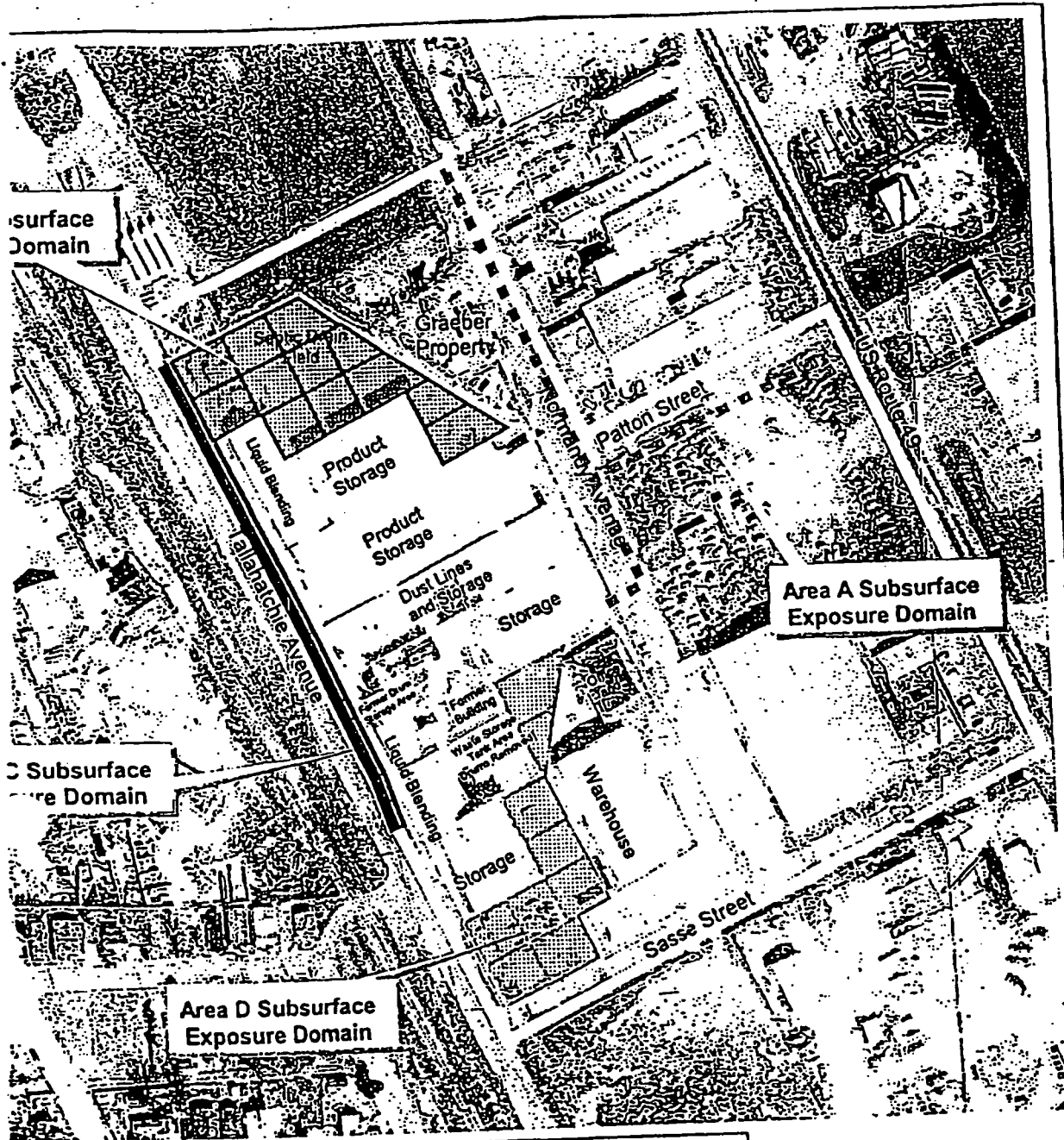


NEWFIELDS

West Peachtree Street - Suite 2000
Atlanta, Georgia 30309
(404) 347-3050 - Fax: (404) 347-3080
www.newfields.com

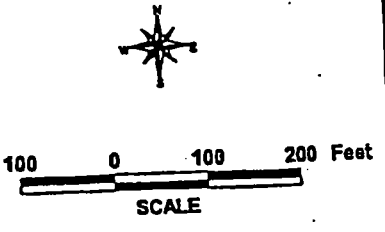
Red Panther Chemical Company
Clarksdale, Coahoma County, Mississippi

Exhibit 1
Surface Exposure Domains



LEGEND

- Area A Subsurface Domain
- Area B Subsurface Domain
- Area C Subsurface Domain
- Area D Subsurface Domain
- Site Boundary
- Study Area



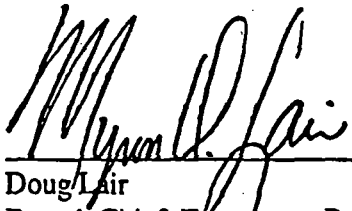
101 Peachtree Street - Suite 2000
 Atlanta, Georgia 30309
 (404) 347-3050 - Fax: (404) 347-3080
 www.newfields.com

Red Panther Chemical Company
 Clarksdale, Coahoma County, Mississippi

Exhibit 2
 Subsurface Exposure Domains

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

It is so ORDERED and Agreed this 4th day of September, 2001.

By:  DATE: 9/4/2001
Doug Lair
Branch Chief, Emergency Response and Removal Branch
Waste Management Division
Region IV
U.S. Environmental Protection Agency EFFECTIVE DATE: 9/7/2001

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 24 day of July, 2001.

Name of Company: Aventis CropScience USA Inc.
(Formerly Rhone-Poulenc Ag Company, Inc.)

Legal Agent Signature: George S. Goodridge

Typed Name and Title: George S. Goodridge - Assistant Secretary

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 19th day of July, 2001.

Name of Company: Bayer Corporation

Legal Agent Signature: Thomas A. Ryan

Typed Name and Title: Thomas A. Ryan, Attorney For Bayer Corporation

Red Panther Pesticide Superfund Site -- Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 18th day of July, 2001.

Name of Company: Chevron Environmental Management Company and Chevron U.S.

Legal Agent Signature: Kati Neidig

Typed Name and Title: KATI NEIDIG, SENIOR ENVIRONMENTAL MANAGER

10 11 0029

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 7th day of August, 2001.

Name of Company: Crescent Corporation

Legal Agent Signature: 

Typed Name and Title: Joseph J. White, Deputy General Counsel

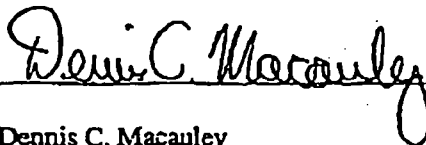
Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representative of the Respondents certifies that he is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 31st day of July, 2001.

Name of Company: **The Dow Chemical Company
Dow AgroSciences LLC*
Union Carbide Corporation***

Legal Agent Signature: _____



Typed Name and Title: **Dennis C. Macauley
Global Remediation Director
The Dow Chemical Company**

*A Subsidiary of The Dow Chemical Company

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 13th day of July, 2001.

Name of Company: Eli Lilly and Company

edd Legal Agent Signature: 

Typed Name and Title: Scott A. Canute, Vice President, Manufacturing

10 11 0032

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 20th day of July, 2001.

Name of Company: FMC CORPORATION

Legal Agent Signature: Robert T. Forbes

Typed Name and Title: ROBERT T FORBES, DIRECTOR REMEDIATION

10 11 0033

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal :

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 19th day of June, 2001.

Name of Company: **THE HARTZ CONSUMER GROUP, INC.,**
as successor to the obligations of
THE HARTZ MOUNTAIN CORPORATION

Legal Agent Signature: *Curtis L. Michael*

Typed Name and Title: Curtis L. Michael
Assistant Vice President
Assistant General Counsel

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 26th day of July, 2001.

Name of Company: Hercules Incorporated

Legal Agent Signature: Kendall W. Patterson

Typed Name and Title: Kendall W. Patterson
Vice President
Safety, Health, Environment
and Regulatory Affairs

BOB AM

10 11 0035

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 25 day of July, 2001.

Name of Company: Kalo, Inc., doing business as
Kalo Agricultural Chemicals, Inc.
from and after April 20, 1981

Legal Agent Signature: *John G. Wise*

Typed Name and Title: JOHN G. WISE CHAIRMAN

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 23 day of July, 2001.

Name of Company: NOR-AM AGRO, L.L.P.

Legal Agent Signature: Joe Madonits

Typed Name and Title: Counsel for NOR-AM Agro, LLP

10 11 0037

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 19 day of July, 2001.

Name of Company: Novozymes North America, Inc.

Legal Agent Signature: Lee Yarborough


Typed Name and Title: Lee Yarborough, President

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 17th day of July, 2001.

Name of Company: Occidental Chemical Corporation (as successor to Diamond Shamrock Chemicals Company)

Legal Agent Signature: 

Typed Name and Title: Keith C. McDole
Senior Vice President
and General Counsel

10 11 0039


Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 24th day of July, 2001.

Name of Company: Pharmacia & Upjohn Company, successor in interest to TUCO Products, Inc.

Legal Agent Signature:



Typed Name and Title:

J. William Whitlock, Esq., Associate General Counsel, ESH and Assistant Secretary

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 12th day of July, 2001.

Name of Company: Rohm and Haas Company

Legal Agent Signature: Audrey C. Friedel

Typed Name and Title: Audrey C. Friedel, Of Counsel

10 11 0041

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 23 day of July, 2001.

Name of Company: Shell Chemical Co.

Legal Agent Signature: J. P. Jenkins

Typed Name and Title: Jay P. Jenkins Remediation Manager

10 11 0042

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 12 day of July, 2001.

Name of Company: Syngenta Crop Protection, Inc. (on behalf of Ciba-Geigy Corporation and Fermenta/ISK Biotech)

Legal Agent Signature: *John A. Licata*

Typed Name and Title: John Licata, Head, HSEQ

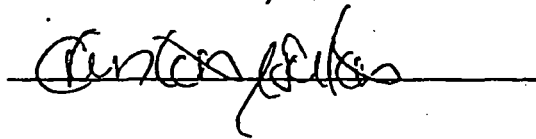
Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order to bind the parties it represents to this document.

Agreed this 23rd day of July, 2001.

Name of Company: United Agri-Products, Inc. and its subsidiaries including Loveland Industries, Inc. and Platte Chemical Co., Inc.

Legal Agent Signature:

A handwritten signature in cursive script, appearing to read "Christopher J. Sutton", is written over a horizontal line.

Typed Name and Title:

Christopher J. Sutton, Esq.
Perkins Coie LLP
Counsel for United Agri-Products, Inc. and its subsidiaries, including Loveland Industries, Inc. and Platte Chemical Co., Inc.

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 20TH day of JULY, 2001.

Name of Company: TENKOCZ, INC.

Legal Agent Signature: Elizabeth W. Boswell

Typed Name and Title: ELIZABETH W. BOSWELL, ATTORNEY
FOR TENKOCZ, INC.

10.11 0045

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 26th day of July, 2001.

Name of Company: Velsicol Chemical Corporation

Legal Agent Signature: _____

Typed Name and Title: George R. Harvell, III
Manager, Environmental Services

10 11 0046

Red Panther Pesticide Superfund Site -- Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 27th day of July, 2001.

Name of Company: U.S. Borax Inc.

Legal Agent Signature: Preston S Chiaro

Typed Name and Title: Preston S. Chiaro, President and Chief Executive

10 11 0047

Red Panther Pesticide Superfund Site - Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 25th day of July, 2001.

Name of Company: E. I. du Pont de Nemours and Company

Legal Agent Signature: Guy V. Johnson

Typed Name and Title: Guy V. Johnson Corporate Counsel

10 11 0048

Red Panther Pesticide Superfund Site – Administrative Order on Consent for Removal

The undersigned representatives of the Respondents certify that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties it represents to this document.

Agreed this 20th day of July, 2001.

Name of Company: Universal Cooperatives, Inc.

Legal Agent Signature: R. Ellis

Typed Name and Title: Robert L. Ellis, Vice President



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

Reference 8

SITE:	Red Panther
BREAK:	2.9
OTHER:	

29 0001

ACTION MEMORANDUM

10095297



DATE:

SUBJECT: Request for an Enforcement Removal Action at the Red Panther Site,
Clarksdale, Mississippi

FROM: De'Lyntoneus Moore, OSC *DM*

TO: Richard D. Green, Director
Waste Management Division

Site ID# MSD000272385

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action described herein for the Red Panther Site in Clarksdale, Coahoma County, Mississippi. The site has extensive, shallow soil contamination by a number of chlorinated pesticides and other hazardous substances. This removal action is necessary in order to abate the continued release and/or substantial threat of release of these hazardous substances, which pose a significant threat to the public health and the environment. This removal action will be conducted by potentially responsible parties (PRPs) pursuant to an Administrative Order on Consent (AOC).

II. SITE CONDITIONS AND BACKGROUND

The Red Panther Site (RPC) is located in Clarksdale, Mississippi and was owned and operated by the Red Panther Chemical Company. Liquid and dry herbicides, insecticides, and fungicides were formulated at the facility between 1949 and 1978. Before ownership by the RPC, the facility was owned by the Coahoma Chemical Company, Riverside Chemical Company, and MFC Services. During this site investigation, it was confirmed that the property is highly contaminated with a wide variety of organo-chlorinated pesticides and arsenic. Toxaphene contaminant levels are up to 120,000 mg/kg, DDT (1,400 mg/kg), arsenic (443 mg/kg), chlordane (270 mg/kg), dieldrin (200 mg/kg). The conditions at the Site meet the requirements of

an imminent and substantial endangerment to the public or environment, as stipulated in 40 CFR § 300.415 of the National Contingency Plan (NCP). A removal action is deemed necessary by the OSC to abate the threats present and eliminate the sources of confirmed and/or potential contaminant migration.¹

A. Site Description

1. Removal site evaluation

On June 14, 1999, a site investigation was performed by the Superfund Technical Assessment and Response Team (START) under the direction of EPA Region 4 Emergency Response and Removal Branch (ERRB). Raw material was received by the facility on a railroad spur located behind the process buildings. Analytical results revealed toxaphene levels up to 10,000 mg/kg were detected in the soils within this area. DDT was detected at 900 mg/kg and arsenic, up to 152 mg/kg.

Chemicals used in the formulation of insecticides at RPC included: toxaphene, methyl parathion, chlorpyrifos, 2, 4 D, malathion, arsenic, carbaryl, diazinon, methoxychlor, DDT, disodium methanearsonate (DSMA), monosodium acid methanearsonate (MSMA), chlorothalonil, and parathion. During its operational period, RPC routinely released contaminated wastewater from the formulating process to the ditches along Normandy Avenue and Patton Street. Sampling data confirms elevated levels of hazardous substances in these areas. Contaminated particulate matter has migrated off the facility via surface water and air-borne pathways. Occupants of the nearby facilities and area residents are subject to exposure from this migration via direct contact, inhalation, and/or ingestion.

2. Physical location

The Site is located in Clarksdale, Mississippi and is owned and operated by Red Panther. The facility's geographic coordinates are N34° 41' 20" latitude and W90° 33' 45" longitude. Normandy Avenue borders the eastern side of the RPC facility, Sasse Street borders the southern side, and Tallahatchee Avenue and the Illinois Central railroad track borders the western side. Property adjacent to the northern boundary of the Site is unoccupied. Businesses in the vicinity of the RPC facility include farm equipment and supply stores, a painting and sandblasting operation, and a used car sales lot. A grain storage and concrete plant lie adjacent to Sasse Street to the south. A residential area lies less than a 1/4 mile south of the facility. The facility occupies approximately 6.6 acres.

¹ Letter Report submitted to De'Lyntoneus Moore. OSC
September 2, 1999
Tetra Tech EM, Inc.
Red Panther Chemical Company
EPA Contract No. 68-W5-0021
TTD No. 04-9905-0024

The topography is relatively flat, with an average elevation at 175 feet above mean sea level (msl). The RPC facility lies at 170 feet msl. Drainage pipes direct site runoff east and west into off-site ditches and storm water drains, which lead to the Sunflower River.

3. Site characteristics

RPC is currently used as a storage facility for seeds and farm chemicals. This activity is not suspected to be contributing to the site contamination. Contamination found on-site is believed to have originated from numerous spills during loading and unloading operations, from leaking transport piping between the process and tank farm areas, contaminated wastewater releases, and from spills and leaking underground piping in the tank farm area. No previous removal activity has ever been conducted at this site.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

A number of conditions make RPC an immediate risk to public health, welfare and the environment. These include the character and volume of hazardous substances present at the site, site location relative to potential receptors, and physical factors such as hydrology, pedology, and topography.

The soil contamination at the Site currently poses a threat to public health and welfare. Loose soil containing elevated levels of chlorinated pesticide and metals may migrate off-site through air and surface water exposure pathways. Any occupants of the site and the surrounding areas can be subject to exposure via direct contact. The past, present or potential migration of hazardous substances from the Site constitutes an actual or threatened release, as defined in Section 101(22) of CERCLA, 42 U.S.C. 9601(22).

The host of hazardous substances present at RPC includes several organic pesticides that are known to be extremely toxic to terrestrial and especially aquatic life. Many of the substances are suspected human carcinogens and known animal carcinogens. The contaminated soil at the Site poses a threat to public health and welfare. Substances detected on the site, including toxaphene, DDT, DDE, DDD, arsenic, benzene hexachloride, chlordane, disulfoton, methyl parathion, and aldrin, All are hazardous substances as defined in Section 101(14) of CERCLA, as amended, 42 U.S.C. 9601(14).

5. NPL status

This site is not listed on the National Priorities List and is not expected to score high enough for inclusion.

6. Maps, pictures, and other graphical representations

None

B. Other Actions to Date**1. Previous actions**

On June 14, 1999, a site investigation was performed by the Superfund Technical Assessment and Response Team (START) under the direction of EPA Region 4 Emergency Response and Removal Branch (ERRB). During this site investigation, it was confirmed that the property was highly contaminated with a wide variety of organo-chlorine pesticides and arsenic. The conditions at the Site meet the requirements of an imminent and substantial endangerment to the public or environment, as stipulated in 40 CFR § 300.415 of the National Contingency Plan (NCP).

The OSC determined that conditions at the Site represented an imminent and substantial threat to public health or environment. The owner/operator was subsequently contacted to initiate a PRP lead removal action. The owner/operator was unable to conduct the removal activity due to financial constraints. During the course of this site evaluation, EPA Region 4 personnel were able to determine additional, viable PRPs that could undertake the necessary removal activity. Negotiations were initiated immediately to draft an acceptable AOC. The Enforcement Addendum is attached as a reference.

2. Current actions

None

C. State and Local Authorities' Role**1. State and local actions to date**

Officials from the Mississippi Bureau of Pollution Control (MDEQ) conducted a site inspection in 1991. In a January 1992 letter, MDEQ made a recommendation of no further remedial action. Since that time MDEQ has not taken any response actions to mitigate the threats posed by the Site.

2. Potential for continued State/local response

It is unlikely that any State or other political subdivision will undertake any response activity on this site in the future due to the lack of available funding.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The National Contingency Plan provides the following criteria for use as a reference in the determination of the need for a removal action.

Section 300.415 (b)(2)(iv): "High levels of hazardous substances or pollutants or contaminants in soils largely at the surface, that may migrate."

Due to the general dusty conditions and sparse vegetation at the Site, the contaminated soil can be easily displaced and migrate off-site. Soil on the property is highly contaminated with a wide variety of organo-chlorinated pesticides and arsenic. Human exposure to these compounds can be accomplished via the migration of contaminated dust and particulate matter. During its operational period, RPC, released contaminated wastewater from the formulating process to the ditches along Normandy Avenue and Patton Street. These areas displayed elevated contaminant levels commensurate with that practice. Toxaphene levels were up to 120,000 mg/kg, DDT (1,400 mg/kg), arsenic (443 mg/kg), chlordane (270 mg/kg), dieldrin (200 mg/kg). These hazardous substances are readily available for further migration along the surface water drainage pathways. The June 1999 Site Assessment confirmed the presence of elevated pesticide contamination along the Patton Street corridor. This parking area is adjacent to a runoff collection area and has displayed elevated chlorinated pesticide and arsenic levels.

Unless the source of contamination at RPC is removed, releases to the environment will continue via windblown contamination, contaminated surface runoff, and vertical migration to the groundwater. The majority of hazardous substances at RPC are persistent in the environment. Since many of the contaminants are known to strongly bioaccumulate, extremely small concentrations of these materials in soil, surface water, and groundwater may have a serious adverse impact on the environment. Pesticides that bioaccumulate (such as DDT) may migrate up through the food chain.

Section 300.415 (b)(2)(i): "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants."

The site continues to present an imminent and substantial endangerment to the public. The proximity of RPC to human receptors of all age groups and the pervasive contamination that remains there, represents a potential of exposure to concentrations of pesticides in the thousands of parts per million at the site. Many of the pesticides that are present at the site are suspected human carcinogens. Even minute concentrations of these substances may increase the cancer risk of exposed individuals. Some of the hazardous substances at RPC are strongly bioaccumulated. Thus,

in addition to other routes of exposure, humans may also be exposed to hazardous substances through ingestion of contaminated fish and wildlife. Workers of the surrounding facilities routinely congregate in the Normandy and Patton corridor before during and after work. Lunch and work breaks in the area may facilitate the ingestion of contaminated soil particles as the dust in these areas are disturbed by industrial, vehicular and pedestrian traffic.

For example, for human exposure, a cancer risk of 1 in 1,000,000 is posed by chronic exposure to a concentration of 0.44 mg/kg (ppm) of toxaphene in soil. In comparison, toxaphene concentrations up to 120,000 mg/kg (ppm) in surficial soils have been documented at RPC. The proximity of this highly contaminated site to human receptors of all age groups constitutes an immediate threat to public health and welfare. The site lies within 1/2 mile of a school and within 1/4 mile of a residential area.

The health and environmental effects of the major contaminants for the site are summarized below. The human health-based criteria given are based on 1 in 1,000,000 (10^{-6}) for carcinogens and 1 in 100,000 risk for Class C carcinogens.^{2,3}

Aldrin/Dieldrin: Aldrin was detected in soil samples in concentrations up to 160 mg/kg. Dieldrin was detected in soil samples in concentrations up to 200 mg/kg. Aldrin degrades to dieldrin, which is very persistent in the environment, and both pesticides have been determined to pose a substantial risk of cancer to humans. A concentration 0.029 mg/kg soil is believed to pose a human cancer risk of 1 in 1,000,000 for chronic exposure. The OSHA permissible exposure limit (PEL) for the workplace has been established at 0.25 mg/m³. Both chemicals are very toxic to aquatic organisms and have been connected with large-scale kills of terrestrial wildlife in treated areas.

Chlordane: Chlordane was detected in soil samples in concentrations up to 490 mg/kg. Chlordane is a broad spectrum insecticide. The poison attacks the central nervous system, eyes, lungs, liver, kidneys, and skin. Harmful effects and symptoms of exposure include blurred vision, nausea, vomiting, and convulsions. For humans, a 1 in 1,000,000 cancer risk is presented by chronic exposure to 1.6 mg/kg of chlordane in soil. The PEL for chlordane in the workplace atmosphere has been set at 0.5 mg/m³.

DDT: DDT and its degradation products were detected in soil samples in concentrations up to

² Region 9 Risk-based Preliminary Remediation Goals (PRGs)
U.S. Environmental Protection Agency
Region 9
October 1, 1999

³ NIOSH Pocket Guide to Chemical Hazards, June 1997
U.S. Department of Health and Human Services
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

1,400 mg/kg. DDT is a broad spectrum insecticide that was banned for use in 1972 by the EPA. DDT and its metabolites are persistent in soil and water and easily dispersed by erosion and runoff. DDT is strongly bioaccumulated in humans and wildlife. DDT and its metabolites are highly toxic to aquatic organisms. In addition, DDT has been linked with the decreased reproductive success of many bird species. Most concern about the toxicity of DDT is related to its chronic effects due to its strong tendency to bioaccumulate. Chronic exposure to DDT can damage the central nervous system and liver. In addition, DDT is a reproductive toxin. For humans, a 1 in 1,000,000 additional cancer risk is believed to result from chronic exposure to 1.7 mg/kg of DDT in soil. The PEL for the workplace is 1 mg/m³.

Toxaphene: Toxaphene contaminated soils are present on-Site in concentrations up to 10,000 mg/kg. Toxaphene is a chlorinated organic pesticide that is persistent in the natural environment. Toxaphene is an animal carcinogen and is highly toxic to aquatic organisms. In humans, symptoms of toxaphene exposure include vomiting, convulsions, cyanosis, and coma. For human exposure, an additional lifetime cancer risk of 1 in 1,000,000 is presented by a concentration of 0.44 mg/kg of toxaphene in soil. The MCL for toxaphene is 5 ug/l. A PEL for toxaphene in the workplace is 0.5 mg/m³.

Arsenic: Arsenic was detected in soil samples in concentrations up to 843 mg/kg. Arsenic is a known poison and carcinogen that has been shown to cause skin and lung cancer. It may also damage a developing fetus and should be handled as a potential teratogenic compound. Oral exposures can cause skin abnormalities, digestive tract pain, nausea, abnormal heart functions, liver and kidney damage. For humans, a 1 in 1,000,000 additional cancer risk is believed to result from chronic exposure to 0.39 mg/kg of arsenic in soil. A PEL of 0.010 mg/m³ has been established for the workplace environment. In drinking water, a maximum level of 0.05 mg/l has been established.

B. Threats to the Environment

Section 300.415 (b)(2)(ii) "Actual or potential contamination of drinking water supplies or sensitive ecosystems."

The hazardous substances found at the RPC site are extremely toxic to aquatic life. The impact of RPC on nearby aquatic communities is evidenced by a November 1985, fish kill in the Sunflower River from on site runoff.⁵ If the potential source of the groundwater contamination is

⁵ Site Screening Inspection Report
Red Panther Chemical Company
Coahoma, County
Clarksdale, Mississippi 38614
MSD000272385
January 31, 1991

not removed, vertical migration may possibly affect area drinking water sources. At this time, no residential drinking water sources (municipal or private) have been contaminated with substances associated with this site.

Section 300.415(b)(2)(vii) "Availability of other appropriate federal or state response mechanisms to respond to the release."

It is not expected that any State or Local entity will initiate and maintain any removal activity at this site. To this date, neither the State of Mississippi nor the local government has identified the resources necessary to conduct the removal activities required to mitigate the threats present at the Site. Viable PRPs have been identified to conduct the removal activities necessary to mitigate the hazards present at this site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of the hazardous substances from this site, if not addressed by implementing the removal action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Based upon a review by the Region 4 Office of Technical Services, a site specific cleanup goal of for each substance listed below was developed for the PRPs. The clean-up goals are less than or equal to the following concentrations: Arsenic – 23 ppm; Toxaphene – 39 ppm; Dieldrin- 3 ppm; Total Chlorinated pesticides- 100 ppm.⁶

EPA Region IV proposed removal activity at the site can be summarized as follows:

- Determine the volume of contaminated soil through extensive soil sampling.
- Excavate all contaminated soils specifically containing above 39 mg/kg Toxaphene, 40 mg/kg Arsenic, and 3.0 mg/kg Dieldrin as identified within the scope of the removal evaluation. Excavate all other contaminated soil to 100 mg/kg total chlorinated pesticides as identified within the scope of the removal evaluation.

6

Memorandum to De' Lyntoneus Moore
June 28, 2000
"Review of Soil Data Summary and Proposed Remedial goals
Red Panther Pesticide Site, Mississippi"
Submitted by H. Glen Adams, Risk Assessment Specialist
Office of Technical Services

- Treat, store, and/or dispose of all site related hazardous waste at a RCRA-approved disposal facility.
- Conduct post-excavation sampling in the excavated areas to assure that clean-up levels have been achieved.
- Provide for the collection and treatment/disposal of all contaminated waters, rinses, and sediment accumulated as a result of the decontamination operation.
- Secure the area of concern in such a manner as to prevent the access of unauthorized pedestrian traffic.

2. Contribution to remedial performance

The proposed removal activity is designed to eliminate the threats of exposure and release at the Site and will provide the abatement necessary to protect public health, welfare, and the environment. The site is not expected to obtain a score sufficiently high enough to warrant inclusion on the NPL. Therefore, no subsequent remedial activity is likely to take place at the Site. If the Site were to undergo a remedial action, then the planned removal activity would contribute to the long term remedial performance of the site.

3. Description of alternative technologies

Because the final disposition of the waste materials at the site has not been determined, no formal evaluation of alternative technologies has been made. Such an evaluation will take place before the disposal phase of the response action and will be documented at that time.

4. EE/CA

Not applicable, Time-critical removal action

5. Applicable or relevant and appropriate requirements (ARARs)

Potential Federal ARAR(s) for RPC are the Resource Conservation and Recovery Act (RCRA) and the Off Site Rule (CERCLA § 121(d)(3)). To date, the State of Mississippi has not identified any ARARs.

At this time the State of Mississippi has not identified any substantively additional ARARs.

6. Project Schedule

Response actions at the site will be initiated upon approval of this Action Memorandum. Foregoing any unexpected delays, all actions are expected to be completed within one year of mobilization.

A. Estimated Costs

No cost estimate is necessary because this is an enforcement- lead removal action.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If action is significantly delayed or not taken there will be continued releases into the environment increasing the possibility of exposure to the public. If no actions are taken, the site will remain a threat to public health and the environment. All exposure routes that threaten residents of the area remain at RPC. Unless source control is performed, groundwater may be affected. Also, surface streams and aquatic ecosystems will continue to be impacted by contamination from sources such as storm water runoff, sediment input, and groundwater.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

Enforcement activities are ongoing. EPA is negotiating an AOC with a group of PRPs. The enforcement strategy for the Site has been developed through consultation with the Environmental Accountability Division, Office of Legal Support. See the attached Enforcement Addendum for additional information.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Red Panther Chemical Company Site in Clarksdale, Mississippi; developed in accordance with CERCLA as amended, and consistent with the NCP. This document is based on the administrative record for the site.

Conditions at the site meet the NCP section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. .

Approval: Will A. Green Date: 6 SEP 01

Disapproval: _____ Date: _____

Note: Due to the confidential nature of the material, page 290012 of this document have been withheld. Withheld material is available, for Judicial review only, in the Records Center at EPA Region IV, Atlanta, GA.

SITE: <i>Red Panther</i>
BREAK: <i>1.9</i>
OTHER: _____

SCREENING SITE INSPECTION REPORT
RED PANTHER CHEMICAL COMPANY
COAHOMA COUNTY
CLARKSDALE, MISSISSIPPI 38614
MSD000272385

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PREPARED BY:

Ken Whitten
CERCLA Section
Hazardous Waste Division
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GEOLOGY & HYDROLOGY SECTION

Reviewed By:

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CERCLA Section
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Hazardous Waste Division
MS OPC

FINAL REVISIONS

January 31, 1991

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1.0 INTRODUCTION

The Mississippi Department of Environmental Quality, Office of Pollution Control, has conducted a screening site inspection (SSI) at the Red Panther facility in Clarksdale, Coahoma County, Mississippi. The inspection was performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The field investigation was conducted on November 12 and 13, 1990.

1.1 Objectives

The objectives of the SSI were to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, the SSI inspection sought to determine the possible pathways by which contamination could migrate from the site, and the populations and environments that could be potentially affected. Through these objectives, a recommendation was made regarding future CERCLA action at the site.

1.2 Scope of Work

The objectives were achieved through the completion of a number of specific tasks, as follows:

- Review background materials and topographic maps relevant to HRS scoring of the site;
- Evaluate target populations associated with the groundwater, surface water, air, and on-site exposure pathways;
- Verify the location and distance to the nearest drinking water well and irrigation well;
- Develop a site sketch and take photographs;
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

2.1 Site Location and Contact Official (References 1 & 2)

Red Panther Chemical Company is located south of the intersection of Highway 61 and Highway 49, in Clarksdale, MS.

County Code 027

Congressional District: 01

Coordinates: Latitude: 34° 41' 20"
Longitude: 90° 33' 45"

Location: SW1/4 NW1/4 NE1/4 S25 -T27N -R4W

Directions to Site: Red Panther Chemical Company is reached by traveling south on Hwy 49 from the intersection of Hwy 61 and Hwy 49. Travel about 1/2 mile and turn right on Patton Street. Go to the end of Patton Street and turn left onto Leflore Avenue. Red Panther is on the west side of Leflore Avenue.

Contact Officials: Jim Thomas
Red Panther Chemical Company
P. O. Box 550
Clarksdale, Mississippi 38614
601-627-4731

John Duff, President
Red Panther Chemical Company
P. O. Box 550
Clarksdale, Mississippi 38614
601-627-4731

2.2 Site Background and History (References 1 and 2)

Red Panther Chemical Company is a pesticide formulating plant. The facility has been engaged in the formulation of liquid and powdered herbicides, insecticides, and fungicides since 1949. Former owners are Coahoma Chemical Company (the original owner), Riverside Chemical Company, and MFC Services.

In 1980, Red Panther filed a RCRA notification for storage of wastewater in tanks and dirty solvents in drums. These wastes are generated from cleaning the process equipment. The wastewater contains pesticide and solvent residues. The dirty solvents contain pesticide residues. The dirty solvents are generally reused in the formulating process.

In November of 1984, Red Panther obtained a RCRA Part B permit from the MS Bureau of Pollution Control (BPC) for storage of the above mentioned wastes.

In November of 1986, Red Panther's storage permit was terminated because Red Panther lost its liability insurance coverage that is required for long-term storage of hazardous wastes. At that time, Red Panther reverted to the status of a hazardous waste generator with short-term (less than ninety day) storage only.

In November of 1985, there was a fire at one of the Red Panther warehouses. Contaminated runoff resulting from the fire-fighting effort caused a fish kill in the nearby Sunflower River. The contaminant was LoroX, a slightly toxic herbicide. A large volume of the contaminated water was contained on site and later shipped to a commercial hazardous waste disposal facility.

During the investigation and cleanup after the fire, 382 old fiber drums were discovered in the crawlspace below the warehouse that burned. Two hundred and eighty-seven of the drums were empty. These drums were crushed and sent to the local municipal landfill. Ninety-five of the drums contained trace residues of technical grade dieldrin and were disposed of at a commercial hazardous waste facility. A new warehouse was built over this area in 1986.

At various times in the past, wastewater from the formulating process has apparently been discharged either directly to a ditch off-site along Leflore Avenue and Patton Street, or into an underground septic tank and drainfield on-site. Red Panther was issued a "no discharge" permit in 1984 by the BPC.

Red Panther is currently classified as a hazardous waste generator.

2.3 Site Description (References 1, 2, & 5)

Red Panther Chemical Company is located off of Highway 49 South in Clarksdale, MS. The surrounding land use is mainly commercial. The facility is surrounded by a fence and is not accessible to non-employees. It is bordered on the west by East Tallahatchie Avenue, and also by a spur track that connects with the Illinois Central railroad track located just west of the avenue. West of the main track is a residential area. A school, Washington School, is located about 2,000 feet west of the facility. The property north, east, and south of the facility is commercial. Leflore Avenue borders the facility on the east.

The facility is about six and one-half acres in size. Buildings on the property include formulating plants, warehouses, a maintenance building, boiler room, and the main office. There are also two tank farms on site. Various raw materials and products are stored in the tanks. One tank in the south tank farm is used for storage of wastewater. There is also a wastewater collection pit at this location. An abandoned, underground septic drain/drainfield is located in the north tank farm area.

In the past, contaminated wastewater has been discharged to an off-site drainage ditch along Leflore Avenue and also to the underground septic drain/drainfield with little or no containment. The depth of contaminated soil is unknown, so a depth of six feet is assumed.

2.4 Waste Quantity/Containment

The total quantity of hazardous substances deposited at the site is not known. However, based on elevated levels of toxaphene, DDT, and several other compounds that were detected in soil/sediment samples collected during the SSI, releases have occurred, probably as a result of spills and inadequate containment practices in the past. Therefore, a minimum waste quantity of ten cubic yards can be assumed. Toxaphene has a severe toxicity rating and is highly persistent (Reference 4).

Red Panther generates wastewater and spent solvents from the formulating process. The total annual quantity of hazardous waste reported in the Red Panther 1980 RCRA hazardous waste notification was approximately 6318 kilograms. The facility has been operating for about forty years (Reference 1).

3.0 GEOLOGY AND HYDROLOGY

3.1 Stratigraphic Units (References 1)

The stratigraphic units in this part of the state in descending order are as follows:

Mississippi River Valley Alluvium, Cook Mountain, Sparta, Zilpha, Winona, Tallahatta, Meridian-Upper Wilcox, Lower Wilcox.

The Mississippi River Valley Alluvial Aquifer is one of the most prolific and widespread aquifers in northwestern Mississippi. It is primarily a water table aquifer. The formation dips gently to the south and is exposed at the surface over its entire area of occurrence. Alluvial deposits blanket and underlie the entire Mississippi Delta.

The upper surface of the Alluvial Aquifer is at land surface and the base of the alluvium averages about 140 feet lower. A layer of clay at land surface confines or semiconfines the water in most of the aquifer when the water is near land surface. Geophysical logs of wells in vicinity of the facility indicate that the Alluvial Aquifer extends to a depth of about 125 feet below the land surface in this area. The lower part of the Alluvial Aquifer consists of coarse sand and gravel which grades upward through coarse sand, fine sand, silt, and clay. Results from aquifer tests indicate hydraulic conductivities of 170 to 190 ft/day or 6.7×10^{-2} cm/sec.

The Cook Mountain is composed of clay and shale with an estimated permeability of 10^{-5} cm/sec. In some areas of northwestern Mississippi, the Cook Mountain confines the underlying Sparta aquifer. However, geophysical logs of wells in vicinity of the facility suggest that the Cook Mountain pinches out in the Clarksdale area. Therefore, the Alluvial Aquifer and the Sparta are probably hydraulically connected in this area.

The Sparta is composed of rounded, well-sorted quartz grains in two or three thick beds separated by beds of clay. Regionally, water in the Sparta moves from east to west. The unit dips to the west at about 25 feet per mile. Lithologic data and geophysical logs of wells in the surrounding area indicate that the Sparta Aquifer is approximately 500 feet in thickness and occurs at a depth of approximately 155 feet below the land surface in this area. The average hydraulic conductivity of the Sparta is 67 ft/day.

The Zilpha and Winona occurs approximately 655 feet below the land surface and underlies the Sparta Aquifer. The Zilpha consists of dark-brown clay which overlies the Winona and prevents movement of water between the Winona and the Sparta. The Winona consists of glauconitic fossiliferous sands and clays.

The Tallahatta is hydraulically connected with the overlying Winona. The Tallahatta contains several thick to very thin sand beds that are separated by clay. The aquifer dips to the west and southwest. The aquifer tests on wells in the Winona-Tallahatta Aquifer indicate a hydraulic conductivity of 6.7 ft/day. The base of the Winona/Tallahatta Aquifer is approximately 1120 feet below the land surface.

The Meridian Sand of the Tallahatta, together with uppermost sand beds of the Wilcox Group, is an aquifer throughout the area. These units are regarded as one aquifer because they are hydraulically connected.

The Meridian Sand is a massive unit consisting of fine-to-coarse micaceous sand. The Upper Wilcox Aquifer consists of a less permeable sandy clay that dips west to southwest at 28 to 40 ft/mile. The configuration of the top of the Meridian-Upper Wilcox Aquifer occurs approximately 1120 feet below the land surface and is approximately 300 feet in thickness. Hydraulic conductivity of the aquifer ranges between 30 to 68 ft/day.

The Lower Wilcox is the deepest aquifer underlying the region. The Lower Wilcox consists of a thick sand unit containing over 60 percent sand. The aquifer dips about 50 ft/mile to the southwest in the southern part of the region. Multiple clay beds in the overlying part of the Wilcox hydraulically separate the Lower Wilcox Aquifer from overlying aquifers. The Lower Wilcox Aquifer occurs approximately 1900 feet below the land surface and extends to a depth of approximately 2100 feet in the site area. Hydraulic conductivity of the aquifer ranges from 29 to 64 ft/day.

3.2 Aquifer of Concern (References 1 and 2)

The Alluvial Aquifer and the Sparta are probably hydraulically connected in the Clarkdale area. Therefore, they are considered as one aquifer, the aquifer of concern (AOC). The estimated depth to the water table is about 30 feet below the land surface. The Alluvium is composed of silt, clay, and loam in the upper part and coarse sand and gravel in the lower part. The estimated permeability of the unsaturated zone of the Alluvium is 10^{-4} cm/sec.

Public (city of ^{Clarkdale} ~~Cleveland~~) wells within a three mile radius of the site provide drinking water to 6,500 connections or 24,700 people. Water from these wells is distributed through the same system.

The nearest drinking water well is a public well located about 1,100 feet south of Red Panther at the Lewis Wilkens Generating Station, a city-owned electric generating plant. This well is screened at about 592 feet below land surface in the Sparta. There are also nine industrial wells at this station that provide cooling water for the plant operation. These wells are screened in the Alluvial Aquifer. There are also a number of irrigation wells within the three-mile radius.

3.3 Precipitation (Reference 1)

Northwestern Mississippi has a humid subtropical climate influenced by the Gulf of Mexico. Mean annual precipitation is approximately 51 inches of which about one-third runs off and about one-third seeps into the ground. Evapotranspiration accounts for the remaining third. Most of the water that seeps into the ground is later released to the streams. Approximately less than 5% of the rainfall goes into storage in the aquifers. January is the wettest month and October is the driest.

The mean annual lake evaporation for the area is approximately 42 inches. The net annual precipitation of the area is about 9 inches. The one-year, twenty-four-hour rainfall is approximately 3.5 inches.

3.4 Surface Water (Reference 1 and 2)

The facility and surrounding area is nearly flat. Some surface runoff and/or discharge from the facility drains into the drainage ditch along Leflore Avenue and Patton Street east of the facility. This ditch drains into another ditch along Highway 49, which intersects an intermittent stream about 22,400 stream feet southeast of the facility. This intermittent stream flows in a westerly direction for about 4,000 stream feet before entering the Sunflower River. The fifteen-mile migration pathway ends in the Sunflower River.

There is another (shorter) potential migration pathway to the Sunflower River via storm drains located on the west side of the facility along East Tallahatchie Avenue. These storm drains flow directly into the Sunflower River about 3,000 feet west of the facility, bypassing the city POTW plant.

In November 1985, contaminated runoff from a warehouse fire at the facility caused a fish kill in the Sunflower River. This contaminated water likely drained through the above mentioned storm drains into the Sunflower River.

4.0 SENSITIVE ENVIRONMENTS

There are no national wildlife refuges, critical habitats of federal endangered species, or wetlands along the extended surface water migration pathway (Reference 1).

5.0 FIELD INVESTIGATION

5.1 Sampling History (Reference 1)

In August, 1984, a contractor performed a sampling inspection at Red Panther for the MS OPC. Environmental samples were collected around the site to determine and characterize any hazardous substances present. Two composite soil samples were taken from the off-site ditch along Leflore Street and Patton Street. One water sample was taken where wastewater leaves the property and discharges into the above mentioned ditch. One subsurface composite soil sample was collected from the underground septic tank/drain field area. All these samples were analyzed for pesticides and total arsenic.

The test results of the soil and sediment samples indicated elevated levels of toxaphene, arsenic, and several other pesticides.

5.2 Sample Collection Methodology

All sample collection, preservation, and chain-of-custody procedures used during the 1990 SSI were in accordance with the standard operating procedures specified in Sections 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

5.3 Description of Samples and Sample Locations

The purpose of the field investigation was to characterize the chemical composition of sediment, subsurface soil, and surface water samples collected from potentially contaminated areas. The selection of sample locations was based on visual observations and historical information. Background soil samples were collected. Groundwater samples were also collected to determine if

site-related contaminants have impacted either the groundwater below the facility or the nearest drinking water well.

A total of nine (9) samples were collected during the SSI: four surface soil/sediment samples, two subsurface soil samples, and three groundwater samples. A trip blank was also included. Sample codes and descriptions are shown in Table A of the Appendix.

5.4 Analytical Support and Methodology

All samples were analyzed for the compounds listed in the EPA Target Compounds List (TCL). Analyses were performed by Mississippi State Chemical Laboratory (MSCL), Starkville, Mississippi.

The analyses were performed in accordance with the standard procedures and protocols specified in the USEPA manual SW-846, "Test Methods for Evaluating Solid Waste," second edition, or equivalent procedures.

5.5 Mississippi State Chemical Laboratory AQ/QC Procedures

Internal QC for analytes consists of the analysis of surrogate spikes, matrix spikes, matrix blanks, and internal standards with each set of environmental samples of a specific matrix type. Samples are submitted for analysis in small groups typically containing less than 12 samples of any one type, so only one of each of the above QC samples is normally analyzed with each set of samples of a specific matrix. All analytical data are subjected to a QA review to determine their acceptability. Percent recoveries are calculated from matrix spikes for each class of analytes and matrix type. Those data are accepted as valid for which recoveries of 70-130% are obtained. Reported analytical results are flagged for which applicable surrogate recoveries are outside acceptable limits, as suggested in SW-846. Data for sample sets where matrix spike recoveries are not acceptable are deemed invalid, in which case the sample set, including surrogates, blanks, and spikes, are reanalyzed. Standard deviations and coefficients of variation are calculated from recovery data for sets of matrix spikes for specific analytes accumulated over a period of months or even years, illustrating the continuous performance of a particular analytical method for a matrix-analyte pair.

5.6 Analytical Results (References 2 and 3)

Analytical results are discussed below and also summarized in Tables 1-5 in the Appendix.

Sediment Samples

One composite sediment sample (RPC-SD-06) was collected from the drainage ditch along the east side of Leflore Avenue (Leflore Avenue borders the east side of the facility). Another composite sediment sample (RPC-SD-07) was collected where a concrete drain on Red Panther property discharges into the ditch along the west side

of Leflore Avenue. A culvert connects this drainage with the ditch on the east side of the avenue.

High levels (1,270 & 1,130 ppm) of toxaphene, and elevated levels of several other pesticides, were detected in these samples. Elevated levels of several volatile and semivolatile organic compounds were also detected in these two samples, especially in RPC-SD-06, which contained 16,000 ug/kg (ppb) of xylenes, 1,600 ug/kg of ethyl benzene, 790 ug/kg of 2-methylnaphthalene, and several other compounds.

One grab sediment/soil sample (RPC-SD-08) was collected from a low area by a large, stormdrain pipe on the west side of the facility (the pipe has a cut-off valve). The sample contained elevated levels of several pesticides, including 428 ppm of toxaphene, 321 ppm of p,p'-DDT, and 47 ppm of dieldrin.

Soil Samples

Two background soil samples were collected from commercial property north of Red Panther. RPC-SDS-03 was a surface sample and RPC-SDS-04 was a subsurface sample. Trace amounts of DDE, DDT, and dieldrin were detected in RPC-SD-03.

One subsurface grab soil sample (RPC-SB-09) was collected next to the wastewater collection pit at a depth of two to three feet. The collection pit is located next to the south tank farm.

This sample contained a number of pesticides, volatile organic compounds, and semivolatile organic compounds, including 1,130 ppm toxaphene, 245 ppm p,p'-DDT, 1,650,000 ug/kg of xylenes, and 250,000 ug/kg of ethyl benzene. The sample also contained 480 ppm of barium and 9.7 ppm of cyanide.

Groundwater Samples

Two groundwater samples were collected from wells at the Lewis Wilkens Generating Station. One of the samples (RPC-PW-02) was collected from Clarksdale public well #8 located at the station. The depth of this well is about 700 feet and the screened interval is about 590 to 690 feet.

The second water sample (RPC-CW-01) was collected from another well at the station (well #2). This well, and a number of other wells at the station, provide cooling water to the station and are screened in the Alluvial Aquifer.

No pesticides, PCBs, or organic compounds were detected in these samples. Barium (0.2 ppm), manganese (0.55 ppm) and magnesium (60 ppm) were detected in the cooling water sample. Manganese (0.04 ppm) and magnesium (32 ppm) were detected in the drinking water sample. All other metals were below detection limits.

The (secondary) drinking water standard for manganese is 0.05 ppm. There is no drinking water standard for magnesium.

A shallow monitoring well at Red Panther was also sampled. This well was installed in 1989 by Southern Farmers Association, a company that was interested at the time in purchasing Red Panther (Reference 6).

No pesticides, PCBs, or organic compounds were detected in this sample (RPC-MW-05).

6.0 RECOMMENDATIONS

The MS OPC recommends that an LSI evaluation be conducted on a medium priority basis.

RECONNAISSANCE CHECKLIST FOR HRS2 CONCERNS

Instructions: Obtain as much "up front" information as possible prior to conducting fieldwork. Complete the form in as much detail as you can, providing attachments as necessary. Cite the source for all information obtained.

Site Name: Red Panther Chemical Co.

City, County, State: Clarksdale, Coahoma, Mississippi

EPA ID No.: MSD000272385

Person responsible for form: Ken Whitten, Jim Hardage, Mississippi Bureau of Pollution Control

Date: February 22, 1990
Revised January 31, 1991

Air Pathway

Describe any potential air emission source onsite: N/A

Identify any sensitive environments within 4 miles: N/A

Identify the maximally exposed individual (nearest residence or regularly occupied building workers do count): N/A

Groundwater Pathway

Identify any areas of karst terrain: N/A

Identify additional population due to consideration of wells completed in overlying aquifers to the AOC:

Not applicable. The (surficial) Alluvial Aquifer is hydraulically connected to the (deeper) Sparta Aquifer in the Clarksdale area.

Do significant targets exist between 3 and 4 miles from the site?

There are numerous irrigation wells and home between 3 and 4 miles from the site.

Is the AOC a sole source aquifer according to Safe Drinking Water Act: (i.e. is the site located in Dade, Broward, Volusia, Putnam, or Flager County, Florida)

No.

Surface Water Pathway

Are there intakes located on the extended 15-mile migration pathway?

Yes, there are about 12 surface water intakes in the Sunflower River along the extended pathway. These intakes are used for about 383 acres of cotton, 806 acres of soybeans, and 90 acres of rice (Reference: MS Bureau of Land and Water Resources).

Are there recreational areas, sensitive environments, or human food chain targets (fisheries) along the extended pathway?

No. (References: Topo maps; U.S. Fish and Wildlife maps of endangered species).

Onsite Exposure Pathway

Is there waste or contaminated soil onsite at 2 feet below land surface or higher?

Yes. Results of 1990 SSI indicate on-site soil contamination and off-site sediment contamination in nearby ditches.

Is the site accessible to non-employees (workers do not count)?

No. Facility is fenced and access is controlled.

Are there residences, schools, or daycare centers onsite or in close proximity?

There is a school about 2,000 feet west of the site. There are residences west of the site.

Are there barriers to travel (e.g., a river) within one mile?

Yes. The Sunflower River is west of the facility. The above mentioned residences lie between the site and the Sunflower River.

REFERENCES

1. Preliminary Assessment Reassessment for Red Panther Chemical Company by Kenneth Whitten, MS OPC, February 22, 1990.
2. Field Notes and Photographs of the 1990 Screening Site Inspection at Red Panther Chemical Company by MS OPC.
3. Mississippi State Chemical Laboratory Analytical Report for the Red Panther Chemical Company SSI.
4. Data Collection and Documentation Techniques for HRS Scoring of Hazardous Waste Sites, March 1987, NUS Corp./EPA.
5. Diagram of the Red Panther Facility; Diagrams of the North and South Tank Farms.
6. Information Concerning Monitor Well at Red Panther, Provided by Southern Farmers Association, Little Rock, AR.

SAMPLE LOCATIONS AND RATIONALE
 RED PANTHER CHEMICAL COMPANY
 CLARKSDALE, MISSISSIPPI
 APPENDIX A - TABLE 1

Collection Date	Sample Code	Sample Type	Locations	Rationale	Depth (ft bls)
11/12/90	RPC-CW-01	Water	At Lewis Wilkens Generating Station; Well #2, Cooling Water Well	Determine presence or absence of contamination	NA
11/12/90	RPC-PW-02	Water	At Lewis Wilkens Generating Station; Well #8, Public Water Supply Well	Determine presence or absence of contamination	NA
11/12/90	RPC-SD-03	Surficial Soil	North of Red Panther on Graber property.	Background	0-12"
11/12/90	RPC-SBS-04	Subsurface Soil	North of Red Panther on Graber property.	Background	5-6'
11/12/90	RPC-MW-05	Water	Monitoring Well at Red Panther.	Determine presence or absence of contamination.	NA
11/12/90	RPC-SD-06	Sediment	Drainage ditch along east side of Leflore Avenue.	Determine presence or absence of contamination.	0-12"
11/13/90	RPC-SD-07	Sediment	Drainage ditch, west side of Leflore Avenue.	Determine presence or absence of contamination	0-12"
11/13/90	RPC-SD-08	Sediment	Low area, west side of facility.	Determine presence or absence of contamination.	0-12"
11/13/90	RPC-SB-09	Subsurface Soil	North side of wastewater collection pit.	Determine presence or absence of contamination.	2-3'

NA- Not applicable

KW_MES4

1 9 0026

TABLE 1
SUMMARY OF PESTICIDES ANALYTICAL RESULTS
SEDIMENT AND SOIL SAMPLES

Parameters	Back-ground	Back-ground	Back-ground	Drainage ditch, Leflore Ave.	Drainage ditch, Leflore Ave.	West Side of Red Panther	North side of wastewater pit
(ppm)	RPC-SDS-03	RPC-SDS-03 Lab Dup.	RPC-SBS-04	RPC-SD-06	RPC-SD-07	RPC-SD-08	RPC-SB-09
Aldrin	-	-	-	30.3	157	1.17	48.3
p,p'-DDE	0.07	0.09	-	22.5	32.1	12.3	9.82
p,p'-DDD	-	-	-	147	394	36.6	23.7
p,p'-DDT	0.06	0.08	-	140	100	321	245
Dieldrin	0.05	0.05	-	-	209	47.0	37.8
Toxaphene	-	-	-	1270	2320	428	1130

Red Panther Chemical Company, Clarksdale, MS - SSI

- None detected (at lower detection limits)

KW=35

19 0027

TABLE 2
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT AND SOIL SAMPLES

Parameters (ppm)	Back-ground RPC-SDS-03	Back-ground RPC-SDS-03 Lab Dup.	Back-ground RPC-SBS-04	Drainage ditch, Leflore Ave. RPC-SD-06	Drainage ditch, Leflore Ave. RPC-SD-07	West Side of Red Panther RPC-SD-08	North side of wastewater pit RPC-SB-09
Barium	39	-	60	85	280	480	54
Antimony	-	-	-	-	100	70	20
Cyanide	-	-	-	-	-	-	9.7

Red Panther Chemical Company, Clarksdale, MS - SSI

- None detected (at lower detection limits)

KW-35

19 0028

18

TABLE 3
SUMMARY OF VOLATILE ORGANIC ANALYTICAL RESULTS
SEDIMENT AND SOIL SAMPLES

Parameters (ppb)	Drainage ditch, Leflore Ave. RPC-SD-06	Drainage ditch, Leflore Ave. RPC-SD-07	North side of wastewater pit RPC-SB-09
Benzene	30	-	340
Tetrachlorethene	-	13	3,900
Toluene	200	-	9,900
Chlorobenzene	330	-	2,200
Ethyl Benzene	1,600	-	250,000
Xylenes	16,000	-	1,650,000
4-Methyl-2-pentenone	-	-	4,600
Dichloromethane		-	2,800
Trichloromethane		-	6,400
Acetone		-	20,000
1,1,1, Trichloroethene		-	2,800

1
9
0029

Red Panther Chemical Company, Clarksdale, MS - SSI
- None detected (at lower detection limits)

KW=35

19

TABLE 4
SUMMARY OF SEMIVOLATILE ANALYTICAL RESULTS
SEDIMENT AND SOIL SAMPLES

Parameters (ppb)	Drainage ditch, Leflore Ave. RPC-SD-06	Drainage ditch, Leflore Ave. RPC-SD-07	North side of wastewater pit RPC-SB-09
Napthalene	-	-	12,000
2- Methylnaphthalene	790	470	39,000
Dimethylphthalate	360	-	-
4 - Nitrophenol	-	-	14,000
N - Nitrosodiphenylamine	470	-	-
Anthracene	420	-	-
Butylbenzylphthalate	-	24,000	-
bis(2-Ethylhexyl)phthalate	-	-	2,500
Phenol	-	-	39,000

19 0030

Red Panther Chemical Company, Clarksdale, MS - SSI

- None detected (at lower detection limits)

KW=35

du

Reference 10



U.S. Environmental Protection Agency Superfund (CERCLIS)

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Query Results



Site ID: Equal To: MSD000272385

Results are based on data extracted on DEC-08-2005

Note: Click on the underlined CORPORATE LINK value for links to that company's environmental web pages.

Click on the underlined MAPPING INFO value to obtain mapping information for the facility.

Click on the underlined RECORD OF DECISION value for a RODS Site Report.

Click on the underlined "View Facility Information" link to view EPA Facility information for the facility.

[Go To Bottom Of The Page](#)

CERCLIS EPA ID:	MSD000272385	SITE NAME:	RED PANTHER CHEMICAL CO
STREET ADDRESS:	550 PATTON & LEFLORE	FACILITY INFORMATION	View facility information
CITY NAME:	CLARKSDALE	FEDERAL FACILITY:	N
STATE ABBR:	MS	NPL STATUS:	Not on the NPL
ZIP CODE:	38614	RECORD OF DECISION (ROD) INFO:	No
COUNTY NAME:	COAHOMA	EPA REGIONAL LINK:	No
CORPORATE LINK:	No	MAPPING INFO:	MAP
LATITUDE:			
LONGITUDE:			
SITE SMSA:			

Enforcement and Cleanup Actions

Action	Action ID	Actual Start Date	Actual End Date	Responsibility	Planned Outcome	Urgency
SITE UNARCHIVED	001		11/07/2005	EPA In-House		
PRP REMOVAL	001	11/11/2002	07/29/2005	Responsible Party	Cleaned up	Time Critical
ADMINISTRATIVE RECORDS	001		11/06/2003	EPA Fund-Financed		
ADMIN ORDER ON CONSENT	001		09/04/2001	Federal Enforcement		

<u>INTEGRATED ASSESSMENT</u>	001		02/01/2000	EPA Fund-Financed	Low	
<u>EXPANDED SITE INSPECTION</u>	001		02/01/2000	EPA Fund-Financed	Low	
<u>ARCHIVE SITE</u>	001		01/31/1992	EPA In-House		
<u>SITE INSPECTION</u>	001		01/31/1991	State, Fund Financed	Low	
<u>PRELIMINARY ASSESSMENT</u>	001		06/01/1984	State, Fund Financed	Low	
<u>DISCOVERY</u>	001		11/01/1979	EPA Fund-Financed		

Site Description

There were no Site Descriptions reported for this site.

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Last updated on Monday, January 16th, 2006
http://oaspub.epa.gov/enviro/cerclis_web.report

United States Environmental Protection Agency
 Region 4: AL, FL, GA, KY, MS, NC, SC, TN
 Office of External Affairs

Sam Nunn Atlanta Federal Center
 61 Forsyth St. SW
 Atlanta, GA 30303-3104

ENVIRONMENTAL NEWS



PHONE: (404) 562-8327

FAX: (404) 562-8335

EPA ANNOUNCES THE AVAILABILITY OF THE ADMINISTRATIVE RECORD FOR THE RED PANTHER CHEMICAL SITE, CLARKSDALE, MISSISSIPPI

The United States Environmental Protection Agency announced today that the Administrative Record for the Red Panther Chemical Removal Site in Clarksdale, Coahoma County, Mississippi is available for public review.

The Administrative Record file includes documents that form the basis for selection of the removal action. Documents in the record may include, but are not limited to, preliminary assessment and inspection reports, test results, and the Action Memorandum. All interested persons are encouraged to review the documents and provide comments.

The documents will be available for public review during normal business hours at the following locations:

Carnegie Public Library
 114 Delta Avenue
 Clarksdale, MS 38614
 Attn: Missy Craig

U.S. EPA Records Center - Region 4
 Sam Nunn Atlanta Federal Center - 11th Floor
 61 Forsyth Street, SW
 Atlanta, GA 30303-3104
 Attn: Debbie Jourdan

EPA will accept comments regarding the Administrative Record during the public comment period, which begins on December 22, 2003 and ends on January 21, 2004. Comments should be addressed to Steve Spurlin, Federal On-Scene Coordinator, U.S. EPA Region 4, ERRB, 11th Floor, 61 Forsyth Street, S.W., Atlanta, GA 30303-3104. At the end of the 30-day comment period, a written response to all pertinent comments will be prepared in a responsiveness summary and placed in the file.

The Red Panther Chemical Site consists of 6.6 acres and is located at 550 Patton & Leflore Roads, Clarksdale, MS. The site is owned and operated by the Red Panther Chemical Company. Liquid and dry herbicides, insecticides, and fungicides were formulated at the facility between 1949 and 1978. During its operational period, wastewater from the formulating process was routinely released, which resulted in the property being highly contaminated with a wide variety of pesticides and arsenic. The site is currently used as a storage facility for seeds and farm chemicals.

-0- December 22, 2003

CONTACT: Laura Niles, EPA Media Relations, (404) 562-8353

SITE: Red Panther
BREAK: 13-7
OTHER: _____

3 7 0001

10104008



8

11/12/90

11/12/90 Mon. Sunny 50°F → 70°F

8:00 Arrived on site to see
 Jim Thomas (Red Panther)
 Dick Clark, Jim Hedrick, and
 an exp/BOP.

9:05 Arrived FBI Lab (City of Chandler)
 to sample the public water supply wells.

To meet James Carraway (City of Chandler)
 General Manager as we need
 him and the nearest well to
 Red Panther ^{we said} is possible to sample
 4 wells next to the river.

We will sample the Domestic
 Well #8. Cooling water well
 #2 is 150'. South ~~west~~ of
 Red Panther.

Well #2 is in the ^{Area} ~~Area~~ ^{of} ~~of~~ ^{the} ~~the~~ ^{well} ~~well~~ ^{is} ~~is~~ ^{at} ~~at~~ ^{the} ~~the~~ ^{end} ~~end~~ ^{of} ~~of~~ ^{the} ~~the~~ ^{road} ~~road~~
 Well #8 is in the ^{Area} ~~Area~~ ^{of} ~~of ^{the} ~~the~~ ^{well} ~~well~~ ^{is} ~~is~~ ^{at} ~~at~~ ^{the} ~~the~~ ^{end} ~~end~~ ^{of} ~~of~~ ^{the} ~~the~~ ^{road} ~~road~~
 9 total wells on site with ^{the} ~~the~~ ^{well} ~~well~~ ^{is} ~~is~~ ^{at} ~~at~~ ^{the} ~~the~~ ^{end} ~~end~~ ^{of} ~~of~~ ^{the} ~~the~~ ^{road} ~~road~~~~

Picture #1 is of well #2
 Picture #2 is of well #8

RPL-CW-01 is the sample taken
 From Well #2. (TSC)
 @ 8:45

Well #2 is ^{15.00} ~~15.00~~ ^{at} ~~at~~ ^{the} ~~the~~ ^{end} ~~end ^{of} ~~of~~ ^{the} ~~the~~ ^{road} ~~road~~
 to the sample was taken
 - Flow rate
 - via~~

70°F

- Well #2 + 8 are located
west of Lewis Generating Station.*

- RPC - PW-02 was taken by Mike
@ 9:30. (TCL)

- Photo graph #2 is ^{Domestic} @ well #8.

- Thomas Bramlett + David Shuck
from the City of Clarkdale help
Bore with us determining the water
Amount pumped in the wells + helped
in the sampling process by turning
the valves on.

- Domestic well's - Dia.

- Flowrate

- The Domestic well has an automatic
fume and was running most of the
morning. Before ^{Mike} we sampled the
well saw approximately 45 minutes.

- 9:54 finished @ the well #2 + well #8.

- 10:05 Ken called Jacques Reed
(Five County Farms) to
see if we could sample
their wells.

* LEWIS WILKENS GENERATING STATION

JH

- 10:11 Wayne Read ^{said he} well's are around his facility. And said that the well location of USGS map was wrong for the JOSE well. This well is on his facility and not between the city wells and Red Panther.
- JO69 + K037 wells are approximately 1000' deep + used for district water.
- Since these wells are so deep + not in the location of the USGS print-out we decided not to sample.
- JOSE? well is a shallow well in the area + used for well drilling operations.

10:30 Headed back to Red Panther to start up on possible line locations.

Photographs 3 + 4 are of the North to south of Red Panther.
4 is the railroad spur.

(LP 6ns)

- 10:52 Skip Graber (Graber Brothers, Inc.)
said that we could take
A Background sample in
the lot north of Red Panther.
Ken said it must be
approximately 3' deep.

- 11:10 ~~08-10~~ ^{AD}
Start Background sampling
process @ Graber Land.
Graber JH

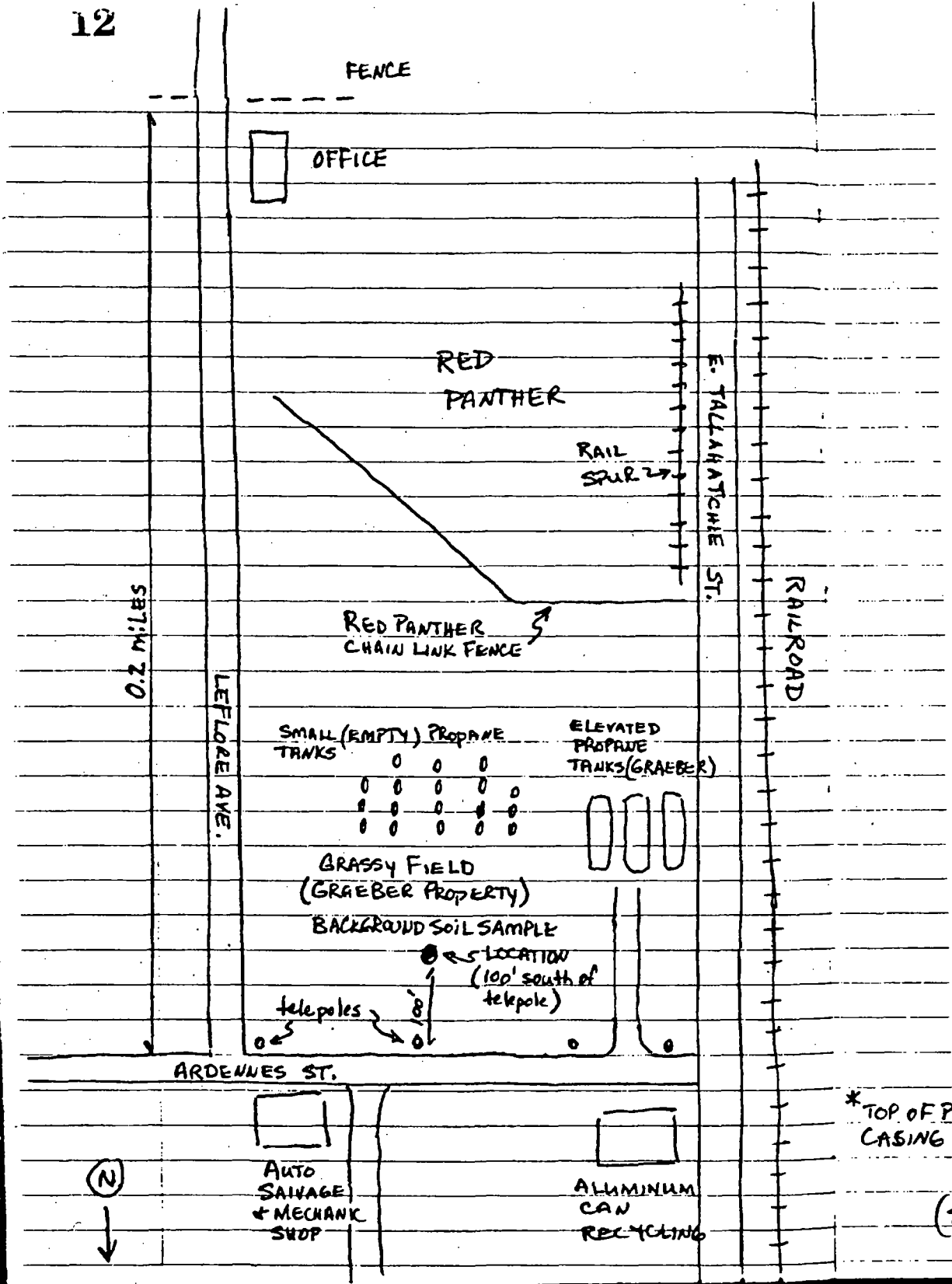
- photo 5 12 from Borehole ^{#6 JH}
to Red Panther. Photo of background
Soil sample, facing South, Red Panther in background. ^{JH}
0-12"

- RPC-SBS-03 Background (sed) ^{JH}
JH ^{SS} SDS @ 11:33 for TCL. ^{JH}
→ moist, dark sandy silt w/pea gravel.

- RPC-SBS-04 Background (borehole)
@ 11:45 AM

Subsurface background soil taken at
5-6' light grayish brown sandy clay
brownish gray ^{JH}
used stainless steel hand auger.

Note: Jim Hardage (JH) started taking
notes on pg. 11. Previous notes pgs 8-11 are
Ken Whitten's.



FENCE

OFFICE

RED PANTHER

RAIL SPUR

E. TALLAHATCHIE ST.

RAILROAD

0.2 MILES

LEFLORE AVE.

RED PANTHER CHAIN LINK FENCE

SMALL (EMPTY) PROPANE TANKS

ELEVATED PROPANE TANKS (GRAEBER)

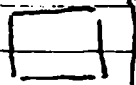
GRASSY FIELD (GRAEBER PROPERTY)

BACKGROUND SOIL SAMPLE

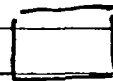
LOCATION (100' south of telepole)

telepoles

ARDENNES ST.



AUTO SAUSAGE & MECHANICAL SHOP



ALUMINUM CAN RECYCLING

* TOP OF P. CASING

(N)



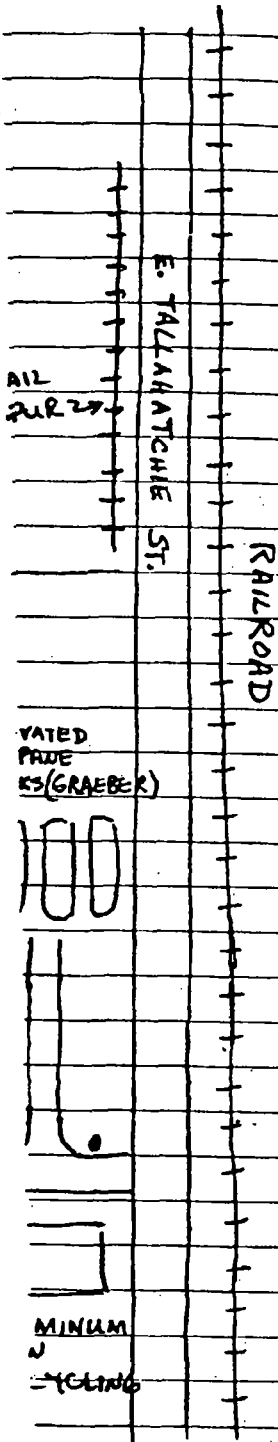
(2)

0.1 MILES FROM LEFLORE AVE TO E. TALLAHATCHIE,

~ 12:15 pm - BROKE FOR LUNCH,

Got back to Red Panther about 1:00 pm.
Met w/ Jim Thomas.

THREE MONITOR WELLS WERE INSTALLED ABOUT ONE YEAR AGO. SOUTHERN FARMERS ASSN (based in Tenn.) WAS INTERESTED IN BUYING RED PANTHER AND HAD THE WELLS INSTALLED. WELLS WERE SAMPLED ONCE. WELLS HAVE NOT BEEN SAMPLED SINCE. TWO OF THE WELLS WERE PLUGGED AFTER THE INITIAL SAMPLING AND ANALYSES. RED PANTHER DOES NOT HAVE THE ANALYTICAL RESULTS. THE ONE REMAINING MONITOR WELL IS A TWO INCH PVC WELL WITH A 4" SQUARE STEEL PROTECTIVE CASING W/ A LOCKING CAP. THE WELL IS LOCATED NEXT TO WAREHOUSE #12 (NORTH SIDE OF WAREHOUSE). RED PANTHER DOES NOT HAVE A KEY TO THE WELL. RED PANTHER REPS OUT THE LOCK. KEN WHITEN, MIKE SLACK, + JIM HARDAGE TOOK WATER LEVEL MEASUREMENT W/ AN ELECTRONIC WATER LEVEL INDICATOR. DEPTH TO WATER FROM TOC* 27 and $\frac{6}{10}$ ft. DEPTH FROM TOC* TO BOTTOM OF WELL IS $48 + \frac{6}{10}$ ft. DISTANCE FROM TOP OF OUTER (STEEL) CASING TO GROUND SURFACE 3' 8". AN ADDITIONAL ONE INCH TO TOP OF PVC CASING.



*TOP OF PVC CASING

(STEEL)

VATED PADE KS (GRAEBER)

MINUM N CYCLING

ALL SURZ

E. TALLAHATCHIE ST.

RAILROAD

14

VOLUME TO BE PURGED:

GH
WATER COLUMN = 21'

✓ $21' \times 0.163 \text{ gal/ft} \times 3 \text{ VOLUMES} = 10.5 \text{ GAL}$

2:

BEGAN PURGING ~ 1:40 P.M.

AFTER PURGING $1\frac{1}{2}$ GAL, CHECKED
TEMP, pH, & CONDUCTIVITY. READINGS
ARE:

2

19.2 C

2

7.32 pH

700 μMHOS

NO READING ON HNU

Photo #7 - MIKE SLACK BAILING MONITOR
WELL.

~ 2:30

EVACUATED WATER POURED INTO "HAZARDOUS
WASTEWATER PIT" PER AGREEMENT W/ JIM
THOMAS.

~ 3:00

1:55 PM - MEASUREMENTS AFTER $4\frac{1}{3}$ GAL:

18.8 C

7.32 pH

900 μMHOS

WATER IS TURBID. FIRST BUCKET WAS
CLEAR.

3:

MEASUREMENT AT ~ 8 GAL:

19° C

7.4 pH

900 μ MHOS

2:10 pm - WATER STILL TURBID. RECHARGE ^{JH}
RECHARGE HAS SLOWED.

2:13 pm - BAILED WELL NEARLY DRY.
STOPPED BAILING FOR WELL TO RECHARGE.

2:20 pm STARTED BAILING AGAIN. ^{WATER} WAS HAS CLEARED.
_{JH}

OFFERED TO SPLIT SAMPLES w/JIM THOMAS.
HE DECLINED.

~ 2:50 pm MEASUREMENT AT ~ 12 GAL:

19° C

7.42 pH

900 μ MHOS

~ 3:07 pm ^{JH} BEGAN SAMPLING MONITOR WELL,
SAMPLE ID. NO, RPC - MW - 05.
2 40 ML AMBER GLASS VIALS w/TEFLON
SEPTA + SCREW CAPS. 4 drops HCL PRESERVATIVE.
METALS - ONE LITER HIGH DEASTY
POLYETHYLENE BOTTLE. ~ 4 ML
HNO₃ PRESERVATIVE.
CYANIDE - ONE LITER HDP BOTTLE, ~ 4 ML
NAOH PRESERVATIVE,
2 ONE LITER GLASS BOTTLES w/TEFLON
CAPS - SEMIVOLATILE ORGANIC CMPDS.

3:17 pm FINISHED CONTAINERIZING SAMPLES.

~ 3:26 PM FINISHED LABELING & PACKAGING SAMPLES.

RED
WAI

Photo #8 depicts Ken Whitten and
Mike Slack collecting JH collecting water
samples from monitor wells
at sample location JH
RPC-MW-05.

~ 3:40 to

~ 3:50 PM - LOOKED AT POTENTIAL ON SITE LOCATIONS
FOR SUBSURFACE SOIL SAMPLES w/ Jim
Thomas.

DR
DR

~ 3:50 PM CALLED PHONE COMPANY RE: UNDERGROUND
CABLE JH CABLE. WILL SEND SOMEONE OVER
HERE (RED PANTHER) BETWEEN 8-9.00 AM
tomorrow.

~ 4:05 PM BEGAN TAKING COMPOSITE SOIL/SED
SAMPLE FROM DRAINAGE DITCH
ALONG EAST SIDE OF LEFLORE AVE.
ACROSS FROM (IN FRONT OF) RED
PANTHER. RPC-SD-06

Photos #9-12 DEPICT THE DRAINAGE
DITCH & THE SAMPLE COLLECTION.

CU
PATTEN

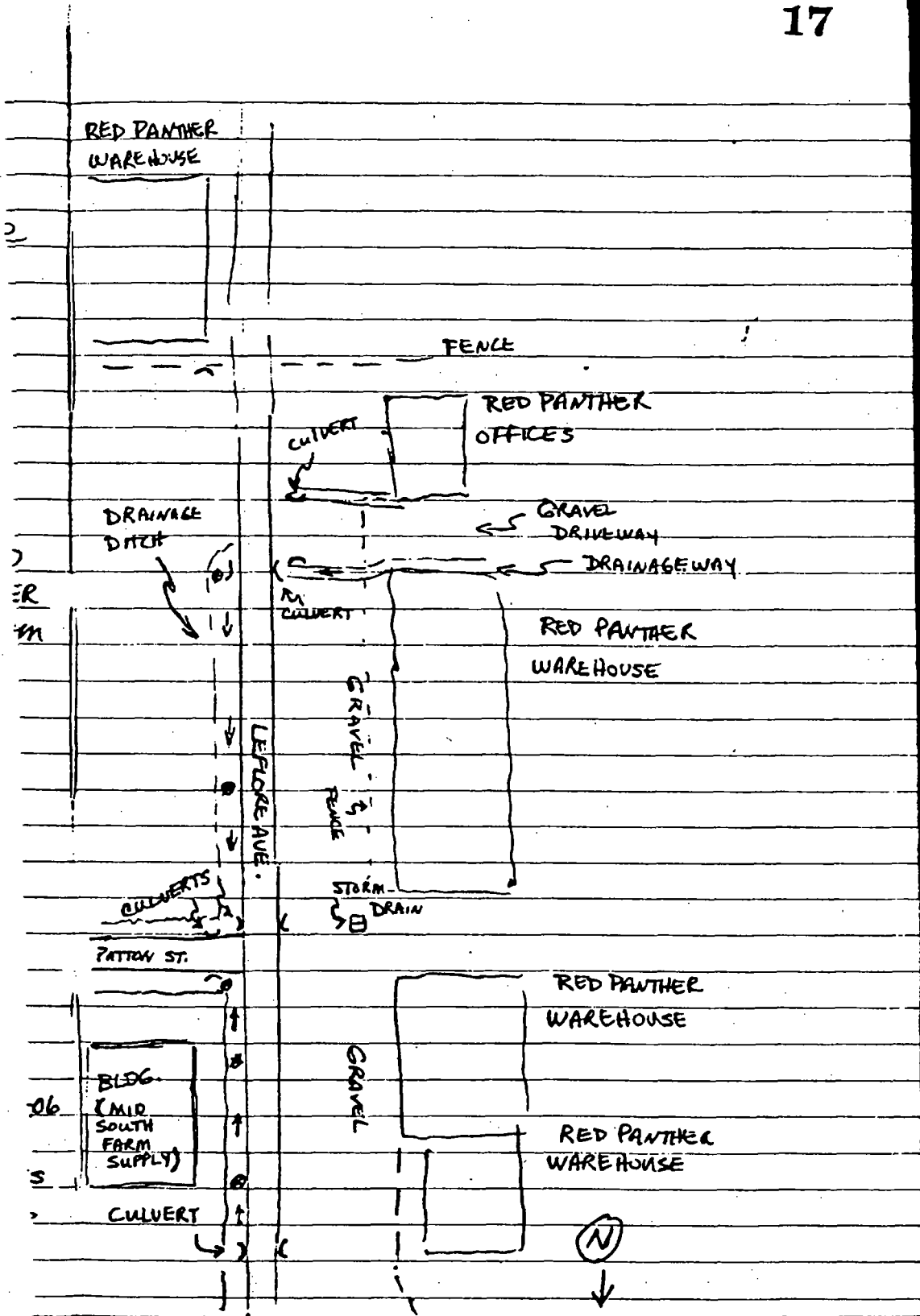
SEE DIAGRAM PAGE 17.

⊗ = SAMPLE LOCATIONS FOR RPC-SD-06

BLEDG
(MID
SOUTH
FARM
SUPPL

SOIL/SED SAMPLES WERE TAKEN w/ STAINLESS
STEEL SPOON FROM 5 LOCATIONS, 0-5", ALONG
DRAINAGE DITCH.

CULL



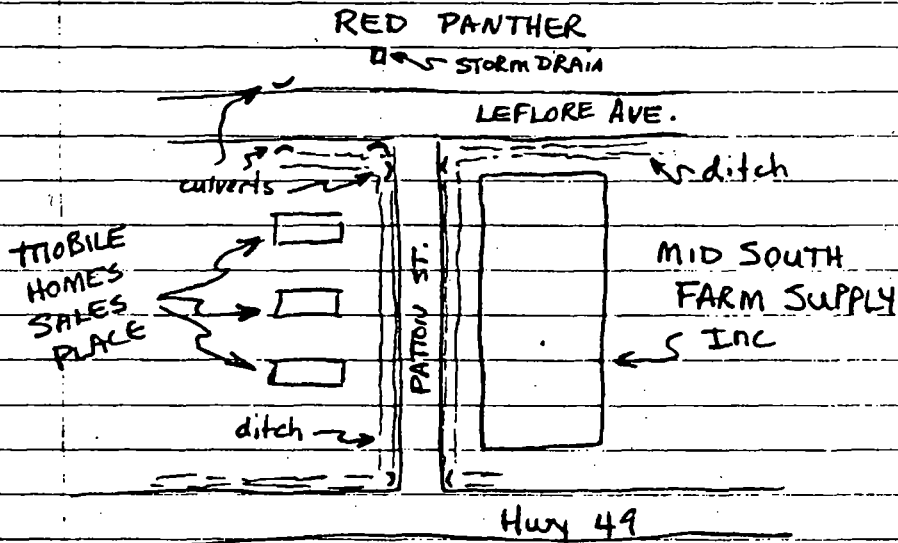
18

FINISHED CONTAINERIZING & LABELING SAMPLES
~ 4:40 p.m.

LEFT SITE APPROX. 4:50 p.m.

ARRIVED AT RED PANTHER ~ 7:55 AM
11/13/90. weather clear, sunny, mild.

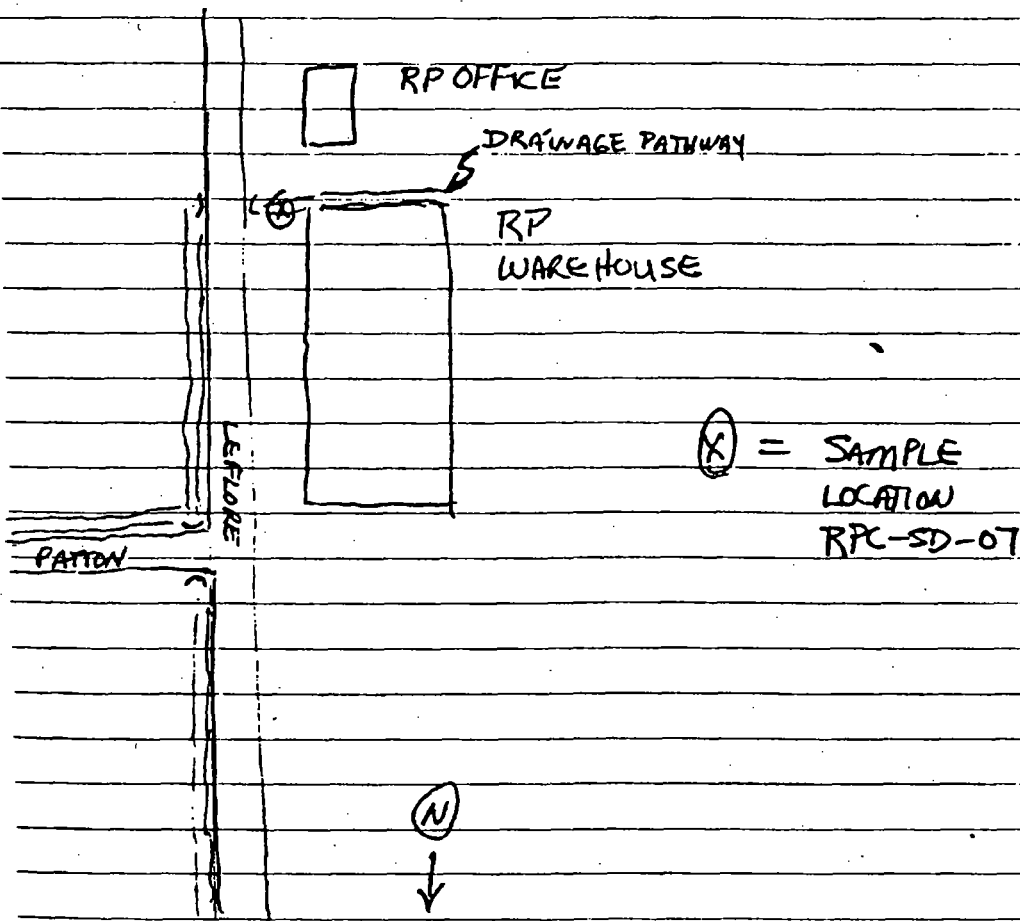
~ 8:45 AM



Made several phone calls concerning
location and use of local wells.

Well #H045 Leon Bramlett

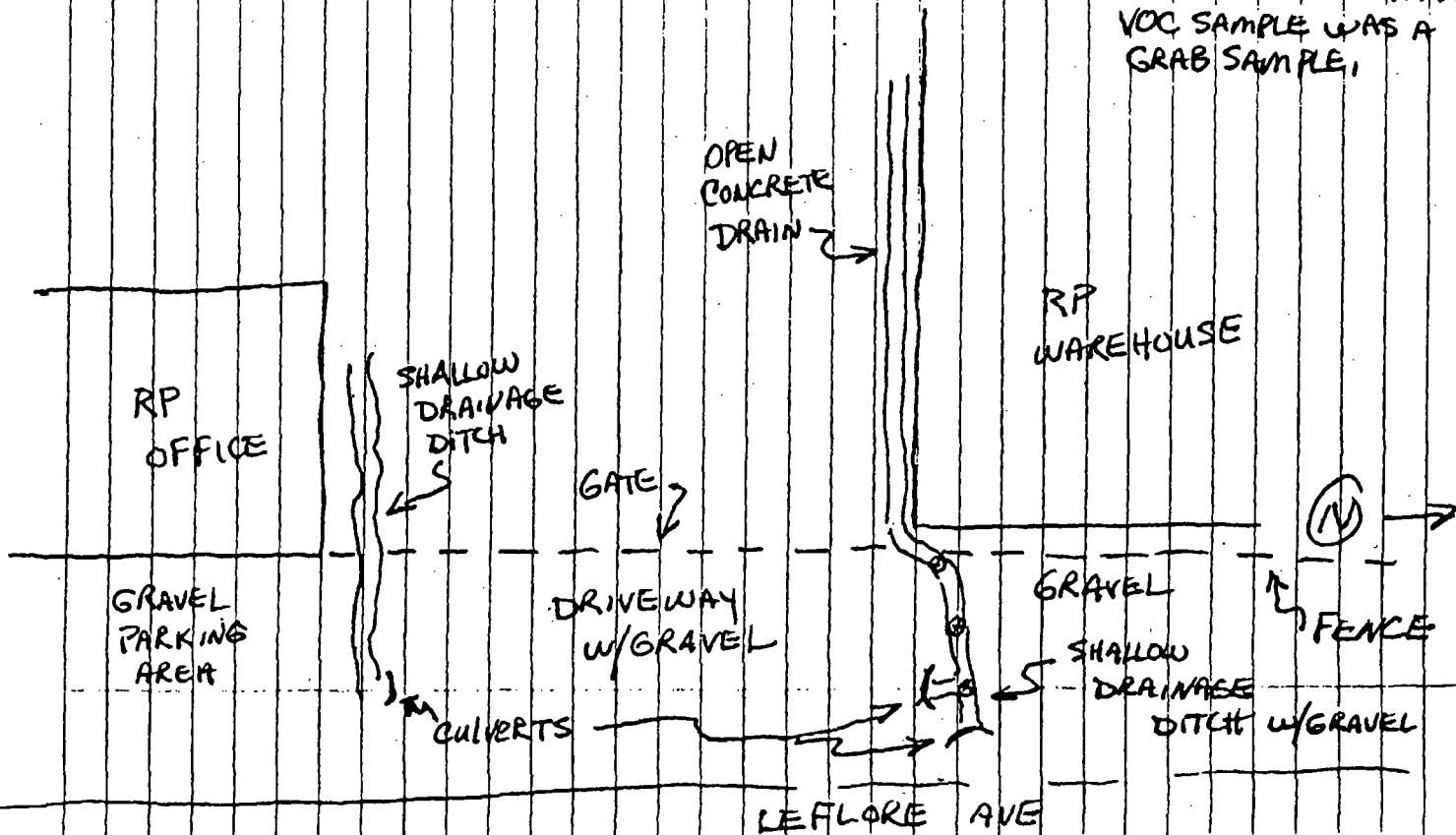
~ 8:45 AM ^{JH} BEGAN SAMPLING COLLECTION OF
SEDIMENT SAMPLE RPC-SD-07,
NO READING ON HNU.
PHOTO #1, 2nd ROLL, LOOKING WEST, SHOWS
KEN WHITTEN COLLECTING SED SAMPLE.



⊗ = SAMPLE LOCATION
FOR RPC-SD-07

THREE GRAB SAMPLES COMPOSITED INTO
ONE COMPOSITE SED SAMPLE ~0-4"
BELOW THE GRAVEL.
VOC SAMPLE WAS A
GRAB SAMPLE.

20.



2nd photo 2nd roll - WEST SIDE OF RED PANTHER, FACING NORTH FROM SOUTH END OF PROPERTY.

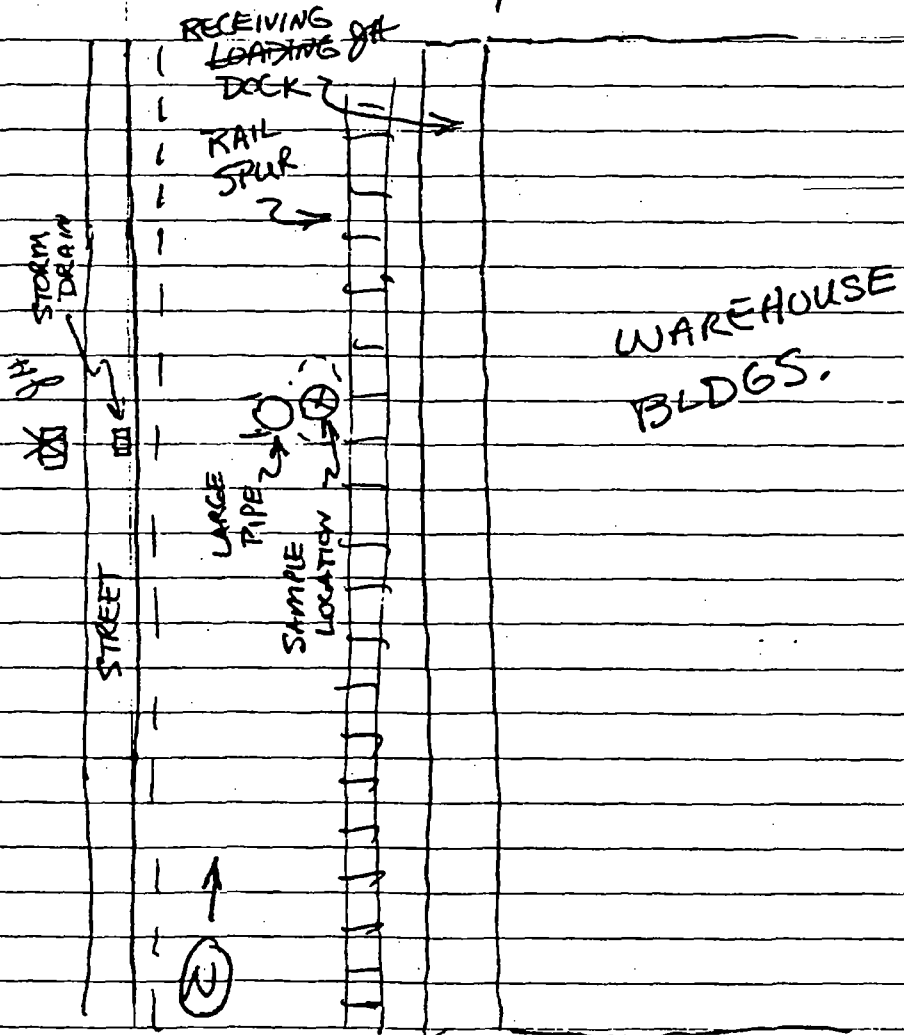
3rd photo - WEST SIDE OF RED PANTHER, FURTHER NORTH, FACING NORTH, ALONG RAIL SPUR.

4th photo - SAMPLE LOCATION RPC-SD-08, FACING WEST.

⊗ = SAMPLE LOCATION FOR RPC-SD-07

THREE GRAB SAMPLES COMPOSITED INTO ONE COMPOSITE SED SAMPLE NO-44

BELOW THE GRAVEL, VOC SAMPLE WAS A GRAB SAMPLE.



RECEIVING LOADING DOCK

RAIL SPUR

STORM DRAIN

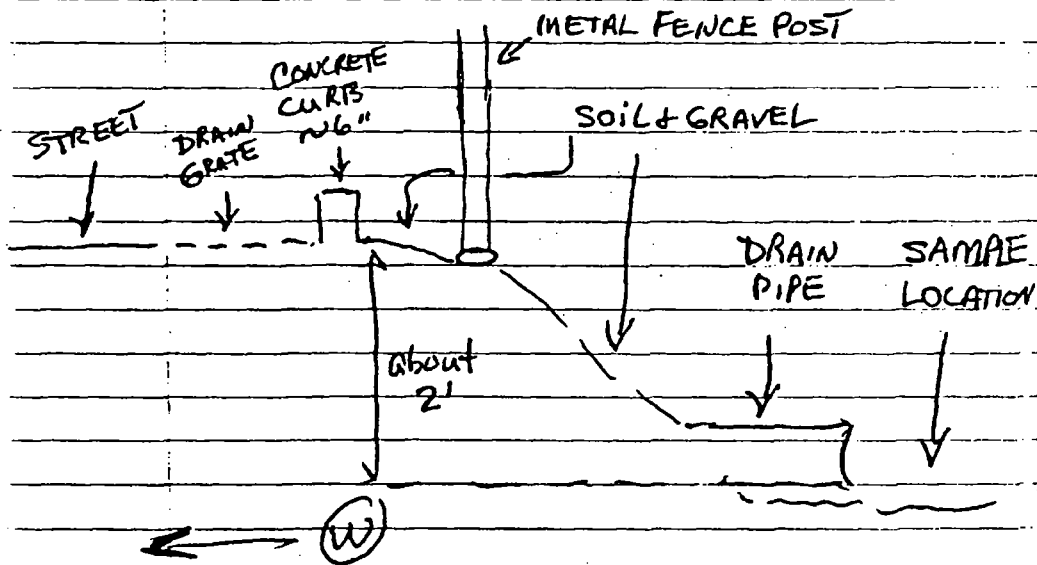
WAREHOUSE BLDGS.

LARGE PIPE
SAMPLE LOCATION

STREET

⊗

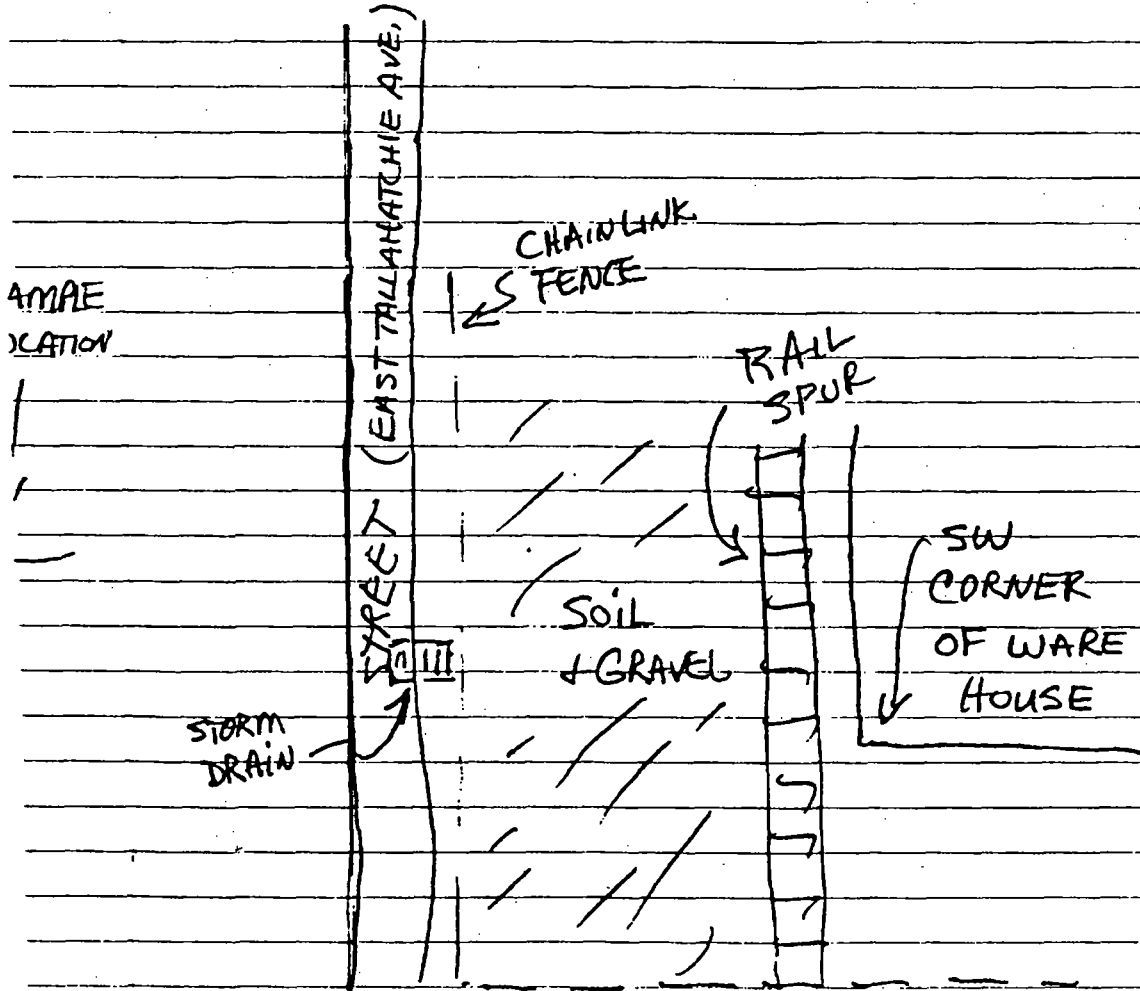
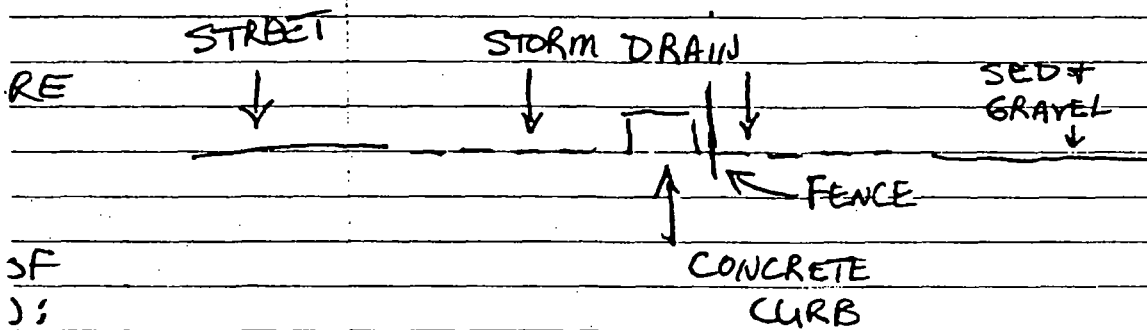
RPC-SD-08 COLLECTED ~ 9:25 AM 9:46
 FROM WEST SIDE OF PROPERTY
 IN A LOW (DRAINAGE) AREA
 NEXT TO THE RAIL SPUR IN
 FRONT OF A LARGE DRAINAGE
 PIPE AT LEAST A FOOT OR MORE
 IN DIAMETER. THERE IS A
 CUT OFF VALVE ON THE PIPE.
 THE PIPE APPEARS TO RUN
 UNDER THE STREET. PROFILE OF
 SAMPLE LOCATION IS SHOWN BELOW;



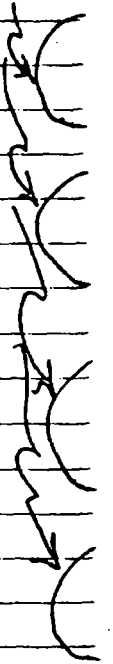
NO READING ON HNU AT THIS
 SAMPLE LOCATION.

STORM
 DRAIN

Am 9:46 Am 5th PHOTO, 2ND ROLL
DEPICTS STORM DRAIN ON
WEST SIDE OF RED PANTHER:

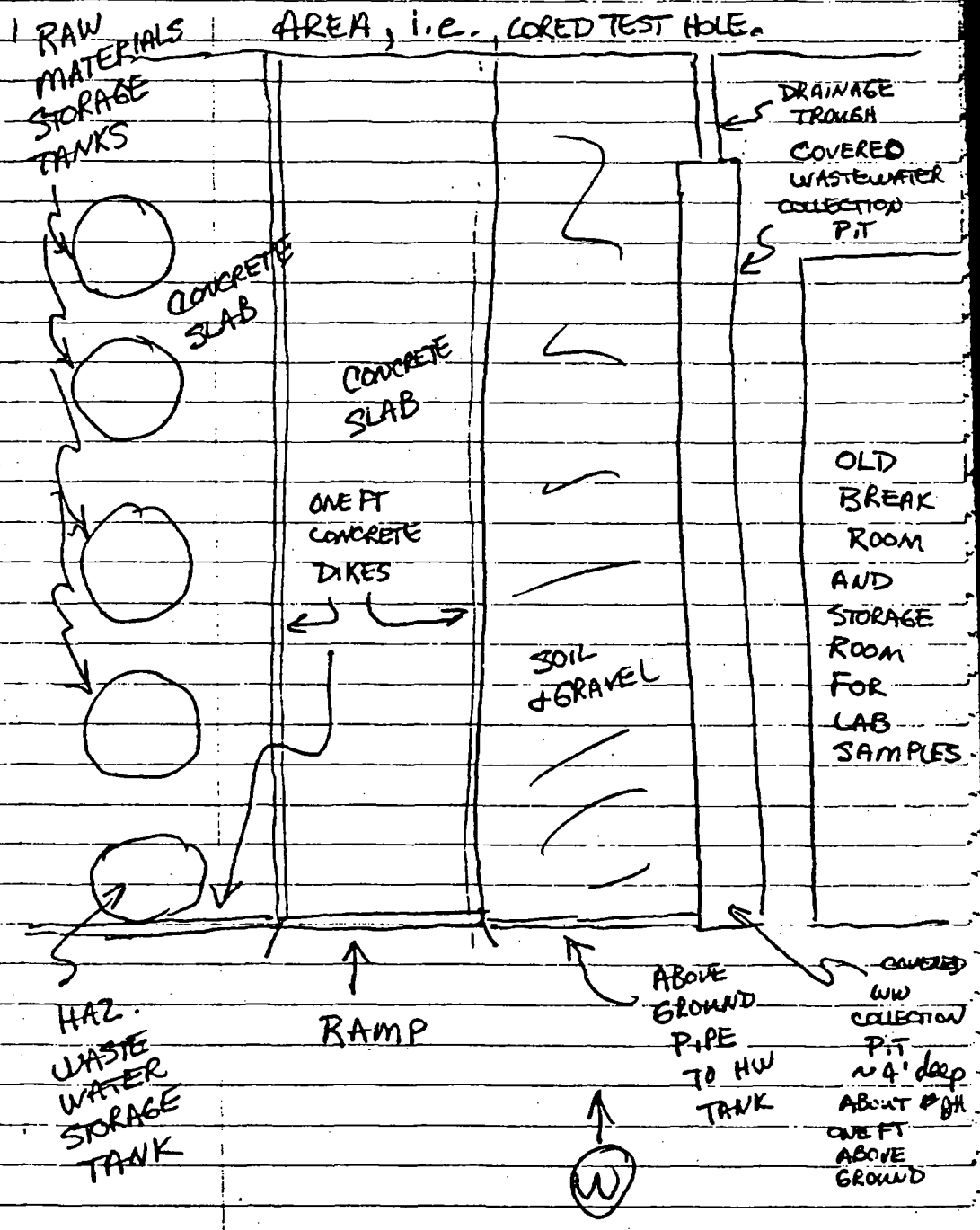


RAW
MATE
STORA
TANK



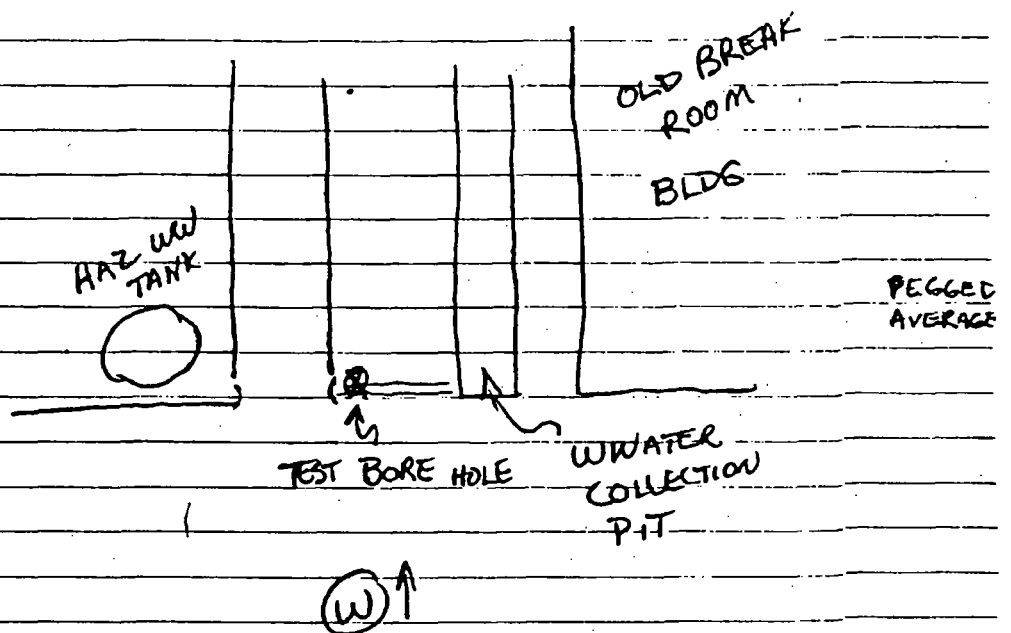
HAZ
WASTE
STOR
TA

9:57 AM BEGAN SAMPLING
IN HAZ WASTE STORAGE TANK
AREA, i.e., CORED TEST HOLE.



WASTEWATER COLLECTION PIT
HAS CONCRETE BOTTOM
AND CINDERBLOCK SIDES.

CORED DOWN ABOUT 6' w/ STAINLESS
STEEL HAND AUGER. RECORDED
~ 3 ppm ON HNUK METER IN BORE
HOLE AT ABOUT 3'. BROWN SANDY
CLAY, NORMAL APPEARANCE
APPEARANCE, NO SAMPLE COLLECTED
FROM THIS BOREHOLE.



S.

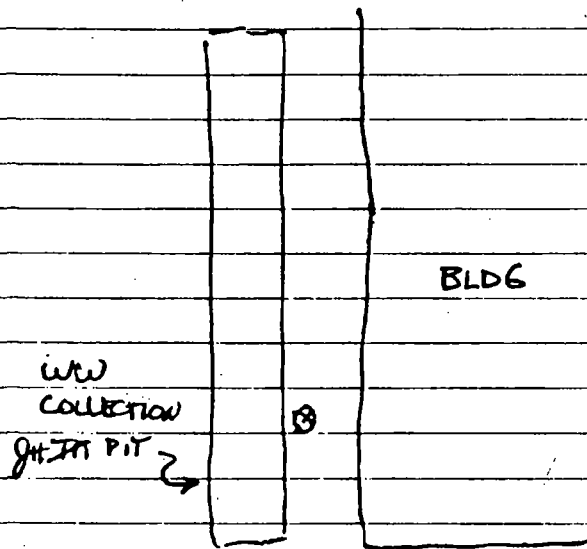
AINLESS

D

RE

INDY

CTED



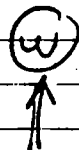
BREAK

DOM

⊗ = SAMPLE LOCATION

RPC-SB-09

DG



PEGGED AT 250 ONCE.
AVERAGE READING WAS ABOUT 50. JH

← GOT READINGS OF 5 to 150 ppm^{JH} ON HNU

FROM SOIL AT ABOVE LOCATION.

COLE JH NO READING IN BREATHING

ZONE, DEPTH OF SAMPLE ~ 2-3 FT.

KEN WHITTEN DOWNED RESPIRATOR

TO CONTAINERIZE SAMPLES ~ 10:33 AM.

HAD RESPIRATOR ON ABOUT 5 MIN OR

LESS.

6th PHOTO DEPICTS SAMPLE LOCATION

RPC-SB-09.

R

TIOW

7th and 8th photos depict the general AREA OF RPC-SB-09, i.e., the WASTEWATER COLLECTION PIT AND THE HAZ WASTEWATER STORAGE TANK AND RAW MATERIALS STORAGE TANKS (IN BACKGROUND).

10:46 AM FINISHED PAPERWORK
+ PULLED AROUND TO FRONT OFFICE.

~10:55 AM LEFT SITE FOR A BREAK.
ATE LUNCH.

~12:00 NOON - WENT TO CITY OF CLARKSDALE
PUBLIC UTILITIES PRODUCTION PLANT

(i.e., the

JH → 627-4761
P.O. Box 940
CLARKSDALE, MS 38614

Met with Philip CLARK, PRODUCTION PLANT
MANAGER. HE LET US REVIEW A WATER
WELL REPORT HE PREPARED, DATED 9/15/89,
FOR THE JOINT MUNICIPAL WATER
MANAGEMENT DISTRICT. GOT DATA
FROM THIS REPORT AS FOLLOWS:

WELL #8 - DRINKING WATER WELL
DEEP WELL 18th ST, PLANT
1963

703' - DEPTH OF WELL

100' - SECTN LENGTH OF SCREENED
INTERVAL

~592' - ~692' - DEPTHS OF SCREENED
INTERVAL-

DIAMETER 16"

the general the T AND ETANK ETANKS	LOCATION OF WELL #8 - NEAR POWER PLANT UNDER ELEVATED TANK NEXT TO FENCE (LEWIS WILKENS GENERATING STATION)									
WORK FRONT	8 WELLS PRESENTLY IN PRODUCTION SUPPLYING CLARKSDALE'S DOMESTIC POTABLE WATER DEMAND. TWO ADDITIONAL WELLS ARE MAINTAINED IN STANDBY.									
A BREAK.	AVERAGE DEPTH OF WELLS IS 830 FT W/ AVERAGE FLOW OF 1076 GPM AT OPERATING PRESSURE, WELLS ASSIGNED THROUGH AN AUTO. CONTROL SYSTEM TO 4 ELEVATED STORAGE TANKS. NORMAL AVERAGE RUN TIME PER COLLECTIVE SYSTEM IS 7.6 HRS/DAY.									
CLARKSDALE PLANT -4761 *940 CLARKSDALE, MS 38614										
ACTION PLAN A WATER DATED 9/15/89, WATER OT DATA WWS:	WELL #2 - COOLING WATER WELL AT LEWIS WILKENS GENERATING STATION									
	<table border="1"> <tr> <td>STATIC LEVEL</td> <td>36 FT</td> <td>1/11/89</td> </tr> <tr> <td>" "</td> <td>45 FT</td> <td>7/26/89</td> </tr> <tr> <td>" "</td> <td>40 FT</td> <td>4/21/89</td> </tr> </table>	STATIC LEVEL	36 FT	1/11/89	" "	45 FT	7/26/89	" "	40 FT	4/21/89
STATIC LEVEL	36 FT	1/11/89								
" "	45 FT	7/26/89								
" "	40 FT	4/21/89								
R WELL	TEN COOLING WATER WELLS AT THE LEWIS WILKENS GENERATING STATION. AVERAGE DEPTH OF THESE WELLS IS 224 FT W/ AV. FLOW OF 2,475 GPM AT OPERATING PRESSURE.									
F SCREENED										
REENED	WELL #2 DIAMETER 16"									



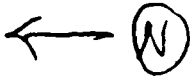
LEFT WILKENS GENERATING STATION
AT ~ 12:55 PM. GOT MORE ICE FOR
SAMPLES.

~ 1:05 PM WENT TO CLARKSDALE WASTEWATER
TREATMENT PLANT AND TALKED
WITH JOHNNY SMITH, PLANT
MANAGER. STORM WATER FROM
THE STREETS AROUND CLARKSDALE
NORMALLY DRAINS TO THE SUNFLOWER.
ANY RUNOFF ALONG E. TALLAHATCHIE
ST. AROUND RED PANTHER WOULD
LIKELY FLOW INTO STORM DRAINS
AND DISCHARGE INTO THE SUNFLOWER
RIVER ABOUT 1/2 MILE WEST OF
RED PANTHER. LEFT WWTP AT
~ 1:35 PM.

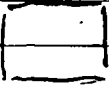
STOPPED AT FOSTER RESIDENCE
> 1 MILE SW OF RED PANTHER
RE: PRIVATE WELL. NO ONE CAME
TO THE DOOR. LEFT ~ 1:43 PM.

OTHER HOUSES ALONG THIS ROAD
~~1:51 PM~~ ~~JK~~ APPEAR TO BE ON CITY
WATER. HOUSES ARE RELATIVELY
NEW. NO PUMP HOUSES NOTED.
SEE DIAGRAM NEXT PAGE.

1:51 PM STOPPED AT WILMA PAYNO'S
RESIDENCE ON ROBIN LANE. THESE
HOUSES ALONG THIS ST. ARE ON
CITY WATER

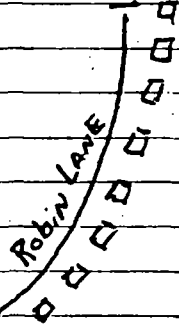


STATION
E ICE FOR



WIKENS
GENERATING
STATION

LARK LANE



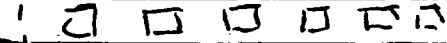
ABOUT 8 SMALL
OLDER HOUSES



STEWATER
KED
ANT
FROM
DALE
SUNFLOWER
LAHATCHIE
WOULD
RAINS
= SUNFLOWER
EST OF
PAT

ENCE
HER
CAME
PM.
ROAD
CITY
VELY
NOTED.

10-12 FAIRLY NEW
BRICK HOUSES



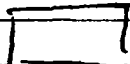
DEAD
END

CLARKSDALE
CORP. LIMITS

FOSTER
RESIDENCE

PAYNO'S
THESE
E ON

WASTEWATER
TREATMENT
PLANT

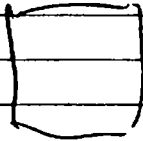
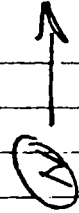


32

PATTON

RED PANTHER

MOBILE HOME REPAIR & SALES



SASSE ST.

REX CEMENT MIXING CO.

Hwy 49

DELTA GRAIN DRYING COOPERATION

LARK LANE



BACK TO RED PANTHER ABOUT 2:10 PM
OR THEREABOUTS.

TOOK 2 PICTURES OF ~~8~~JH NORTH
END OF PROPERTY. FIRST PICTURE
SHOWS GENERAL AREA OF OLD
SEPTIC TANK AND FIELD LINE.
TANKS IN THIS AREA CONTAIN
SOLVENTS AND SURFACTANTS,
INCLUDING ETHYLENE GLYCOL,
KEROSENE, METHY AND ETHYL
ALCOHOL. "BLACK" DRUMS CONTAIN
DSMA OR MSMA (DISODIUM AND
MONOSODIUM METHANE ARSENATE).
STACKED DRUMS ARE EMPTY.
SECOND PEE JH PICTURE SHOWS
~~8~~JH NORTH END OF PROPERTY,
FENCE, CONCRETE DIKE, STORMWATER
DRAIN PIPE IN FOREGROUND.

TOOK ONE MORE PICTURE. THIS
PICTURE SHOWS TRAILER REPAIR/SALES
PLACE ACROSS THE STREET FROM
(EAST OF) RED PANTHER.

LEFT SITE AT 2:45 PM.

JH

34

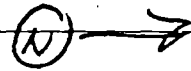
E. TALLAHACHEE ST.

CHAINLINK
FENCE

STORM
DRAIN

DRAINAGE
DITCH

SOUTH END OF
RED PANTHER





STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

January 30, 1992

Mr. Brian Farrier
Site Investigation and Support Branch
Waste Management Division
U.S. EPA - Region IV
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Re: Red Panther Chemical Company
Coahoma County
Clarksdale, MS
MSD000272385

Dear Mr. Farrier:

Enclosed is the SIP for Red Panther. References used in evaluating the facility are listed at the end of this letter report.

Background

Red Panther Chemical Company is a pesticide formulating plant that has been operating since 1949. It is currently classified as a RCRA hazardous waste generator.

The Mississippi Office of Pollution Control (MS OPC) conducted a Site Investigation-Phase II at the facility in 1990.

Waste Characteristics

Test results from the SI-Phase II showed elevated levels of arsenic, toxaphene, and several other pesticides in soil and sediment samples but no contamination of groundwater samples from an on-site monitoring well and two nearby public wells.

*NERAP APPROVED
Low waste quantity
assumed due to lack
of data, therefore score
is low.
BJA 1/31/92*

Groundwater Pathway and Aquifer of Concern

The groundwater pathway was evaluated considering both an observed release and potential to release. The observed release was based on results of groundwater monitoring in 1989 which indicated arsenic in the groundwater underlying the facility. Subsequent sampling by the MS OPC in 1990 didn't detect arsenic in the one remaining monitor well.

The Alluvial and Sparta aquifers are probably hydrologically connected in the Clarksdale area. Therefore, they were considered as a single hydrologic unit. The estimated depth to the water table is twenty-four feet, based on a water level measurement from a monitoring well on-site. The lowest documented point of soil contamination is about three feet below land surface, based on sample RPC-SB-09.

Eleven Clarksdale public wells and twenty-two home wells are within four miles of the facility. Some additional wells are used for irrigation. These public and home wells provide water to a population of 20,349 people. The nearest well is a public well about 1,100 feet from the facility.

Surface Water Pathway

The surface water pathway was evaluated based on potential to release. Some surface water run-off from the facility drains into a drainage ditch along Leflore Avenue and Patton Street east of the facility. This ditch drains into another ditch along Hwy. 49, which intersects an intermittent stream that eventually flows into the Sunflower River. No drinking water intakes are located along the 15-mile pathway. Twelve intakes along the pathway are used for crop irrigation. The annual human food chain production rates for the Sunflower River were conservatively estimated at 20 pds/yr/acre. There are no sensitive environments, including wetlands, along the 15-mile pathway.

Soil Exposure Pathway

The soil exposure pathway was evaluated considering documented soil contamination within the work place property and within two-hundred feet of a work place area. The area of contamination was estimated to be 3,000 ft². Workers are on site but there is no resident population. Access to the property is controlled.

Air Migration Pathway

The air migration pathway was not scored.

Page 3

Recommendation

Based on the score obtained from the SIP evaluation, this Office recommends that no further remedial action be planned for this facility. If you have any questions or comments concerning the evaluation, please contact Ken Whitten at (601) 961-5306.

Sincerely,

Jim Hardage

Jim Hardage
CERCLA UNIT
Hazardous Waste Division

JH:KW_mes4
Enclosure

References

1. Screening Site Inspection Report on Red Panther Chemical Company, January 31, 1991, by Mississippi Office of Pollution Control.
2. Tabulation of Water Wells in Clarksdale Area by USGS and Mississippi Office of Land and Water.
3. Information from Mississippi Office of Pollution Control Hazardous Waste Files Regarding a 1989 Environmental Assessment of the Red Panther Clarksdale Facility by Southern Farmers Association.

Groundwater Migration Pathway Score
* Alluvial + Sparta *

Likelihood of Release

1. NO observed Release : No contamination was found in the public water supply well.

Potential to Release:

2a. Containment : Evidence of hazardous substance migration from the wastewater collection pit. contaminated subsurface soil sample.

2b. Net Precipitation: From Figure 3-2 of Final HRS.

2c. Depth to Aquifer : Subsurface soil Sample (RC-SB-09) sampled at a depth of 2 to 3 feet b.i.s. and contained elevated levels of toluene, p,p'-DDT, xylenes, ethyl-benzene, benzene and cyanide. Depth to AOC is 24 feet, measured from the monitoring well on site.

24 depth to aquifer (AOC).
-3 depth of contamination
Z1 depth to ngrifer

∴ From Table 3-5 @ 21 feet : A value of 5

2d. Travel time: Hydraulic Conductivity of the unsaturated zone is 10⁻⁴ cm/sec.

Thickness of this unit is 24 feet thick

∴ Value of 25 from Table 3-7.

25

5

6

10

0

Groundwater (continued)

2e. Potential to Release:

$$10 \times (6 + 5 + 25) = 360$$

360

3. Likelihood of Release:

higher of lines 1 and 2e: 360

360

Waste Characteristics

4. Toxicity/Mobility:

Substance	Water Solubility (Table 3-8)	Dist. Coeff. from HAZ Sub. Ref.	Groundwater Mob. Factor Value (Table 3-8)	Tox. Fact. Value (HAZ. Sub) Ref.	Tox/mob. Fact. Value (Table 3-9)
Arsenic	liquid	200.0	0.01	10,000	100
Toxaphene	liquid	912.0	0.01	1000	10
DDT	"	23100.0	0.0001	1000	0.1
* Xylene (m)	"	"	1.0	10	10
ethyl-benzene	"	38.0	0.01	10	0.1
barium	"	60.0	0.01	10,000	100
** cyanide	"	—	—	100	—
Aldrin	"	7370.0	0.0001	10,000	1
Carbon disulfide	"	51.3	0.01	1,000	10

* Artificial Data shows xylenes; however - the Hazardous Substance Reference Table has 3 types of xylene. Therefore, m-xylene is used for a substance.

** Water solubility or distribution coefficient are not available therefore, use other hazardous substances for which information is available in evaluating the pathway.

All substances present as a liquid (to determine Mobility factor from table 3-8).

The substances with the highest Tox/mob. factor are barium and Arsenic. @ 100.

100

Groundwater (cont.)

5. Hazardous Waste Quantity: 10 yd^3 for waste quantity is assumed (From SSI-Phase II).

\therefore Table 2-5 \Rightarrow Tier C Measure (contaminated soil) $10 \text{ yd}^3 / 2500 = 0.004$ haz. waste. value.

$0 < 0.004 < 1$ round haz. waste quantity value to 1.

Since the hazardous constituent quantity is not adequately determined, and a removal action has not taken place, a haz. waste quantity factor value of 10 is assigned. (From 2.4.2.2 2nd)

10

b. Waste Characteristics

Tox/mob. \times Waste Quantity = 1000
 100 \times 10 = 1000

\therefore From Table 2-7 \Rightarrow 6

6

Targets

7. Nearest well: 1100 feet to the nearest well (Public) is in the Sparta.
 From Table 3-11 \Rightarrow 20

20.

8. Population

8a. Level I cont.

8b. Level II cont.

8c. Potential Contamination:

Distance (miles)	# Clarksdale <u>**</u> Public wells	# Home Wells	Total Pop.	Value from Table 3-12
0-1/4	1	0	1844	1633
1/4-1/2	0	0	0	0
1/2-1	0	1	3.12	1.0
1-2	9	4	16605	8939
2-3	1	8	1869	212
3-4	0	9	28	1.0
TOTAL	11	22	20,349	4786

⊙ Coahoma County \Rightarrow 3.12 persons per private well and connection

** Clarksdale has 6500 connections for their eleven (11) wells.

0
0

Groundwater (cont.)

Potential Contamination Factor

$$PC = \frac{1}{10} (4786) = 478.6$$

478.

8d. Population

$$(8a + 8b + 8c) \Rightarrow 0 + 0 + 478.6$$

478.6

9. Resources:

Some wells within the Alluvial & Sparta are used for irrigation

5

10. Wellhead Protection Area:

Mississippi has no wellhead Protection Program

0

11. Targets

$$\text{lines } (7 + 8d + 9 + 10) \Rightarrow (20 + 478.6 + 5 + 0) = 503.6$$

503

Groundwater Migration Pathway Score for an Aquifer

12. Aquifer Score :

$$\text{lines } \frac{(3 \times 6 \times 11)}{82500} \Rightarrow \frac{360 \times 6 \times 503.6}{82500} = 13.2$$

13.

SURFACE WATER OVERLAND/FLOOD MIGRATION

Drinking Water ThreatLikelihood of Release1. Observed release: NO.

0

2. Potential to Release by Overland Flow:

2a. Containment:

Table 4-2 under All Sources:

10

Evidence of hazardous substance migration from the source area.

2b. Runoff

Rainfall: 2 yr, 24 hr \rightarrow 4.2 inches
 Drainage Area: 50-250 Ac \Rightarrow 2 (From Table 4-3)
 Soil Group: Moderately fine-textured soils \Rightarrow C
 (From Table 4-4).

3

Rainfall/runoff Value (Table 4-5): 5
 Runoff Factor Value (Table 4-6): 3

2c. Distance to surface water:

26,400 feet to the Sunflower River
 (From Table 4-7) 26,400 feet > 2000 ft \Rightarrow 3

3

2d. Potential to Release by Overland Flow:

$$10 \times (3+3) = 60$$

60

Surface Water (cont.)

3. Potential to Release by Flood:

3a. Containment (Flood)

Other: 10 (From Table 4-8)

10

3b. Flood Frequency:

100-year flood plain: \Rightarrow 25 (From Table 4-9)

25

3c. Potential to Release by Floods

$10 \times 25 = 250$

250

4. Potential to Release:

$2d + 3c \Rightarrow 60 + 250 = 310$

310

5. Likelihood of Release:

310

Waste Characteristics

6. Toxicity/Persistence:

10,000

Substance	Tox. (Haz. sub. ref. table)	Persistence (Haz. sub. ref. table)	Tox/Pers Factor Value
toxaphene	1000	1.0	1000
xylene	10	1.0	10
ethyl-benzene	10	0.4	4.0
2-naphthalene	1000	1.0	1,000
Aldrin	10,000	1.0	10,000
Barium	10,000	1.0	10,000
Arsenic	10,000	1.0	10,000



Surface Water (cont.)

7. Hazardous Waste Quantity:

From Groundwater Pathway ; Line 5 \Rightarrow 10

10

8. Waste Characteristics

$$\text{Line (6 x 7)} \Rightarrow 10,000 \times 10 = \underline{100,000}$$

18

$$\text{From Table 2-7 } @ 100,000 \Rightarrow 1 \times 10^5 = 18$$

Targets

9. Nearest Intake:

No drinking water intakes are located along the 15-mile surface water pathway.

0

10. Population

- 10a. Level I concentrations
- 10b. Level II "
- 10c. Potential Contamination
- 10d. Population

0

0

0

0

11. Resources:

12 intakes along the 15-mile migration pathway are used for irrigation (From HAS-2 checked)
 \approx 806 Acres of soybeans
 \approx 90 Acres of rice

5

12. Targets

$$\text{lines (9 + 10d + 11)} = 0 + 0 + 5 = 5$$

5

Drinking Water Threat Score

13. Drinking Water Threat Score:

$$\text{Lines } \left(\frac{5 \times 8 \times 12}{80,500} \right) = \left(\frac{310 \times 18 \times 5}{80,500} \right) = 0.33$$

0.33

Surface Water (cont.)

HUMAN FOOD CHAIN THREAT

14. Likelihood of Release

SAME AS line 5 → 310

310

Waste Characteristics

15. Toxicity / Persistence / Bioaccumulation:

510⁸

substance	Tox. (Max. Sub.) (Ref. Table)	Persist (Max. Sub.) (Ref. Table)	Bioacc. (Max. Sub.) (Ref. Table)	Tox/Pers (Table 4-12)	Tox/Pers./Bio. (Table 4-14)
Toxaphene	1000	1.0	50	1000	5×10^4
m-xylenes	10	1.0	500	10	5000
ethyl-benzene	10	0.4	50	4	200
Aldrin	10,000	1.0	50,000	10,000	5×10^8 e max
Barium	10,000	1.0	0.5	10,000	5000
Arsenic	10,000	1.0	5.0	10,000	5×10^4

16. Hazardous Waste Quantity:

Same as Line 7 value. (page 7)

10

17. Waste Characteristics:

(Tox/Pers. x Line 16) x (Bioaccumulation factor value)

$$(10,000 \times 10) \times (5 \times 10^8) = 5 \times 10^{13}$$

From table 2-7 @ $5 \times 10^{13} > 1 \times 10^{12} \therefore \underline{\underline{WC=1000}}$

100

Surface Water (cont)

Targets

18. Food Chain Individual

2.0

No observed release to fishery, but fishery is present in the Sunflower River.

∴ Dilution weight of the Sunflower River
(From Table 4-13): 0.1
 $0.1 \times 20 = 2.0$

19. Population:

19a. Level I cont.

0

19b. Level II cont.

0

19c. Potential Contamination

0.03

Annual human food chain production (estimate) = 20 lbs/yr/ac

$$\frac{(1.5 \text{ miles} \times 5280 \frac{\text{ft}}{\text{mile}} \times 60 \text{ ft wide}) (20 \text{ lbs/yr/ac})}{43560 \frac{\text{ft}^2}{\text{ac}}} = 2182 \text{ lbs/yr}$$

Dilution weight (From Table 4-13): 0.1

Human Food Chain Pop. Value (From Table 4-18)

$$\therefore 2182 \text{ lbs/yr} \Rightarrow \underline{\underline{3}}$$

$$P_c = \frac{1}{10} (P.D.) = \frac{(3 \times 0.1)}{10} = \underline{\underline{0.03}}$$

19d. Population:

$$\text{lines } (19a + 19b + 19c) = 0 + 0 + 0.03 = 0.03$$

0.03

20. Targets : Line (18 + 19d)

$$2 + 0.03 = 2.03$$

2.03

Human Food Chain Threat Score

21. Human Food Chain Threat Score: $\frac{(310 \times 1000 \times 2.03)}{82500} = 7.6$

7.6

30 SHEETS 3 SQUARE
 20 SHEETS 2 SQUARE
 10 SHEETS 1 SQUARE
 5 SHEETS 1/2 SQUARE
 2 SHEETS 1/4 SQUARE
 1 SHEET 1/8 SQUARE



Surface Water (cont.)

ENVIRONMENTAL THREATLikelihood of Release

22. Likelihood of Release:

SAME value as line 5

310

Waste Characteristics

23. Ecosystem Toxicity/Persistence/Bioaccumulation

5x10⁸

Substance	Eco. Tox (HPL. sub.) (Ref. table)	Persist. (HPL. sub.) (Ref. table)	Eco. Bioacc. (HPL. sub.) (Ref. Table)	Eco. Tox/Pers. (From Table) 4-20	Eco Tox/P/Bioacc. (From Table) 4-21
Toxaphene	10,000	1.0	50,000	10,000	5x10 ⁸
m-xylene	100	1.0	500	100	5x10 ⁴
ethyl-benzene	100	0.4	50	40	2000
Aldrin	10,000	1.0	50,000	10,000	5x10 ⁸
Barium	1	1.0	0.5	1.0	0.5
Arsenic	10,000	1.0	5.0	10	50

MAX ⇒ 5x10⁸

24. Hazardous Waste Quantity

From Line 7 (page 9) ⇒ 10

10

25. Waste Characteristics:

180

(Eco tox/Pers. value x line 24) x (eco. bioacc. value).

$$(10,000 \times 10) \times (50,000) = 5 \times 10^9$$

∴ From Table 2-7 @ 5x10⁹ ⇒ 180

Surface Water (cont.)

Environmental Threat (cont.)Targets

26. Sensitive Environments

26a. Level I conc. 0

26b. Level II conc. 0

26c. Potential Contamination: 0

No sensitive environments are located along the 15-mile pathway.

26d. Sensitive Environments 0

$$0 + 0 + 0 = 0$$

27 Targets:

Value of line 26 d. 0

Environmental Threat Score:

28. Environmental Threat Score:

$$\frac{(\text{Lines } 22 \times 25 \times 27)}{82500} = \frac{(310 \times 180 \times 0)}{82500} = 0$$

Surface Water Overland/Flood Migration Comp. Score for Watershed.

29. Watershed Score:

/lines (13 + 21 + 28)

$$0.33 + 7.6 + 0 = 7.93 \approx 8.0$$

8.0

Surface Water Overland/Flood MIG. Comp. Score

30. Component Score

Highest of line 29. \therefore 8.0

8.0

Soil Exposure Pathway

Resident Population ThreatLikelihood of Exposure

1. Likelihood of Exposure:

550

Contaminated soils within the workplace property
'and within 200 feet of a workplace AREA.

Resident Population Threat Score:

2. Toxicity

10,000

Substance	Tox (1000 lbs.) (Ref. table)
Toxaphene	1000
n-xylene	10
ethyl-benzene	10
Aldrin	10,000 *
Barium	10,000 *
Arsenic	10,000 *

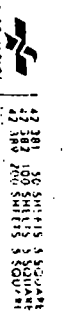
Aldrin, Barium, & Arsenic has the highest toxicity value \Rightarrow 10,000

3. Hazardous Waste Quantity

10

see page 3 in Groundwater Mig.

10



Soil Exposure (cont)

4. Waste Characteristics

(Tox) X (Waste Quantity)

10,000 x 10 = 100,000

100,000 > 100 ∴ 100

Targets

5. Resident Individual

There is no person living or attending school or day care on the property with an of observed contamination and who reside, school, or day care center, respectively, is on or within 200 feet of the area of observed contamination.

∴ Assign value = 0.

6. Resident Population

- 6a. Level I cont.
- 6b. Level II cont.

There are no resident individual criteria as specified in 5.1.2

6c. Resident Population

(lines 6a & 6b) 0 + 0 = 0

7. Workers

There are persons working on the property with 200 feet of observed contamination and workplace area within 200 feet of observed contamination.

of persons working at Red Prairie is estimated to be 4100.

∴ From Table 5.4

Assigned value = 1/5

5

0

0
0

0

100

Soil Exposure (cont.)

8. Resources

Does not meet section 5.1.3.4
Resources criteria.

∴ Assigned value $\Rightarrow 0$

0

9. Terrestrial Sensitive

Does not meet Section 5.1.3.5
Terrestrial sensitive environments criteria.

∴ Assigned value $\Rightarrow 0$

0

10. Targets

(lines 5 + 6 + 7 + 8 + 9)
 $0 + 0 + 5 + 0 + 0 = 5$

5

Resident Population Threat Score

11. Resident Population Threat

(lines 1 x 4 x 10)
 $550 \times 100 \times 5 = 275,000$

275,000

Soil Exposure (cont.)

NEARBY POPULATION THREATLikelihood of Exposure

12. Attractiveness / Accessibility

5

A maintained fence surrounds the property.

∴ From Table 5-6

Assigned value = 5

13. Area of Contamination

estimated to be ONE acre or 43560 FT²

∴ From Table 5-7

Assigned value ⇒ 5

5

14. Likelihood of Exposure

5

From Table 5-8

Using Area cont. of 5
∴ Att. loc value of 5∴ Assigned Value ⇒ 5Waste Characteristics

15. Toxicity:

10,000

Substance	Toxicity (Max. sig. Ref. Table)
toxaphene	1000
(a) xylene	10
ethyl-benzene	10
Aldrin	10,000
Barium	10,000
Arsenic	10,000

Soil Exposure (cont.)
Waste Characteristics (cont.)

16. Hazardous Waste Quantity:

From Table 5-2

Tier: D
Metric: contaminated soil (ft²)

From line 13 $\Rightarrow \frac{3000}{34000} = 0.088$

17. Waste Characteristics:

Line 15 x Line 16

$10,000 \times 0.088 = 880$

$880 > 100 \Rightarrow 100$

Targets

18. Nearby Individual

Travel distance for nearby individual is $\frac{1}{4}$ mile

From Table 5-9

Assigned value $\Rightarrow 1$

19. Population within 1 mile

1 house = 3.12 persons

Distance (miles)

* Population Range (From Table 5-10)

Population Value

0-1/4
1/4-1/2
1/2-1
1-2

101-300
301-1000
1001-15000

Total

4
7
33

* Estimated since the individual houses were not delineated on the topographic map.

44

100

0.088

Soil Exposure (cont.)

Targets (cont.)

20. Targets (lines 18 + 19)
 $1 + 44 = \underline{\underline{45}}$

45

Nearby Population Threat Score

21. Nearby Population Threat
 (lines 14 x 17 x 20)

22,500

$$5 \times 900 \times 45 = \underline{\underline{22,500}}$$

Soil Exposure Pathway Score

22. Soil Exposure Pathway Score:

3.6

$$\frac{\text{lines } [1172]}{82500} = \frac{22500 + 22,500}{82500} = \underline{\underline{3.6}}$$

CALCULATION OF HRS SCORE

	<u>S</u>	<u>S²</u>
Groundwater Pathway score (S _{gw})	13.2	174.24
Surface water Pathway score (S _{sw})	8.0	64
Soil Exposure Pathway score (S _{se})	3.6	13.0
Air Pathway score (S _a)	not scored	not scored

Site Score :

$$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_{se}^2}{4}}$$

$$= \sqrt{\frac{174.24 + 64 + 13.0}{4}}$$

$$= \sqrt{62.81} = \underline{\underline{7.9}}$$

Groundwater Migration Pathway Score

* Alluvial ; Sparta *

Likelihood of Release

1. Observed Release:

In 1989, Chemical Analyses from monitoring wells 1 and 3, which no longer exist, contained elevated levels of Arsenic.

{ monitoring well # 1 contained 83.6 ppb of Arsenic }
 { monitoring well # 3 contained 452 ppb of Arsenic }

Because no other sources can be identified in this area and MSMA herbicide was formulated at the facility, which Arsenic could be associated with the breakdown of MSMA, an observed release can be established to the aquifer.

∴ observed Release ⇒ 550 . 550

CALCULATION OF HRS SCORE

	<u>S</u>	<u>S²</u>
Groundwater Pathway score (S _{gw})	20.1	404.01
Surface water Pathway score (S _{sw})	8.0	64
Soil Exposure Pathway score (S _{se})	3.6	13.0
Air Pathway score (S _a)	not scored	not scored

Site Score :

$$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_{se}^2}{4}}$$

$$= \sqrt{\frac{404.01 + 64 + 13.0}{4}}$$

$$= \sqrt{120.25} = \underline{\underline{10.9}}$$

TABLE 3-1
GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor Categories and Factors

<u>Likelihood of Release to an Aquifer</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
1. Observed Release	550	<u>550</u>
2. Potential to Release		
2a. Containment	10	_____
2b. Net Precipitation	10	_____
2c. Depth to Aquifer	5	_____
2d. Travel Time	35	_____
2e. Potential to Release (lines 2a x (2b + 2c + 2d))	500	_____
3. Likelihood of Release (higher of lines 1 and 2e)	550	<u>550</u>
<u>Waste Characteristics</u>		
4. Toxicity/Mobility	a	<u>100</u>
5. Hazardous Waste Quantity	a	<u>10</u>
6. Waste Characteristics	100	<u>6</u>
<u>Targets</u>		
7. Nearest Well	50	<u>20</u>
8. Population		
8a. Level I Concentrations	b	<u>0</u>
8b. Level II Concentrations	b	<u>0</u>
8c. Potential Contamination	b	<u>478.6</u>
8d. Population (lines 8a + 8b + 8c)	b	<u>478.6</u>
9. Resources	5	<u>5</u>
10. Wellhead Protection Area	20	<u>0</u>
11. Targets (lines 7 + 8d + 9 + 10)	b	<u>503.6</u>
<u>Ground Water Migration Score for an Aquifer</u>		
12. Aquifer Score ((lines 3 x 6 x 11)/82,500) ^c	100	<u>20.1</u>
<u>Ground Water Migration Pathway Score</u>		
13. Pathway Score (S _{gw}), (highest value from line 12 for all aquifers evaluated) ^c	100	<u>20.1</u>

^aMaximum value applies to waste characteristics category.

^bMaximum value not applicable.

^cDo not round to nearest integer.

Red Pen
by Ken Whitten

TABLE 3-1
GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor Categories and Factors

	<u>Likelihood of Release to an Aquifer</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
1.	Observed Release	550	<u>0</u>
2.	Potential to Release		
2a.	Containment	10	<u>10</u>
2b.	Net Precipitation	10	<u>6</u>
2c.	Depth to Aquifer	5	<u>5</u>
2d.	Travel Time	35	<u>25</u>
2e.	Potential to Release [lines 2a x (2b + 2c + 2d)]	500	<u>360</u>
3.	Likelihood of Release (higher of lines 1 and 2e)	550	<u>360</u>
<u>Waste Characteristics</u>			
4.	Toxicity/Mobility	a	<u>100</u>
5.	Hazardous Waste Quantity	a	<u>10</u>
6.	Waste Characteristics	100	<u>6</u>
<u>Targets</u>			
7.	Nearest Well	50	<u>20</u>
8.	Population		
8a.	Level I Concentrations	b	<u>0</u>
8b.	Level II Concentrations	b	<u>0</u>
8c.	Potential Contamination	b	<u>478.6</u>
8d.	Population (lines 8a + 8b + 8c)	b	<u>478.6</u>
9.	Resources	5	<u>5</u>
10.	Wellhead Protection Area	20	<u>0</u>
11.	Targets (lines 7 + 8d + 9 + 10)	b	<u>503.6</u>
<u>Ground Water Migration Score for an Aquifer</u>			
12.	Aquifer Score [(lines 3 x 6 x 11)/82,500] ^c	100	<u>13.2</u>
<u>Ground Water Migration Pathway Score</u>			
13.	Pathway Score (S _{gw}), (highest value from line 12 for all aquifers evaluated) ^c	100	<u>13.2</u>

^aMaximum value applies to waste characteristics category.

^bMaximum value not applicable.

^cDo not round to nearest integer.

TABLE 4-1
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>	
DRINKING WATER THREAT			
<u>Likelihood of Release</u>			
1. Observed Release	550	<u>0</u>	
2. Potential to Release by Overland Flow			
2a. Containment	10	<u>10</u>	
2b. Runoff	25	<u>3</u>	
2c. Distance to Surface Water	25	<u>3</u>	
2d. Potential to Release by Overland Flow (lines 2a x [2b + 2c])	500	<u>60</u>	
3. Potential to Release by Flood			
3a. Containment (Flood)	10	<u>10</u>	
3b. Flood Frequency	50	<u>0.5</u>	
3c. Potential to Release by Flood (lines 3a x 3b)	500	<u>250</u>	
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	<u>310</u>	
5. Likelihood of Release (higher of lines 1 and 4)	550		<u>310</u>
<u>Waste Characteristics</u>			
6. Toxicity/Persistence	a	<u>10,000</u>	
7. Hazardous Waste Quantity	a	<u>10</u>	
8. Waste Characteristics	100		<u>18</u>
<u>Targets</u>			
9. Nearest Intake	50	<u>0</u>	
10. Population			
10a. Level I Concentrations	b	<u>0</u>	
10b. Level II Concentrations	b	<u>0</u>	
10c. Potential Contamination	b	<u>0</u>	
10d. Population (lines 10a + 10b + 10c)	b	<u>0</u>	
11. Resources	5	<u>5</u>	

TABLE 4-1 (Continued)

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
DRINKING WATER THREAT (Concluded)		
<u>Targets (Concluded)</u>		
12. Targets (lines 9 + 10d + 11)	b	<u>5</u>
<u>Drinking Water Threat Score</u>		
13. Drinking Water Threat Score ((lines 5 x 8 x 12)/82,500, subject to a maximum of 100)	100	<u>0.33</u>
HUMAN FOOD CHAIN THREAT		
<u>Likelihood of Release</u>		
14. Likelihood of Release (same value as line 5)	550	<u>310</u>
<u>Waste Characteristics</u>		
15. Toxicity/Persistence/Bioaccumulation	a	<u>5x10⁸</u>
16. Hazardous Waste Quantity	a	<u>10</u>
17. Waste Characteristics	1,000	<u>1000</u>
<u>Targets</u>		
18. Food Chain Individual	50	<u>2.0</u>
19. Population		
19a. Level I Concentrations	b	<u>0</u>
19b. Level II Concentrations	b	<u>0</u>
19c. Potential Human Food Chain Contamination	b	<u>0.03</u>
19d. Population (lines 19a + 19b + 19c)	b	<u>0.03</u>
20. Targets (lines 18 + 19d)	b	<u>2.03</u>
<u>Human Food Chain Threat Score</u>		
21. Human Food Chain Threat Score ((lines 14 x 17 x 20)/82,500, subject to a maximum of 100)	100	<u>7.6</u>

TABLE 4-1 (Concluded)

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
ENVIRONMENTAL THREAT		
<u>Likelihood of Release</u>		
22. Likelihood of Release (same value as line 5)	550	<u>310</u>
<u>Waste Characteristics</u>		
23. Ecosystem Toxicity/Persistence/ Bioaccumulation	a	<u>5 x 10⁸</u>
24. Hazardous Waste Quantity	a	<u>10</u>
25. Waste Characteristics	1,000	<u>180</u>
<u>Targets</u>		
26. Sensitive Environments		
26a. Level I Concentrations	b	<u>0</u>
26b. Level II Concentrations	b	<u>0</u>
26c. Potential Contamination	b	<u>0</u>
26d. Sensitive Environments (lines 26a + 26b + 26c)	b	<u>0</u>
27. Targets (value from line 26d)	b	<u>0</u>
<u>Environmental Threat Score</u>		
28. Environmental Threat Score ([lines 22 x 25 x 27]/82,500, subject to a maximum of 60)	60	<u>0</u>
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORE FOR A WATERSHED		
29. Watershed Score ^c (lines 13 + 21 + 28, subject to a maximum of 100)	100	<u>80</u>
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORE		
30. Component Score (S _{of}) ^c (highest score from line 29 for all watersheds evaluated, subject to a maximum of 100)	100	<u>80</u>

^aMaximum value applies to waste characteristics category.

^bMaximum value not applicable.

^cDo not round to nearest integer.

TABLE 3-1
SOIL EXPOSURE PATHWAY SCORESHEET

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
RESIDENT POPULATION THREAT		
<u>Likelihood of Exposure</u>		
1. Likelihood of Exposure	550	<u>550</u>
<u>Waste Characteristics</u>		
2. Toxicity	a	<u>10,000</u>
3. Hazardous Waste Quantity	a	<u>1</u>
4. Waste Characteristics	100	<u>100</u>
<u>Targets</u>		
5. Resident Individual	50	<u>0</u>
6. Resident Population		
6a. Level I Concentrations	b	<u>0</u>
6b. Level II Concentrations	b	<u>0</u>
6c. Resident Population	b	<u>0</u>
(lines 6a + 6b)		
7. Workers	15	<u>5</u>
8. Resources	5	<u>0</u>
9. Terrestrial Sensitive Environments	c	<u>0</u>
10. Targets (lines 5 + 6c + 7 + 8 + 9)	b	<u>5</u>
<u>Resident Population Threat Score</u>		
11. Resident Population Threat (lines 1 x 4 x 10)	.b	<u>275,000</u>
NEARBY POPULATION THREAT		
<u>Likelihood of Exposure</u>		
12. Attractiveness/Accessibility	100	<u>5</u>
13. Area of Contamination	100	<u>5</u>
14. Likelihood of Exposure	500	<u>5</u>
<u>Waste Characteristics</u>		
15. Toxicity	a	<u>10,000</u>
16. Hazardous Waste Quantity	a	<u>0.088</u>
17. Waste Characteristics	100	<u>100</u>

TABLE 5-1 (Concluded)

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
NEARBY POPULATION THREAT (Concluded)		
<u>Targets</u>		
18. Nearby Individual	1	$\frac{1}{44}$
19. Population Within 1 Mile	b	
20. Targets (lines 18 + 19)	b	<u>45</u>
<u>Nearby Population Threat Score</u>		
21. Nearby Population Threat (lines 14 x 17 x 20)	b	<u>22,500</u>
SOIL EXPOSURE PATHWAY SCORE		
22. Soil Exposure Pathway Score ^d (S _g), (lines [11+21] + 82,500, subject to a maximum of 100)	100	<u>3.6</u>

^aMaximum value applies to waste characteristics category.

^bMaximum value not applicable.

^cNo specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to maximum of 60.

^dDo not round to nearest integer.

SITE:	Red Panther
BREAK:	2.8
OTHER:	

**Tetra Tech EM Inc.**

Gwinnett Corporate Center ♦ 1750 Corporate Drive, Suite 735 ♦ Norcross, GA 30093 ♦ (770) 935-1542 ♦ FAX (770) 935-9049

2 8 0001

September 2, 1999

Mr. De'Lyntoneus Moore
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303

10095296



**Subject: Letter Report
Red Panther Chemical
EPA Contract No. 68-W5-0021 (START 4)
EPA ID No. MSD000272385
Technical Direction Document (TDD) No. 04-9905-0024**

Dear Mr. Moore:

The Tetra Tech EM Inc. Superfund Technical Assessment and Response Team (START) is submitting one copy of the letter report for the sampling investigation conducted at the Red Panther Chemical site in Clarksdale, Coahoma County, Mississippi.

If additional copies of the report or data sheets are needed, or you have any questions or comments regarding this letter report, please contact me at (770) 717-2305.

Sincerely,

David L. Brown
START Project Manager

cc: Doug Thompson, EPA Project Officer (w/o enclosure)
Steve Pierce, START Program Manager (w/o enclosure)
START file

LETTER REPORT
RED PANTHER CHEMICAL
CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Emergency Response and Removal Branch
61 Forsyth Street, SW
Atlanta, Georgia 30303

TDD No.	:	04-9905-0024
Date Prepared	:	September 2, 1999
Contract No.	:	68-W5-0021
Prepared by	:	Tetra Tech EM Inc.
START Project Manager	:	David L. Brown
Telephone No.	:	(770) 717-2305
EPA Task Monitor	:	De'Lyntoneus Moore
Telephone No.	:	(404) 562-8756

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- A FIELD LOGBOOK NOTES
- B DATA EVALUATION REPORT
- C PHOTOGRAPHIC LOG
- D TABLE OF WITNESSES

**LETTER REPORT
RED PANTHER CHEMICAL
CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI**

1.0 INTRODUCTION

This report has been prepared in accordance with Technical Direction Document (TDD) No. 04-9905-0024, which the Region 4 U.S. Environmental Protection Agency (EPA) assigned to the Tetra Tech EM Inc. Superfund Technical Assessment and Response Team (START). Under this TDD, EPA tasked START to conduct an integrated site investigation at the Red Panther Chemical site to determine if it poses a threat to the surrounding population. Specific tasks included preparing a safety plan, conducting air monitoring, providing photographic and written documentation of site conditions and activities, preparing a site diagram, and collecting soil samples.

This report summarizes the site history, observations on site, sampling activities, and analytical results. Figures follow the text of the report and include a site location map, site layout map, and sample location map.

2.0 BACKGROUND

The site consists of approximately 6.5 acres and is located in Clarksdale, Coahoma County, Mississippi. The facility is bordered on the west by the Illinois Central Railroad tracks, to the south by a cement company, to the north by Graeber Farm Supply, and to the east by a used car lot. A residential area lies 0.25 mile west of the facility (see Figures 1 and 2).

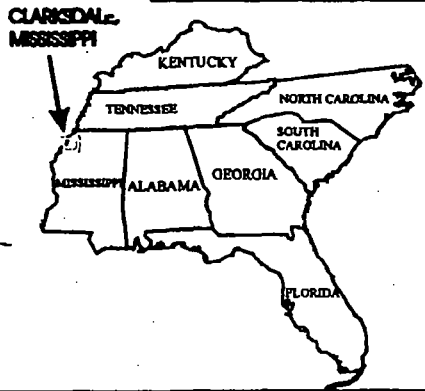
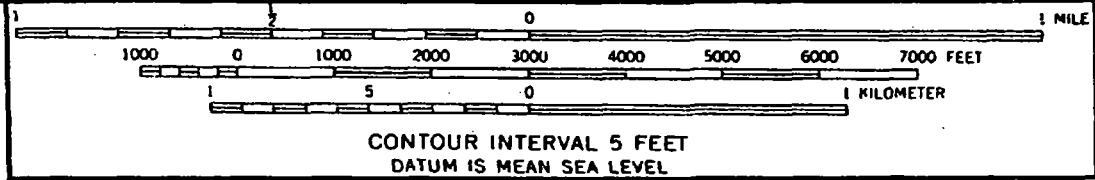
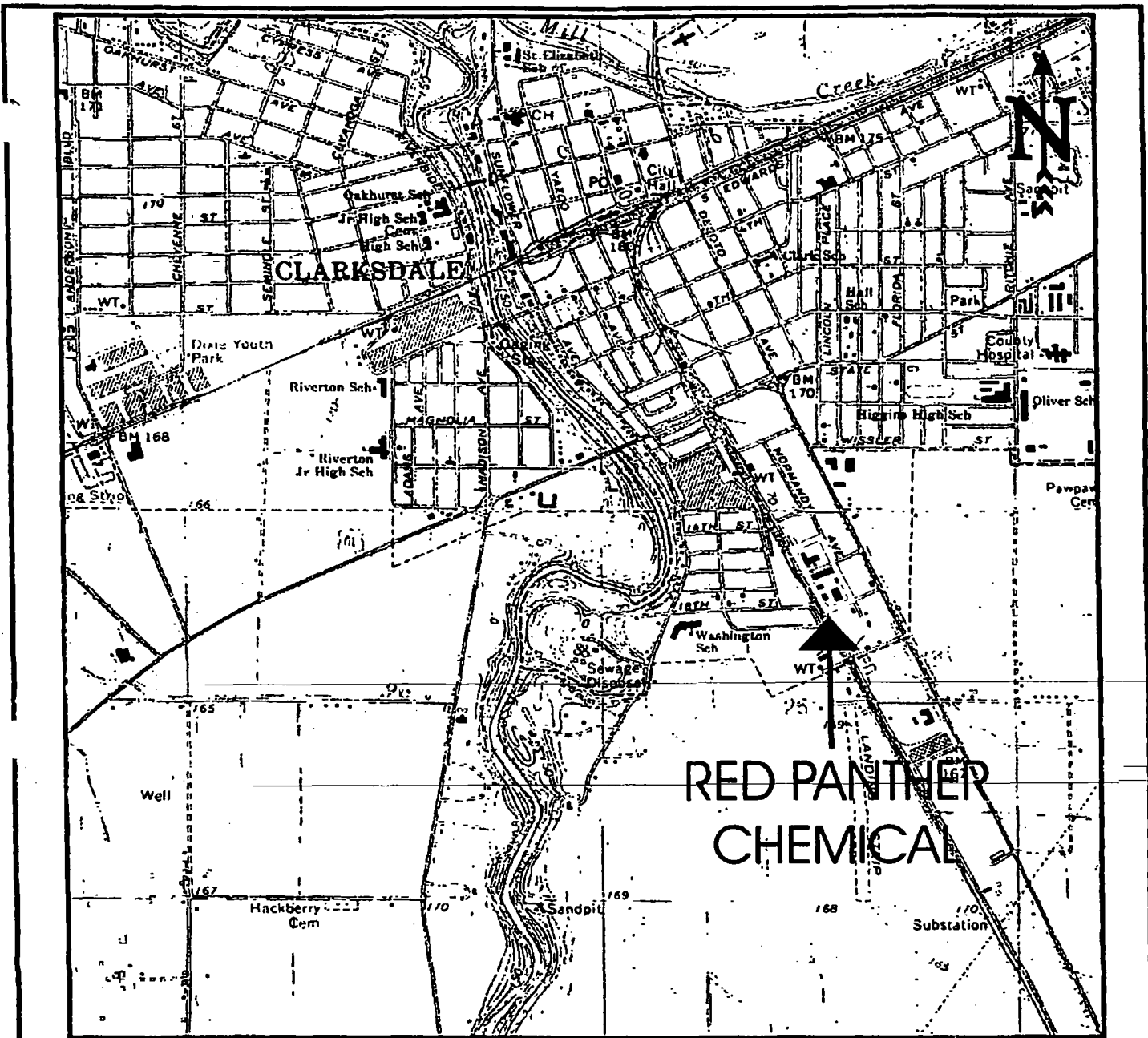
The Red Panther Chemical facility began operations in 1949 as a pesticide production plant. The facility formulated liquid and powder herbicides, insecticides, and fungicides, including toxaphene, aldrin, arsenic, and DDT. Previous owners of the facility include Coahoma Chemical Company, Riverside Chemical Company, and MFC Services. Coahoma Warehousing is currently operating at the former Red Panther Chemical facility. The Red Panther facility filed a Resource Conservation and Recovery Act (RCRA) notification in 1980 for storage of wastewater and spent or used solvents in drums and tanks on site. Wastewater and solvents containing pesticide and solvent residues

residues were generated from the cleaning of equipment. The facility's RCRA Part A permit application listed wastes from site operations, including acetone, benzene, chlordane, chloroform, dichloromethane, methanol, and toxaphene. In November 1985, the facility obtained a RCRA Part B permit from the Mississippi Bureau of Pollution Control (MBPC) to store the wastewater and dirty solvents. Prior to that, wastewater from the formulating process was discharged either directly to a ditch off site or into an underground septic tank and drained on site.

MBPC performed a sampling inspection at the facility in August 1984. Environmental samples were collected to determine the presence of and characterize any hazardous substances at the site. Composite sediment samples were collected from the off-site drainage ditch adjacent to Normandy and Patton Streets, and composite subsurface soil samples were collected from an area around the septic tank and drain field. A water sample was collected from an area where wastewater discharged into the off-site ditch. Analysis of sediment and soil samples revealed detectable levels of pesticides and arsenic.

3.0 SUMMARY

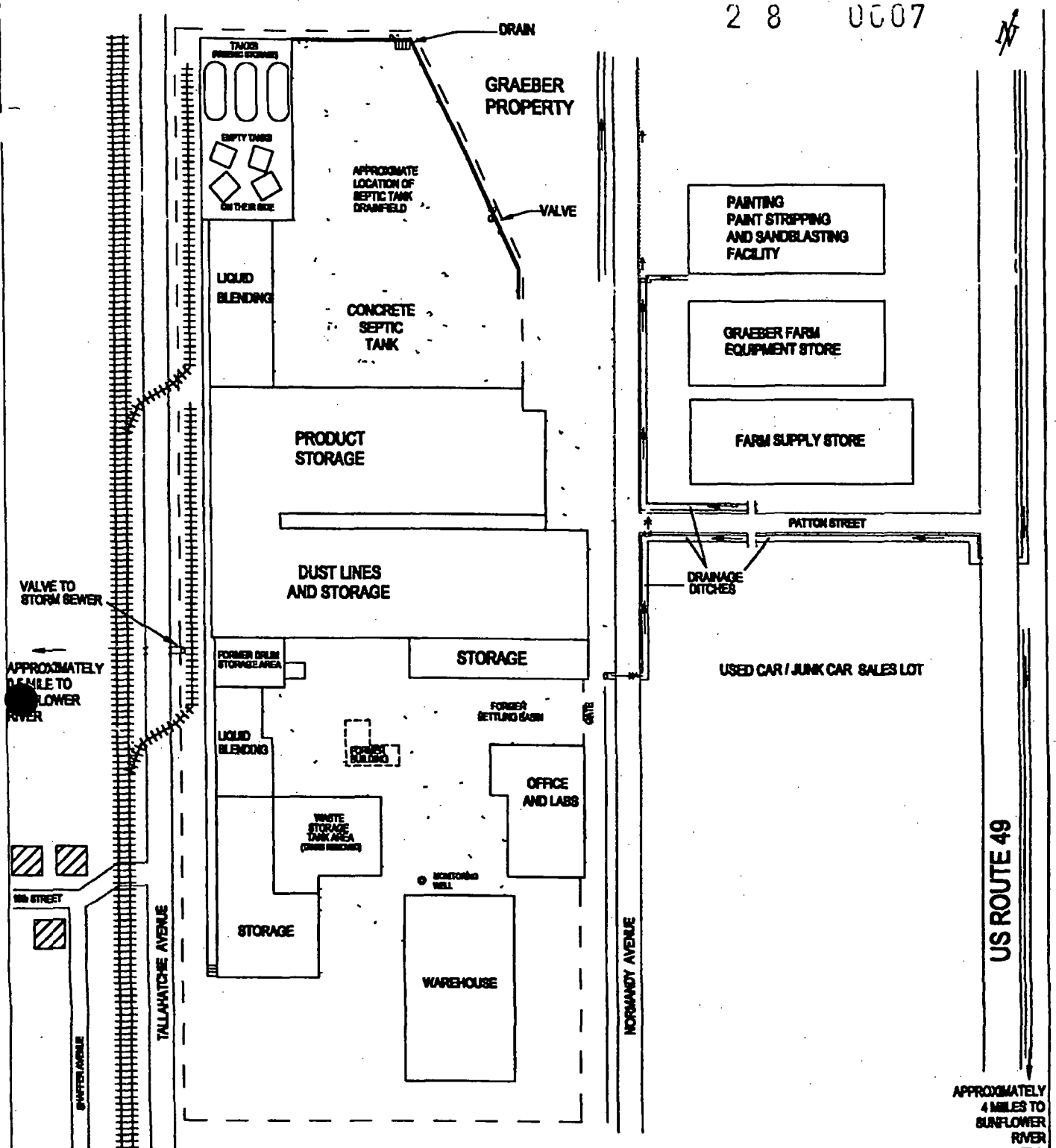
START personnel mobilized to Clarksdale, Mississippi, on June 14, 1999, and met On-Scene Coordinator (OSC) De'Lyntoneus Moore on site the morning of June 15, 1999, to begin sampling activities (see Appendix A). START and OSC Moore established the sample locations on site (see Figure 3). OSC Moore indicated that three areas of concern (Areas A, B, and C) were associated with the site. Area A consists of the drainage ditches located across the street from the facility and adjacent to Normandy Avenue and Patton Street. During the previous formulating processes at the facility, wastewater was discharged directly into these ditches. START collected 12 surface and 12 subsurface grab soil samples at 50-foot intervals from Area A. All surface soil samples were collected from 0 to 3 inches below ground surface (bgs) with clean stainless-steel spoons and stainless-steel bowls. All subsurface soil samples collected from Area A were collected from a depth of 1-foot bgs with clean stainless-steel augers. The surface and subsurface soil samples collected from Area A were labeled RPA-01-SS through RPA-12-SS and RPA-01-SB through RPA-12-SB, respectively. Additionally, START conducted volatile organics screening across Area A. The background reading for the area was 2.5 parts per million (ppm). The volatile organics screening revealed one location at the intersection of Normandy Avenue and Patton Street with a reading of 202 ppm. The organics



RED PANTHER CHEMICAL
 CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI
 EPA ID No MSD000272385
 TDD No. 04-9905-0024

FIGURE 1 - GENERAL SITE LOCATION MAP

Tt TETRA TECH EM INC. **START**



LEGEND

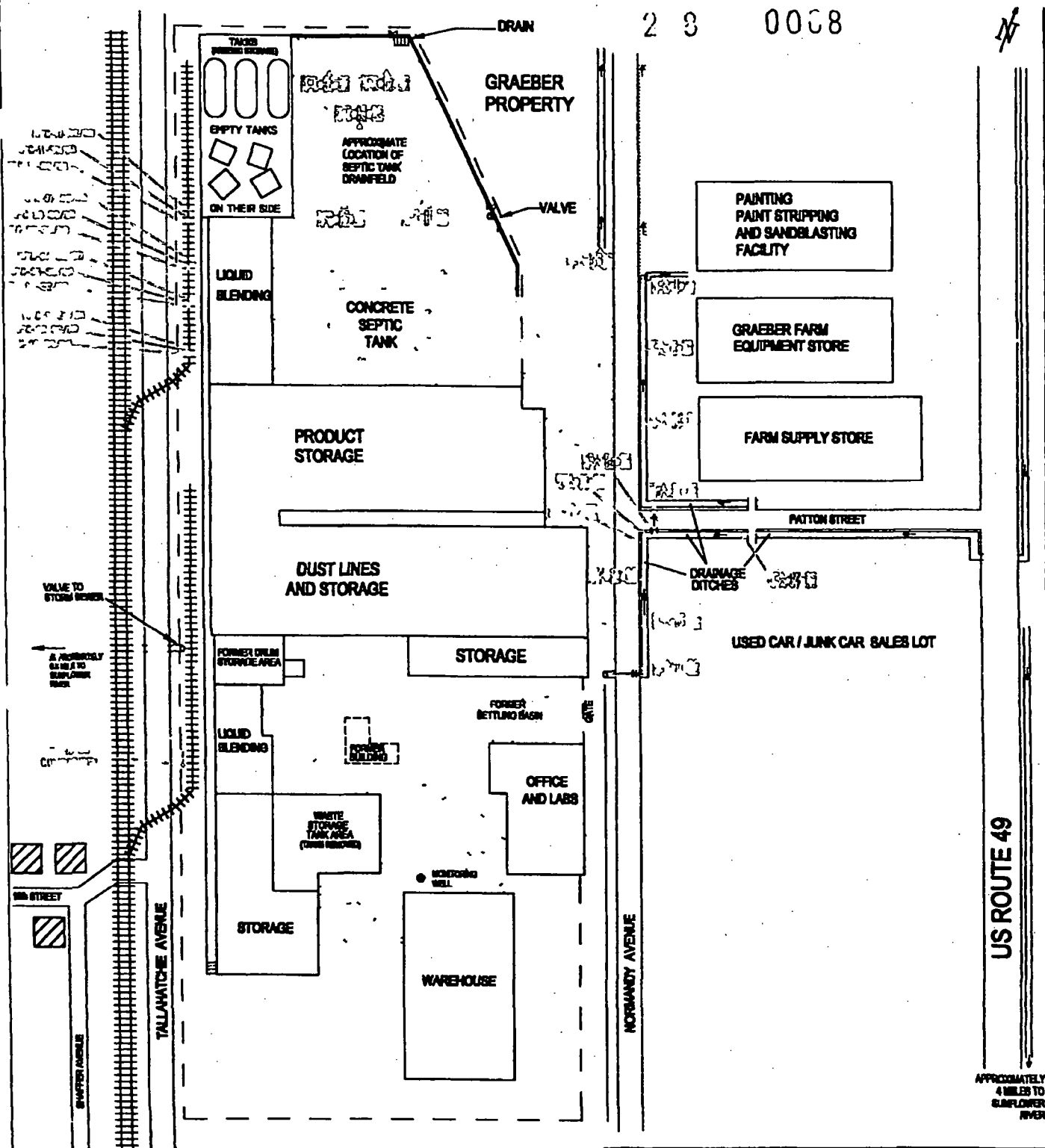
- GRAVEL COVERED AREAS
- RESIDENTIAL HOMES
- FENCE
- RAILROAD TRACKS

APPROXIMATE SCALE
IN FEET

0 100 200

RED PANTHER CHEMICAL
CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI
 TDD No. 04-9905-0024
 EPA ID No. MSD000272385

FIGURE 2
SITE LAYOUT MAP



APPROXIMATELY 4 MILES TO SHELBY RIVER

LEGEND	
	GRAVEL COVERED AREAS
	RESIDENTIAL HOMES
	FENCE
	RAILROAD TRACKS
	SAMPLE LOCATION
SS	SURFACE SOIL SAMPLE
SB	SUBSURFACE SOIL SAMPLE



RED PANTHER CHEMICAL
 CLARKSDALE, COAHOMA COUNTY, MISSISSIPPI
 TDD No. 04-9905-0024
 EPA ID No. MSD000272385

FIGURE 3
SAMPLE LOCATION MAP



Tetra Tech EM Inc.

SP-PT

screening of subsurface soil samples in Area A revealed several areas with elevated concentrations.

On the morning of June 16, 1999, START personnel sampled Area B. Area B consists of the area where the former on-site septic tank and drain field reportedly received wastewater from the previous formulating processes at the facility. START collected five subsurface grab soil samples from within the northern portion of the former septic drainfield. START personnel advanced a power auger to sample depth at each of the Area B sampling locations, then collected each sample with stainless-steel augers. Subsurface soil sample RPB-05-SB was collected at the northeast portion of the former septic drainfield, at 12 feet bgs, where the water table was encountered. Subsurface soil sample PRB-04-SB was collected from the northwest portion of the former septic drainfield, at 9 feet bgs. Subsurface soil sample RPB-03-SB was collected from near the center of the former septic drainfield, at 6 feet bgs. Subsurface soil sample RPB-02-SB was collected near the southwest portion of the former septic drainfield, at 6 feet bgs. Subsurface soil sample RPB-01-SB was collected near the southeast portion of the former septic drainfield, at 3 feet bgs. Additionally, START conducted volatile organics screening across Area B. The background reading for the area was 2.5 ppm; the volatile organics screening revealed one location (RPB-01-SB) with a reading of 32 ppm.

On the morning of June 17, 1999, START personnel sampled Area C. Area C consists of the railroad spur located behind the facility at the loading dock area. OSC Moore established the sampling locations along the railroad spur. START collected 12 surface and 12 subsurface grab soil samples from along the railroad spur. All surface soil samples were collected from 0 to 3 inches bgs with clean stainless-steel spoons and stainless-steel bowls. All subsurface soil samples collected from Area C were collected from a depth of 1-foot with clean stainless-steel augers. Additionally, START collected one five-point composite surface soil sample (RPC-13-SS) from the railroad spur directly adjacent to a loading dock where, according to local residents, the product formulation took place. No readings above background were detected during the volatile organics screening across Area C.

All surface soils were collected from the site using clean stainless-steel spoons and stainless-steel bowls. In addition, all subsurface soil samples were collected with clean stainless-steel augers; one auger bucket was used to advance to depth, and a second auger bucket was used to collect the sample. Soils collected for RCRA metals and pesticides analysis were homogenized in a bowl and apportioned into the sample containers. Additionally, all samples were preserved on ice after collection. Samples were

processed and packaged for delivery by START and shipped to Quanterra Environmental Services in Tampa, Florida, on June 16 and June 18, 1999.

4.0 ANALYTICAL

All samples were analyzed for RCRA metals and pesticides. The analytical report is provided in Appendix B, and includes a summary of all contaminants identified. The source facility property is highly, but irregularly, contaminated with a wide variety of persistent organochlorine pesticides and their degradation products. Toxaphene, 4,4'-DDT, chlordane, aldrin, dieldrin, endosulfan II, and endrin were the most frequently found pesticides. Subsurface soil sample RPA-02-SB (Area A) was reported to contain 12 percent toxaphene plus substantial amounts (parts-per-thousand range) of several other organochlorine pesticides. Toxaphene is a complex mixture of at least 177 chlorinated compounds. In addition, the concentrations of arsenic in the samples varied from 7.4 milligrams per kilogram (mg/kg) in sample RPA-03-SB to 834 mg/kg in sample RPA-12-SS. This range of concentrations implies that arsenic is a contaminant, probably derived from pesticides. Of note, arsenic is found in two chemically distinct classes of pesticide. The inorganic salts, such as Paris green (copper acetoarsenite), are relatively insoluble in water and, therefore, have low environmental mobility. The organoarsenates (chemically analogous to the organophosphate insecticides and nerve agents), such as cacodylic acid (dimethylarsinic acid), are relatively water soluble and, therefore, more mobile.

Lead also has a wide concentration range indicative of contamination. However, the highest concentration in these samples is 142 mg/kg (in sample RPA-09-SS), well under the usual 400 mg/kg acceptable limit for lead in residential soil.

5.0 CONCLUSIONS

The purpose of this investigation was to determine whether the Red Panther Chemical facility posed an immediate threat to nearby residents. The facility is surrounded by commercial property; however, a residential area lies 0.25 mile west of the facility.

Coahoma Warehousing is currently operating on the former Red Panther Chemical property. In June 1999, START conducted a site investigation that included collecting surface and subsurface soil samples from the former Red Panther Chemical property. Analytical results indicated that the facility property is highly contaminated with a wide variety of persistent organochlorine pesticides and their degradation products. Toxaphene, 4,4'-DDT, chlordane, aldrin, dieldrin, endrin, and endosulfan II were the most frequently found pesticides. Additionally, the concentrations of arsenic in the samples collected from the site property implied that arsenic is a contaminant, probably derived from pesticides. The analytical results also revealed a wide concentration range for lead; however, the lead concentrations were below the acceptable limit for lead in residential soil. Therefore, lead may not be a concern; however, concentrations of arsenic (a known carcinogenic in humans) are above acceptable levels. As a result, arsenic is of concern at the site.

Future site activities will be based on future agreements between EPA and Coahoma Warehousing. No further START activity is anticipated under this TDD.

MEASUREMENT CONVERSIONS

IF YOU KNOW	MULTIPLY BY	TO FIND
LENGTH		
inches	2 540	centimeters
feet	30 480	centimeters
yards	0 914	meters
miles	1 609	kilometers
millimeters	0 039	inches
centimeters	0 393	inches
meters	3 280	feet
meters	1 093	yards
kilometers	0 621	miles

WEIGHT		
ounces	28 350	grams
pounds	0 453	kilograms
grams	0 035	ounces
kilograms	2 204	pounds

VOLUME		
fluid ounces	29 573	milliliters
pints	0 473	liters
quarts	0 946	liters
gallons (U S)	3 785	liters
milliliters	0 033	fluid ounces
liters	1 056	quarts
liters	0 264	gallons (U S)

TEMPERATURE		
°C = (°F - 32) x 5/9		
°F = (°C x 1 8) + 32		

Inches	Decimals of foot	Milli-meters
1/16	0052	1 5875
1/8	0104	3 1750
3/16	0156	4 7625
1/4	0208	6 3500
5/16	0260	7 9375
<hr/>		
3/8	0313	9 5250
1/2	0417	12 7000
5/8	0521	15 8750
3/4	0625	19 0500
7/8	0729	22 2250
<hr/>		
1"	0833	25 4000
2"	1667	50 8000
3"	2500	76 2000
4"	3333	101 6000
5"	4167	127 0000
<hr/>		
6"	5000	152 4000
7"	5833	177 8000
8"	6667	203 2000
9"	7500	228 6000
10"	8333	254 0000
11"	9167	279 4000
1 foot	1 0000	304 8000

LEGAL DOCUMENT
DO NOT DESTROY

"Rite in the Rain"
ALL-WEATHER WRITING PAPER



04-S-0415

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0013

²
Tuesday, June 15, 1999

0900 START personnel David Brown, Greg Kowalski, Jennifer Claverty, and Kristin Knoll arrive at the Red Puddle site and meet with EPA OSC Tony Moore, the facility is currently operating as Cochona Warehousing. Mr. Moore explains tasks to be completed by ERRB. START personnel do a walk through of the site property. The site property is completely surrounded by barbed-wire fencing, however, the gate to the facility is open, adjacent to the Cochona Warehousing office. START personnel are noting the site features on a site layout map derived from site file material obtained from EPA.

0950 START personnel complete site walk through. OSC Moore explained to START personnel that there are three areas of interest. Area A is the drainage ditch pathway along the front of the facility adjacent to Normandy Avenue. He requested that this drainage ditch be gridded off in 50 foot intervals and to collect surface soil and 1-foot subsurface soil.

1030 START personnel have set up the grid on Area A.

1040 START collects the RPA-01-S1 sample approximately 5 feet from a discharge pipe which comes from the site property and discharges into the drainage ditch which comprises Area A. The sample collected from 3 inch depth consists of gravel fines and black sandy clay.

1050 Photo taken at the RPA-01-S5, RPA-01-SB sample location, begin augering for the subsurface soil, when the wind is not blowing, pesticide odor in this area can be strong. The weather is sunny and breezy, temperature is $\approx 75^{\circ}\text{F}$, high temperature to reach 82°F .

1055 START collects the RPA-01-SB sample from depth of 1-foot, sample consists of a moist grey colored silty clay with a slight odor. Note: The Micro FID is reading 2 ppm for background conditions, at area A readings are 0.8 ppm, it is breezy.

1115 START begin to collect the RPA-02-SS sample.

1125 Air Monitoring with FID Repts:

BQENO 2.5 ppm

Above Sample 1.5 ppm

Ambient fluctuating from 1.2 - 2.8

Wind coming from East (off site)

Particulate Monitor Repts:

BQENO: 0 - 0.1 ug/m³

At Sampling Location = 0 - 0.1 ug/m³

Start Walks East of Samp. Location

and FID readings climb to 8.5 ppm.

This location is away from site & upwind of site.

1135 BQENO Repts Near Sample Pt. = 5.9 ppm

1140 Collect RPA-02-SB, Soil Hole Goes from a Brown Sandy Clay on surface, to a Black Clay at 10". Start searches to a Clean Bucket & collects the sample from 12"-16"

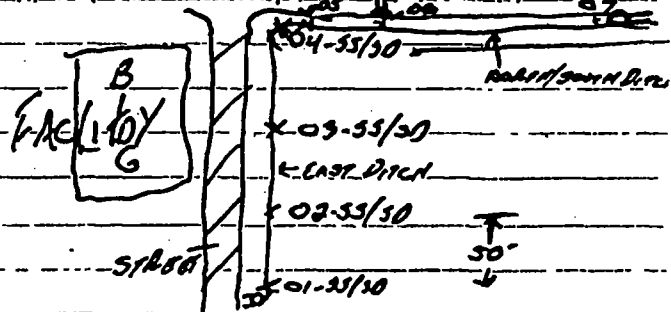
A Pesticide like odor is noticed, but no increase in monitoring instr.

Place FID in Boring & Read 74.7 ppm

Due to the odor & high FID, start will

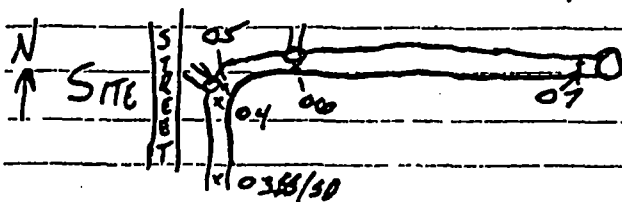
Collect remaining subsamples in modified LWC.

1220 Collect RPA-03-SS from East Drainage Ditch 100' North of RPA-01



Soil Hole is a Brown Sandy Clay. 1230 Begin Drilling to 1' Bgs. Soil Becomes a Black Clay at 8"

1255 Start Collects RPA-04-SS which the East Ditch Meets the North/South Ditch



Soil Hole is a Dark Grey Sandy Clay. 1300 Bore Down to 1', Soil is the same, No FID Repts Above 5 ppm from Boring

1305 Collect RPA-04-SB from same loc. of 04-SS at 12"-16". Soil Hole is a Dark Grey Clay (Gumbo Clay) that is very sticky/facile. Sparse vegetation is found in the East Ditch

And No Vegetation Is In The North/South Ditch. This Area Is The Low Spot And Water Appears To Pool Here Before Reaching A "Sealodor" Culvert, Taking Runoff North Across Street.

1310 START performs preliminary decon on sample equipment before breaking for lunch.

1510 START personnel are at the RPA-05-SS, RPA-05-SB sample location located at the drainage culvert at intersection of Patton Street & LeFlore.

1515 START collects the RPA-05-SS sample from 3" depth, soil consists of a sandy clay with a slight odor. Note: There have not been any bugs or worms encountered in any of the soils collected within Area A.

1525 START collects the RPA-05-SB sample, sample collected 12"-16", soil consists of gray silty clay with slight odor. Sampling still conducted in Level C PPE.

1535 START collects the RPA-06-SS sample in front of a roller drainage pipe.

1536 The RPA-06-SS soil consists of sandy, sedimentary deposit for the first inch and followed by black colored clay at 3" depth. Note: photo taken at the RPA-05-SB location.

1540 START collects the RPA-06-SB sample from depth of 12", soil consists of gray colored clay with odor.

1545 START collects the RPA-07-SS sample collected in front of yet another drain pipe within this drainage system. The soil consists of a brown colored silty, no odor detected.

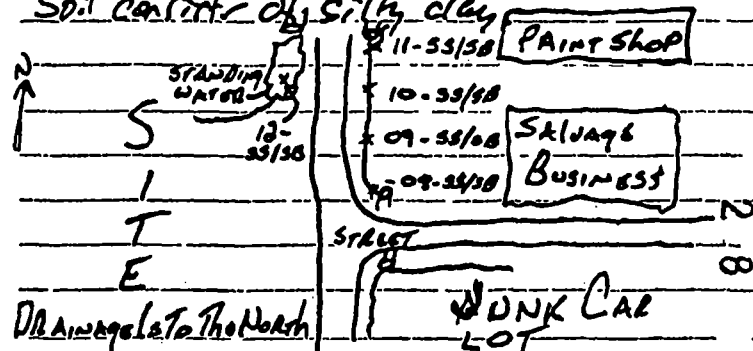
1600 START collects the RPA-07-SB sample from the 1-foot depth, the MicroFID is registering 74 ppm in the borehole at this location, START is in Level C PPE, soil consists of gray clay with odor.

1630 START collects the RPA-08-SS sample from 3" depth, soil consists of a brown colored silty clay.

1640 START collects the RPA-08-SB sample from 1-foot depth, the MicroFID reads 202 ppm in borehole.

1641 The RPA-08-SB sample consist
 of brown silty clay.
 Note: START collected the RPA-12-
 SS sample a lot collected at
 1640, collected by Clemens and Knoll.
 Sample collected from depth of
 3 inches, sample consists of silty clay.
 photograph taken at this location.
 1650 START collect the RPA-09-SS
 sample from 3" depth, sample
 consists of gray clay & silty sand.
 1655 START collect the RPA-04-SB
 sample, the sample was collected from
 a depth of 1-foot, sample consist of
 a gray silty clay, Micro FID
 reading 0.8 ppm at this borehole.
 1700 START personnel Clemens and
 Knoll collect the RPA-11-SS sample
 from 3" depth, soil consists of silty
 clay. Photograph taken at this location.
 Micro FID reading 0 ppm at borehole.
 1705 START collect the RPA-11-SB
 sample from 1-foot depth, same
 sample type.

1705 START Manbo-Kawaldi collect
 the RPA-10-SS sample from 3" depth,
 soil consists of brown silty clay, no odor.
 1710 START collect the RPA-10-SB
 soil consists of brown silty clay, FID
 reading 0 ppm in the borehole.
 Sample collected from 1-foot depth.
 1711 Note: RPA-12-SB collected at
 1645 soil collected from 1-foot interval,
 soil consists of silty clay.



1900 START personnel complete decommissioning
 of equipment and sample management activities and return to hotel, end
 of day.

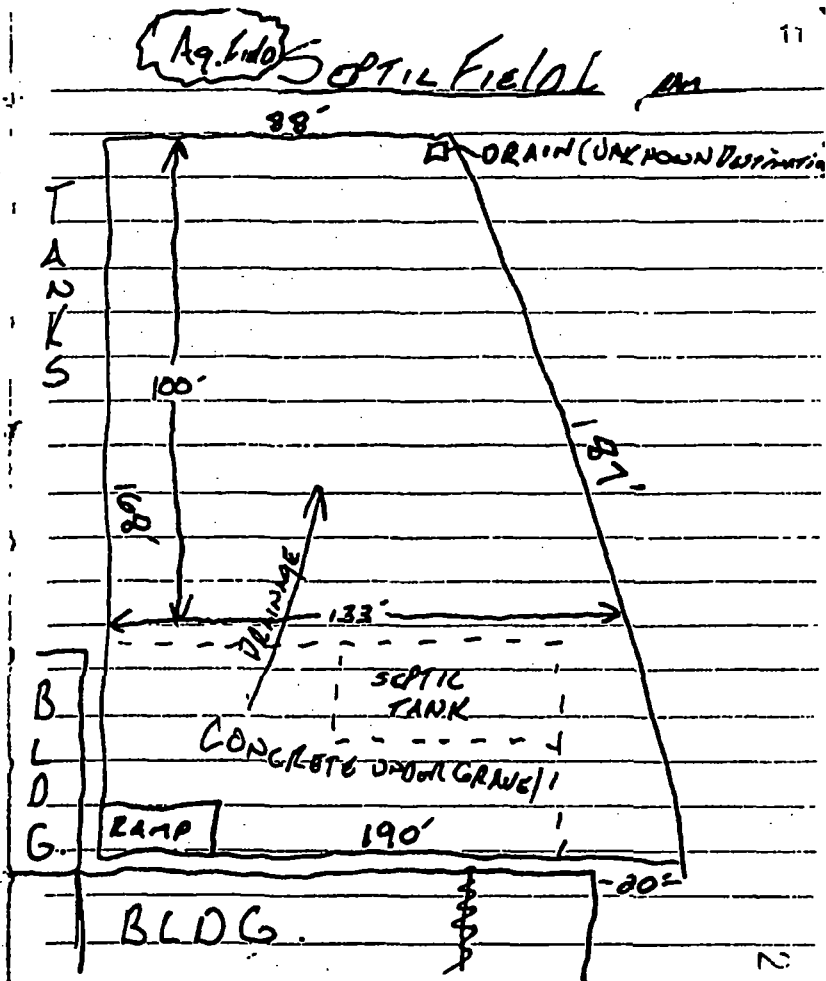
[Signature]
 6/15/99

¹⁰
 Wednesday, June 16, 1999
 0730 START personnel meet and
 prepare samples that were collected
 yesterday for shipment to the laboratory.
 0800 START personnel arrive at the
 Red Feather site, and ask security to
 unlock gates so that we can obtain
 access to the site property. OSC
 Tony Moore is not on site currently,
 the weather is partly cloudy, temperature
 is $\approx 73^{\circ}\text{F}$, high temperature to reach
 83°F .

0820 START personnel setting up
 for today's activities in Area B
 which is the location of the former
 septic field.

0840 START personnel are using shovels
 in Area B to scrape away a layer of
 gravel that has been spread over the
 entire area of the former septic field.
 In doing so, START will attempt to
 discover the location of the septic
 tank.

1000 START has determined the location
 of the septic tank (Area $\approx 60' \times 60'$)



1050 START personnel have marked the location for the five-point sample area for sampling in the former septic drain field area. START personnel have been using shovels and hand auger trying to penetrate the surface of this area and have had auger refusal repeatedly, will now attempt to use the Little Beaver power auger in this area.

1125 START personnel have power augered to a depth of 9 feet at the RPB-05-SB sample location, the designated sample depth is to be 25 feet. START personnel are air monitoring with Micro FID which is reading 2.5 ppm in the borehole. START working in Level D PPE. The sample location is located near the northeast corner (approx 5 feet) of the septic field area. The power auger encountered auger refusal at 9 feet using maximum power. START will continue to hand auger to attempt to reach sample depth. Photo taken air monitoring borehole, 2.5 ppm

1200 START personnel have augered to a depth of 12 feet at the RPB-05-SB location, groundwater encountered at this depth. START makes call to OSC Moore and informs of the situation, OSC Moore instructs START to collect the subsurface soil at 12 feet rather than 25 feet, he also stated that START should collect the remainder of the sample at: (1) 9 feet (2) 6 feet and (1) 3 feet

1220 START collects RPB-05-SB from 12 foot depth, the sample is very wet, the sample consists of very dense brown/gray clay, sample collected 23' west of the eastern wall and 19' south of the northern wall. The Micro FID reading is 2.7 ppm from the borehole.

1240 OSC Moore arrives onsite, START preparing to auger at the RPB-04-SB which is located 25' south of north wall and 35' East of West Wall. RECON OF AREA REVEALS THAT THE NEAREST SCHOOL IS B.T. WASHINGTON

ELEMENTARY SCHOOL & 1/2 - 1 MILE WESTERN SOUTH OF THE SITE. START MUST COLLECT SAMPLES FROM ADJACENT RESIDENCES (≤ 200' FROM SITE), TO DATE NO RESIDENCE HAS ALLOWED THEIR YARD TO BE SAMPLED. RE: HOME OWNER NOT PRESENT FOR DISCUSSION. MAY BE ABLE TO COLLECT SAMPLE FROM RIGHT OF WAY INSTEAD OF YARD.

THE CHILDREN OF THE ADJACENT NEIGHBORHOOD USE THE LPS FIELD AREA AND THE LEFLORE-PATTEN AREA AS STREET CUTS TO THE STORES ON HWY 49. NOTE: DITCHES ALONG LEFLORE DISPLAY CONTAMINATION AT PRESENT.

1330 START personnel have augered to a depth of 9 feet at the RP-04-SB location and are collecting the sample which consists of a tight brown/gray clay, slight odor, sample collected in level C protection, photo taken at this location, micro FID reads 2.7 ppm in borehole.

0021

1540 START personnel are at the RP-03-SB location and are utilizing Little Beaver power Auger, photograph taken here START to auger to 6-foot depth.

1610 START collects the RP-03-SB sample from a depth of 6 feet, micro FID reads 0.0 ppm from the borehole. Soil consists of brown sandy clay with no odor. Note: There is a paint facility located adjacent to the site which is spraying paint/finish into the air while paint application is occurring, photograph taken.

1615 Note: The RP-03-SB sample is located 45' south of north wall and 55' east of west tank impoundment wall.

1635 START has power augered to a depth of 6 feet at the RP-02-SB location to begin hand augering to clean out hole and collect sample, micro FID reads 0.0 ppm from borehole.

1650 START collects RP-02-SB sample consists of gray/brown clay, sample located 65' south of north wall & 78' east of west wall.

1705 START personnel have power augered to a depth of 3 feet at the RPB-01-5B location, will clean out borehole with hand auger and collect sample. Micro FTO reading 32 ppm from borehole.
 1715 START collect the RPB-01-5B sample from 3-foot depth, sample consisted of dark gray clay with no odor, sample located 41' east of west well and 67' south of North well.
 1730 START begin site breakdown activities and equipment decon.
 1930 START personnel arrive back at hotel, end of day.

Q.P.
 6/16/99

2
 8
 0022

Thursday, June 17, 1999

0730 START personnel meet and prepare samples for shipment to the laboratory.
 0845 START arrives on site, the weather is sunny, temp. \approx 67°F, high temp to reach 83°F, it is breezy, crew to begin setting up for today's activities.
 0905 START PERSONNEL ARE ON THE RAILROAD SPUR BEHIND THE FACILITY AT THE LOADING DOCK. THIS AREA IS REFERRED TO AS AREA C. THERE IS A SLIGHT ODOOR AND THE AREA IS MODERATELY VEGETATED.
 1010 START PERSONNEL COLLECT RPC-01-55. THE SOIL TYPE AT 3 INCHES IS SANDY W/ PEBBLES AND DARK COLOR, NO ODOOR. THIS SAMPLE IS CLOSEST TO THE LOADING DOCK.
 1015 START PERSONNEL COLLECT RPC-01-53. THE SOIL TYPE IS DARK W/ PIECES OF GLASS / COAL. START PERSONNEL AUGERED TO 12".
 1020 START PERSONNEL COLLECT RPC-02-55. THE SAMPLE IS

6/17/99

LOCATED BETWEEN THE TRACKS. THE SOIL TYPE IS A MIXTURE OF GRAVEL & DARK SILTY SOIL AT APPROX. 6", NO ODOR.

10:35 START PERSONNEL COLLECT RPC-02-SB FROM THE SAME LOCATION AND SOIL TYPE AS RPC-02-SS. NO ODOR. AUGURED THROUGH BALAST TO 12" b/s.

1040 START PERSONNEL COLLECT RPC-03-SS. THIS SAMPLE IS FURTHEST FROM THE LOADING DOCK. IT WAS COLLECTED AT 3" THE SOIL TYPE IS BROWN SILTY SOIL W/ ROCKS MIXED IN. NO ODOR.

NOTE: THERE IS A TRANSFORMER ON A TELEPHONE POLE NEAR THIS LOCATION.

1045 START PERSONNEL COLLECT RPC-03-SB. IT HAS THE SAME SOIL TYPE AND LOCATION AS RPC-03-SS.

THIS SAMPLE IS LOCATED AT 12" b/s.

1105 START PERSONNEL COLLECTS RPC-04-SS AT 3" b/s. SOIL TYPE IS DARK SILTY SOIL W/ GRAVEL. NOTE: OSC FLAGGED SAMPLE POINT

ON CROSS TIE. START PERSONNEL ADJUSTED THE POINT. SAMPLE IS LOCATED ADJACENT TO CROSS TIE AND IS CLOSEST TO THE LOADING DOCK. NO ODOR. SLIGHT BREEZE. PHOTO WAS TAKEN AT RPC-04-SS.

1120: START PERSONNEL COLLECTED RPC-04-SB. THE SAMPLE LOCATION ~~IS THE SAME AS~~ ~~RPC-04-SS~~ ~~THE~~ ~~SAMPLE~~ ~~WAS~~ ~~TAKEN~~ ~~AT~~ ~~12"~~ ~~IS~~ ~~THE~~ ~~SAME~~ ~~AS~~ ~~RPC-04-SS~~. THE SAMPLE WAS TAKEN AT 12" —

NOTE: SOIL TYPE CHANGED TO BLACK DAMP, SANDY SOIL —

1125: START PERSONNEL COLLECTED RPC-05-SS. FROM THE MIDDLE OF THE TRACKS. SOIL TYPE BROWN SANDY SOIL MIXED W/ ROCK. SAMPLE TAKEN AT 3" b/s. NO ODOR. NOTE: WINDY —

1130 START PERSONNEL COLLECTED RPC-05-SB. AT THE SAME LOCATION AS RPC-05-SS. SOIL TYPE IS THE SAME AS RPC-05-SS. SOIL TYPE CHANGED AT 12" b/s TO BLACK, DAMP, SANDY SOIL —

28

6/17/99

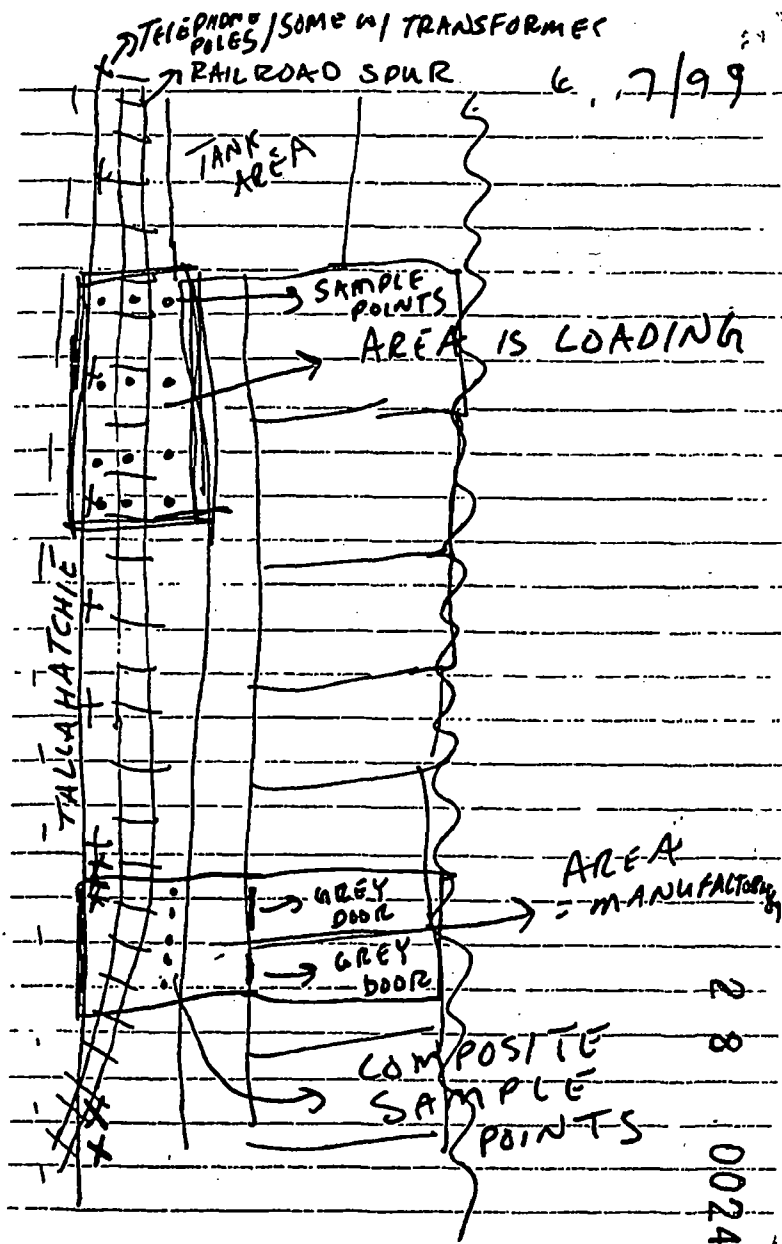
1140 RPC-06-SS WAS COLLECTED BY START PERSONNEL. THIS SAMPLE IS LOCATED FARTHEST FROM THE LOADING DOCK. SOIL TYPE IS BROWN SILTY SOIL W/ GRAVEL. THE SAMPLE WAS TAKEN FROM 3" b/s.

1145 START PERSONNEL COLLECTS RPC-06-SB. IT IS AT THE SAME LOCATION AS RPC-06-SS. SOIL TYPE IS DARK IN COLOR W/ PIECES OF METAL AND DEBRIS. NO ODOOR

NOTE: THIS SECTION OF THE RAILROAD SPUR IS CLOSEST TO THE LARGE STORAGE TANKS ON THE NORTH WEST SIDE.

1150 OSC ARRIVES AND INSTRUCTS START TO TAKE A COMPOSITE SAMPLE FROM AN AREA THAT IS BELIEVED TO BE A MANUFACTURING LOADING BAY.

ON THE RAILROAD SPUR START PERSONNEL COLLECT COMPOSITE FROM GRAVEL AREA W/ ON RAILROAD SPUR ADJACENT TO BUILDING W/ GREY DOORS



6/17/99

PHOTO TAKEN OF BUILDING
to SPUR WHERE COMPOSITE
WAS TAKEN

1345 START PERSONNEL COLLECT
RPC-10-SS. SOIL TYPE SANDY,
SILTY, DARK, NO ~~ODOR~~ ODOR
CLOSEST TO THE TRACK SLIGHT
ODOR AT 3" b/s. CLOSEST TO THE
LOADING BAY.

1405 - START COLLECTED
RPC-07-SS. SOIL TYPE IS ROCKY.
SAMPLE COLLECTED AT 3" b/s.
SAMPLE CLOSEST TO THE ROAD.

1405 START COLLECTED RPC-
10-SB AT SAME LOCATION
AS RPC-10-SS. SOIL TYPE IS
SAME AS RPC-10-SS. 12" b/s

1410 START COLLECTED RPC-11-SS
SOIL TYPE IS SILTY, BROWN.
COLLECTED AT 3" b/s. NO ODOR

1415 START PERSONNEL COLLECTED
RPC-11-SB. SAME SOIL AS
RPC-11-SS, NO ODOR. COLLECTED
AT 12" b/s BETWEEN RAILROAD
TRACKS

6/17/99

1420 - START COLLECTED
RPC-12-SS. THIS SAMPLE
LOCATION IS FURTHEST
FROM THE LOADING BAY. THE
SOIL TYPE IS ROCKY W/ SILTY
BROWN SOIL. 3" b/s.

1445 START PERSONNEL
COLLECT RPC-12-SB AT
12" b/s. SOIL TYPE AND
LOCATION ARE THE SAME AS
RPC-12-SS

1435 - START PERSONNEL COLLECTS
RPC-09-SS. GREY SILTY SOIL.
NO ODOR.

NOTE: PICTURE TAKEN OF
RPC-07-SS, FOLLOWED BY
A PICTURE OF CAUTION SIGN
1440 START COLLECTS RP-07-SB
LOCATED 3 FEET NORTH OF
SURFACE SOIL DUE TO CONCRETE
PAD. BLACK SANDY SOIL. CLOSEST
TO THE LOADING BAY - 12"

1445 RPC-09-SB COLLECTED AT 12"
FURTHEST FROM LOADING BAY -
SAME TYPE & LOCATION AS
RPC-09-SS.

6/17/49

1445 START PERSONNEL COLLECTED
 RPC-08-SS, SOIL TYPE IS
 SILTY + ROCKY. SAMPLE TAKE
 AT 43" b/s, IN BETWEEN TRACKS

1450 START PERSONNEL COLLECTED
 RPC-08-SB. AT 12" b/s

FURTHEST FROM THE JC. IN
 THE SAME LOCATION + SOIL
 TYPE AS RPC-08-SS. NO
 ODDR.

NOTE: VERY DIFFICULT TO
 AUGUR RPC 07-SB + RPC 09-SB

Q.B. Min
 6/17/49

APPENDIX B
DATA EVALUATION REPORT
(15 Pages)



August 9, 1999

Mr. De'Lyntoneus Moore
On-Scene Coordinator
U.S. Environmental Protection Agency
61 Forsyth Street, SW
11th Floor
Atlanta, GA 30303

**Subject: Data Evaluation Report
Red Panther Chemical Site
Technical Directive Document No. 04-9905-0021
Quanterra Incorporated
SDGs B9F170172 and B9F190126**

**Pesticides: 54/Soil Samples/RPA-01-SS through RPA-12-SS
RPA-01-SB through RPA-12-SB
RPB-01-SB through RPB-05-SB
RPC-01-SS through RPC-13-SS
RPC-01-SB through RPC-13-SS**

**Inorganics: 54/Soil Samples/RPA-01-SS through RPA-12-SS
RPA-01-SB through RPA-12-SB
RPB-01-SB through RPA-05-SB
RPC-01-SS through RPC-13-SS
RPC-01-SB through RPC-12-SB**

Dear Mr. Moore:

Data evaluation was performed on the analytical data for 54 soil samples collected by Tetra Tech EM Inc. (Tetra Tech), at Red Panther Chemical site. The samples were analyzed under sample delivery groups (SDG) B9F170172 and B9F190126 by Quanterra, Inc., of Tampa, Florida. The samples were analyzed for pesticides and inorganic chemicals using U.S. Environmental Protection Agency (EPA) methods SW-846 8081A, 6010B, and 7471A. The summary data packages were evaluated in accordance with the "U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review," dated February 1994, and were based on the following parameters:

- Data Completeness
- Holding Times
- Calibrations

Mr. De'Lyntoneus Moore
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Red Panther Chemical
SDGs B9F170172 and B9F190126

- Blanks
- Surrogate recoveries
- Matrix spike/matrix spike duplicates (MS/MSD) and matrix duplicates
- Laboratory control samples (LCS)
- Compound quantitation
- Compound identification

Table 1 summarizes the qualified data results.

I. DATA COMPLETENESS

The data packages for SDGs B9F170172 and B9F190126 were complete.

II. HOLDING TIMES

The holding times were met for the samples.

III. CALIBRATIONS

The initial and continuing calibrations were analyzed at the proper frequencies and concentrations and met all requirements, except for one minor irregularity for one surrogate in a continuing calibration. No qualifications are warranted.

IV. BLANKS

The calibration blanks were free of target analytes.

V. SURROGATE RECOVERIES

Surrogate recoveries were generally acceptable, when measurable; however, most pesticide analyses (each sample received three analyses, one for chlordane, one for toxaphene, and one for the other analytes) required dilutions of 10-fold to 200,000-fold, so the surrogate recoveries could not be determined. No qualifications are warranted.

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Red Panther Chemical
SDGs B9F170172 and B9F190126

VI. MATRIX SPIKE/MATRIX SPIKE DUPLICATES AND MATRIX DUPLICATES

The MS/MSD analyses for the pesticides were not usable. Each selected sample (RPA-09-SS, RPC-01-SS, and RPC-11-SB) contained at least one analyte in such quantity that the spikes were below the sample detection limit when the sample was diluted to bring the contaminant concentrations within calibration range.

The MS/MSD analyses of the inorganic analytes (metals) were generally within the acceptable range. However, in the analysis of sample RPA-08-SS, the arsenic recoveries were 163 percent in the MS analysis and 61 percent in the MSD analysis, both unacceptable. This anomalous result is probably due to variations in the arsenic concentration in the sample. In the MS/MSD analysis of sample RPB-01-SB, both barium recoveries were high, and both chromium and selenium recoveries were low. These results probably reflect matrix interference. In all the above cases, the results for the affected metals in those samples are considered estimates and flagged "J" to indicate that.

VII. LABORATORY CONTROL SAMPLES

The results obtained for the target analytes in the analysis of the LCSs were within control limits.

VIII. COMPOUND QUANTITATION

Sample results were spot checked for proper dilution factors, volumes, and dry weight corrections. Calculations were acceptable. The raw data for a majority of the samples showed interference from target and non-target chemicals, requiring dilutions of up to 200,000-fold for the pesticide analyses and up to 15-fold for the metals analyses.

In the pesticide analyses, overlapping peaks and raised baselines required manual integration in many samples. The laboratory examined each peak carefully and used the "cleanest" one for each quantitation. The results appear to be the best possible for such highly contaminated samples.

In the metals analyses, the major complication was spectral interference, mostly from calcium and iron, which are present in high concentrations in most samples. Dilution of the sample extracts eliminated this problem.

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Red Panther Chemical
SDGs B9F170172 and B9F190126

IX. COMPOUND IDENTIFICATION

Results are acceptable. Note, however, that absolute identification is not possible with this method of pesticide analysis. As an extreme case, consider sample RPA-02-SB, which was reported to contain 12 percent toxaphene plus substantial amounts (parts per thousand range) of several other organochlorine pesticides. Toxaphene is a complex mixture of at least 177 chlorinated compounds. It is possible that at least some of the other non-toxaphene pesticide results are toxaphene components, either partially or entirely. However, the same other non-toxaphene pesticide results were seen in many samples in similar concentration ratios, so the results in sample RPA-02-SB may be completely accurate.

Many of the pesticides appear to have been significantly degraded by their environmental exposure. During calibration it was noted that about 2 or 3 percent of the 4,4'-dichlorodiphenyltrichloroethane (4,4'-DDT) put on column was degraded to 4,4'-dichlorodiphenyldichloroethane (4,4'-DDD) and 4,4'-dichlorodiphenyldichloroethylene (4,4'-DDE) during the analysis. This same reaction is the most common environmental degradation mechanism for 4,4'-DDT, and in most samples, some 20 to 30 percent had been degraded. Similar degradation results would be expected for all the pesticides.

X. OVERALL ASSESSMENT OF DATA

The overall quality of this data package was acceptable. Results are as good as can be expected from such samples.

The source facility is highly, but irregularly, contaminated with a wide variety of persistent organochlorine pesticides and their degradation products. Toxaphene, 4,4'-DDT, chlordane, aldrin and dieldrin, endrin, and endosulfan II were the most frequently found pesticides.

The concentrations of arsenic in the samples vary from 7.4 milligrams per kilogram (mg/kg) in sample RPA-03-SB to 834 mg/kg in sample RPA-12-SS. This range of concentrations implies that arsenic is a contaminant, probably derived from pesticides. Of note, arsenic is found in two chemically distinct classes of pesticide. The inorganic salts, such as Paris green (copper acetoarsenite), are relatively insoluble in water and, therefore, have low environmental mobility. The organoarsenates (chemically analogous to the organophosphate insecticides and nerve agents), such as cacodylic acid (dimethylarsinic acid), are relatively water soluble and, therefore, more mobile. Either the facility history or special

2 8 . 0032

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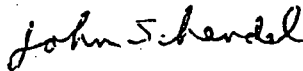
Red Panther Chemical
SDGs B9F170172 and B9F190126

analyses should be used to determine if the site contamination includes one or both groups of arsenic-containing pesticides.

Lead, too, has a wide concentration range, indicative of contamination. However, the highest concentration in these samples is 142 mg/kg (in sample RPA-09-SS), well under the usual 400 mg/kg acceptable limit for lead in residential soil. Therefore, lead may not be a concern, although arsenic (known to be carcinogenic in humans) is definitely a major concern at this site.

If you have any questions or need further information, please contact me at (404) 225-5516.

Sincerely,



John Schendel

Data Validation Chemist

Enclosures (2)

TA 1

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPA-01-SS	RPA-01-SB	RPA-02-SS	RPA-02-SB	RPA-03-SS	RPA-03-SB	RPA-04-SS	RPA-04-SB
Pesticides (microgram per kilogram)								
Aldrin	7,900	680,000	69,000	59,000	10,000 U	52,000	10,000	660
alpha-BHC	3,700 U	94,000	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
beta-BHC	3,700 U	26,000	20,000 U	51,000 U	11,000	42,000 U	4,000 U	430 U
delta-BHC	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
gamma-BHC (lindane)	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
4,4'-DDD	59,000	280,000	440,000	230,000	110,000	470,000	82,000	1,400
4,4'-DDE	4,500	22,000 U	27,000	51,000 U	14,000	42,000 U	4,000 U	450
4,4'-DDT	80,000	380,000	78,000	1,100,000	120,000	1,400,000	77,000	10,000
Dieldrin	21,000	84,000	54,000	150,000	38,000	200,000	16,000	4,400
Endrin	4,100	53,000	20,000 U	170,000	10,000 U	320,000	4,600	2,600
Endrin aldehyde	3,700 U	39,000	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
Endosulfan I	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
Endosulfan II	4,600	22,000 U	20,000 U	54,000	10,000 U	42,000 U	4,000 U	430 U
Endosulfan sulfate	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
Heptachlor	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
Heptachlor epoxide	3,700 U	22,000 U	20,000 U	51,000 U	10,000 U	42,000 U	4,000 U	430 U
Methoxychlor	7,200 U	42,000 U	39,000 U	100,000 U	20,000 U	82,000 U	7,800 U	840 U
Chlordane	22,000	47,000	110,000	210,000	55,000	230,000	18,000	1,300
Toxaphene	420,000	2,100,000	1,700,000	120,000,000	1,200,000	830,000 U	210,000	10,000
Metals (milligram per kilogram)								
Mercury	0.11 U	0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U
Arsenic	14.0	14.8	37.4	8.7	39.7	7.4	106	31.2
Lead	11.2	7.4	56.7	8.6	25.9	8.8	13.6	6.5
Barium	62.7	115	72.0	100	82.2	184	96.7	119
Selenium	2.7 U	0.96	0.60 U	0.81	0.60 U	0.88	1.5 U	1.1
Cadmium	0.54 U	0.63 U	0.60 U	0.60 U	1.2 U	1.2 U	0.59 U	0.64
Chromium	10.9 U	7.5	8.9	7.3	6.8	9.4	9.0	7.3
Silver	1.1 U	1.3 U	1.2 U	1.2 U	2.4 U	2.5 U	1.2 U	1.3 U

280034

TABLE 1 (continued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPA-05-SS	RPA-05-SB	RPA-06-SS	RPA-06-SB	RPA-07-SS	RPA-07-SB	RPA-08-SS	RPA-08-SD
Pesticides (microgram per kilogram)								
Aldrin	160,000	22,000 U	11,000 U	22,000 U	21,000 U	25,000	1,000 U	56
alpha-BHC	44,000 U	31,000	11,000 U	22,000 U	21,000 U	42,000	1,000 U	45 U
beta-BHC	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	63
delta-BHC	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	45 U
gamma-BHC (lindane)	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	25,000	1,000 U	45 U
4,4'-DDD	1,200,000	26,000	330,000	180,000	200,000	210,000	21,000	790
4,4'-DDE	44,000 U	22,000 U	14,000	22,000 U	21,000 U	22,000 U	6,000	140
4,4'-DDT	170,000	39,000	48,000	350,000	170,000	440,000	11,000	100
Dieldrin	44,000 U	43,000	72,000	65,000	67,000	110,000	12,000	440
Endrin	44,000 U	22,000 U	38,000	89,000	24,000	88,000	1,000	45 U
Endrin aldehyde	44,000 U	32,000	11,000	28,000	21,000 U	31,000	1,000 U	45 U
Endosulfan I	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	45 U
Endosulfan II	44,000 U	22,000 U	13,000	24,000	21,000 U	23,000	1,400	45 U
Endosulfan sulfate	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	45 U
Heptachlor	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	45 U
Heptachlor epoxide	44,000 U	22,000 U	11,000 U	22,000 U	21,000 U	22,000 U	1,000 U	45 U
Methoxychlor	86,000 U	43,000 U	21,000 U	43,000 U	40,000 U	43,000 U	2,000 U	87 U
Chlordane	270,000	180,000	93,000	67,000	43,000	76,000	13,000	790
Toxaphene	3,200,000	2,100,000	1,600,000	3,400,000	1,100,000	3,400,000	26,000	2,000
Metals (milligram per kilogram)								
Mercury	0.27	0.13 U	0.13 U	0.13	0.12 U	0.13 U	0.12 U	0.13 U
Arsenic	71.9	45.7	135	122	135	34.1	147 J	443
Lead	43.8	8.8	17.5	9.3	31.6	10.1	54.0	10.6
Barium	111	165	10.3	188	96.8	149	78.7	163
Selenium	0.60	1.1	0.95 U	0.97	0.91 U	1.4	1.5 U	1.7
Cadmium	0.65 U	1.3 U	0.64 U	0.65 U	0.60 U	1.3 U	0.84	0.66 U
Chromium	9.2	9.5	10.1	9.7	25.7	10.1	8.5	10.3
Silver	1.3 U	2.6 U	1.3 U	1.3 U	1.2 U	2.6 U	1.2 U	1.3 U

23 0035

TABLE 1 (tinued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPA-09-SS	RPA-09-SB	RPA-10-SS	RPA-10-SB	RPA-11-SS	RPA-11-SB	RPA-12-SS	RPA-12-SB
Pesticides (microgram per kilogram)								
Aldrin	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
alpha-BHC	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
beta-BHC	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
delta-BHC	100 U	44 U	37 U	110 U	100 U	22 U	2,500	210 U
gamma-BHC (lindane)	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
4,4'-DDD	940	1,400	580	1,200	760	370	1,500	1,100
4,4'-DDE	1,300	94	490	190	730	32	810	480
4,4'-DDT	1,700	140	1,000	410	1,300	87	340	1,900
Dieldrin	1,600	680	730	3,300	1,500	180	1,400	1,300
Endrin	200	44 U	37 U	110 U	100 U	22 U	230 U	210 U
Endrin aldehyde	210	44 U	37 U	110 U	100 U	22 U	230 U	210 U
Endosulfan I	100 U	44 U	37 U	110 U	100 U	22 U	1,200	210 U
Endosulfan II	330	74	69	170	340	22 U	2,400	210 U
Endosulfan sulfate	100 U	44 U	37 U	110 U	100 U	22 U	880	210 U
Heptachlor	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
Heptachlor epoxide	100 U	44 U	37 U	110 U	100 U	22 U	230 U	210 U
Methoxychlor	200 U	85 U	180	210 U	200 U	44 U	450 U	400 U
Chlordane	5,200	2,200	2,800	5,200	11,000	130	48,000	7,500
Toxaphene	19,000	2,100	6,300	6,700	16,000	700	31,000	8,600
Metals (milligram per kilogram)								
Mercury	0.12 U	0.13 U	0.11 U	0.13 U	0.12 U	0.13 U	0.14 U	0.12 U
Arsenic	228	97.2	65.6	169	108	134	834	38.2
Lead	142	9.1	75.1	12.9	45.3	8.3	27.1	10.9
Barium	151	141	116	128	102	130	121	109
Selenium	0.89 U	1.2	1.1 U	1.5	0.92 U	1.1	1.0 U	1.3
Cadmium	0.74	0.64 U	0.70	0.64 U	0.62	1.3 U	0.68 U	1.2 U
Chromium	16.3 U	7.4	14.7	8.4	10.1	8.2	7.6	8.9
Silver	1.2 U	1.3 U	1.1 U	1.3 U	1.2 U	2.6 U	1.4 U	2.4 U

23 0036

TABLE 1 (continued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPB-01-SB	RPB-02-SB	RPB-03-SB	RPB-04-SB	RPB-05-SB	RPC-01-SS	RPC-01-SB
Pesticides (microgram per kilogram)							
Aldrin	11 U	2.2 U	2.2 U	2.4 U	2.3 U	10,000 U	4,100 U
alpha-BHC	11 U	2.2 U	29	2.4	5.5	10,000 U	8,000
beta-BHC	14	2.2 U	22	2.4 U	2.3 U	10,000 U	25,000
delta-BHC	25	2.2 U	2.2 U	2.4 U	2.3 U	10,000 U	4,100 U
gamma-BHC (lindane)	11 U	2.2 U	4.4	2.4 U	2.3 U	10,000 U	9,700
4,4'-DDD	42	2.2 U	30	2.4 U	2.3 U	10,000 U	4,100 U
4,4'-DDE	11 U	2.2 U	6.9	2.4 U	2.3 U	14,000	5,500
4,4'-DDT	150	2.2 U	16	2.6	2.3 U	250,000	110,000
Dieldrin	33	2.2 U	19	2.4 U	2.3 U	10,000 U	4,100 U
Endrin	20	2.2 U	6.4	2.4 U	2.3 U	10,000 U	4,100 U
Endrin aldehyde	62	2.2 U	2.2 U	2.4 U	2.3 U	10,000 U	4,100 U
Endosulfan I	11 U	2.2 U	3.5	2.4 U	2.3 U	10,000 U	4,100 U
Endosulfan II	58	2.2 U	31	2.4 U	2.3 U	10,000 U	4,100 U
Endosulfan sulfate	27	2.2 U	16	2.4 U	2.3 U	10,000 U	4,100 U
Heptachlor	11 U	3.7	2.2 U	2.4 U	2.3 U	10,000 U	4,100 U
Heptachlor epoxide	11 U	2.2 U	2.2 U	2.4 U	2.3 U	10,000 U	4,100 U
Methoxychlor	65	4.3 U	38	4.6 U	4.4 U	20,000 U	7,900 U
Chlordane	140	190	170	24 U	55	3,300	1,900
Toxaphene	5,300	150	2,600	93 U	95	160,000	63,000
Metals (milligram per kilogram)							
Mercury	0.13 U	0.13 U	0.13 U	0.14 U	0.13 U	0.12 U	0.12 U
Arsenic	16.8	10.7	47.2	9.3	101	150	147
Lead	91	11.3	12.0	16.4	10.0	138	113
Barium	157 J	113	190	148	165	105	107
Selenium	1.3 J	1.3	1.4	2.7	1.6	1.7	1.5
Cadmium	0.64 U	0.65 U	0.65 U	1.4 U	0.67 U	2.3	2.4
Chromium	11.0 J	9.0	25.4	45.6	14.8	35.4	27.7
Silver	1.3 U	1.3 U	1.3 U	2.8 U	1.3 U	1.2 U	1.2 U

23,0037

TABLE 1 (continued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPC-02-SS	RPC-02-SB	RPC-03-SS	RPC-03-SB	RPC-04-SS	RPC-04-SB	RPC-05-SS	RPC-05-SB
Pesticides (microgram per kilogram)								
Aldrin	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
alpha-BHC	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
beta-BHC	1,300	370 U	2,500	39,000 U	950 U	550	3,900 U	540
delta-BHC	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
gamma-BHC (lindane)	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
4,4'-DDD	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
4,4'-DDE	3,900	1,800	5,100	39,000 U	3,000	1,300	4,700	1,300
4,4'-DDT	17,000	7,800	15,000	900,000	23,000	9,400	64,000	12,000
Dieldrin	2,900	1,200	2,200	39,000 U	2,200	1,300	3,900 U	690
Endrin	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Endrin aldehyde	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Endosulfan I	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Endosulfan II	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Endosulfan sulfate	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Heptachlor	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Heptachlor epoxide	930 U	370 U	990 U	39,000 U	950 U	390 U	3,900 U	410 U
Methoxychlor	1,800 U	710 U	1,900 U	77,000 U	1,800 U	760 U	7,500 U	790 U
Chlordane	9,300 U	3,700 U	9,900 U	1,300	600	3,900 U	39,000 U	4,100 U
Toxaphene	27,000	9,500	32,000	69,000	25,000	19,000	32,000	10,000
Metals (milligram per kilogram)								
Mercury	0.11 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U
Arsenic	40.4	44.1	100	58	157	160	107	93.4
Lead	10.8	37.0	89.0	80.2	40.8	35.7	71.4	24.0
Barium	79.1	47.9	102	53	42.7	37.9	112	50.8
Selenium	2.7 U	2.7 U	1.2 U	0.87 U	4.2 U	2.3 U	1.0	0.60 U
Cadmium	1.8	1.0	2.1	2.1	2.3	1.1	3.3	1.2
Chromium	26.5	10.8 U	28.3	23.5	16.7 U	14.1	31.3	12.9
Silver	1.1 U	1.1 U	1.2 U	3.5 U	1.1 U	1.1 U	3.4 U	2.4 U

23 0038

TABLE 1 (continued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPC-06-SS	RPC-06-SB	RPC-07-SS	RPC-07-SB	RPC-08-SS	RPC-08-SB	RPC-09-SS	RPC-09-SB
Pesticides (microgram per kilogram)								
Aldrin	3,900 U	2,000 U	120	21 U	360 U	21 U	370 U	10 U
alpha-BHC	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
beta-BHC	3,900 U	2,000 U	230	110	740	21 U	670	78
delta-BHC	3,900 U	2,000 U	760	21 U	360 U	21 U	370 U	10 U
gamma-BHC (lindane)	3,900 U	2,000 U	100 U	37	360 U	21 U	370 U	10 U
4,4'-DDD	3,900 U	2,000 U	170	88	740	21 U	1,400	23
4,4'-DDE	4,200	3,300	1,800	73	2,700	21 U	2,800	64
4,4'-DDT	58,000	38,000	680	440	9,400	87	9,300	200
Dieldrin	3,900 U	2,000	480	63	890	21 U	900	24
Endrin	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Endrin aldehyde	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Endosulfan I	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Endosulfan II	3,900 U	2,000 U	250	21 U	360 U	21 U	370 U	10 U
Endosulfan sulfate	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Heptachlor	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Heptachlor epoxide	3,900 U	2,000 U	100 U	21 U	360 U	21 U	370 U	10 U
Methoxychlor	7,500 U	3,900 U	500	41 U	690 U	40 U	720 U	20 U
Chlordane	39,000 U	720	880	210 U	590	210 U	3,700 U	100 U
Toxaphene	33,000	26,000	4,700	3,100	12,000	110	15,000	660
Metals (milligram per kilogram)								
Mercury	0.39	0.21	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U
Arsenic	73.8	72.4	282	339	381	161	279	137
Lead	73.4	136	78.4	13.8	67.7	8.6	77.2	10.0
Barium	103	97.7	105	112	141	152	161	145
Selenium	0.86	0.90 U	0.89 U	1.5	0.95	1.2	0.82 U	1.3
Cadmium	3.9	4.4	3.6	0.62 U	2.6	0.61	2.8	0.60 U
Chromium	26.5	23.1	53.8	13.3	41.6	9.9	37.2	9.8
Silver	3.4 U	3.6 U	3.6 U	1.2 U	3.2 U	1.2 U	3.3 U	1.2 U

28 0039

TABLE 1 (inued)

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Analyte	RPC-10-SS	RPC-10-SB	RPC-11-SS	RPC-11-SB	RPC-12-SS	RPC-12-SB	RPC-13-SS
Pesticides (microgram per kilogram)							
Aldrin	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
alpha-BHC	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
beta-BHC	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
delta-BHC	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
gamma-BHC (lindane)	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
4,4'-DDD	1,600	490	730	650	1,900 U	1,300	63,000
4,4'-DDE	3,200	1,100	1,400	1,600	4,700	2,800	29,000
4,4'-DDT	19,000	5,400	8,500	8,500	29,000	15,000	220,000
Dieldrin	2,400	710	810	970	2,900	1,600	68,000
Endrin	910 U	390 U	380 U	390 U	1,900 U	980 U	44,000
Endrin aldehyde	910 U	390 U	380 U	390 U	1,900 U	980 U	77,000
Endosulfan I	2,300	1,400	380 U	390 U	1,900 U	980 U	18,000 U
Endosulfan II	1,700	1,200	380 U	390 U	1,900 U	980 U	160,000
Endosulfan sulfate	910 U	390 U	380 U	390 U	1,900 U	980 U	42,000
Heptachlor	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
Heptachlor epoxide	910 U	390 U	380 U	390 U	1,900 U	980 U	18,000 U
Methoxychlor	1,800	760 U	740 U	750 U	3,700 U	1,900 U	150,000
Chlordane	4,300	4,300	1,200	2,300	19,000 U	9,800 U	490,000
Toxaphene	33,000	19,000	7,100	8,500	10,000	10,000	10,000,000
Metals (milligram per kilogram)							
Mercury	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U
Arsenic	238	277	344	255	152	105	133
Lead	60.1	60.7	60.0	111	36.1	37.2	99.8
Barium	76.4	76.9	20.2	84.7	85.6	51.7	101
Selenium	0.80 U	1.2 U	1.1 U	0.85 U	0.83 U	2.3 U	1.4 U
Cadmium	1.7	1.6	1.5	0.84	0.75	1.3	0.98
Chromium	28.1	24.2	23.4	14.2	13.8	20.8	22.2
Silver	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U

2 3 0040

SUMMARY OF SOIL ANALYTICAL RESULTS FOR THE RED PANTHER CHEMICAL SITE

Notes:

J The associated numerical value is an estimated quantity.

U The pesticide or metal was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.

BHC Benzene hexachloride

DDD Dichlorodiphenyldichloroethane

DDE Dichlorodiphenyldichloroethylene

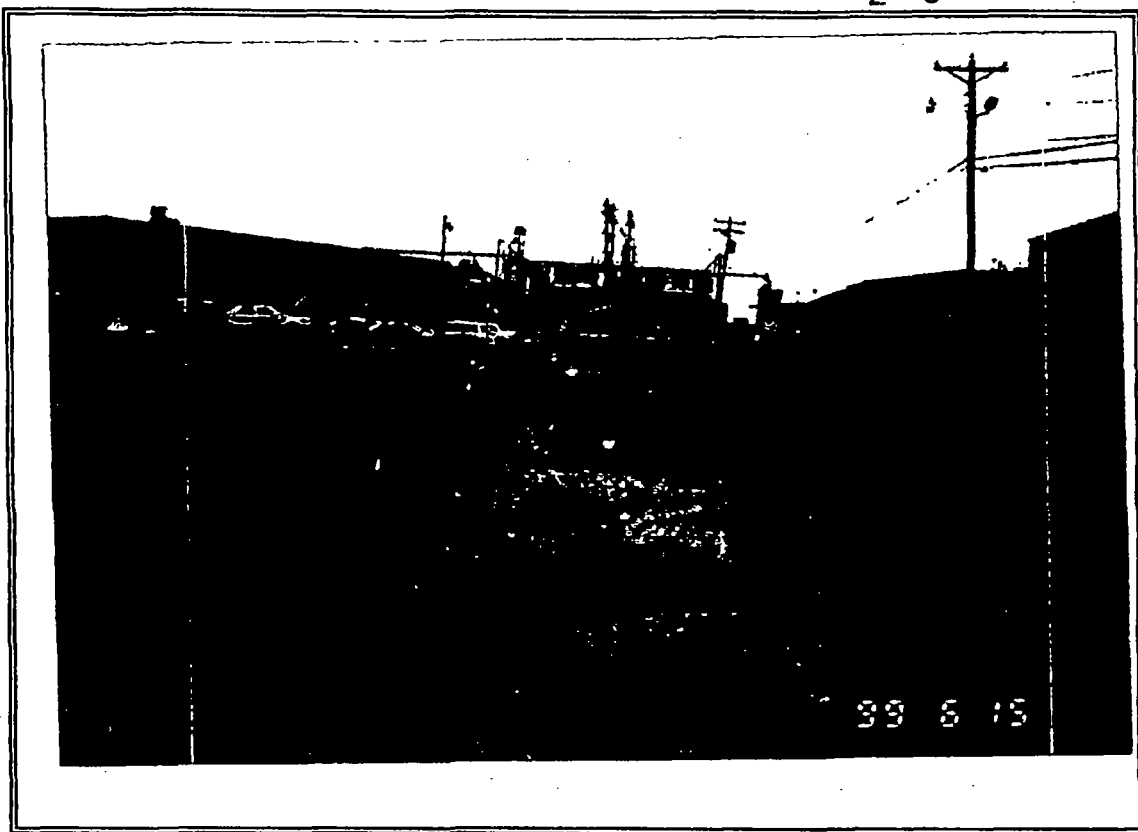
DDT Dichlorodiphenyltrichloroethane

2 8 0041

2 3 0042

APPENDIX C
PHOTOGRAPHIC LOG
(9 Sheets)

2 8 0043



**OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: Drainage ditch (Area A) adjacent to Normandy Avenue and across the street from the former Red Panther Chemical facility.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: South

TDD Number: 04-9905-0024

Date: June 15, 1999

Photographer: D. Brown, START

Witness: G. Kowalski, START



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Drainage ditch (Area A) at the intersection of Normandy Avenue and Patton Street.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: Northeast

TDD Number: 04-9905-0024 **Date:** June 15, 1999

Photographer: D. Brown, START **Witness:** G. Kowalski, START



**OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: START personnel collecting surface soil RPA-04-SS sample from the drainage ditch (Area A) at the intersection of Normandy Avenue and Patton Street.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: Southeast

TDD Number: 04-9905-0024 **Date:** June 15 , 1999

Photographer: G. Kowalski, START **Witness:** D. Brown, START



**OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: START personnel collecting subsurface soil sample RPA-05-SB (Area A) in level C personal protection.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: East

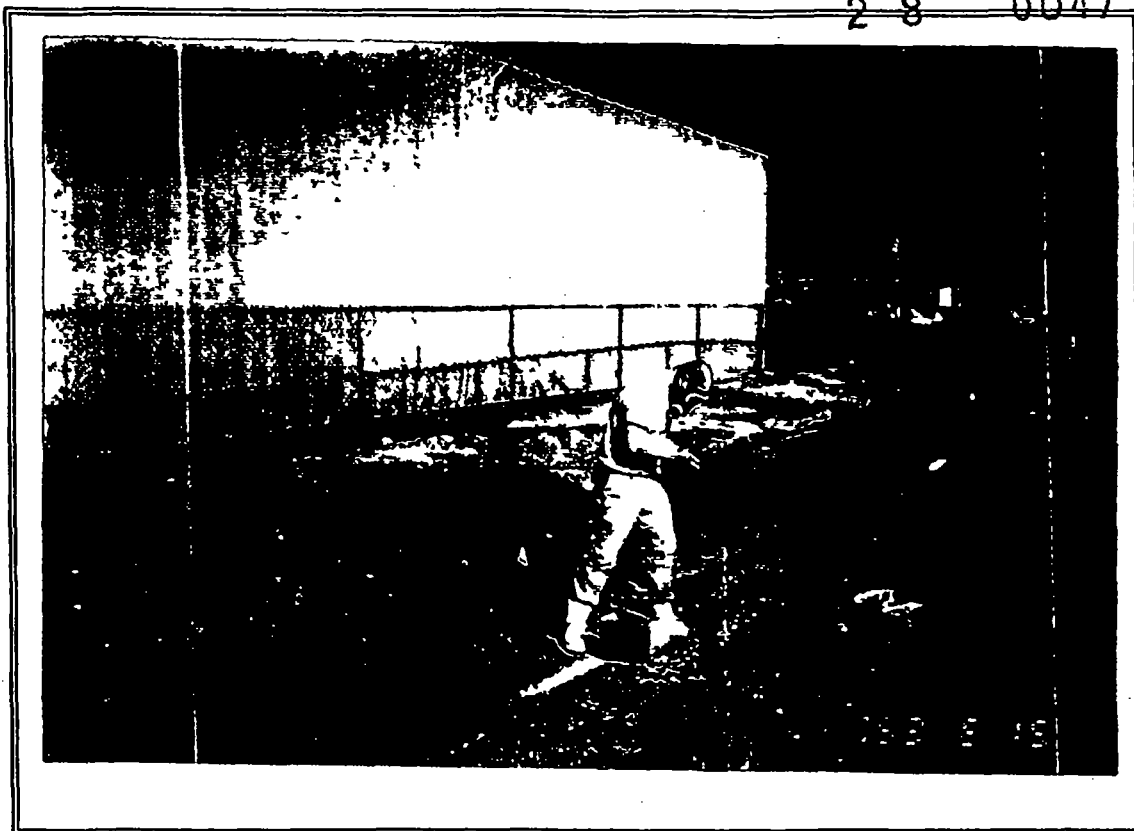
TDD Number: 04-9905-0024

Date: June 15, 1999

Photographer: D. Brown, START

Witness: G. Kowalski, START

2 8 0047



**OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: START personnel collecting surface soil sample RPA-10-SS (Area A) in level C personal protection.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

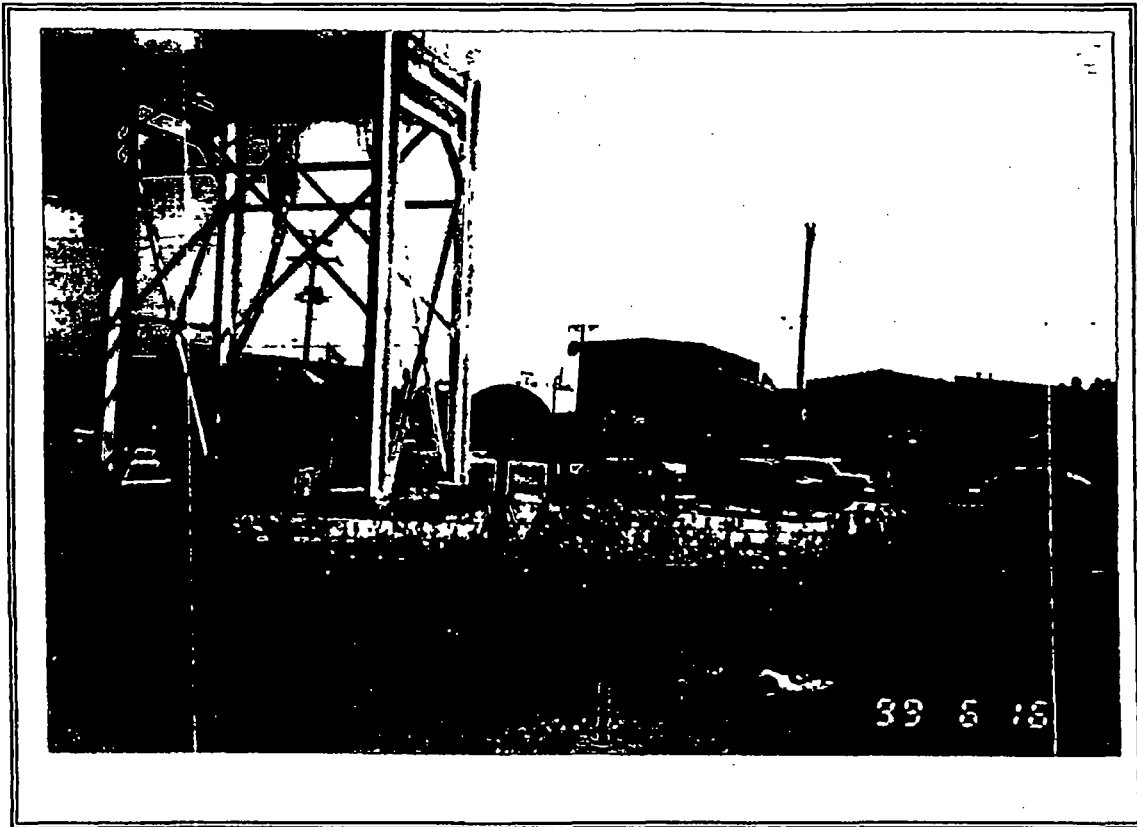
Orientation: Southeast

TDD Number: 04-9905-0024

Date: June 15, 1999

Photographer: D Brown, START

Witness: G Kowalski, START



**OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: Industrial facilities located adjacent to the Red Panther Chemical property.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: Northeast

TDD Number: 04-9905-0024 **Date:** June 16, 1999

Photographer: D. Brown, START **Witness:** G. Kowalski, START



**OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: START personnel collecting subsurface soil sample RPB-05-SB.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

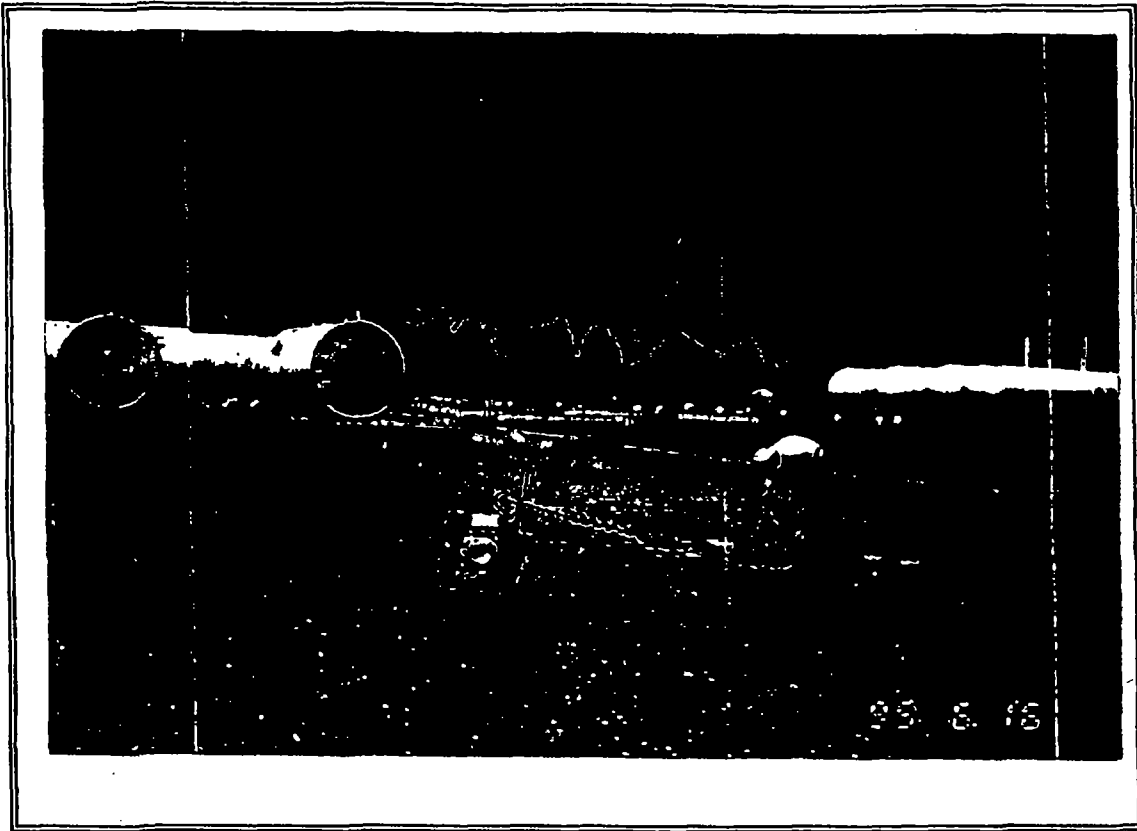
Orientation: North

TDD Number: 04-9905-0024

Date: June 16, 1999

Photographer: D. Brown, START

Witness: G. Kowalski, START



**OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: START personnel conducting air monitoring activities at sampling location RPB-04-SB (Area B).

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: Northwest

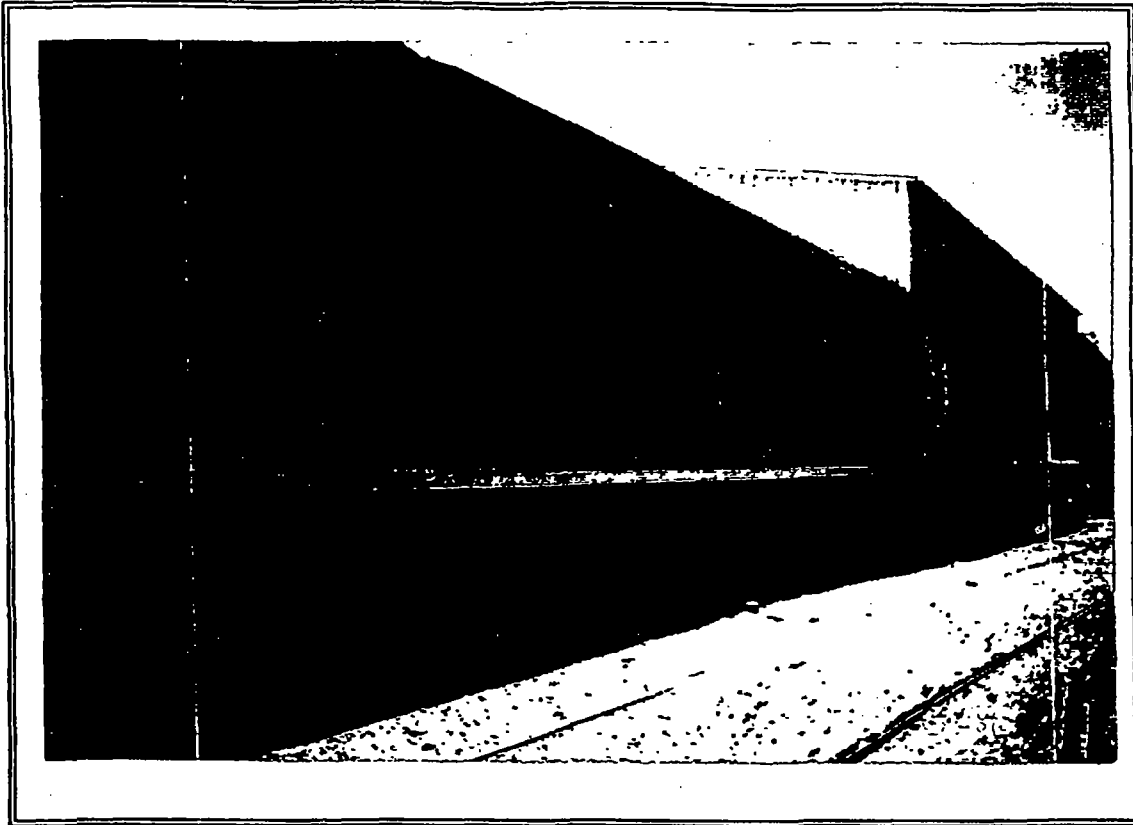
TDD Number: 04-9905-0024

Date: June 16, 1999

Photographer: D. Brown, START

Witness: D. Brown, START

2 8 0051



**OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: Loading docks adjacent to the railroad spur.

Location: Red Panther Chemical
Clarksdale, Coahoma County, Mississippi

Orientation: Southeast

TDD Number: 04-9905-0024 **Date:** June 17, 1999

Photographer: D. Brown, START **Witness:** G. Kowalski, START

APPENDIX D
TABLE OF WITNESSES
(1 Sheet)

TABLE OF WITNESSES

De'Lyntoneus Moore, On-Scene Coordinator
U.S. Environmental Protection Agency
Emergency Response and Removal Branch, Region 4
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Greg Kowalski, Environmental Scientist
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**REPORT
PHASE I REMOVAL ACTION
RED PANTHER SITE
CLARKSDALE, MISSISSIPPI**

Prepared For:
Red Panther PRP Group

Prepared By:

URS

March 18, 2003

**REPORT
PHASE I REMOVAL ACTION
RED PANTHER SITE
CLARKSDALE, MISSISSIPPI**

**Prepared for:
Red Panther PRP Group**

March 2003

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Table 5	Ditch Confirmation Sample Analytical Results
Table 6	Nonhazardous Soil Disposal Information
Table 7	Removal Action Air Monitoring Results
Table 8	Borrow material Analytical Data
Table 9	Storm Water Analytical Results

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Figure 1	Site Location Map
Figure 2	Site Diagram
Figure 3	Ditch Characterization Sample Locations and Results
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Appendix I	Storm Water Analytical Data
Appendix J	Storm Water Disposal Manifests

List of Acronyms

AOC	Administrative Order on Consent
BLS	Below Land Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COCs	Constituents of Concern
DOT	Department of Transportation
EPA	Environmental Protection Agency
mg/L	Milligrams Per Liter
mg/kg	Milligrams Per Kilogram
mg/m ³	Milligrams Per Cubic Meter
PID	Photoionization Detector
POTW	Publicly Owned Treatment Works
PRPs	Potentially Responsible Parties
QA/QC	Quality Assurance and Quality Control
QAPP	Quality Assurance Project Plan
MBPC	Mississippi Bureau of Pollution Control
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SSHP	Site Safety and Health Plan
START	Superfund Technical Assessment and Response Team
TAL	Target Analyte List
TCL	Target Compound List

EXECUTIVE SUMMARY

This report presents the results of the Phase I Removal Action conducted in November and December of 2002 at the Red Panther Superfund Site in Clarksdale, Mississippi. The Removal Action was conducted pursuant to the Administrative Order on Consent (AOC) for Removal Action, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. CER-04-2001-3776 between Environmental Protection Agency (EPA) Region IV and a group comprised of a number of parties identified by EPA as Performing Potentially Responsible Parties (Performing PRPs). The AOC required the remediation at the Red Panther Site be conducted in two phases. Phase I consists of the following four components:

- Excavation of surface soils from drainage ditches between the Red Panther property boundaries and Route 49 and the disposal or temporary stockpiling of the excavated material,
- Characterization of onsite soils and the remaining ditch soils,
- Design of Phase II removal activities, and
- Preparation of a Phase II Work Plan detailing additional removal tasks necessary to complete the requirements of the AOC.

The scope of work for the Phase I Removal Action was to excavate the surface soils from Ditches 1, 2, 3, and 4, perform confirmation sampling after the soils were removed, and to erect a security fence around Ditches 5 and 6 to prevent access to the ditches. The objective of the ditch soil removal action was to remove the surface and subsurface ditch soils exceeding the performance standards and to limit access to Ditches 5 and 6 until the impacted soils in these two ditches can be removed during Phase II.

The ditch characterization activities were performed from June 24, 2002 through June 27, 2002. The purpose of the ditch sampling was to compare the analytical results to the performance standards, estimate the amount of soil that would require excavation to meet the performance standards, and to evaluate disposal options for the soils to be excavated. Six ditches (designated 1 through 6) were sampled during the characterization activities. The ditch characterization data indicated that the concentrations of total chlorinated pesticides and dieldrin in the surface soils of Ditches 1 and 2 generally exceeded the performance standards whereas the concentrations of total chlorinated pesticides, dieldrin, and toxaphene in Ditches 3, 4, 5, and 6 did not exceed the performance standards. Arsenic was detected in lower concentrations in Ditches 1 and 2, and in higher concentrations in Ditches 3, 4, 5, and 6. The arsenic concentrations in all six ditches exceeded the performance standards. The soils (0-2-foot interval) in Ditches 1, 2, 3, and 4 did not exceed the TCLP regulatory limits for the full TCLP parameter list except for the 0-1' foot interval in Ditch 4. Tetrachloroethene was detected at 0.87 milligrams per liter (mg/L) in the 0-1' foot interval in Ditch 4, which barely exceeded the TCLP regulatory limit of 0.7 mg/L. Based on the TCLP testing, a majority of the soils in Ditches 1, 2, 3, and 4 were nonhazardous and could be disposed at a Subtitle D Landfill.

A majority of the soils in Ditches 5 and 6 exceeded the TCLP regulatory limit for arsenic (5.0 mg/L). Disposal of soils in Ditches 5 and 6 that exceed TCLP criteria for arsenic are subject to the hazardous waste and land disposal regulations.

The Phase I Removal Action was performed in November and December of 2002. Approximately 900 tons of soil were removed from four (Ditches 1, 2, 3, and 4) of the six drainage ditches. Of the excavated soil, 825 tons were disposed in the Waste Management Subtitle D Tunica Landfill in Robinsonville, Mississippi. Approximately 75 tons of soil exceeding the TCLP criteria were excavated from Ditch 1 (2-3 foot interval) and stockpiled onsite and secured. These soils will be addressed during Phase II.

Once each ditch had been excavated to 2 feet (except for Ditch 1), composite confirmation samples were collected. The samples were sent to Test America Laboratories in Nashville, Tennessee for analysis. The confirmation samples were analyzed for arsenic, dieldrin, and toxaphene (COCs for subsurface soils). After the ditch confirmation sample data was received the 95% Upper Confidence Limit (UCL) of the mean ditch domain concentration was calculated. Ditches 3 and 4 were approved for backfilling. Portions of Ditches 1 and 2 still exceeded the performance standards and required additional soil removal. An additional 1-foot interval was excavated from these portions of Ditches 1 and 2 and confirmation samples were collected over the areas of additional excavation. The 95% UCL of the mean ditch domain again failed the subsurface performance standards for toxaphene and dieldrin. This issue will be addressed during Phase II.

Heavy rains filled the ditches (mainly 1, 2, 3, and 4) several times during the backfilling process, complicating the excavation and backfilling process. The storm water was pumped from the ditches and stored in a frac tank onsite and sampled to determine disposal options. The storm water contained concentrations of pesticides, which were above the standards that the local POTW would accept. The storm water was subsequently transported to Excel TSD, Inc. in Memphis for final treatment and disposal as a non-hazardous non-regulated liquid.

During the removal action, approximately 350 feet of 6-foot high chain-link fence was removed from the north end of the property along Ditches 5 and 6 and disposed offsite. A new 6-foot high chain-link fence, with three-strand barbed wire, was installed north of Ditches 5 and 6 to prevent public access.

1.0 INTRODUCTION

This report presents the results of the Phase I Removal Action conducted in November and December of 2002 at the Red Panther Superfund Site in Clarksdale, Mississippi. The Removal Action was conducted pursuant to the Administrative Order on Consent (AOC) for Removal Action, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. CER-04-2001-3776 between Environmental Protection Agency (EPA) Region IV and the Performing PRPs. The AOC required the remediation at the Red Panther Site be conducted in two phases. Phase I consists of the following four components:

- Excavation of surface soils from drainage ditches between the Red Panther property boundaries and Route 49 and the disposal or temporary stockpiling of the excavated material,
- Characterization of onsite soils and the remaining ditch soils,
- Design of Phase II removal activities, and
- Preparation of a Phase II Work Plan detailing additional removal tasks necessary to complete the requirements of the AOC.

This report presents the results of the drainage ditch characterization and the excavation and disposal of the drainage ditch soils.

1.1 Background Information

The Red Panther Superfund site is located in Clarksdale, Coahoma County, Mississippi (Figure 1). The site occupies approximately 6.5 acres off Normandy Avenue and Patton Street, on the south side of the city of Clarksdale. The facility is bordered on the west by East Tallahatchie Avenue, to the south by Springer International, to the north by Graeber Brothers, and to the east by Normandy Avenue. Presently, Coahoma Inc. still uses a portion of the facility as a warehouse.

The Red Panther Chemical facility began operations in 1949 as a pesticide production plant. The plant formulated liquid and powdered herbicides, insecticides, and fungicides, including toxaphene, aldrin, arsenic, and DDT. The facility reportedly did not manufacture any active ingredients, but only received technical materials from basic manufacturers. Previous owners of the facility include Coahoma Chemical Company, Riverside Chemical Company, and MFC Services.

The Red Panther facility filed a Resource Conservation and Recovery Act (RCRA) hazardous waste management activity notification and a Part A application in 1980 for storage of wastewater and spent or used solvents in drums and tanks onsite. Wastewater and solvents containing pesticide and solvent residues were generated from the cleaning of equipment. In November 1985, the facility obtained a RCRA Part B permit from the Mississippi Bureau of Pollution Control (MBPC) to store wastewater and spent solvents. At some point prior to obtaining RCRA interim status, and/or permit status, wastewater from the formulating process

was discharged either directly to an offsite ditch or into an underground septic tank and drain field on the facility property. MBPC completed a site inspection in 1984 (Potential Hazardous Waste Site Report, Clifford D. Porterfield) concluding that the sediment and soil samples contained detectable levels of chlorinated pesticides and arsenic.

In 1999, the EPA Superfund Technical Assessment and Response Team (START) conducted surface and subsurface sampling at the site. The sampling effort focused on the drainage ditches (Area A), the former onsite septic tank and drain field (Area B), and the railroad spur located behind the facility at the loading dock area (Area C) (Figure 2).

The AOC between EPA Region IV and the Performing PRPs was finalized in September 2001. The AOC contained the previously described four components, established the performance standards for the surface and subsurface soils, and provided a schedule for performing the Phase I Removal Action. The constituents of concern (COCs) for the Red Panther site include arsenic, toxaphene, dieldrin, and total chlorinated pesticides (for surface soils only).

In 2001, the Performing PRPs retained Newfields and URS to prepare a Phase I Removal Action Work Plan including a Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP), Site Safety and Health Plan (SSHP) and to ascertain acceptable surface and subsurface soil performance standards prior to conducting the Phase I Removal Action at the facility. The Phase I Work Plan was submitted to EPA Region IV on May 24, 2002 and was subsequently approved.

Ditch soil characterization work was performed in June 2002 in accordance with the work plan. Soil samples were collected from six drainage ditches that border or are directly affected by runoff drainage from the site. Composite soil samples were collected from the 0-1 and 1-2 foot interval blow the land surface (bls) and analyzed for total chlorinated pesticides and arsenic. In August 2002, a technical memo was prepared and submitted to EPA Region IV requesting several modifications to the Phase I Work Plan based on the results of the ditch characterization sampling. A copy of the technical memo is included in Appendix A. Specifically, the modifications involved addressing Ditches 5 and 6 under the Phase II Work Plan instead of Phase I, installing a security fence around Ditches 5 and 6 to prevent public access, and establishing eight soil sampling grids in ditches 5 and 6. EPA Region IV approved the modifications as part of the original work plan. In October 2002, a revised schedule was submitted to EPA to extend the due date of the Site Characterization report. EPA Region IV approved this request on October 30, 2002.

2.0 DITCH CHARACTERIZATION ACTIVITIES

Ditch characterization activities were performed from June 24, 2002 through June 27, 2002. The purpose of the ditch sampling was to compare the analytical results to the performance standards, estimate the amount of soil that would require excavation to meet the performance standards, and to evaluate disposal options for the soils to be excavated. Six ditches (designated 1 through 6) were sampled during the characterization activities (Figure 2).

Ditch 1 receives runoff from a portion of Area D where the liquid blending operation was reportedly performed (Figure 2). Ditch 1 also receives a substantial amount of roof runoff from the warehouses in Area D. Ditch 1 drains into Ditch 2 on the south side of Patton Street. Ditches 5 and 6 are located on the northern side of the facility and are the most upgradient ditches that receive runoff from the site. Surface water in Area B drains to the north into Ditches 5 and 6, which then flows southeastwards into Ditch 4, which then in turns drains into Ditch 3 through a culvert under Normandy Avenue. Ditch 3 drains underneath Patton Street through two culverts into Ditch 2.

The ditch sampling was performed in accordance with the approved Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP). The soil samples were collected using stainless steel hand augers and sampling equipment. The sampling equipment was decontaminated between each sample location in accordance with the QAPP. The investigative derived waste (IDW) generated during the sampling effort was placed in 55-gallon Department of Transportation (DOT) drums, properly labeled, and secured onsite pending disposal during future removal actions. One drum of liquid decontamination fluids (wash and rinse water and isopropanol) and one drum of soil cuttings were generated during the ditch characterization.

A pair of composite soil samples were collected from each of the six ditches (Figure 3). Each pair consisted of a composite soil sample collected from the 0-1 foot below land surface (bls) interval and 1-2 foot bls interval in each ditch. A composite sample was formed by collecting soil from 5 aliquots (designated A through E) from the same interval (0-1' or 1-2') spaced evenly along the centerline of each ditch. Figure 3 shows the sample locations in each ditch. Each aliquot sample location was marked with a stake and surveyed for horizontal control by W.L. Burle, a registered surveyor in the State of Mississippi.

The ditch characterization samples were submitted to Test America, Inc. in Nashville, Tennessee for analysis of total chlorinated pesticides by EPA Method 8081A, arsenic by EPA Method 6010, and Toxicity Leaching Characteristic Procedure (TCLP) parameters (full list). The analytical results are presented on Table 1. A summary of the Quality Assurance Quality Control (QA/QC) samples is provided on Table 2. A copy of the analytical data and the chain-of-custodies are provided in Appendix B.

Table 3 presents the soil performance standards as outlined in the Phase I Work Plan and in the AOC. Surface soils are defined as the top two feet of soil. Subsurface soils are defined as the soils below the top two feet. The COCs for surface soils include total chlorinated pesticides, arsenic, dieldrin, and toxaphene; whereas, the COCs for the subsurface soils are arsenic, dieldrin, and toxaphene. The ditch characterization data indicated that the concentrations of total

chlorinated pesticides and dieldrin in the surface soils of Ditches 1 and 2 generally exceeded the performance standards; whereas, the concentrations of total chlorinated pesticides, dieldrin, and toxaphene in Ditches 3, 4, 5, and 6 surface soils did not exceed the performance standards. Arsenic was detected at lower concentrations in Ditches 1 and 2, and in higher concentrations detected in Ditches 3, 4, 5, and 6. The arsenic concentrations in all six ditches exceeded the performance standards.

The soils in Ditches 1, 2, 3, and 4 did not exceed the TCLP regulatory limits for the full TCLP parameter list except for the 0-1' foot interval in Ditch 4. Tetrachloroethene was detected at 0.87 milligrams per liter (mg/L) in the 0-1' foot interval in Ditch 4, which barely exceeded the TCLP regulatory limit of 0.7 mg/L. Based on the TCLP testing, a majority of the soils in Ditches 1, 2, 3, and 4 were classified as nonhazardous and could be disposed at a Subtitle D Landfill.

A majority of the soils in Ditches 5 and 6 exceeded the TCLP regulatory limit for arsenic (5.0 mg/L). Disposal of soils in Ditches 5 and 6 that exceed TCLP criteria for arsenic is subject to the hazardous waste and land disposal regulations.

Based upon the review of the analytical data, a request to modify the Phase I Work Plan was submitted to EPA on August 24, 2002. The modification included delaying the excavation of Ditches 5 and 6 until Phase II because the lateral and vertical extent of the impacted soils was unknown. A copy of the Phase I Work Plan modification request is included in Appendix A.

3.0 PHASE I REMOVAL ACTION

3.1 Purpose

The scope of work for the Phase I Removal Action was to excavate the surface soils from Ditches 1, 2, 3, and 4, perform confirmation sampling after the soils were removed, and to erect a security fence around Ditches 5 and 6 to prevent access to the ditches. The objective of the ditch soil removal action was to remove the surface and subsurface ditch soils exceeding the performance standards and to limit access to Ditches 5 and 6 until the impacted soils in these two ditches can be removed during Phase II.

3.2 Ditch Excavation Activities

The Phase I Removal Action was performed from November 11, 2002 through November 22, 2002. Prior to commencement of the removal activities, all appropriate permits were obtained from the City of Clarksdale and the Mississippi Department of Transportation (MS DOT) for excavation of the ditches. In addition to obtaining permits from the City, utilities were located and marked prior to the start of the excavation activities. URS retained HEPACO Incorporated in Memphis, Tennessee to perform the removal activities. Region IV EPA's contractor, Roy F. Weston, provided oversight services for EPA during the removal action.

Contamination Reduction Zones were established adjacent to Normandy Avenue, upgradient of Ditch 1, for the decontamination of excavation equipment during excavation activities. Prior to and after final completion of excavation activities, all excavation equipment was decontaminated using a high-pressure water wash. All decontamination wash waters were collected and stored onsite in 55-gallon drums or a 2,500-gallon frac tank, until disposal could be arranged.

The upper two feet of soil in Ditches 2 and 3 and the 0-1 foot interval in Ditch 1 were excavated and directly loaded into trucks for transportation to the Waste Management Subtitle D Landfill located in Robinson, Mississippi. The soils in these two ditches were determined to be nonhazardous during the ditch characterization sampling (see Table 1) and were profiled into the landfill prior to the start of the removal action. A copy of the waste disposal profile is included in Appendix C.

The soils in the 1-2 foot interval in Ditch 1 and the soils in Ditch 4 exceeded the TCLP regulatory limits for endrin (0.02 mg/L) and PCE (0.7 mg/L), respectively (Table 1). Therefore, it was determined that the 1-2 foot interval in Ditch 1 and soils in Ditch 4 would be stockpiled separately in the concrete berm in Area B. A composite sample was then collected from each of the stockpiles and submitted to Test America for TCLP testing. The resample of the Ditch 4 soils indicated these soils did not exceed the TCLP regulatory limit for PCE. Therefore, these soils were determined to be nonhazardous and could be disposed of at the Waste Management Subtitle D Landfill. The Ditch 1 soils that were resampled exceeded the TCLP toxaphene regulatory limit of 0.50 mg/L. These soils were stockpiled in the concrete berm in Area B for disposal during the Phase II Removal Action. The stockpile was placed on plastic sheeting and the entire stockpile covered and secured to prevent rainwater run-on and runoff. Table 4

provides the TCLP analytical results for the Ditch 1 and 4 stockpiles. A copy of the analytical data is included in Appendix D.

Once each ditch had been excavated to a 2 foot depth (except for Ditch 1), composite confirmation samples were collected. A composite sample was collected every 50 feet along the ditches (except where the culverts existed). The composite samples were formed by collecting soil from 5 aliquots (designated A1 through A5) spaced evenly along the centerline of the ditch. The samples were sent to Test America Laboratories in Nashville, Tennessee for analysis. The confirmation samples were analyzed for arsenic, dieldrin, and toxaphene (COCs for subsurface soils). The confirmation sample results are presented on Table 5. A copy of the analytical data is provided in Appendix E.

After the ditch confirmation sample data was received the 95% UCL of the mean concentration over the ditch exposure domain was calculated. It was found that Ditches 3 and 4 met the performance standards and were approved for backfill. The results of the 95% UCL calculation of the mean of the confirmation samples is provided in Appendix F. Portions of Ditches 1 and 2 still exceeded the performance standards and required additional soil removal. An additional 1-foot interval was excavated from these portions of Ditches 1 and 2. Confirmation samples (D1-C3 from Ditch 1 and D2-C5, D2-C6, and D2-C7 from Ditch 2) were collected from the bottom (3' bls) of both ditches after the additional 1-foot of soil was removed (Figure 5). The 95% UCL was recalculated and indicated that the ditch domain again failed the subsurface performance standards for toxaphene and dieldrin. The soils remaining in Ditches 1 and 2 that failed the subsurface performance standards will be addressed in the Phase II Work Plan. The statistical evaluation report (Memo, Newfields, December 6, 2002) is attached as Appendix F. The analytical results are presented on Table 5.

Approximately 900 tons of soil were excavated during the removal action from the four ditches. Of the soil excavated during this phase, 825 tons were disposed of at the Waste Management Subtitle D landfill. Table 6 lists the manifest numbers and tons of soil for each shipment that was transported to the landfill. The remaining 75 tons were comprised of the Ditch 1 soil that was stockpiled onsite and secured and will be addressed during Phase II, since these soils exceeded TCLP criteria.

3.3 Perimeter Air Monitoring During Removal Activities

Air monitoring was conducted at the perimeter of the exclusion zones during remediation activities that involved excavation, sorting, or direct handling of excavated soils. The purpose of monitoring was to monitor and control any potential off site migration of volatile substances or dusts. The monitoring strategy included the following:

- Real time monitoring for total organic vapors and particulates at the exclusion zone such that timely decisions could be made as needed to modify remedial operations or procedures, or to modify the level of personnel protection equipment required for worker protection.
- Dust measurements were collected using a real-time dust monitor for evaluation of potential off site impact from particulate matter.

3.3.1 Volatile Chemical Real Time Monitoring

Volatile emissions onsite were monitored utilizing direct read instrumentation. A photoionization detector (PID) was used to measure concentrations of organic vapors periodically at the site fence line, at the exclusion zone boundary, in the breathing zone, and in the excavated soils. Values obtained from the PID are listed on Table 7.

No exceedances of the 5 ppm breathing zone standard were observed in the breathing zone, at the exclusion zone boundary, or the site fence line.

3.3.2 Dust Monitoring

Fugitive dust monitoring was performed around the perimeter of the site during periods of active remediation activities. Portable instruments were used to collect dust measurements at two-hour intervals, upwind and downwind of the waste handling activities. Dust collection was performed using a GCE Mini-Ram portable dust monitor. In operation, ambient air is drawn by an internal pump and passed through a light beam where refracted dust is detected and digitally expressed in milligrams per cubic meter (mg/m^3). The monitor is calibrated with clean air prior to sampling to establish the zero level. Readings were recorded on a standard form noting the date, time, and location of sample reading. The continuous monitors were calibrated or zeroed daily with a certified gas standard or per the manufacturers instructions to ensure that precise measurements were made.

No fugitive dust levels monitored downwind of the activity were $5 \text{ mg}/\text{m}^3$ greater than the upwind readings. Therefore, per the SSHP, no action was required to mitigate dust emissions during the removal action.

3.4 Culvert Removal and Replacement

Approximately 24 linear feet of 12-inch diameter and 365 linear feet of 16-inch diameter shallow metal corrugated culverts along Normandy Avenue and 22 linear feet of 18-inch diameter and 97 linear feet of 24-inch diameter concrete culvert along Patton Street were removed and replaced with new culverts. Removed metal culverts were crushed and disposed with the nonhazardous materials at the approved Tunica Subtitle D Landfill. Removed concrete culverts were transported and disposed of intact. Culverts were replaced in their former locations using similar concrete or galvanized steel culverts. Following installation culvert soils and gravel beds were compacted with a vibrating compactor. The culverts were surveyed during installation to ensure appropriate drainage.

3.5 Ditch Restoration

A local borrow pit was utilized as a source of backfill for the ditch restoration. Prior to utilization, one composite sample was collected from the borrow pit and analyzed for Target Analyte List (TAL) metals and cyanide and Target Compound List (TCL) organics using EPA methods. The backfill sample contained low level of arsenic ($4.92 \text{ mg}/\text{kg}$), considered to be

within the range of background levels in the area. It also contained 0.008 mg/kg DDT. Table 8 summarizes the borrow material analytical results and a copy of the analytical data is included in Appendix H. The borrow pit was approved by EPA after review of the analytical data.

The ditches were backfilled with soil from the borrow pit and were compacted using the excavator bucket and by running the excavator or the dozer over each area. Orange high visibility fencing was placed in the bottom of each ditch prior to backfilling to delineate clean fill from undisturbed soils, should additional excavation be required in the future. The ditches were surveyed during the backfilling operation to ensure that grade was maintained and the ditches would drain properly.

After the ditches were backfilled and graded, erosion and sedimentation control measures were installed. Erosion control measures consisted of lining the bottom and slopes of the ditches with grass matting. In addition, a series of hay bales were installed in Ditch 2, near Highway 49, to prevent silt from leaving the site. Ditches 5 and 6, which were not excavated, were also lined with the grass matting. A series of hay bales with silt fence were also installed in Ditches 5 and 6 every 100 feet to minimize sediment erosion and transport to the downgradient Ditches 1, 2, 3, and 4.

3.6 Surface Water Containment and Disposal

Heavy rains filled the ditches (mainly 1, 2, 3, and 4) several times during the backfilling process, complicating the excavation and backfilling process. A sample of the storm water was collected on November 20, 2002 and was analyzed for arsenic, dieldrin, and toxaphene. The analysis indicated the storm water contained 3.6 ug/L of arsenic, 1.2 ug/L of dieldrin, and was below the laboratory detection limits for toxaphene. The analytical results are presented on Table 9. Since the bottom of Ditches 1 and 2 failed the excavation standards and the storm water sample indicated that the storm water had been impacted, EPA directed that the storm water not be discharged directly downgradient from the ditches or to the sanitary sewer. The storm water was pumped out of the ditches and held on-site until disposal options could be determined.

A 20,000-gallon frac tank and a 2,500-gallon poly tank were brought on site to temporarily store the storm water. Approximately 23,000 gallons of water was eventually pumped from the ditches and collected on-site. A sample of the tank contents were collected on November 25, 2002 and submitted to Analytical Services, Inc. in Norcross, Georgia for analysis. The analytical data is presented on Table 9 and a copy of the data is included in Appendix I. The storm water in the holding tanks contained concentrations of pesticides that were above the levels that the local POTW would accept. The storm water was subsequently profiled for disposal as a non-hazardous non-regulated liquid at Excel TSD, Inc. in Memphis. On December 10, 2002 the 22,604 gallons of storm water were shipped to Excel TSD, Inc. for final treatment and disposal. Copies of the waste manifest are included in Appendix J.

3.7 Site Access and Security

During the removal action, approximately 350 feet of 6-foot high chain-link fence was removed from the north end of the property along Ditches 5 and 6 and disposed offsite. After the removal action was complete, a new 6-foot high chain-link fence, with three-strand barbed wire, was

installed north of Ditches 5 and 6 to prevent public access. A gate and lock was installed at the southeastern end of Ditch 5 to allow access to perform future removal action activities, as necessary.

4.0 RECOMMENDATIONS

Based upon the results of the Phase I Removal Action, URS makes the following recommendations:

- Address the soils remaining in Ditches 1 and 2 in the Phase II Work Plan.
- Address disposal options for the stockpiled soils from Ditch 1 in the Phase II Work Plan. The Ditch 1 soils currently stockpiled in the Area B berm should be periodically (i. e. every 3 months) inspected to ensure that the stockpile is properly covered.

Table 1
Ditch Characterization Analytical Data
Phase I Removal Action Report
Red Panther Site

Constituent	Analytical Method	Units	TCLP Regulatory Limit (mg/L)	SB01 0-1'	SB01 1-2'	SB02 0-1'	SB02 1-2'	SB03 0-1'	SB03 1-2'	SB04 0-1'	SB04 1-2'	SB05 0-1'	SB05 1-2'	SB06 0-1'	SB06 1-2'
Pesticides	8081A														
aldrin		mg/kg	N/A	105.00	152.00	310.00	84.40	1.49	0.0294	ND	ND	ND	ND	ND	ND
a-BHC		mg/kg	N/A	ND	16.90	114.00	22.10	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC		mg/kg	N/A	ND	ND	ND	ND	ND	ND	ND	0.0284	ND	ND	ND	ND
d-BHC		mg/kg	N/A	ND	ND	29.50	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC (Lindane)		mg/kg	N/A	ND	ND	44.30	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4' -DDD		mg/kg	N/A	644.00	507.00	695.00	268.00	10.4	0.386	0.416	0.1950	ND	ND	0.238	1.98
4,4' -DDE		mg/kg	N/A	ND	ND	57.00	ND	1.73	0.0755	0.791	0.244	ND	ND	0.523	11.0
4,4' -DDT		mg/kg	N/A	917.00	823.00	1160.00	300.00	5.52	0.0714	0.958	0.0589	ND	ND	0.515	6.14
Dieldrin		mg/kg	N/A	213.00	177.00	822.00	160.00	4.37	0.31	1.16	0.374	0.26	0.0585	0.649	0.572
Endosulfan I		mg/kg	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II		mg/kg	N/A	52.4	44.40	158.00	44.4	0.989	ND	0.749	ND	0.305	0.096	0.127	ND
Endosulfan sulfate		mg/kg	N/A	ND	ND	57.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin		mg/kg	N/A	278.00	194.00	443.00	156.00	ND	ND	ND	ND	ND	ND	0.182	ND
Endrin aldehyde		mg/kg	N/A	101.00	80.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone		mg/kg	N/A	98.7	78.1	88.5	64.4	0.989	ND	ND	ND	ND	ND	ND	ND
Heptachlor		mg/kg	N/A	ND	ND	12.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor		mg/kg	N/A	ND	ND	ND	ND	ND	ND	0.916	ND	ND	ND	ND	ND
Heptachlor epoxide		mg/kg	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor		mg/kg	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene		mg/kg	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-chlordane		mg/kg	N/A	18.1	12.7	50.6	20.0	2.97	0.0755	10.8	0.0853	1.05	0.348	0.175	ND
gamma-chlordane		mg/kg	N/A	ND	ND	25.3	ND	3.38	0.0840	12.8	0.106	1.28	0.296	0.18	ND
Total Pesticides				2427.20	2085.30	4066.80	1119.30	31.84	1.01	28.59	1.09	2.90	0.80	2.58	19.69
Metals	6010B														
Arsenic		mg/kg	N/A	71.50	39.50	69.10	80.30	248.00	90.90	859.00	57.30	3500.00	1470.00	2950.00	527.00

Table 1
Ditch Characterization Analytical Data
Phase I Removal Action Report
Red Panther Site

Constituent TCLP	Analytical Method 6000/8260/8270/8081A/B	Units	TCLP Regulatory Limit (mg/L)	SB01 0-1'	SB01 1-2'	SB02 0-1'	SB02 1-2'	SB03 0-1'	SB03 1-2'	SB04 0-1'	SB04 1-2'	SB05 0-1'	SB05 1-2'	SB06 0-1'	SB06 1-2'
Arsenic		mg/L	5.0	ND	ND	ND	ND	0.670	0.830	1.820	0.630	26.8	15.5	17.8	1.98
Barium		mg/L	100.0	1.04	1.19	1.53	1.64	ND	1.14	ND	ND	ND	ND	ND	ND
Cadmium		mg/L	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead		mg/L	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury		mg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium		mg/L	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene		mg/L	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		mg/L	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene		mg/L	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylethylketone		mg/L	200.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane		mg/L	0.7	0.050	0.040	ND	0.060	0.070	ND	0.87	ND	0.150	1.03	ND	ND
Trichloroethene		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride		mg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cresols		mg/L	200.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		mg/L	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		mg/L	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
hexachlorobenzene		mg/L	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
hexchlor-1,3-butadin		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		mg/L	3.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene		mg/L	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol		mg/L	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyridine		mg/L	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol		mg/L	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		mg/L	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodane		mg/L	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		mg/L	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin		mg/L	0.02	0.015	0.020	0.015	0.015	ND	0.0010	ND	0.0010	ND	0.0010	ND	ND
heptachlor		mg/L	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lindane		mg/L	0.4	0.00600	0.0450	0.0750	0.0550	ND	0.0010	ND	ND	ND	ND	0.0010	ND
methoxychlor		mg/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium		mg/L	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-D		mg/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene		mg/L	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silvex		mg/L	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide		mg/L	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note:
mg/kg - milligrams per kilogram.
mg/L - milligrams per liter
ND - Not Detected
Bold - Value exceeds TCLP regulatory Limit

Table 2

Ditch Characterization QA/QC Analytical Data
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi

Constituent	Analytical Method	Units	SB03 0-1 EB (mg/L)	SB03 0-1 FB (mg/L)	SB03 0-1 D (mg/kg)	Trip Blank (1) (mg/L)	Trip Blank (2) (mg/L)
Pesticides	8081A						
aldrin		mg/L	ND	ND	0.240	ND	ND
a-BHC		mg/L	ND	ND	ND	ND	ND
b-BHC		mg/L	ND	ND	ND	ND	ND
d-BHC		mg/L	ND	ND	ND	ND	ND
g-BHC (Lindane)		mg/L	ND	ND	ND	ND	ND
4,4' -DDD		mg/L	ND	ND	228.000	ND	ND
4,4' -DDE		mg/L	ND	ND	0.738	ND	ND
4,4' -DDT		mg/L	ND	ND	1.470	ND	ND
Dieldrin		mg/L	ND	ND	1.800	ND	ND
Endosulfan I		mg/L	ND	ND	ND	ND	ND
Endosulfan II		mg/L	ND	ND	0.399	ND	ND
Endosulfan sulfate		mg/L	ND	ND	ND	ND	ND
Endrin		mg/L	ND	ND	ND	ND	ND
Endrin aldehyde		mg/L	ND	ND	ND	ND	ND
Endrin Ketone		mg/L	ND	ND	0.259	ND	ND
Heptachlor		mg/L	ND	ND	ND	ND	ND
Heptachlor		mg/L	ND	ND	ND	ND	ND
Heptachlor epoxide		mg/L	ND	ND	ND	ND	ND
Methoxychlor		mg/L	ND	ND	ND	ND	ND
Toxaphene		mg/L	ND	ND	ND	ND	ND
alpha-chlordane		mg/L	ND	ND	1.41	ND	ND
gamma-chlordane		mg/L	ND	ND	1.68	ND	ND
Metals	8010B						
Arsenic		mg/L	ND	ND	84.70	ND	ND

Note:
mg/kg - milligrams per kilogram for soil samples
mg/L - milligrams per liter for water samples

Table 3
Performance Standards
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi

Contaminant	Surface Soils Domain Average Concentration (95% UCL) (ppm)	Subsurface Soils Domain Average Concentration (95% UCL) (ppm)	Grid Concentration Requiring Aliquot Sampling (ppm)	Maximum Hot Spot Allowable (Size - 500 ft²) (ppm)
Toxphene	39	220	260	1300
Arsenic	23	270	190	954
Dieldrin	3	15	18	89
Total Chlorinated Pesticides	100	N/A	N/A	N/A

Notes:

Surface Soils Defined as soils in the upper two feet
N/A Not Applicable
UCL Upper Confidence Level
ppm parts per million

Table 4
Soil Stockpile Analytical Data
Phase I Action Removal Report
Red Panther Site
Clarksdale, Mississippi

Constituent	Analytical Method	Units	TCLP Regulatory Limit	Ditch 1 D1-1 - 2'	Ditch 4 D4-0 - 2'
TCLP - Pesticides					
	8081A				
Chlordane		mg/L	0.030	< 0.0025	
Endrin		mg/L	0.02	0.0150	
Heptachlor		mg/L	0.008	< 0.0025	
g-BHC (Lindane)		mg/L	0.4	0.0350	
Methoxychlor		mg/L	10.0	< 0.0025	
Toxaphene		mg/L	0.50	0.550	
Heptachlor epoxide		mg/L	0.008	< 0.0025	
TCLP - Volatiles					
	8280				
Benzene		mg/L	0.5		< 0.0200
Carbon tetrachloride		mg/L	0.5		< 0.0200
Chlorobenzene		mg/L	100		< 0.0200
Chloroform		mg/L	6.0		< 0.0200
1,2-Dichloroethane		mg/L	0.5		< 0.0200
1,1-Dichloroethene		mg/L	0.7		< 0.0200
Methyl ethyl ketone		mg/L	200		< 0.100
Tetrachloroethene		mg/L	0.7		< 0.0200
Trichloroethene		mg/L	0.5		< 0.0200
Vinyl Chloride		mg/L	0.2		< 0.0200

Note:
 mg/L - milligrams per liter
Bold - Value exceeds TCLP regulatory Limit

Table 5

Ditch Confirmation Sample Analytical Results
 Phase I Removal Action Report
 Red Panther Site
 Clarksdale, Mississippi

Constituent	Analytical Method	Units	Ditch 1			Ditch 2						Ditch 3			Ditch 4			
			D1-C1* 2' bis	D1-C2* 2' bis	D1-C3* 3' bis	D2-C1* 2' bis	D2-C2* 2' bis	D2-C3* 2' bis	D2-C4* 2' bis	D2-C5* 3' bis	D2-C6* 3' bis	D2-C7* 3' bis	D3-C1* 2' bis	D3-C2* 2' bis	D3-C3* 2' bis	D4-C1* 2' bis	D4-C2* 2' bis	D4-C3* 2' bis
Pesticides	8081A																	
Dieldrin		mg/kg	131	5.16	140	73.3	19.0	91.9	117	13.3	1.93	8.66	0.433	0.716	0.0626	0.140	0.0899	0.103
Toxaphene		mg/kg	1190	243	3130	509	209	1280	1680	157	19.0	378	3.83	7.69	ND	1.24	0.519	0.609
Metals	6010B																	
Arsenic		mg/kg	109	47.3	14.5	31.9	119	34.7	82.3	26.8	44.1	42.7	183	206	58.5	59.9	24.4	104

Note:
 mg/kg - milligrams per kilogram.
 * Each sample is a composite of 5 aliquots (A1 through A5)
 bis - below land surface
 ND - Non detect

Table 6

Nonhazardous Soil Disposal Information
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi

Manifest #	Profile #	Date Shipped	Tons	Disposal Facility
010510	CU4849	11/12/02	24.59	Tunica Landfill
010678	CU4849	11/12/02	27.18	Tunica Landfill
010679	CU4849	11/12/02	32.41	Tunica Landfill
010676	CU4849	11/12/02	29.54	Tunica Landfill
010677	CU4849	11/12/02	22.02	Tunica Landfill
010506	CU4849	11/13/02	26.08	Tunica Landfill
010503	CU4849	11/13/02	25.79	Tunica Landfill
010505	CU4849	11/13/02	22.73	Tunica Landfill
010504	CU4849	11/13/02	19.40	Tunica Landfill
010502	CU4849	11/13/02	25.77	Tunica Landfill
010508	CU4849	11/13/02	22.01	Tunica Landfill
010509	CU4849	11/13/02	21.23	Tunica Landfill
010681	CU4849	11/13/02	27.65	Tunica Landfill
010691	CU4849	11/18/02	32.01	Tunica Landfill
010684	CU4849	11/20/02	29.42	Tunica Landfill
010685	CU4849	11/20/02	32.31	Tunica Landfill
010686	CU4849	11/20/02	7.52	Tunica Landfill
010687	CU4849	11/21/02	31.49	Tunica Landfill
010688	CU4849	11/21/02	28.04	Tunica Landfill
010692	CU4849	11/21/02	27.40	Tunica Landfill
010695	CU4849	11/21/02	29.70	Tunica Landfill
010693	CU4849	11/21/02	27.95	Tunica Landfill
010697	CU4849	11/22/02	27.07	Tunica Landfill
010698	CU4849	11/22/02	36.14	Tunica Landfill
008395	CU4849	11/22/02	36.14	Tunica Landfill
008396	CU4849	11/22/02	31.28	Tunica Landfill
010689	CU4849	11/22/02	31.83	Tunica Landfill
010683	CU4849	12/02/02	1.170	Tunica Landfill
008396	CU4849	11/22/02	31.28	Tunica Landfill
010694	CU4849	11/21/02	33.25	Tunica Landfill
010507	CU4849	11/13/02	25.79	Tunica Landfill
010680	CU4849	11/12/02	27.36	Tunica Landfill
006531	CU4849	12/27/02	29.09	Tunica Landfill

Table 7

**Air Monitoring Results
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi**

Date/Time	Location	Reading ppm	Standard
November 13 10:19	Ditch 2	0 Breathing Zone	5-50 ppm
November 13 10:19	Ditch 2	14 – 18.6 Soil	N/A
November 13 10:45	Ditch 2	0 Breathing Zone	5-50 ppm
November 13 3:45	Ditch 4	0 Breathing Zone	5-50 ppm
November 13 3:45	Ditch 4	14.5 Soil	N/A
November 14 9:30	Ditch 4 Culvert	1.5 Soil	N/A
November 22 11:00	Ditch 1	0.2 Breathing Zone	5-50 ppm
November 22 11:00	Ditch 1	31.2 Soils	N/A

ppm – parts per million

Table 8

**Borrow Material Analytical Data
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi**

Sample Number	Date Collected	Volatile Organic Compounds EPA Method 8260B (mg/kg)	Pesticides EPA Method 8081A (mg/kg)	Arsenic EPA Method 6010B (mg/kg)
SBP-01	11/12/02	ND	DDT - 0.008	4.92

ND - Not Detected
mg/kg - milligrams per kilogram

Table 9

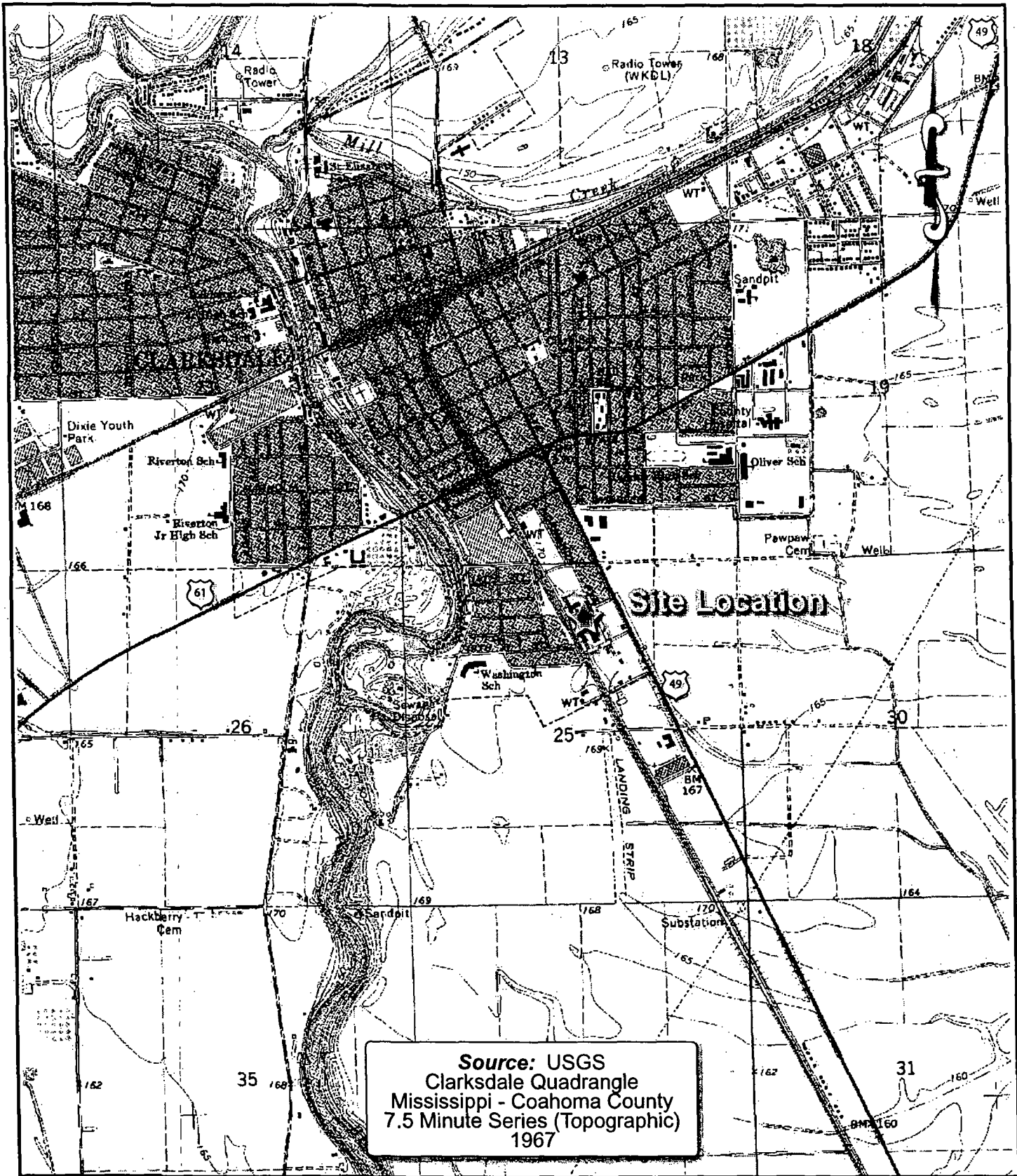
**Storm Water Analytical Data
Phase I Removal Action Report
Red Panther Site
Clarksdale, Mississippi**

Constituent	Analytical Method	Units	Ditch Water (11/20/02)	SW-1 (11/25/02)
Metals				
Aluminum	6010B	mg/L		1.9
Antimony	6010B	mg/L		BDL
Arsenic	6010B	mg/L	3.6	0.62
Barium	6010B	mg/L		0.10
Beryllium	6010B	mg/L		BDL
Cadmium	6010B	mg/L		BDL
Calcium	6010B	mg/L		35
Chromium	6010B	mg/L		BDL
Cobalt	6010B	mg/L		BDL
Copper	6010B	mg/L		BDL
Iron	6010B	mg/L		1.7
Lead	7421	mg/L		BDL
Magnesium	6010B	mg/L		5.8
Manganese	6010B	mg/L		0.33
Mercury	7470A	mg/L		BDL
Nickel	6010B	mg/L		BDL
Potassium	6010B	mg/L		2.7
Selenium	7740A	mg/L		BDL
Silver	6010B	mg/L		BDL
Sodium	6010B	mg/L		31
Thallium	7841A	mg/L		BDL
Vanadium	6010B	mg/L		BDL
Zinc	6010B	mg/L		0.06
Pesticides				
Aldrin	8081A	ug/L		BDL
BHC-alpha	8081A	ug/L		12.2
BHC-beta	8081A	ug/L		5.8
BHC-delta	8081A	ug/L		4.6
BHC-gamma (Lindane)	8081A	ug/L		3.6
Chlordane	8081A	ug/L		BDL
4,4'-DDD	8081A	ug/L		BDL
4,4''-DDE	8081A	ug/L		BDL
4,4''-DDT	8081A	ug/L		7.8
Dieldrin	8081A	ug/L	1.2	BDL

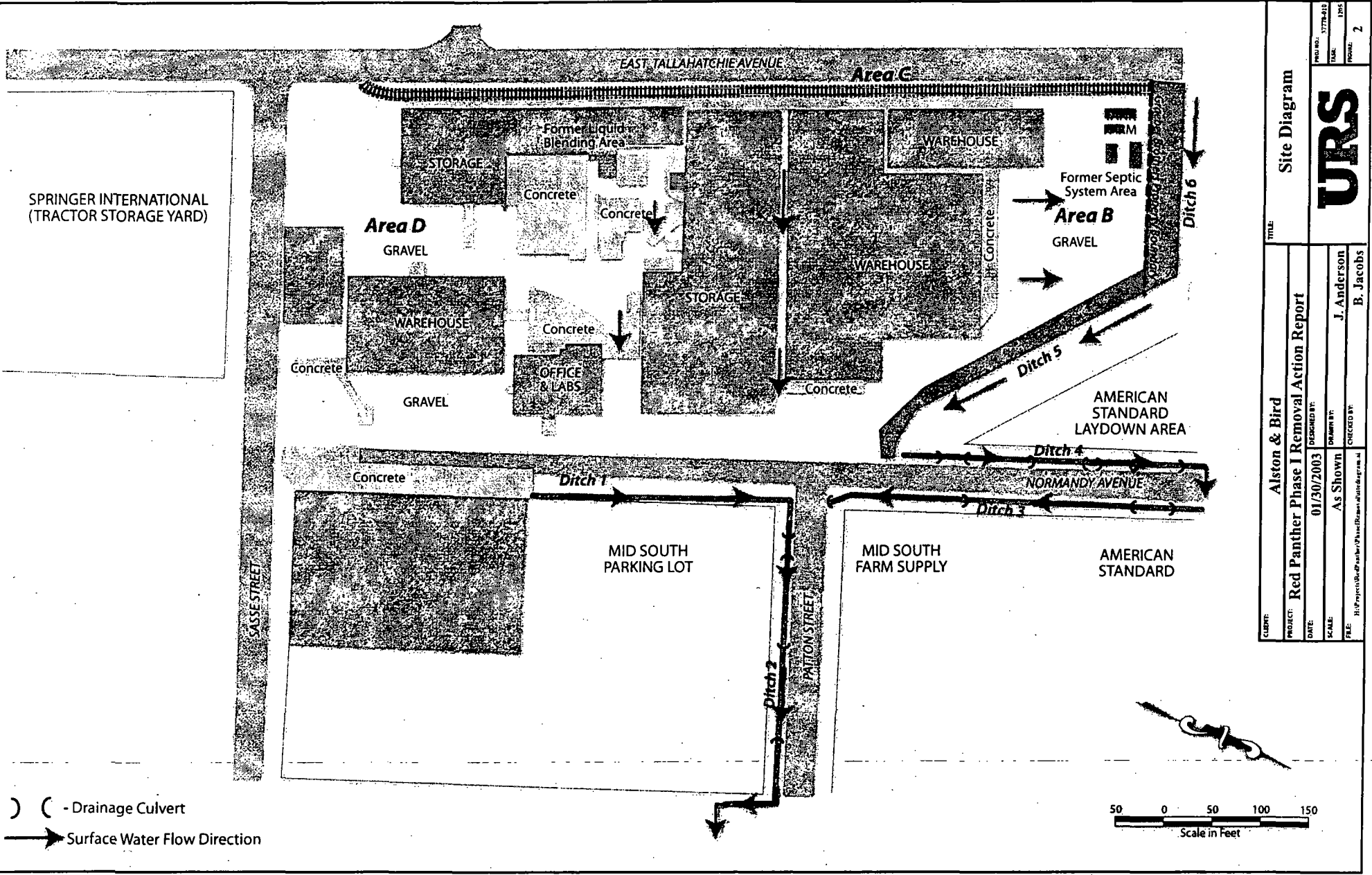
Table 9

Storm Water Analytical Data
 Phase I Removal Action Report
 Red Panther Site
 Clarksdale, Mississippi

Constituent	Analytical Method	Units	Ditch Water (11/20/02)	SW-1 (11/25/02)
Endosulfan I	8081A	ug/L		BDL
Endosulfan II	8081A	ug/L		BDL
Endosulfan sulfate	8081A	ug/L		BDL
Endrin	8081A	ug/L		12.0
Endrin aldehyde	8081A	ug/L		BDL
Heptachlor	8081A	ug/L		BDL
Heptachlor epoxide	8081A	ug/L		BDL
Methoxychlor	8081A	ug/L		BDL
Toxaphene	8081A	ug/L	BDL	184
Chlorinated Herbicides				
2,4-D	8151A	ug/L		BDL
2,4-DB	8151A	ug/L		BDL
2,4,5-T	8151A	ug/L		BDL
Dalapon	8151A	ug/L		BDL
Dicamba	8151A	ug/L		BDL
Dichloroprop	8151A	ug/L		BDL
Dinoseb	8151A	ug/L		BDL
MCPA	8151A	ug/L		BDL
MCPP	8151A	ug/L		BDL



CLIENT: Alston and Bird		TITLE: Site Location Map	
PROJECT: Red Panther Phase I Removal Action Report			
DATE: 01/30/2003	DESIGNED BY:	URS	PROJ NO.: 37778-010
SCALE: Approximate Scale 1" = 2000'	DRAWN BY: J. Anderson		TASK: 1205
FILE: H:\Projects\Red Panther\PI Removal\Sitemap.ai	CHECKED BY: B. Jacobs		FIGURE: 1

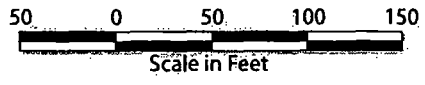
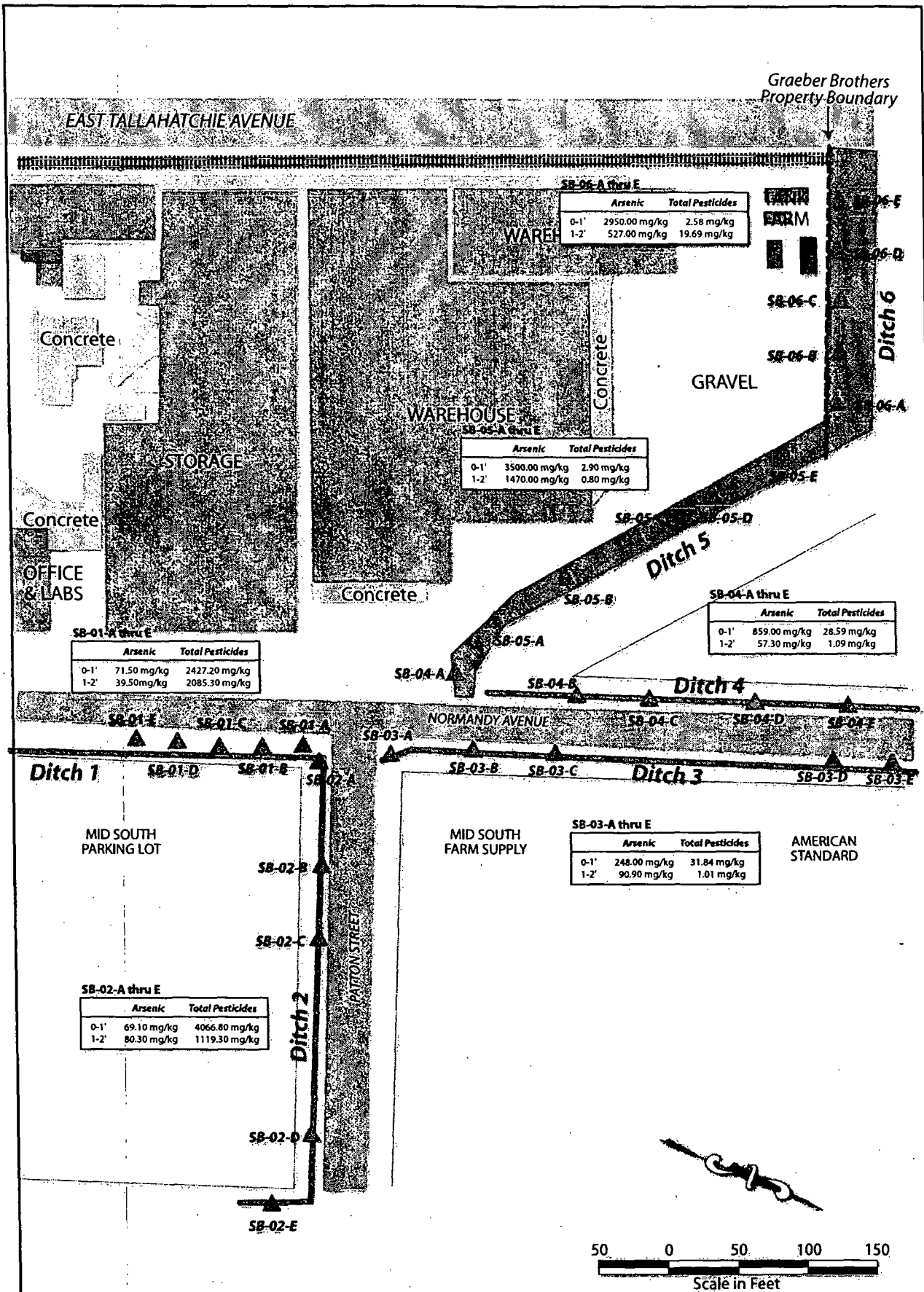


Site Diagram

CLIENT:	Alston & Bird
PROJECT:	Red Panther Phase I Removal Action Report
DATE:	01/30/2003
SCALE:	AS SHOWN
FILE:	H:\Project\Red Panther\Phase I Removal Action Report.dwg
DESIGNED BY:	J. Anderson
DRAWN BY:	B. Jacobs
ENGCDD BY:	

PROJ NO: 1778-010
 TASK: 1205
 DRAWING: 2





CLIENT:	Alston & Bird		TITLE:	Ditch Characterization Sample Locations & Results		
PROJECT:	Red Panther Phase I Removal Action Report		PROJ NO.:	37778-010		
DATE:	01/30/2003	DESIGNED BY:	TASK:	1204		
SCALE:	As Shown	DRAWN BY:	J. Anderson			
FILE:	H:\Projects\RedPanther\Phase I Removal\Sub_ditches.dwg		CHECKED BY:	B. Jacobs		
					FIGURE:	3

OFFICE
CLABS

D1-C1-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	131 mg/kg
Toxaphene	1190 mg/kg
Metals	
Arsenic	109 mg/kg

D1-C1-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	5.16 mg/kg
Toxaphene	243 mg/kg
Metals	
Arsenic	47.3 mg/kg

**Concrete
D6-C1-A1 thru A5**

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.140 mg/kg
Toxaphene	1.24 mg/kg
Metals	
Arsenic	59.9 mg/kg

D4-C2-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.0899 mg/kg
Toxaphene	0.519 mg/kg
Metals	
Arsenic	24.4 mg/kg

D4-C3-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.103 mg/kg
Toxaphene	0.609 mg/kg
Metals	
Arsenic	104 mg/kg

AMERICAN STANDARD
LAYDOWN AREA

Ditch 1

MID SOUTH
PARKING LOT

D2-C4-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	117 mg/kg
Toxaphene	1680 mg/kg
Metals	
Arsenic	82.3 mg/kg

D2-C3-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	91.9 mg/kg
Toxaphene	1280 mg/kg
Metals	
Arsenic	34.7 mg/kg

D2-C2-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	19.0 mg/kg
Toxaphene	209 mg/kg
Metals	
Arsenic	119 mg/kg

D2-C1-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	73.3 mg/kg
Toxaphene	509 mg/kg
Metals	
Arsenic	31.9 mg/kg

D2-C1-A2

D2-C1-A1

D3-C1-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.433 mg/kg
Toxaphene	3.83 mg/kg
Metals	
Arsenic	183 mg/kg

D3-C2-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.716 mg/kg
Toxaphene	7.69 mg/kg
Metals	
Arsenic	206 mg/kg

D3-C3-A1 thru A5

CONSTITUENT	UNITS
Pesticides	
Dieldrin	0.0626 mg/kg
Toxaphene	ND
Metals	
Arsenic	56.5 mg/kg

PATTON STREET

Ditch 3

NORMANDY AVENUE

Ditch 4

AMERICAN
STANDARD

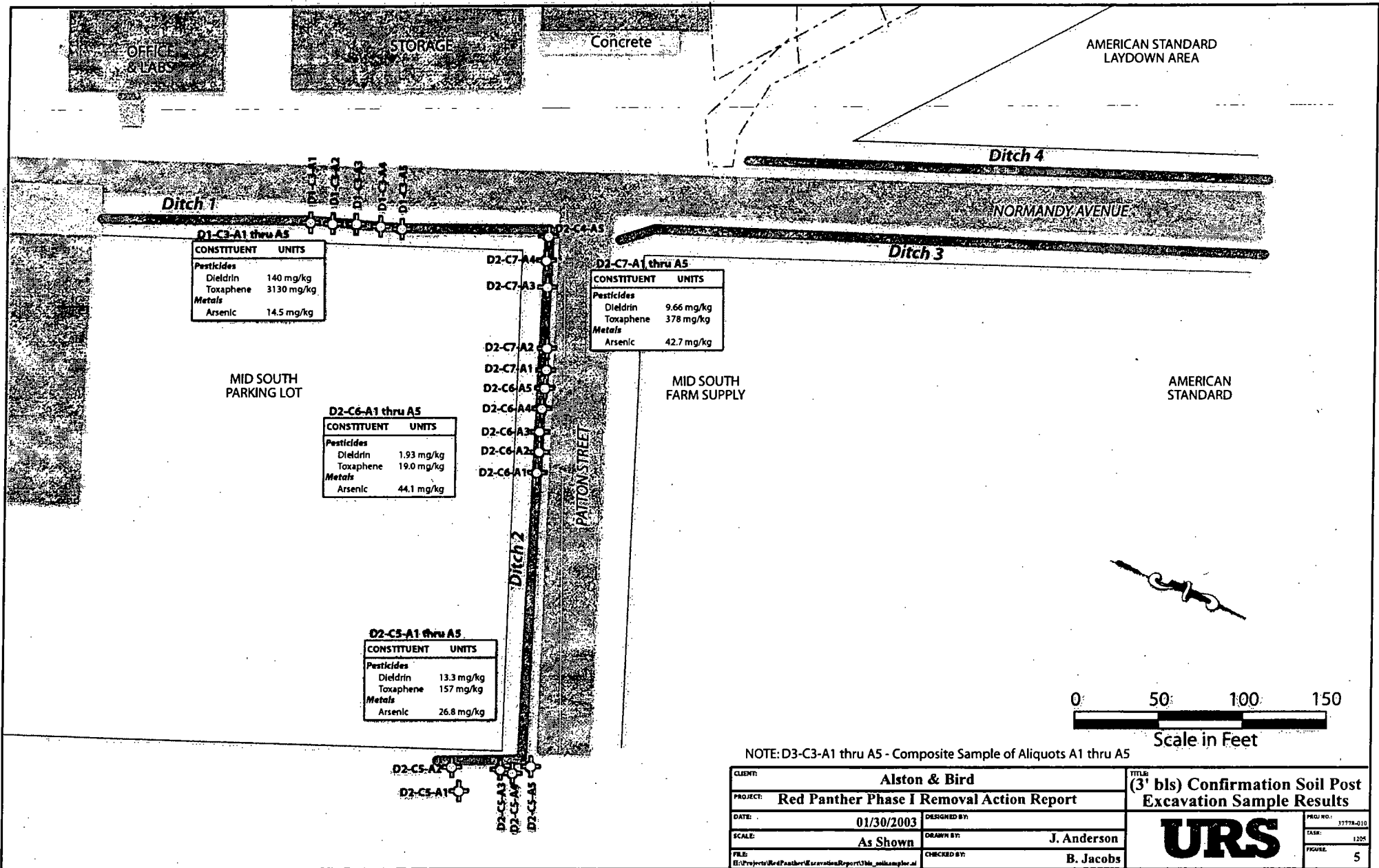
0 50 100 150

Scale in Feet

NOTE: D3-C3-A1 thru A5 - Composite Sample of Aliquots A1 thru A5

CLIENT:	Alston & Bird	TITLE:	(2' bls) Confirmation Soil Post Excavation Sample Results
PROJECT:	Red Panther Phase I Removal Action Report	PROJ NO.:	3778-010
DATE:	01/30/2003	DESIGNED BY:	
SCALE:	As Shown	DRAWN BY:	J. Anderson
FILE:	H:\Projects\Red Panther\Excavation\Report\soil\soil.rpt	CHECKED BY:	B. Jacobs
		TASK:	1205
		FIGURE:	4

URS



NOTE: D3-C3-A1 thru A5 - Composite Sample of Aliquots A1 thru A5

CLIENT:	Alston & Bird		TITLE:	(3' bls) Confirmation Soil Post Excavation Sample Results	
PROJECT:	Red Panther Phase I Removal Action Report		PROJ NO.:	37778-010	
DATE:	01/30/2003	DESIGNED BY:			
SCALE:	As Shown	DRAWN BY:	J. Anderson		
FILE:	E:\Projects\RedPanther\ExcavationReport\37778_010\alston\alston.apr		CHECKED BY:	B. Jacobs	
			URS	TASK:	1205
				FIGURE:	5

Report: Resource costs
 Layout: Red Panther Contract
 Filter: All Activities

Red Panther Phase I and Phase II Work Plan Schedule Soil Remedial Action

Report Date: 11OCT02
 Page 1A of 1A

Activity ID	Description	Early Start	Early Finish	2002												2003											
				MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
Total Project																											
Phase 1 Work Plan																											
1040	Final Work Plan Agency Approval	29MAR02	27MAY02	Final Work Plan Agency Approval																							
1050	Phase 1 Work Plan Complete		28MAY02	Phase 1 Work Plan Complete																							
Ditch Characterization																											
1990	Pre Mobilization Coordination	28MAY02	24JUN02	Pre Mobilization Coordination																							
2000	Ditch Sampling Mobilization	24JUN02	01JUL02	Ditch Sampling Mobilization																							
2010	Ditch Sample Collection	01JUL02 *	09JUL02	Ditch Sample Collection																							
2020	Data Review	09JUL02	06AUG02	Data Review																							
Ditch Excavation/Site Characterization																											
3000	Procure Subs - Excav/Disposal	06AUG02	28OCT02	Procure Subs - Excav/Disposal																							
3010	Mobilize	28OCT02	11NOV02	Mobilize																							
3020	Conduct Ditch Excavation/Disposal	11NOV02	02DEC02	Conduct Ditch Excavation/Disposal																							
3025	Ditch Excavation Field Report	02DEC02	16DEC02	Ditch Excavation Field Report																							
3030	Site Characterization Sampling	02DEC02	23DEC02	Site Characterization Sampling																							
3040	Phase 1 Site Work Completion	23DEC02		Phase 1 Site Work Completion																							
3050	Site Characterization Lab Analysis	23DEC02	22JAN03	Site Characterization Lab Analysis																							
3060	Compile Data and Report	22JAN03	19FEB03	Compile Data and Report																							
3065	PRP Review of Phase 1 Report	19FEB03	19MAR03	PRP Review of P																							
3070	Submit to Agency - Phase 1 Complete		19MAR03	Submit to Agenc																							
Phase 2 Work Plan																											
4000	Draft PSVP/Excav WP	19MAR03	14MAY03	Draft PSVP/Excav WP																							



1349 West Peachtree Street, Suite 2000, Atlanta, Georgia 30309
Tel: (404)347-9050 Fax: (404)347-9080

August 24, 2002

Ms. Katrina Jones
U.S. EPA Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia

Re: Submittal of Data and Modifications to Phase I Work Plan Ditch Excavation and Site Characterization
Red Panther Pesticide Superfund Site, Clarksdale, Mississippi
Administrative Order on Consent for Removal Action
Docket No. CER-04-2001-3766

Dear Ms Jones:

The purpose of this letter is 1) to transmit the field sampling results from the ditch characterization samples taken at the Red Panther Pesticide Superfund site (the "Site") in June; 2) based on these results and the field observations, request a modification to the ditch excavation and site characterization sampling as described below; and 3) seek written approval of the Final Work Plan, as modified.

Modification #1 – Excavate ditches 1, 2, 3 and 4 during Phase I activities; address ditches 5 and 6 during Phase II removal work

Ditches 1, 2, 3 and 4 are materially different from ditches 5 and 6

The soil sample results and field observations indicate that there are two separate types of surface soil materials in the ditches that are to be excavated. The material in ditches 1, 2, 3 and 4 contain primarily pesticides. Some arsenic is also present in ditches 3 and 4. The material in ditches 5 and 6 contain arsenic and tetrachloroethene. The field samples also identified a visually distinct possible "product-like" material in two of the borings in ditch 6. The lateral extent of this material is not known since the samples were collected only along the centerline of the ditch.

Avoid risking large excavation off-site during ditch excavation

We propose to defer excavation of ditches 5 and 6 to avoid opening a potentially large excavation during the ditch removal operation, in an area off the Red Panther property.

Coordinate ditch 5 and 6 excavation with future work after further sampling.

We propose to defer excavation of ditches 5 and 6 to allow additional sampling of these ditches to be performed during site characterization sampling. Horizontal and

vertical excavation cut lines for ditches 5 and 6 can then be developed and the excavation can be coordinated with the removal work performed with respect to the remainder of the site.

Disposal requirements differ

The TCLP results of ditch 5 and 6 samples are characteristically hazardous for arsenic and tetrachloroethene. The results from ditches 1, 2, 3 and 4 were not characteristically hazardous with the exception of a slight exceedance in ditch 4 for tetrachloroethene. (Ditch 4 will be resampled for characterization following excavation and prior to disposal.) Ditches 5 and 6 may require segregation of the excavated soils for proper disposal. Deferring the excavation of the soils from ditches 5 and 6 until the removal activities during Phase II would allow more efficient handling by consolidation with other hazardous materials requiring similar treatment. Assuming the resample of ditch 4 proves non-hazardous, the soils from ditches 1, 2, 3 and 4 will be non-hazardous and can be disposed off-site in a sub-title D landfill. If the resample of ditch 4 indicates TCLP exceedances, the appropriate soils from ditch 4 will be covered and stockpiled on site.

Source of tetrachloroethene unknown

Please note that the PRP group will perform the remediation required to properly dispose of the soils in the ditches contaminated with tetrachloroethene, and as noted above, horizontal and vertical excavation cut lines for ditches 5 and 6 will be developed so that the excavation can be coordinated with the removal activities on the remainder of the site, utilizing the constituents of concern in the Administrative Order on Consent (AOC) to determine the extent of removal. However, the AOC otherwise does not address tetrachloroethene, and it was not identified as a constituent of concern on the site proper through EPA's extensive sampling on the Red Panther property. The ditches where it has been identified receive runoff from other potential source locations not associated with the Site. The PRP group does not accept responsibility for placing the tetrachloroethene in the ditches. The PRP group has no knowledge of records that indicate tetrachloroethene was used at the Red Panther facility. The PRP group assumes it has no further responsibility for investigation or remediation of tetrachloroethene and does not anticipate conducting work specific to the substance beyond the excavation necessary to reach the performance standards specified in the AOC.

Modification #2 – Install fence and erosion control along ditches 5 and 6

The PRP group will install a fence north of the ditch on the Graeber property. The fence will limit access to the ditches in the interim period from the ditch excavation through completion of site remediation. During the excavation of ditches 1 through 4 the group will also install silt fences and hay bales along ditches 5 and 6 in order to reduce erosion and runoff.

Modification #3 – Add sample grids to ditches 5 and 6

The attached figures show the modified surface and subsurface exposure domain and the proposed additional sample grids for ditches 5 and 6. The original exposure domain included the area of ditch 5 and the parking area immediately to the northeast. Ditch 6 was not included in the original exposure domain. An area approximately 20 feet wide and 200 feet long was added to the north side of Area B to bring in ditch 6 (Figure 1). Figure 2 shows the additional sampling grids to be added to the site characterization sampling plan for ditches 5 and 6. These grids are numbered BG13 through BG20. The ditch sampling grids will be sampled in the same manner and for the same constituents as the on site grids for the site characterization.

Modification #4 – Remove and replace road and driveway culverts instead of pressure washing

The culverts had previously been planned for pressure washing with collection of sediments and wash water. The culverts were to remain in place following the ditch excavation. Given the poor condition of the culverts and complexity of collecting the sediments and wash water, the group will instead excavate the culvert across the roadways, driveways and ditches in the areas of ditches 1, 2, 3 and 4 and replace with new corrugated metal culverts. Material excavated will be disposed with the other ditch materials in the sub-title D landfill. The metal culverts removed will be crushed and disposed in the sub-title D landfill.

Please be advised that to date we have not received written approval from U.S. EPA of the final Phase I Work Plan as provided under Section V(2)(A)(1)(d) of the AOC. The PRP group received an email approval of the draft Phase I Work Plan in March, and then submitted the Final Work Plan as required under Section V(2)(A)(1) of the AOC on May 24, 2002. As the Final Work Plan included elements that were not present in the draft Work Plan, and in light of the modifications requested in this letter, the PRP group requests U.S. EPA provide written approval of the Final Phase I Work Plan, as modified by this letter so that the implementation of the Phase I Work Plan field work can commence. Following receipt of written approval, the PRP group will submit a revised schedule for the Phase I Work Plan implementation.

Thank you for your attention in reviewing this modification to the Red Panther work plans.
Please contact the undersigned if you have any questions or comments.

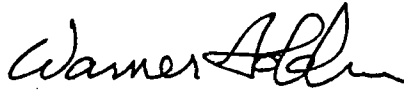
Sincerely,

URS



~~FOR~~
Brent Jacobs
Project Coordinator

NewFields



Warner Golden, P.E.
Technical Coordinator

Attachments:

Ditch Sample Results Summary Table

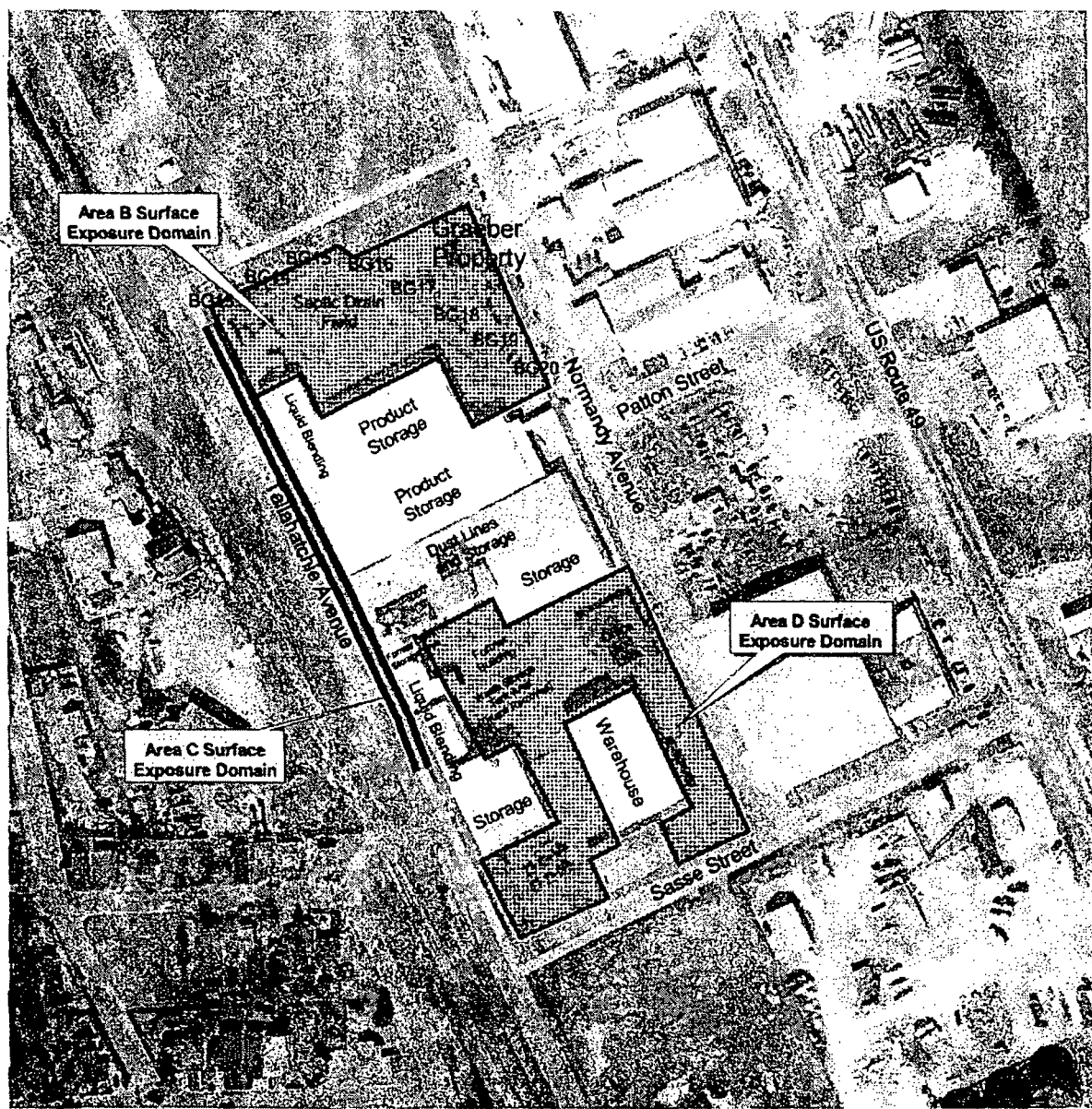
Figure 1 – Surface Exposure Domain

Figure 2 – Subsurface Exposure Domain






Ditch Characterization Analytical Data
 Red Panther Removal
 Clarksdale, Mississippi

Constituent	Analytical Method	Units	TCLP Regulatory Limit (mg/L)	SB01 0-1'	SB01 1-2'	SB02 0-1'	SB02 1-2'	SB03 0-1'	SB03 1-2'	SB04 0-1'	SB04 1-2'	SB05 0-1'	SB05 1-2'	SB06 0-1'	SB06 1-2'
Pesticides	8081A														
aldrin		mg/kg		105.00	155.00	310.00	84.40	1.49	0.03						
a-BHC		mg/kg			16.90	116.00	22.10								
b-BHC		mg/kg									0.03				
d-BHC		mg/kg				29.50									
g-BHC (Lindane)		mg/kg				46.30									
4,4'-DDD		mg/kg		694.00	538.00	833.00	295.00	11.30	0.39	0.79	0.02			0.31	2.03
4,4'-DDE		mg/kg				78.00		1.82	0.08	0.79	0.24			0.60	11.20
4,4'-DDT		mg/kg		956.00	854.00	1280.00	321.00	5.89	0.08	0.89	0.08			0.58	6.09
Dieldrin		mg/kg		243.00	200.00	938.00	184.00	4.62	0.31	1.18	0.37	0.26	0.05	0.74	0.78
Endosulfan I		mg/kg													
Endosulfan II		mg/kg		76.50	65.40	228.00	64.40						0.12	0.18	
Endosulfan sulfate		mg/kg				99.10									
Endrin		mg/kg		294.00	213.00	527.00	177.00							0.24	
Endrin aldehyde		mg/kg		121.00	94.90								0.14		
Endrin Ketone		mg/kg		98.70	78.10	97.00	64.40	0.82							
Heptachlor		mg/kg				12.60									
Heptachlor		mg/kg								0.92					
Heptachlor epoxide		mg/kg													
Methoxychlor		mg/kg													
Toxaphene		mg/kg													
alpha-chlordane		mg/kg		22.10	16.90	61.10	22.10	3.04	0.08	10.80	0.08	1.05	0.31	0.19	
gamma-chlordane		mg/kg				25.30		3.47	0.09	12.90	0.11	1.34	0.38	0.21	
Total Pesticides				2610.30	2233.20	4680.90	1234.40	32.25	1.08	28.35	0.91	2.65	1.00	3.03	20.10
Metals	6010B														
Arsenic		mg/kg		71.50		69.10	60.30	248.00		858.00	57.30	3500.00	1470.00	2950.00	527.00
TCLP *	6000/6260/6270/6														
Arsenic		mg/L	5.00	-	-	-	-	-	-	-	-	26.80	15.50	17.80	-
Tetrachloroethene		mg/L	0.70	-	-	-	-	-	-	0.87	-	-	1.03	-	-

Note:
 mg/kg - milligrams per kilogram.
 mg/L - milligrams per liter
 If a value is not listed for total pesticides then the constituent was not detected above the laboratory report limits
 * Only values for constituents exceeding TCLP regulatory values are listed
 - Below TCLP Regulatory Limit



LEGEND

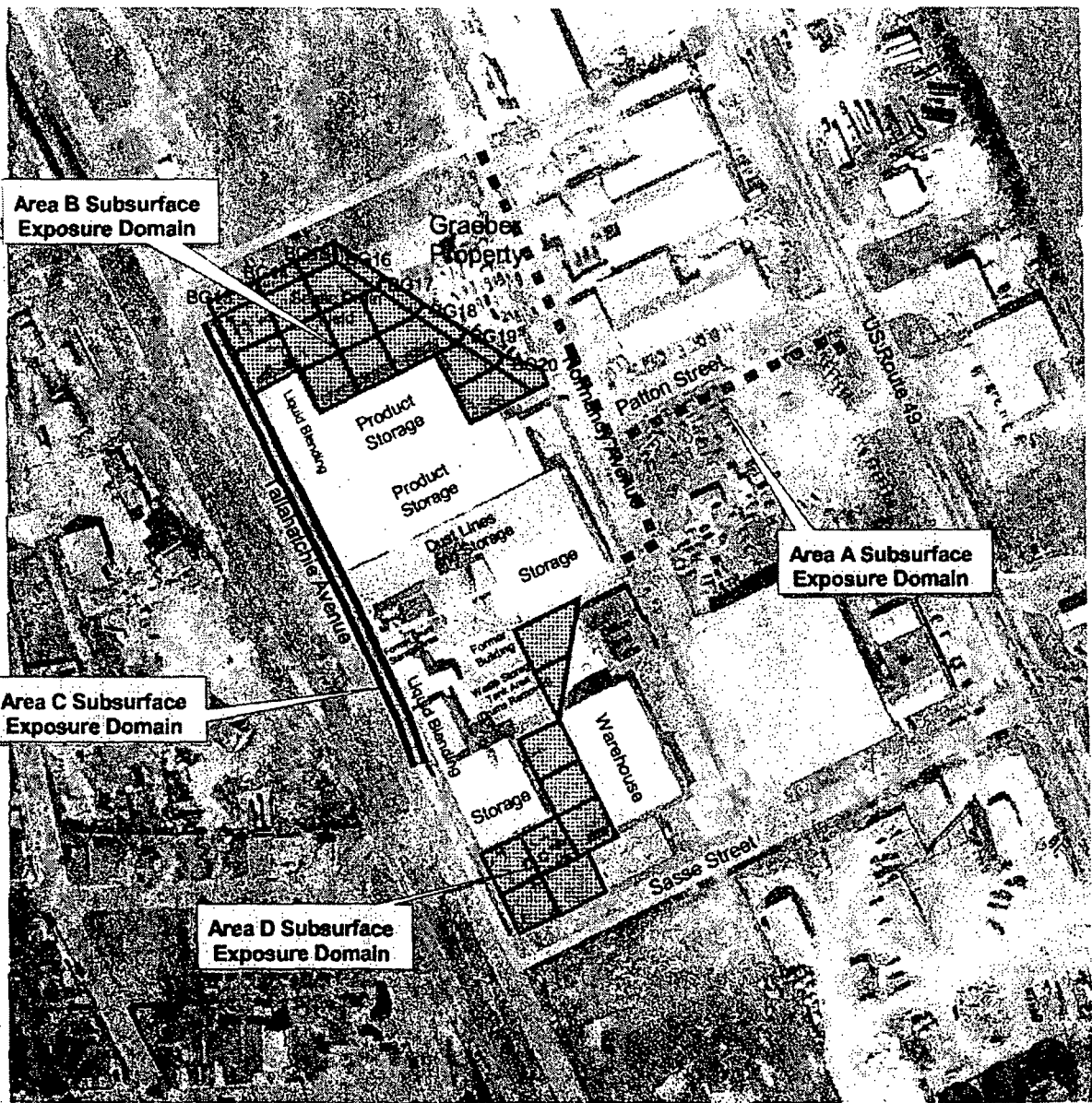
-  Area B Surface Exposure Domain
-  Area C Surface Exposure Domain
-  Area D Surface Exposure Domain
-  Site Boundary
-  Study Area









1349 West Peachtree Street - Suite 2000
Atlanta, Georgia 30309
Phone: (404) 347-9050 - Fax: (404) 347-9080
www.newfields.com

Red Panther Chemical Company
Clarksdale, Coahoma County, Mississippi

Figure 1
Surface Exposure Domains
Rev: Aug 23, 2002



LEGEND

-  Area A Subsurface Domain
-  Area B Subsurface Domain
-  Area C Subsurface Domain
-  Area D Subsurface Domain
-  Site Boundary
-  Study Area



1349 West Peachtree Street - Suite 2000
Atlanta, Georgia 30309
Phone: (404) 347-9050 - Fax: (404) 347-9080
www.newfields.com

Rad Panther Chemical Company
Clarksdale, Coahoma County, Mississippi

Figure 2
Subsurface Exposure Domains
Ditch 5 and 6 Sampling Grids
Rev: August 23, 2002



September 13, 2002

Ms. Katrina Jones
U.S. EPA Region 4
Waste Management Branch
Emergency Response and Removal Branch
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Re: Approval of August 24, 2002 Modifications to Phase I Final Work Plan
Red Panther Site
Clarksdale, Mississippi

Dear Ms. Jones:

This letter is to acknowledge the Red Panther PRP's receipt of your approval letter for the modifications (dated August 24, 2002) to the Phase I Final Work Plan. The modifications will be incorporated as an appendix to the Final Work Plan. It is my understanding from our telephone conversation on September 11, 2002 that the PRPs do not need to reissue the Phase I Final Work Plan after incorporating the modifications. I will forward you a schedule for the ditch excavation and site characterization activities next week.

-oOo-

If you have any questions or need additional information, please contact me at (678) 356-8205 or by email at Brent_Jacobs@URScorp.com.

Yours very truly,
URS Corporation

Brent B. Jacobs, P.G.
Project Coordinator

Cc: Mr. Bob Mowrey, Alston & Bird
Mr. Warner Golden, Newfields

URS Corporation
5900 Windward Parkway, Suite 400
Alpharetta, GA 30005
Tel: 678.356.8300
Fax: 678.356.0055



October 18, 2002

Ms. Katrina Jones
U.S. EPA Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia

Re: Revised Schedule for Red Panther Site and Notification of Removal Start Date
Red Panther Site
Clarksdale, Mississippi

Dear Ms. Jones

This letter transmits a revised schedule for the Red Panther site activities. URS is requesting a 45-day extension on behalf of the PRPs for the submittal of the Site Characterization report with the revised submittal date of March 19, 2003. The extension is being requested due to the recent modifications to the Phase I Work Plan that were approved by EPA on September 11, 2002. This extension will give the PRPs, URS, and Newfields sufficient time to receive and review the large amount of data that will be generated during the site characterization.

This letter also serves to notify EPA that URS will begin the Red Panther Removal, specifically the excavation of ditches 1 through 4 on November 11, 2002, subject to confirmation of access to the Red Panther property and adjacent properties. The removal activities will take approximately two weeks to complete. The site characterization activities will begin on December 2, 2002 after the removal activities have been completed and last approximately three weeks.

-oOo-

If you have any questions or need additional information, please contact me at (678) 356-8205 or email me at Brent_Jacobs@URScorp.com.

Yours very truly,
URS Corporation

Brent B. Jacobs, P.G.
Project Coordinator

URS Corporation
5900 Windward Parkway, Suite 400
Alpharetta, GA 30005
Tel: 678.356.8300
Fax: 678.356.0055



Division/Laboratory Name:

FAX COC TO NORCROSS

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring Yes

290725

Client Name: URS Corp Client #: 2693

Address: 5900 Windward Pkwy Suite 406

City/State/Zip Code: Alpharetta GA 30005

Project Manager: Brent Jacobs

Telephone Number: 678 356 8305 Fax: 678 356 0055

Sampler Name: (Print Name) Brent Jacobs

Sampler Signature: Brent Jacobs

Project Name: Red Leather Removal

Project #: _____

Site/Location ID: M5 State: _____

Report To: Brent Jacobs

Invoice To: Same

Quote #: _____ PO#: _____

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharge may apply)	Date Needed:	Fax Results: (Y) N	Data Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix										Analyze For:	QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other:				
							SL - Sludge	DW - Drinking Water	GW - Groundwater	S - Solids	IW - Wastewater	Specify Other	Asst.	HCl	NaOH	%SO ₄			Methanol	None	Other (Specify)	
							As - Sludge	DW - Drinking Water	GW - Groundwater	S - Solids	IW - Wastewater	Specify Other	Asst.	HCl	NaOH	%SO ₄	Methanol	None	Other (Specify)			REMARKS
			<u>SBO3 0-1 EB</u>	<u>6/27/02</u>	<u>C</u>																	<u>Level III Required</u>
			<u>SBO3 0-1 FB</u>	<u>6/27/02</u>	<u>G</u>																	<u>Level III Required</u>

Special Instructions: Cell 770 630 0913

LABORATORY COMMENTS:
 Init Lab Temp:
 Rec Lab Temp: 3.0
 Customer Satisfaction: Y N NA
 Services Supplied by TestAmerica: Y N
 Method of Separation:

Relinquished By: Brent Jacobs Date: 6/27/02 Time: 0930 Received By: Dina Blackburn Date: 6/27 Time: 0930
 Relinquished By: _____ Date: _____ Time: _____ Received By: TMP Date: 6/27/02 Time: 9:30
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

Test America

Nashville Division
2980 Foster Creighton
Nashville, TN 37204

Phone: 615-728-0177
Fax: 615-728-3404

200725

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring Yes

Client Name: URS Client #: 200725

Address: 5510 KIMMELMANE PKWY. STE 400
City/State/Zip Code: ALPHARETTA GA 30005

Project Manager: Brent Jacobs

Telephone Number: 478 366 8603 Fax: 615 728 3404

Sampler Name: (Print Name) Brent Jacobs

Sampler Signature: Brent Jacobs

Project Name: Red Panther

Project #: _____

Site/Location ID: MS State: MS

Report To: Brent Jacobs

Invoice To: Same

Quote #: _____ PO#: _____

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Needed:	Fax Results: <input checked="" type="radio"/> Y <input type="radio"/> N	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers								Analyze For:	QC Deliverables	REMARKS			
								SL - Sludge	DW - Drinking Water	GW - Groundwater	S - Soil/Sediment	WW - Wastewater	Specify Other	MNO	HCl				NaOH	H ₂ SO ₄	Methanol

Special Instructions:

Cell 770 630 0913

Relinquished By: <u>[Signature]</u>	Date: <u>4/26/02</u>	Time: <u>0930</u>	Received By: <u>[Signature]</u>	Date: <u>4/27</u>	Time: <u>0930</u>
Relinquished By:	Date:	Time:	Received By: <u>MB</u>	Date: <u>4/27</u>	Time: <u>9:30</u>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

LABORATORY COMMENTS:

Inlt Lab Temp: _____
Rec Lab Temp: _____
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
Method of Shipment: _____

Test America

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105513
 Sample ID: SB03 0-1 EB
 Sample Type: Ground water
 Site ID: MS

Project:
 Project Name: RED PANTHER REMOVAL
 Sampler: BRENT JACOBS

Date Collected: 6/26/02
 Time Collected:
 Date Received: 6/27/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
PESTICIDES/PCB's/HERBICIDES									
Aldrin	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
a-BHC	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
b-BHC	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
d-BHC	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
g-BHC, Lindane	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
4,4'-DDD	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
4,4'-DDE	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
4,4'-DDT	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Dieldrin	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Endosulfan I	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
Endosulfan II	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Endosulfan Sulfate	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Endrin	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Endrin Aldehyde	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Endrin Ketone	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Heptachlor	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
Heptachlor Epoxide	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
Methoxychlor	ND	ug/l	0.00010	1	7/ 9/02	1:31	Henderson	8081A	5248
Toxaphene	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
alpha-Chlordane	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
gamma-Chlordane	ND	ug/l	0.00005	1	7/ 9/02	1:31	Henderson	8081A	5248
METALS									
Arsenic	ND	ug/l	0.0050	1	7/ 1/02	10:30	C.Johnson	6010B	4924
MISCELLANEOUS CHEMISTRY									

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105513
 Sample ID: SB03 0-1 EB
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
pH	7.4				6/28/02	13:00	J. Tyree	9040/150.1	9173

Sample Extraction Data

Parameter	Wt/vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Pesticides	500. ml	5.00 ml	7/ 3/02		M. Rieke	3510/608

Surrogate	% Recovery	Target Range
pest surr-TMX	87.	33. - 127.
pest surr-DCS	63.	8. - 133.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated value below report limit.
- E - Estimated value above the calibration limit of the instrument.
- ® - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105514
Sample ID: SB03 0-1 FB
Sample Type: Ground water
Site ID: MS

Project:
Project Name: RED PANTHER REMOVAL
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected:
Date Received: 6/27/02
Time Received: 9:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
PESTICIDES/PCB's/HERBICIDES									
Aldrin	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
a-BHC	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
b-BHC	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
d-BHC	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
g-BHC, Lindane	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
4,4'-DDD	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
4,4'-DDE	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
4,4'-DDT	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Dieldrin	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Endosulfan I	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
Endosulfan II	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Endosulfan Sulfate	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Endrin	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Endrin Aldehyde	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Endrin Ketone	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Heptachlor	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
Heptachlor Epoxide	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
Methoxychlor	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
Toxaphene	ND	ug/l	0.00010	1	7/ 9/02	2:01	Henderson	8081A	5248
alpha-Chlordane	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
gamma-Chlordane	ND	ug/l	0.00005	1	7/ 9/02	2:01	Henderson	8081A	5248
METALS									
Arsenic	ND	ug/l	0.0050	1	7/ 1/02	10:30	C.Johnson	6010B	4524
MISCELLANEOUS CHEMISTRY									

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105514
 Sample ID: SB03 0-1 FB
 Project:
 Page 2

Analyte	Result	Units	Report	Dil	Analysis	Analysis	Analyst	Method	Batch
			Limit	Factor	Date	Time			
pH	6.8				6/28/02	13:00	J. Tyree	9040/150.1	9173

Sample Extraction Data

Parameter	wt/vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Pesticides	500. ml	5.00 ml	7/ 3/02		M. Ricke	3510/608

Surrogate	% Recovery	Target Range
pest surr-TOMX	80.	33. - 127.
pest surr-DCB	77.	8. - 133.

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
- B = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- ‡ = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105515
 Sample ID: TRIP BLANK-1
 Sample Type: Ground water
 Site ID: MS

Project:
 Project Name: RED PANTHER REMOVAL
 Sampler: BRENT JACOBS

Date Collected:
 Time Collected:
 Date Received: 6/27/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*VOLATILE ORGANICS:									
Acetone	ND	mg/l	0.0500	1	7/ 7/02	9:15	B.Herford	8260B	9191
Benzene	ND	mg/l	0.0020	1	7/ 7/02	9:15	B.Herford	8260B	9191
Bromobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Bromochloromethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Bromoform	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Bromomethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
2-Butanone	ND	mg/l	0.0500	1	7/ 7/02	9:15	B.Herford	8260B	9191
n-Butylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
sec-Butylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
t-Butylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Carbon disulfide	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Carbon tetrachloride	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Chlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Chloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Chloroform	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Chloromethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
2-Chlorotoluene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
4-Chlorotoluene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2-Dibromo-3-chloropropane	ND	mg/l	0.0100	1	7/ 7/02	9:15	B.Herford	8260B	9191
Dibromochloromethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2-Dibromoethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Dibromomethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2-Dichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,3-Dichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,4-Dichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Dichlorodifluoroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105515
 Sample ID: TRIP BLANK-1
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Oil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2-Dichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1-Dichloroethene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
cis-1,2-Dichloroethene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
trans-1,2-Dichloroethene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,3-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
2,2-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
cis-1,3-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
trans-1,3-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Ethylbenzene	ND	mg/l	0.0020	1	7/ 7/02	9:15	B.Herford	8260B	9191
Hexachlorobutadiene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
2-Hexanone	ND	mg/l	0.0100	1	7/ 7/02	9:15	B.Herford	8260B	9191
Isopropylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
4-Isopropyltoluene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	7/ 7/02	9:15	B.Herford	8260B	9191
Methylene chloride	ND	mg/l	0.00500	1	7/ 7/02	9:15	B.Herford	8260B	9191
Naphthalene	ND	mg/l	0.00500	1	7/ 7/02	9:15	B.Herford	8260B	9191
n-Propylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Styrene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Toluene	ND	mg/l	0.0020	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2,3-Trichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2,4-Trichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1,1-Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,1,2-Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2,3-Trichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	7/ 7/02	9:15	B.Herford	8260B	9191
1,3,5-Trimethylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Vinyl chloride	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Xylenes (Total)	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191
Bromodichloromethane	ND	mg/l	0.00200	1	7/ 7/02	9:15	B.Herford	8260B	9191

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105515
 Sample ID: TRIP BLANK-1
 Project:
 Page 3

Analyte	Result	Units	Report	Dil	Analysis	Analysis	Analyst	Method	Batch
			Limit	Factor	Date	Time			
Trichlorofluoromethane	ND	ug/l	0.00200	1	7/ 7/02	9:15	B.Herford	82608	9191

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	88.	73. - 133.
VOA Surr Toluene-d8	92.	80. - 121.
VOA Surr, 4-BPB	96.	80. - 128.
VOA Surr, D5PM	90.	81. - 121.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated Value below Report Limit.
- E - Estimated Value above the calibration limit of the instrument.
- * - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693

5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005Lab Number: 02-A105516
Sample ID: TRIP BLANK-2
Sample Type: Ground water
Site ID:Project:
Project Name: RED PANTHER REMOVAL
Sampler: BRENT JACOBSDate Collected:
Time Collected:
Date Received: 6/27/02
Time Received: 9:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS									
Acetone	ND	ug/l	0.0500	1	7/ 7/02	9:46	B.Herford	8260B	9191
Benzene	ND	ug/l	0.0020	1	7/ 7/02	9:46	B.Herford	8260B	9191
Bromobenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Bromochloromethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Bromoform	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Bromomethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
2-Butanone	ND	ug/l	0.0500	1	7/ 7/02	9:46	B.Herford	8260B	9191
n-Butylbenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
sec-Butylbenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
t-Butylbenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Carbon disulfide	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Carbon tetrachloride	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Chlorobenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Chloroethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Chloroform	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Chloromethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
2-Chlorotoluene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
4-Chlorotoluene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2-Dibromo-3-chloropropane	ND	ug/l	0.0100	1	7/ 7/02	9:46	B.Herford	8260B	9191
Dibromochloromethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2-Dibromoethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Dibromomethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2-Dichlorobenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,3-Dichlorobenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,4-Dichlorobenzene	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Dichlorodifluoromethane	ND	ug/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191

Sample report continued . . .

Test America

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105516
 Sample ID: TRIP BLANK-2
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2-Dichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1-Dichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
cis-1,2-Dichloroethene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
trans-1,2-Dichloroethene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,3-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
2,2-Dichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
cis-1,3-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
trans-1,3-Dichloropropene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Ethylbenzene	ND	mg/l	0.0020	1	7/ 7/02	9:46	B.Herford	8260B	9191
Hexachlorobutadiene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
2-Hexanone	ND	mg/l	0.0100	1	7/ 7/02	9:46	B.Herford	8260B	9191
Isopropylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
4-Isopropyltoluene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
4-Methyl-2-pentanone	ND	mg/l	0.0100	1	7/ 7/02	9:46	B.Herford	8260B	9191
Methylene chloride	ND	mg/l	0.00500	1	7/ 7/02	9:46	B.Herford	8260B	9191
Naphthalene	ND	mg/l	0.00500	1	7/ 7/02	9:46	B.Herford	8260B	9191
n-Propylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Styrene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Tetrachloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Toluene	ND	mg/l	0.0020	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2,3-Trichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2,4-Trichlorobenzene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1,1-Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,1,2-Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Trichloroethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2,3-Trichloropropane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,2,4-Trimethylbenzene	ND	mg/l	0.0020	1	7/ 7/02	9:46	B.Herford	8260B	9191
1,3,5-Trimethylbenzene	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Vinyl chloride	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Xylenes (Total)	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191
Bromodichloromethane	ND	mg/l	0.00200	1	7/ 7/02	9:46	B.Herford	8260B	9191

Sample report continued . . .

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INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105516
 Sample ID: TRIP BLANK-2
 Project:
 Page 3

Analyte	Result	Units	Report	Dil	Analysis	Analysis	Analyte	Method	Batch
			Limit	Factor	Date	Time			
Trichlorofluoromethane	ND	mg/l	0.00200	1	7/7/02	9:46	B. Merford	8260B	9191

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	90.	71. - 133.
VOA Surr Toluene-d8	93.	80. - 121.
VOA Surr. 4-BFB	97.	80. - 120.
VOA Surr. DBPH	90.	81. - 121.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- D - Analyte was detected in the method blank.
- J - Estimated value below Report Limit.
- E - Estimated value above the calibration limit of the instrument.
- \$ - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105517
 Sample ID: SB05 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 13:30
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
c-BHC	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
4,4'-DDD	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
4,4'-DDE	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
4,4'-DDT	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Dieldrin	0.263	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
Endosulfan II	0.306	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Endrin	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.497	50	7/10/02	16:29	Henderson	8081A	5267
Endrin Ketone	ND	ug/kg	0.202	50	7/10/02	16:29	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	1.01	50	7/10/02	16:29	Henderson	8081A	5267
Toxaphene	ND	ug/kg	10.1	50	7/10/02	16:29	Henderson	8081A	5267
alpha-Chlordane	1.05	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
gamma-Chlordane	1.28	ug/kg	0.101	50	7/10/02	16:29	Henderson	8081A	5267
METALS									
Arsenic	3500	ug/kg	1.17	1	7/10/02	10:26	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105517

Sample ID: SB05 0-1

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	82.1	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Past	30.2 gm	10.0 ml	7/ 9/02		M. Ricks	3550 ..

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

S = Recovery outside laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Past surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105518
Sample ID: SB05 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/25/02
Time Collected: 14:00
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
4,4'-DDD	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
4,4'-DDE	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
4,4'-DDT	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Dieldrin	0.0605	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
Endosulfan II	0.0961	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Endrin	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.134	10	7/11/02	15:39	Henderson	8081A	5267
Endrin Ketone	ND	ug/kg	0.0410	10	7/11/02	15:39	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	0.200	10	7/11/02	15:39	Henderson	8081A	5267
Toxaphene	ND	ug/kg	2.00	10	7/11/02	15:39	Henderson	8081A	5267
alpha-Chlordane	0.294	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
gamma-Chlordane	0.345	ug/kg	0.0200	10	7/11/02	15:39	Henderson	8081A	5267
METALS									
Arsenic	1470	ug/kg	1.22	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105518
 Sample ID: SB05 1-2
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
† Dry Weight	79.7	†			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Vess	30.1 gm	10.0 ml	7/ 9/02		M. Ricks	3550

LABORATORY COMMENTS:

- ND - Not Detected at the report limit.
 - S - Analyte was detected in the method blank.
 - J - Estimated Value below Report Limit.
 - E - Estimated Value above the calibration limit of the instrument.
 - R - Recovery outside Laboratory historical or method prescribed limits.
- All reported results for metals or Organic analyses have been corrected for dry weight.
 Pest surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105519
Sample ID: SB04 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/25/02
Time Collected: 15:15
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
a-BHC	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
b-BHC	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
d-BHC	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
g-BHC, Lindane	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
4,4'-DDD	0.416	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
4,4'-DDE	0.791 P	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
4,4'-DDT	0.958 P	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Dieldrin	1.16	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Endosulfan I	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
Endosulfan II	0.749	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Endosulfan sulfate	ND	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Endrin	ND	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Endrin aldehyde	ND	mg/kg	1.60	100	7/10/02	17:28	Henderson	8081A	5267
Endrin Ketone	ND	mg/kg	0.416	100	7/10/02	17:28	Henderson	8081A	5267
Heptachlor	0.916	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
Heptachlor epoxide	ND	mg/kg	0.208	100	7/10/02	17:28	Henderson	8081A	5267
Methoxychlor	ND	mg/kg	2.08	100	7/10/02	17:28	Henderson	8081A	5267
Toxaphene	ND	mg/kg	20.8	100	7/10/02	17:28	Henderson	8081A	5267
alpha-Chlordane	10.8	mg/kg	1.04	500	7/10/02	17:28	Henderson	8081A	5267
gamma-Chlordane	12.8	mg/kg	1.04	500	7/10/02	17:28	Henderson	8081A	5267
METALS									
Arsenic	859.	mg/kg	1.21	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105519

Sample ID: SB04 0-1

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
* Dry Weight	80.0	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	wt/vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.2 gm	10.0 ml	7/ 9/02		M. Ricke	3650

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
 - B - Analyte was detected in the method blank.
 - J - Estimated value below Report Limit.
 - E - Estimated value above the calibration limit of the instrument.
 - S - Recovery outside Laboratory historical or method prescribed limits.
- All reported results for Metals or Organic analyses have been corrected for dry weight.
Pest surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105520
 Sample ID: SB04 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 15:40
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
a-BHC	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
b-BHC	0.0284	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
d-BHC	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
g-BHC, Lindane	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
4,4'-DDE	0.195	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
4,4'-DDE	0.244	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
4,4'-DDT	0.0569	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Dieldrin	0.374	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Endosulfan I	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
Endosulfan II	ND	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Endosulfan sulfate	ND	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Endrin	ND	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Endrin aldehyde	ND	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Endrin ketone	ND	mg/kg	0.0407	10	7/10/02	17:57	Henderson	8081A	5267
Heptachlor	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
Heptachlor epoxide	ND	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
Methoxychlor	ND	mg/kg	0.203	10	7/10/02	17:57	Henderson	8081A	5267
Toxaphene	ND	mg/kg	2.03	10	7/10/02	17:57	Henderson	8081A	5267
alpha-Chlordane	0.0853	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
gamma-Chlordane	0.106	mg/kg	0.0203	10	7/10/02	17:57	Henderson	8081A	5267
METALS									
Arsenic	57.2	mg/kg	1.16	1	7/10/02	10:26	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105520

Sample ID: SB04 1-2

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	21.9	%			6/26/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	7/ 9/02.		M. Ricks	3550

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pest surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105521
Sample ID: SB03 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 9:40
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	1.49	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
4,4'-DDD	10.4	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
4,4'-DDE	1.73	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
4,4'-DDT	5.52	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Dieldrin	4.27	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
Endosulfan II	0.969	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Endrin	ND	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Endrin Ketone	0.844	ug/kg	0.824	200	7/10/02	18:27	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	4.12	200	7/10/02	18:27	Henderson	8081A	5267
Toxaphene	ND	ug/kg	41.2	200	7/10/02	18:27	Henderson	8081A	5267
alpha-Chlordane	2.97	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
gamma-Chlordane	3.28	ug/kg	0.412	200	7/10/02	18:27	Henderson	8081A	5267
METALS									
Arsenic	248.	ug/kg	1.20	1	7/10/02	10:25	C. Johnson	60105	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105521
 Sample ID: SB03 0-1
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	80.8	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.9 gm	10.0 ml	7/ 9/02		M. Ricks	1660

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pest surrogate diluted out due to sample matrix. 4,4'DDE

result shows >40% difference between channels.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105522
Sample ID: SB03 0-1D
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 9:40
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	0.240	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
4,4'-DOD	2.28	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
4,4'-DOE	0.738	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
4,4'-DDT	1.47	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Dieldrin	1.80	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
Endosulfan II	0.383	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Endrin	ND	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.743	50	7/10/02	18:56	Henderson	8081A	5267
Endrin Ketone	0.259	ug/kg	0.199	50	7/10/02	18:56	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	0.996	50	7/10/02	18:56	Henderson	8081A	5267
Toxaphene	ND	ug/kg	9.96	50	7/10/02	18:56	Henderson	8081A	5267
alpha-Chlordane	1.41	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
gamma-Chlordane	1.68	ug/kg	0.0996	50	7/10/02	18:56	Henderson	8081A	5267
METALS									
Arsenic	84.7	ug/kg	1.16	1	7/10/02	10:25	C.Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105522
 Sample ID: SB03 0-1D
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	83.5	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.5 gm	10.0 ml	7/ 9/02		M. Ricke	3550

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
 - B - Analyte was detected in the method blank.
 - J - Estimated Value below Report Limit.
 - E - Estimated Value above the calibration limit of the instrument.
 - S - Recovery outside Laboratory historical or method prescribed limits.
- All reported results for metals or organic analyses have been corrected for dry weight.
 Pest surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105523
Sample ID: SB03 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 10:10
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	0.0294	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
4,4'-DDD	0.366	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
4,4'-DDE	0.0755 P	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
4,4'-DDT	0.0714	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Dieldrin	0.310	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
Endosulfan II	ND	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Endrin	ND	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Endrin Ketone	ND	ug/kg	0.0420	10	7/11/02	9:15	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	0.209	10	7/11/02	9:15	Henderson	8081A	5267
Toxaphene	ND	ug/kg	2.09	10	7/11/02	9:15	Henderson	8081A	5267
alpha-Chlordane	0.0755	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
gamma-Chlordane	0.0840	ug/kg	0.0209	10	7/11/02	9:15	Henderson	8081A	5267
METALS									
Arsenic	90.9	ug/kg	1.25	1	7/10/02	10:25	C. Johnson	6010B	7599

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105523
 Sample ID: SB03 1-2
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
† Dry Weight	79.3	‡			6/26/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.1 gm	10.0 ml	7/ 9/02		M. Ricke	3550

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pest surrogate diluted out due to sample matrix. 4.4'DDX

result shows >40% difference between channels.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105524
Sample ID: SB02 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 10:45
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	nil Factor	Date	Time	Analyst	Method	Batch
PESTICIDES/PCPs/HERBICIDES									
Aldrin	310.	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
a-BHC	114.	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
b-BHC	ND	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
d-BHC	29.5	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
g-BHC, Lindane	44.3	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
4,4'-DDB	695.	mg/kg	105.	25000	7/10/02	20:54	Henderson	8081A	5267
4,4'-DDE	57.0	mg/kg	21.0	5000	7/10/02	20:54	Henderson	8081A	5267
4,4'-DDT	1160	mg/kg	105.	25000	7/10/02	20:54	Henderson	8081A	5267
Dieldrin	822.	mg/kg	105.	25000	7/10/02	20:54	Henderson	8081A	5267
Endosulfan I	ND	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
Endosulfan II	158.	mg/kg	21.0	5000	7/10/02	20:54	Henderson	8081A	5267
Endosulfan sulfate	57.0	mg/kg	21.0	5000	7/10/02	20:54	Henderson	8081A	5267
Endrin	443.	mg/kg	105.	25000	7/10/02	20:54	Henderson	8081A	5267
Endrin aldehyde	ND	mg/kg	309.	5000	7/10/02	20:54	Henderson	8081A	5267
Endrin Ketone	89.5	mg/kg	21.0	5000	7/10/02	20:54	Henderson	8081A	5267
Heptachlor	12.6	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
Heptachlor epoxide	ND	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
Methoxychlor	ND	mg/kg	105.	5000	7/10/02	20:54	Henderson	8081A	5267
Toxaphene	ND	mg/kg	1050	5000	7/10/02	20:54	Henderson	8081A	5267
alpha-Chlordane	50.6	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
gamma-Chlordane	25.3	mg/kg	10.5	5000	7/10/02	20:54	Henderson	8081A	5267
METALS									
Arsenic	49.1	mg/kg	1.23	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105524

Sample ID: SB02 0-1

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	79.0	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	7/ 9/02		M. Rieke	2550

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

S - Estimated Value above the calibration limit of the instrument.

* - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Test surrogate diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105525
Sample ID: SB02 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 11:10
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	84.4	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
a-BHC	22.1	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
b-BHC	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
d-BHC	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
4,4'-DDD	268.	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
4,4'-DDS	ND	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
4,4'-DDT	300.	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Dieldrin	160.	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
Endosulfan II	45.2	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Endrin	156.	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	76.9	5000	7/11/02	10:14	Henderson	8081A	5267
Endrin ketone	64.4	ug/kg	22.1	5000	7/11/02	10:14	Henderson	8081A	5267
Heptachlor	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	111.	5000	7/11/02	10:14	Henderson	8081A	5267
Toxaphene	ND	ug/kg	1110	5000	7/11/02	10:14	Henderson	8081A	5267
alpha-Chlordane	20.0	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
gamma-Chlordane	ND	ug/kg	11.1	5000	7/11/02	10:14	Henderson	8081A	5267
METALS									
Arsenic	80.3	ug/kg	1.35	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105525

Sample ID: SB02 1-2

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	75.0	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.2 gm	10.0 ml	7/ 9/02		M. Ricks	3550

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pest surrogate diluted out due to sample matrix

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105526
Sample ID: SB06 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 11:50
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	D11 Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
4,4'-DDD	0.238	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
4,4'-DDE	0.523	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
4,4'-DDT	0.515	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Dieldrin	0.649	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
Endosulfan II	0.127 P	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Endrin	0.182	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.245	20	7/11/02	16:08	Henderson	8081A	5267
Endrin Ketone	ND	ug/kg	0.0792	20	7/11/02	16:08	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	0.396	20	7/11/02	16:08	Henderson	8081A	5267
Toxaphene	ND	ug/kg	3.96	20	7/11/02	16:08	Henderson	8081A	5267
alpha-Chlordane	0.175	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
gamma-Chlordane	0.175	ug/kg	0.0396	20	7/11/02	16:08	Henderson	8081A	5267
METALS									
Arsenic	2950	ug/kg	1.19	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105526
 Sample ID: SB06 0-1
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	84.1	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.8 gm	10.0 ml	7/9/02		M. Ricke	3550

LABORATORY COMMENTS:

ND - Not detected at the report limit.
 B - Analyte was detected in the method blank.
 J - Estimated Value below Report Limit.
 E - Estimated Value above the calibration limit of the instrument.
 S - Recovery outside Laboratory historical or method prescribed limits.
 All reported results for metals or Organic analytes have been corrected for dry weight.
 Pest surrogate diluted out due to sample matrix. Endosulfan
 II result shows >40% difference between channels.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105527
Sample ID: SB06 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 12:35
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
a-BHC	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
b-BHC	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
d-BHC	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
4,4'-DDD	1.98	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
4,4'-DBP	11.0	ug/kg	1.04	200	7/11/02	11:13	Henderson	8081A	5267
4,4'-DDT	6.14	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Dieldrin	0.572	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
Endosulfan II	ND	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Endrin	ND	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Endrin aldehyde	ND	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Endrin Ketone	ND	ug/kg	0.520	100	7/11/02	11:13	Henderson	8081A	5267
Heptachlor	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	2.59	100	7/11/02	11:13	Henderson	8081A	5267
Toxaphene	ND	ug/kg	25.9	100	7/11/02	11:13	Henderson	8081A	5267
alpha-Chlordane	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
gamma-Chlordane	ND	ug/kg	0.259	100	7/11/02	11:13	Henderson	8081A	5267
METALS									
Arsenic	527	ug/kg	1.58	1	7/10/02	10:25	C. Johnson	6010A	7899

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105527

Sample ID: SB06 1-2

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
† Dry Weight	64.0	†			6/28/02	14:00	X. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.2 gm	10.0 ml.	7/ 9/02		M. Ricke	3590

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated value below Report Limit.

E - Estimated value above the calibration limit of the instrument.

\$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pests urrogete diluted out due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105528
Sample ID: SB01 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 13:00
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	105.	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
a-BHC	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
b-BHC	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
d-BHC	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
4,4'-DDD	644.	ug/kg	101.	25000	7/11/02	11:43	Henderson	8081A	5267
4,4'-DBP	ND	ug/kg	52.6	5000	7/11/02	11:43	Henderson	8081A	5267
4,4'-DOP	917.	ug/kg	101.	25000	7/11/02	11:43	Henderson	8081A	5267
Dieldrin	213.	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endosulfan II	52.4	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endrin	278.	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endrin aldehyde	101.	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Endrin Ketone	98.7	ug/kg	20.1	5000	7/11/02	11:43	Henderson	8081A	5267
Heptachlor	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	101.	5000	7/11/02	11:43	Henderson	8081A	5267
Toxaphene	ND	ug/kg	1010	5000	7/11/02	11:43	Henderson	8081A	5267
alpha-Chlordane	18.1	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
gamma-Chlordane	ND	ug/kg	10.1	5000	7/11/02	11:43	Henderson	8081A	5267
METALS									
Arsenic	71.5	ug/kg	1.17	1	7/10/02	10:25	C.Johnson	6010B	7699

sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105528

Sample ID: SB01 0-1

Project:

Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch

GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	83.7	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Post	29.8 gm	10.0 ml	7/ 9/02		M. Ricke	3950

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

S - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analytes have been corrected for dry weight.

Pest surrogate diluted out-due to sample matrix. Endrin

aldehyde result shows >40% difference between channels.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105529
Sample ID: SB01 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/26/02
Time Collected: 13:25
Date Received: 6/27/02
Time Received: 9:30
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Aldrin	152.	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
a-BHC	16.9	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
b-BHC	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
d-BHC	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
g-BHC, Lindane	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
4,4'-DDD	507.	ug/kg	105.	25000	7/11/02	12:12	Henderson	8081A	5267
4,4'-DDE	ND	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
4,4'-DDT	823.	ug/kg	105.	25000	7/11/02	12:12	Henderson	8081A	5267
Dieldrin	177.	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Endosulfan I	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
Endosulfan II	44.4	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Endosulfan sulfate	ND	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Endrin	194.	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Endrin aldehyde	80.2	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Endrin Ketone	78.1	ug/kg	21.0	5000	7/11/02	12:12	Henderson	8081A	5267
Heptachlor	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
Heptachlor epoxide	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
Methoxychlor	ND	ug/kg	105.	5000	7/11/02	12:12	Henderson	8081A	5267
Toxaphene	ND	ug/kg	1050	5000	7/11/02	12:12	Henderson	8081A	5267
alpha-Chlordane	12.7	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
gamma-Chlordane	ND	ug/kg	10.5	5000	7/11/02	12:12	Henderson	8081A	5267
METALS									
Arsenic	39.8	ug/kg	1.22	1	7/10/02	10:25	C. Johnson	6010B	7699

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105529
 Sample ID: SB01 1-2
 Project:
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
* Dry Weight	78.9	%			6/28/02	14:00	K. Keller	CLP	9179

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	.20.4 gm	10.0 ml	7/ 9/02		M. Ricks	3550

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

* - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

Pest surrogate diluted out due to sample matrix. Endrin

aldehyde result shows >40% difference between channels.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105530
Sample ID: SB05 0-1
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/25/02
Time Collected: 13:30
Date Received: 6/27/02
Time Received: 9:30
Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	26.8	mg/l	5.0	98		7/11/02	6010B
Barium	< 1.00	mg/l	100	98		7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96		7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92		7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96		7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101		7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105		7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99		7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108		7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100		7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104		7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110		7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108		7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108		7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88		7/10/02	8260
Tetrachloroethene	0.150	mg/l	0.7	100		7/10/02	8260
Trichloroethene	< 0.0200	mg/l	0.5	104		7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	100		7/10/02	8260
Cresols	< 0.0100	mg/l	200	55		7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	56		7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72		7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	58		7/16/02	8270
Hexchlor-1,3-butadien	< 0.0100	mg/l	0.5	52		7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	54		7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	68		7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74		7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105530
 Sample ID: SB05 0-1
 Project:
 Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	36		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	< 0.00050	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	< 0.00050	mg/l	0.4	76		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	76		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace, Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3510
TCLP BNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	108.	73. - 139.
VOA Surr Toluene-d8	101.	80. - 121.
VOA Surr, 4-BFB	87.	80. - 128.
BNA Surr-Nitrobenzene-d5	70.	40. - 127.

Sample report continued . . .

TestAmerica

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ANALYTICAL REPORT

Laboratory Number: 02-A105530

Sample ID: SB05 0-1

Project:

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Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	66.	42. - 113.
BNA Surr-Terphenyl-d14	78.	41. - 129.
BNA Surr-Phenol-d5	34.	1. - 75.
BNA Surr-2-Fluorophenol	50.	2. - 97.
BNA Surr-2,4,6-Tribromophenol	78.	25. - 174.
pest surr-TCHX	42.	33. - 127.
surr-Dibutylchlorodate	40.	1. - 151.
surr-DCAA	86.	61. - 159.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated value below Report Limit.
- E - Estimated value above the calibration limit of the instrument.
- * - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105531
 Sample ID: SB05 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 14:00
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	16.6	mg/l	5.0	98	7/11/02	6010B
Barium	< 1.00	mg/l	100	98	7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92	7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105	7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104	7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108	7/10/02	8260
1,1-Dichloroethene	< 0.0200	mg/l	0.7	108	7/10/02	8260
Methylalkylketone	< 0.100	mg/l	200	88	7/10/02	8260
Tetrachloroethane	1.03	mg/l	0.7	108	7/10/02	8260
Trichloroethane	< 0.0200	mg/l	0.5	104	7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.3	108	7/10/02	8260
Cresols	< 0.0100	mg/l	200	59	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	82	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72	7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	60	7/16/02	8270
Hexachlor-1,3-butadien	< 0.0100	mg/l	0.5	44	7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	48	7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	3.0	66	7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105531

Sample ID: SB05 1-2

Project:

Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridins	< 0.0100	mg/l	5.0	44		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	400	78		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	76		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	0.00100	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	< 0.00050	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricke	3510
TCLP BMA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	100.	75. - 133.
VOA Surr Toluene-d8	91.	80. - 121.
VOA Surr, 4-BFB	89.	80. - 128.
BMA Surr-Nitrobenzene-d5	74.	40. - 127.

Sample report continued . . .

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INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105531

Sample ID: SB05 1-2

Project:

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Surrogate	% Recovery	Target Range
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BNA Surr-2-Fluorobiphenyl	68.	42. - 113.
BNA Surr-Terphenyl-d14	80.	41. - 129.
BNA Surr-Phenol-d5	32.	1. - 75.
BNA Surr-2-Fluorophenol	48.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	84.	38. - 174.
pest surr-TCMX	44.	33. - 127.
surr-Dibutylchlorodate	40.	1. - 151.
surr-DCAA	78.	61. - 159.

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
- B = Analyte was detected in the method blank.
- J = Estimated Value below report limit.
- E = Estimated Value above the calibration limit of the instrument.
- * = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105532
 Sample ID: SB04 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 15:15
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	1.82	mg/l	5.0	98	7/11/02	6010B
Barium	< 1.00	mg/l	100	98	7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92	7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105	7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104	7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108	7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108	7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88	7/10/02	8260
Tetrachloroethane	0.870	mg/l	0.7	108	7/10/02	8260
Trichloroethene	< 0.0200	mg/l	0.5	104	7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108	7/10/02	8260
Cresols	< 0.0100	mg/l	200	60	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	56	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	74	7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	80	7/16/02	8270
Hexachlor-1,3-butadien	< 0.0100	mg/l	0.5	52	7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	52	7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	74	7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	64	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105532

Sample ID: SB04 0-1

Project:

Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	38		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	< 0.00050	mg/l	0.02	88		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	< 0.00050	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	7		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3510
TCLP ENA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	99.	73. - 133.
VOA Surr Toluene-d8	91.	80. - 121.
VOA Surr, 4-BFB	86.	80. - 128.
ENA Surr-Nitrobenzene-d5	68.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105532

Sample ID: SB04 0-1

Project:

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Surrogate	% Recovery	Target Range
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BNA Surr-2-Fluorobiphenyl	64.	42. - 113.
BNA Surr-Terphenyl-d14	72.	41. - 129.
BNA Surr-Phenol-d6	30.	1. - 75.
BNA Surr-2-Fluorophenol	44.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	76.	35. - 174.
pest surr-TCHX	46.	33. - 127.
surr-Dibutylchlorodate	49.	1. - 151.
surr-DCAA	88.	61. - 159.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

* - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

Lab Number: 02-A105533
Sample ID: SB04 1-2
Sample Type: Soil
Site ID: MS

Project:
Project Name: RED PANTHER
Sampler: BRENT JACOBS

Date Collected: 6/25/02
Time Collected: 15:40
Date Received: 6/27/02
Time Received: 9:30
Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	0.630	ug/l	5.0	98	7/11/02	6010B
Barium	< 1.00	ug/l	100	98	7/11/02	6010B
Cadmium	< 0.100	ug/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	ug/l	5.0	92	7/11/02	6010B
Lead	< 0.500	ug/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	ug/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	ug/l	1.0	105	7/11/02	6010B
Silver	< 0.100	ug/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	ug/l	0.5	108	7/10/02	8260-
Carbon tetrachloride	< 0.0200	ug/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	ug/l	100	104	7/10/02	8260
Chloroform	< 0.0200	ug/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	ug/l	0.5	108	7/10/02	8260
1,1-Dichloroethene	< 0.0200	ug/l	0.7	108	7/10/02	8260
Methylalkylketone	< 0.100	ug/l	200	88	7/10/02	8260
Tetrachloroethane	< 0.0200	ug/l	0.7	108	7/10/02	8260
Trichloroethane	< 0.0200	ug/l	0.5	104	7/10/02	8260
Vinyl Chloride	< 0.0200	ug/l	0.2	108	7/10/02	8260
Cresols	< 0.0100	ug/l	200	55	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	ug/l	7.5	86	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	ug/l	0.13	72	7/16/02	8270
Hexachlorobenzene	< 0.0100	ug/l	0.13	58	7/16/02	8270
Hexchlor-1,3-butadien	< 0.0100	ug/l	0.5	52	7/16/02	8270
Hexachloroethane	< 0.0100	ug/l	2.0	54	7/16/02	8270
Nitrobenzene	< 0.0100	ug/l	2.0	68	7/16/02	8270
Pentachlorophenol	< 0.0100	ug/l	100	74	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105533
 Sample ID: SB04 1-2
 Project:
 Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	ug/l	5.0	36		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	ug/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	ug/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	ug/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	ug/l	10.0	96		7/12/02	8151A
Endrin	0.00100	ug/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	ug/l	0.008	79		7/10/02	8081A
Lindane	0.00200	ug/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	ug/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	ug/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	ug/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	ug/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace, Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Richte	3510
TCLP BNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	106.	75. - 133.
VOA Surr Toluene-d8	92.	80. - 121.
VOA Surr, 4-BFP	87.	60. - 128.
BNA Surr-Microbenzene-d5	72.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105533

Sample ID: SB04 1-2

Project:

Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	68.	42. - 113.
BNA Surr-Terphenyl-d14	74.	41. - 129.
BNA Surr-Phenol-d6	32.	1. - 76.
BNA Surr-2-Fluorophenol	48.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	78.	35. - 174.
pest surr-TOM	80.	22. - 127.
surr-Dibutylchloroendate	44.	1. - 161.
surr-DCAA	86.	61. - 159.

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
- D = Analyte was detected in the method blank.
- J = Estimated Value below Report Limit.
- E = Estimated Value above the calibration limit of the instrument.
- * = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105534
 Sample ID: SB03 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 9:40
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Meg Limit	Recovery (%)		
Arsenic	0.670	mg/l	5.0	98	7/11/02	6010B
Barium	< 1.00	mg/l	100	98	7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92	7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105	7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104	7/10/02	8260
Chloroform	< 0.0200	mg/l	5.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108	7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108	7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88	7/10/02	8260
Tetrachloroethane	0.0700	mg/l	0.7	108	7/10/02	8260
Trichloroethane	< 0.0200	mg/l	0.5	104	7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108	7/10/02	8260
Cresols	< 0.0100	mg/l	200	59	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	52	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72	7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	60	7/16/02	8270
Hexchlor-1,3-butadien	< 0.0100	mg/l	0.5	44	7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	48	7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	66	7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74	7/16/02	8270

sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105534

Sample ID: SB03 0-1

Project:

Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	44		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	400	78		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	76		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	< 0.00050	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	< 0.00050	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8141A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3510
TCLP RNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	73. - 133%
VOA Surr Toluene-d8	96.	80. - 121.
VOA Surr, 4-BPA	81.	80. - 128.
BMA Surr-Nitrobenzene-d8	72.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105534
 Sample ID: SB03 0-1
 Project:
 Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	66.	42. - 113.
BNA Surr-Terphenyl-d14	68.	41. - 129.
BNA Surr-Phenol-d5	30.	1. - 76.
BNA Surr-2-Fluorophenol	44.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	80.	26. - 174.
pest surr-TCMX	46.	32. - 127.
surr-Dibutylchloroendate	50.	1. - 151.
surr-DCAA	98.	61. - 169.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated Value below Report Limit.
- E - Estimated Value above the calibration limit of the instrument.
- R - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105535
 Sample ID: SB03 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 10:10
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike			
			Reg Limit	Recovery (%)	Date	Method
Arsenic	0.830	ug/l	5.0	98	7/11/02	6010B
Barium	1.14	ug/l	100	98	7/11/02	6010B
Cadmium	< 0.100	ug/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	ug/l	5.0	92	7/11/02	6010B
Lead	< 0.500	ug/l	5.0	96	7/11/02	6010D
Mercury	< 0.0100	ug/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	ug/l	1.0	105	7/11/02	6010B
Silver	< 0.100	ug/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	ug/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	ug/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	ug/l	100	104	7/10/02	8260
Chloroform	< 0.0200	ug/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	ug/l	0.5	108	7/10/02	8260
1,1-Dichloroethene	< 0.0200	ug/l	0.7	108	7/10/02	8260
Methyl ethyl ketone	< 0.100	ug/l	200	88	7/10/02	8260
Tetrachloroethene	< 0.0200	ug/l	0.7	108	7/10/02	8260
Trichloroethene	< 0.0200	ug/l	0.5	104	7/10/02	8260
Vinyl Chloride	< 0.0200	ug/l	0.2	108	7/10/02	8260
Cresols	< 0.0100	ug/l	200	60	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	ug/l	7.5	56	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	ug/l	0.13	74	7/16/02	8270
Hexachlorobenzene	< 0.0100	ug/l	0.13	68	7/16/02	8270
Hexchlor-1,3-butadien	< 0.0100	ug/l	0.5	52	7/16/02	8270
Hexachloroethane	< 0.0100	ug/l	3.0	52	7/16/02	8270
Nitrobenzene	< 0.0100	ug/l	2.0	74	7/16/02	8270
Pentachlorophenol	< 0.0100	ug/l	100	64	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105535
Sample ID: SB03 1-2
Project:
Page 2

TCLP RESULTS

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	38		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	94		7/12/02	8151A
Endrin	0.00100	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	0.00100	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Ml/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Rieke	3510
TCLP BNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	73. - 133.
VOA Surr Toluene-d8	95.	80. - 121.
VOA Surr. 4-BFB	86.	80. - 128.
BNA Surr-Nitrobenzene-d5	72.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105535

Sample ID: SB03 1-2

Project:

Page 3

Surrogate	% Recovery	Target Range
EMA Surr-2-Fluorobiphenyl	66.	42. - 113.
EMA Surr-Terphenyl-d14	78.	41. - 129.
EMA Surr-Phenol-d5	32.	1. - 75.
EMA Surr-2-Fluorophenol	48.	3. - 97.
EMA Surr-2,4,6-Tribromophenol	80.	35. - 174.
pest surr-TCMX	36.	33. - 127.
surr-Dibutylchlorodate	38.	1. - 151.
surr-DCAA	90.	61. - 159.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

§ - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105536
 Sample ID: SB02 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 10:45
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	< 0.100	mg/l	5.0	98	7/11/02	6010B
Barium	1.53	mg/l	100	98	7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92	7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105	7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104	7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108	7/10/02	8260
1,1-Dichloroethene	< 0.0200	mg/l	0.7	108	7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88	7/10/02	8260
Tetrachloroethene	< 0.0200	mg/l	0.7	108	7/10/02	8260
Trichloroethene	< 0.0200	mg/l	0.8	104	7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108	7/10/02	8260
Cresols	< 0.0588	mg/l	200	55	7/16/02	8270
1,4-Dichlorobenzene	< 0.0118	mg/l	7.5	66	7/16/02	8270
2,4-Dinitrotoluene	< 0.0118	mg/l	0.13	72	7/16/02	8270
Hexachlorobenzene	< 0.0118	mg/l	0.13	58	7/16/02	8270
Hexchlor-1,3-butadien	< 0.0118	mg/l	0.5	52	7/16/02	8270
Hexachloroethane	< 0.0118	mg/l	2.0	54	7/16/02	8270
Nitrobenzene	< 0.0118	mg/l	2.0	68	7/16/02	8270
Pentachlorophenol	< 0.0588	mg/l	100	74	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105536
Sample ID: SB02 0-1
Project:
Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0118	mg/l	5.0	36		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0568	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0588	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00250	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	0.0150	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00250	mg/l	0.008	79		7/10/02	8081A
Lindane	0.0750	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00250	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0500	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00250	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace, Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Caughen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3510
TCLP BWA's	340. ml	1.0 ml	7/11/02		M. Caughen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	308.	73. - 133.
VOA Surr Toluene-d8	97.	80. - 121.
VOA Surr. 4-BPB	88.	80. - 128.
BWA Surr-Nitrobenzene-d5	72.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105536

Sample ID: SB02 0-1

Project:

Page 3

Surrogate	% Recovery	Target Range
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EMA Surr-2-Fluorobiphenyl	66.	42. - 123.
EMA Surr-Terphenyl-d14	74.	41. - 129.
EMA Surr-Phenol-d5	36.	1. - 75.
EMA Surr-2-Fluorophenol	52.	3. - 97.
EMA Surr-2,4,6-Tribromophenol	76.	35. - 174.
pest Surr-TCMX	46.	33. - 127.
surr-Dibutylchlorodate	52.	1. - 151.
surr-DCAA	66.	61. - 159.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105537
 Sample ID: SB02 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 11:10
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	< 0.100	mg/l	5.0	98		7/11/02	6010B
Barium	1.64	mg/l	100	98		7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96		7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92		7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96		7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101		7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105		7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99		7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108		7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100		7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104		7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110		7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108		7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108		7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88		7/10/02	8260
Tetrachloroethane	0.0600	mg/l	0.7	108		7/10/02	8260
Trichloroethane	< 0.0200	mg/l	0.5	104		7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108		7/10/02	8260
Cresols	< 0.0100	mg/l	200	59		7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	52		7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72		7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	60		7/16/02	8270
Hexachlor-1,3-butadien	< 0.0100	mg/l	0.5	44		7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	48		7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	66		7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74		7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105537

Sample ID: SB02 1-2

Project:

Page 2

TCLP Results

Analyte	Result	Units	Reg limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	44		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	78		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	76		7/16/02	8270
Chlordane	< 0.00260	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	0.0150	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00250	mg/l	0.004	79		7/10/02	8081A
Lindane	0.0550	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00250	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0500	mg/l	0.30	98		7/10/02	8081A
Silver	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00250	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3910
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricke	3510
TCLP BNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	105.	73. - 123.
VOA Surr Toluene-d8	95.	80. - 121.
VOA Surr. 4-BFB	85.	80. - 128.
BNA Surr-Nitrobenzene-d5	6A.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105537

Sample ID: SB02 1-2

Project:

Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	64.	42. - 113.
BNA Surr-Terphenyl-d14	74.	41. - 129.
BNA Surr-Phenol-d5	30.	1. - 75.
BNA Surr-2-Fluorophenol	46.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	80.	35. - 174.
pest surr-TMX	59.	33. - 127.
surr-Dibutylchloroendate	35.	1. - 151.
surr-DCAA	106.	61. - 159.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated Value below Report Limit.
- E - Estimated Value above the calibration limit of the instrument.
- # - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105538
 Sample ID: SB06 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 11:50
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	17.6	mg/l	5.0	98		7/11/02	6010B
Barium	< 1.00	mg/l	100	99		7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96		7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92		7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96		7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101		7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105		7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99		7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108		7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100		7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104		7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110		7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.8	109		7/10/02	8260
1,1-Dichloroethene	< 0.0200	mg/l	0.7	108		7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88		7/10/02	8260
Tetrachloroethene	< 0.0200	mg/l	0.7	108		7/10/02	8260
Trichloroethene	< 0.0200	mg/l	0.5	104		7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108		7/10/02	8260
Cresols	< 0.0100	mg/l	200	60		7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	56		7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	74		7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	88		7/16/02	8270
Hexchlor-1,3-butadien	< 0.0100	mg/l	0.5	52		7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	52		7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	74		7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	64		7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105538
Sample ID: SB06 0-1
Project:
Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	38		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.020	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Dudrin	< 0.00050	mg/l	0.02	88		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	0.00100	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1211
Zero Headspace Extraction	Initiated					7/ 9/02	1211

Sample Extraction Data

Parameter	Nt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricke	3510
TCLP BMA's	500. ml	1.0 ml	7/11/02		M. Cauthen	2810

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	105.	73. - 133.
VOA Surr Toluene-d8	99.	80. - 121.
VOA Surr, 4-BFB	84.	80. - 128.
BMA Surr-Nitrobenzene-d5	74.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105538

Sample ID: SB06 0-1

Project:

Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	68.	42. - 113.
BNA Surr-Terphenyl-d14	78.	41. - 129.
BNA Surr-Phenol-d5	34.	1. - 75.
BNA Surr-2-Fluorophenol	48.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	80.	35. - 174.
pest-surr-TCX	42.	33. - 127.
surr-Dibutylchlorodare	46.	1. - 151.
surr-DCA	119.	61. - 159.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

N = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

* = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105539
 Sample ID: SB06 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 12:35
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	1.98	mg/l	5.0	98	7/11/02	6010B
Barium	< 1.00	mg/l	100	98	7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96	7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92	7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96	7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101	7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105	7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99	7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108	7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100	7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104	7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110	7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108	7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108	7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88	7/10/02	8260
Tetrachloroethane	< 0.0200	mg/l	0.7	108	7/10/02	8260
Trichloroethane	< 0.0200	mg/l	0.5	104	7/10/02	8260
Vinyl chloride	< 0.0200	mg/l	0.2	108	7/10/02	8260
Cresols	< 0.0100	mg/l	200	55	7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	56	7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72	7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	58	7/16/02	8270
Hexachlor-1,3-butadiene	< 0.0100	mg/l	0.5	82	7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	54	7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	69	7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74	7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105539
Sample ID: SB06 1-2
Project:
Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridina	< 0.0100	mg/l	5.0	36		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	< 0.00050	mg/l	0.02	88		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	< 0.00050	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	90		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	WT/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3510
TCLP EMA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d6	102.	73. - 133.
VOA Surr Toluene-d8	92.	80. - 121.
VOA Surr, 4-BFB	84.	80. - 120.
EMA Surr-Nitrobenzene-d5	64.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105539

Sample ID: SB06 1-2

Project:

Page 3

Surrogate -----	% Recovery -----	Target Range -----
BNA Surr-2-Fluorobiphenyl	58.	42. - 113.
BNA Surr-Terphenyl-dia	74.	41. - 129.
BNA Surr-Phenol-d5	30.	1. - 75.
BNA Surr-2-Fluorophenol	46.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	74.	35. - 174.
pest surr-TCMX	70.	33. - 127.
surr-Dibutylchloroendate	42.	1. - 151.
surr-DCAA	100.	61. - 159.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

K - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

Test America

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105540
 Sample ID: SB01 0-1
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 13:00
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	< 0.100	mg/l	5.0	98		7/11/02	6010B
Barium	1.04	mg/l	100	98		7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96		7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92		7/11/02	6010B
Lead	< 0.500	mg/l	510	96		7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101		7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	108		7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99		7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108		7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100		7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104		7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110		7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.5	108		7/10/02	8260
1,1-Dichloroethane	< 0.0200	mg/l	0.7	108		7/10/02	8260
Methylethylketone	< 0.100	mg/l	200	88		7/10/02	8260
Tetrachloroethane	0.0500	mg/l	0.7	108		7/10/02	8260
Trichloroethane	< 0.0200	mg/l	0.5	104		7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.8	108		7/10/02	8260
Cresols	< 0.0100	mg/l	200	59		7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	52		7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	72		7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.12	60		7/16/02	8270
Hexachlor-1,3-butadiene	< 0.0100	mg/l	0.5	44		7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	48		7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	66		7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	74		7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105540

Sample ID: SB01 0-1

Project:

Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	44		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	78		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	76		7/16/02	8270
Chlordane	< 0.00050	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	0.0150	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00050	mg/l	0.008	79		7/10/02	8081A
Lindane	0.00600	mg/l	0.4	78		7/10/02	8081A
Methoxychlor	< 0.00050	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0100	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00050	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricke	3510
TCLP RNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	102.	73. - 133.
VOA Surr Toluene-d8	93.	80. - 121.
VOA Surr, 4-BFB	83.	80. - 128.
RNA Surr-Nitrobenzene-d5	74.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105540

Sample ID: SB01 0-1

Project:

Page 3

Surrogate	% Recovery	Target Range
-----	-----	-----
BNA Surr-2-Fluorobiphenyl	68.	42. - 113.
BNA Surr-Terphenyl-d14	80.	41. - 129.
BNA Surr-Phenol-d5	34.	1. - 75.
BNA Surr-2-Fluorophenol	48.	2. - 97.
BNA Surr-2,4,6-Tribromophenol	82.	35. - 174.
pest surr-TCMX	48.	33. - 127.
surr-Dibutylchloranadate	56.	1. - 151.
Surr-DCPA	106.	61. - 159.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

* = recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A105541
 Sample ID: SB01 1-2
 Sample Type: Soil
 Site ID: MS

Project:
 Project Name: RED PANTHER
 Sampler: BRENT JACOBS

Date Collected: 6/25/02
 Time Collected: 13:25
 Date Received: 6/27/02
 Time Received: 9:30
 Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	< 0.100	mg/l	5.0	98		7/11/02	6010B
Barium	1.19	mg/l	100	98		7/11/02	6010B
Cadmium	< 0.100	mg/l	1.0	96		7/11/02	6010B
Chromium	< 0.500	mg/l	5.0	92		7/11/02	6010B
Lead	< 0.500	mg/l	5.0	96		7/11/02	6010B
Mercury	< 0.0100	mg/l	0.2	101		7/11/02	7470A
Selenium	< 0.100	mg/l	1.0	105		7/11/02	6010B
Silver	< 0.100	mg/l	5.0	99		7/11/02	6010B
Benzene	< 0.0200	mg/l	0.5	108		7/10/02	8260
Carbon tetrachloride	< 0.0200	mg/l	0.5	100		7/10/02	8260
Chlorobenzene	< 0.0200	mg/l	100	104		7/10/02	8260
Chloroform	< 0.0200	mg/l	6.0	110		7/10/02	8260
1,2-Dichloroethane	< 0.0200	mg/l	0.8	108		7/10/02	8260
1,1-Dichloroethene	< 0.0200	mg/l	0.7	198		7/10/02	8260
Methylalkylketone	< 0.100	mg/l	200	88		7/10/02	8260
Tetrachloroethane	0.0400	mg/l	0.7	108		7/10/02	8260
Trichloroethene	< 0.0200	mg/l	0.5	104		7/10/02	8260
Vinyl Chloride	< 0.0200	mg/l	0.2	108		7/10/02	8260
Cresols	< 0.0100	mg/l	200	60		7/16/02	8270
1,4-Dichlorobenzene	< 0.0100	mg/l	7.5	96		7/16/02	8270
2,4-Dinitrotoluene	< 0.0100	mg/l	0.13	74		7/16/02	8270
Hexachlorobenzene	< 0.0100	mg/l	0.13	58		7/16/02	8270
Hexachlor-1,3-butadien	< 0.0100	mg/l	0.5	52		7/16/02	8270
Hexachloroethane	< 0.0100	mg/l	3.0	52		7/16/02	8270
Nitrobenzene	< 0.0100	mg/l	2.0	74		7/16/02	8270
Pentachlorophenol	< 0.0100	mg/l	100	64		7/16/02	8270

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105541
 Sample ID: SB01 1-2
 Project:
 Page 2

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Pyridine	< 0.0100	mg/l	5.0	18		7/16/02	8270
2,4,5-Trichlorophenol	< 0.0100	mg/l	400	76		7/16/02	8270
2,4,6-Trichlorophenol	< 0.0100	mg/l	2.0	74		7/16/02	8270
Chlordane	< 0.00250	mg/l	0.030	96		7/10/02	8081A
2,4-D	< 0.100	mg/l	10.0	96		7/12/02	8151A
Endrin	0.0200	mg/l	0.02	85		7/10/02	8081A
Heptachlor	< 0.00250	mg/l	0.008	79		7/10/02	8081A
Lindane	0.0480	mg/l	0.4	75		7/10/02	8081A
Methoxychlor	< 0.00250	mg/l	10.0	78		7/10/02	8081A
Toxaphene	< 0.0500	mg/l	0.50	98		7/10/02	8081A
Silvex	< 0.0100	mg/l	1.0	77		7/12/02	8151A
Heptachlor epoxide	< 0.00250	mg/l	0.008	75		7/10/02	8081A
TCLP Extraction	Initiated					7/ 9/02	1311
Zero Headspace Extraction	Initiated					7/ 9/02	1311

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Herbicides	5.0 ml	5.00 ml	7/10/02		M. Cauthen	3510
TCLP Pesticides	100. ml	10.0 ml	7/10/02		M. Ricks	3810
TCLP BNA's	500. ml	1.0 ml	7/11/02		M. Cauthen	3510

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	104.	73. - 133.
VOA Surr Toluene-d8	93.	80. - 121.
VOA Surr. 4-BFB	89.	80. - 128.
BNA Surr-Nitrobenzene-d5	72.	40. - 127.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A105541
 Sample ID: SB01 1-2
 Project:
 Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2-Fluorobiphenyl	66.	42. - 113.
BNA Surr-Terphenyl-d14	82.	41. - 129.
BNA Surr-Phenol-d5	32.	1. - 75.
BNA Surr-2-Fluorophenol	46.	3. - 97.
BNA Surr-2,4,6-Tribromophenol	84.	35. - 174.
pest surr-TCMX	39.	22. - 127.
surr-Dibutylchlorodate	48.	1. - 151.
surr-DCAA	132.	61. - 159.

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
- D - Analyte was detected in the method blank.
- J - Estimated Value below Report Limit.
- E - Estimated Value above the calibration limit of the instrument.
- R - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

Appendix C

Nonhazardous Waste Profile Application

02/04/2003 12:36 16623630170

THE TUNICA LANDFILL

PAGE 02

Nov 11 02:10:50a John Fanning

8502638557

p.1

10/17/2002 13:39 16623630170

THE TUNICA LANDFILL

PAGE 02



GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? YES NO
 Hazardous Non-hazardous TECA

Profile Number: WM CU 4849
Renewal Date: 02/28/03

A. Waste Generator Information

1. Generator Name: Red Panther PRP Group 2. SIC Code:
3. Facility Street Address: 550 Patton Street 4. Phone:
5. Facility City: Blackdale 6. State/Province: Mississippi
7. Zip/Postal Code: 38614 8. Generator USEPA/Federal ID #:
9. County: Leflore 10. State/Province ID #:
11. Customer Name: HEPACO 12. Customer Phone: (901) 345 6332
13. Customer Contact: David Moore 14. Customer Fax: 901 352 5982
15. Billing Address: 4000 N Watkins Memphis TN (Same as above)

B. Waste Stream Information

1. Description
a. Name of Waste: Contaminated Soil with Debris
b. Process Generating Waste: Runoff from pesticide facility

Table with 5 columns: c. Color (Brown to Grey Black), d. Strong odor (mild musty odor), e. Physical state @ 70°F (Solid, Liquid, Gas, Sludge, Other), f. Layers (Single Layer, Multi-Layer), g. Free liquid range to %, h. pH: Range (5 to 8 %)

1. Liquid Flash Point: <73°F 73-99°F 100-199°F 140-199°F ≥ 200°F Not applicable
2. Chemical Composition (List all constituents including halogenated organics, acids, and UHC's present in any concentration and submit representative sample):

Table with 4 columns: Constituents, Concentration Range, Constituents, Concentration Range. Rows include Soil (24-95%), Debris (concrete, bricks, plastic, metal, automotive waste, pesticides) (25%), and Arsenic.

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. Oxidizer Pyrophoric Explosive Radioactive
 Carcinogen Infectious Shock Sensitive Water Reactive
l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) YES NO
m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) YES NO
n. Does the waste represented by this profile contain asbestos? YES NO
o. Does the waste represented by this profile contain benzene? YES NO
p. Is the waste subject to RCRA Subpart C controls? YES NO
q. Does the waste contain any Class I or Class II ozone-depleting substances? YES NO
r. Does the waste contain debris? (list in Section B.1.j) YES NO

2. Quantity of Waste
Estimated Annual Volume: 4000 Tons

3. Shipping Information
a. Packaging: Bulk Solid; Type/Size: End Users or Retailer
b. Shipping Frequency: Units Per Month One time
c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? YES NO

02/04/2003 12:35 16623630170

THE TUNICA LANDFILL

PAGE 03

Nov 11 02 10:50a John Fanning

8502630557

P. 2

18/17/2002 17:29 16623630170

THE TUNICA LANDFILL

PAGE 03



GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs., kgs.): N/A e. Hazard Class/ID #:
f. USDOJ Shipping Name:
g. Personal Protective Equipment Requirements: Level "D"
h. Transport/Transfer Station: HE PACE

Generator's Certification (Please print appropriate responses, sign, and date below.)

- 1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2. YES NO
2. Is this a state hazardous waste? Identify ALL state hazardous waste codes. YES NO
3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? YES NO
4. Does the waste represented by this waste profile sheet contain radioactive material, or is it regulated by the Nuclear Regulatory Commission? YES NO
5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 791? (If yes, list in Chemical Composition - C.1.) YES NO
6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste materials, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? YES NO
7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? YES NO

Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WM to obtain a sample from any waste shipment for purposes of identification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: Brent B. ... Title: Project Coordinator
Name (Type or Print): Brent B. ... Company Name: WBS Corporation Date: 10/18/02

Check if additional information is attached. Indicate the number of attached pages 100

WM Management's Decision section containing management methods, special waste decisions, and signatures.

Appendix D

Stockpile TCLP Analytical Data

Test America

INCORPORATED

TESTAMERICA, INC.
ATLANTA SERVICE CENTER

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: UKS Corp. Client #: 2693
 Address: on file
 City/State/Zip Code: _____
 Project Manager: Brent Jacobs
 Telephone Number: (678) 356-8205 Fax: (678) 356-0055
 Sampler Name: (Print Name) Steven Susten / Rachel Aitken
 Sampler Signature: Rachel Aitken

Project Name: Red Panther
 Project #: 37778-010-1003
 Site/Location ID: Red Panther State: MS
 Report To: Brent Jacobs
 Invoice To: #
 Quote #: _____ PO#: _____

TAT Standard <input checked="" type="checkbox"/> Rush (surcharges may apply) 48-hour Date Needed: <u>11-19-02</u> Fax Results: <input checked="" type="checkbox"/> N Bert Cole 920-968-6940	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	Preservation & # of Containers										Analyze For	QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other: _____	REMARKS		
						HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)								
DI-1'-2'	187919	1-14-02	1440	C	S													<input checked="" type="checkbox"/> TC-LP - PARTICLES <input checked="" type="checkbox"/> TC-LP - VOLATILES		
DA-0'-2'	187920	1-14-02	1445	C	S															Hold extract for future analysis
																				* Contact Steve Susten (404) 822-8483 w/ any QUESTIONS

Special Instructions: 48-hour TAT Fed Ex 838191165900
Fax Results to Bert Cole 920-968-6940
 Relinquished By: Rachel Aitken Date: 11/14/02 Time: 1:00 Received By: [Signature] Date: 11/15/02 Time: 9:00
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

LABORATORY COMMENTS:
 Init Lab Temp: _____
 Rec Lab Temp: 20°
 Custody Seals: Y N N/A
 Bottles Supplied by Test America: Y N
 Method of Shipment: _____

TestAmerica

INCORPORATED

11/21/02

URS 2693
BRENT JACOBS
5900 WINDWARD PENY. STE. 400
ALPHARETTA, GA 30005

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 37778-010-1003 RED PANTHER. The Laboratory Project number is 309365.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Page 1 Collection Date
D1-1-2	02-A187919	11/14/02
D4-0-2	02-A187920	11/14/02

A2LA certification number 0453.07 for analysis of wastewater and solid/hazardous waste effective 09/30/99-12/31/03.

NELAC/Florida certification number E87358 for analysis of environmental water, soil/hazardous waste, and drinking water effective 07/01/99-06/30/03.

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Roxanne L Connor Report Date: 11/21/02

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187919
 Sample ID: D1-1-2
 Sample Type: Solid waste
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S.SUSTEN/R.AITKEN

Date Collected: 11/14/02
 Time Collected: 14:40
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Time	Analyst	Method	QC Batch
				Recovery (%)						
Chlordane	< 0.0025	mg/l	0.030	114		11/18/02	19:28	Carmichael	8081A	4616
Endrin	0.0150	mg/l	0.02	136		11/18/02	19:28	Carmichael	8081A	4616
Heptachlor	< 0.0025	mg/l	0.008	121		11/18/02	19:28	Carmichael	8081A	4616
Lindane	0.0350	mg/l	0.4	126		11/18/02	19:28	Carmichael	8081A	4616
Methoxychlor	< 0.0025	mg/l	10.0	158		11/18/02	19:28	Carmichael	8081A	4616
Toxaphene	0.550	mg/l	0.50	120		11/18/02	19:28	Carmichael	8081A	4616
Heptachlor epoxide	< 0.0025	mg/l	0.008	122		11/18/02	19:28	Carmichael	8081A	4616
TCLP Extraction	Initiated					11/15/02	15:30	B. Powell	1311	2313

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TCLP Pesticides	100. ml	10.0 ml	11/18/02		M. Lax	3510

Surrogate	% Recovery	Target Range
pest surr-TCMX	70.	33. - 127.
surr-Dibutylchlorandate	40.	1. - 151.

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A187919
Sample ID: D1-1-2
Project: 37778-010-1003
Page 2

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
 - B - Analyte was detected in the method blank.
 - J - Estimated Value below Report Limit.
 - E - Estimated Value above the calibration limit of the instrument.
 - # - Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187920
 Sample ID: D4-0-2
 Sample Type: Solid waste
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S.SUSTEN/R.AITKEN

Date Collected: 11/14/02
 Time Collected: 14:45
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

TCLP Results

Analyte	Result	Units	Matrix Spike		Date	Time	Analyst	Method	QC Batch
			Reg Limit	Recovery (%)					
Benzene	< 0.0200	mg/l	0.5	102	11/17/02	23:33	J.Haley	8260	3762
Carbon tetrachloride	< 0.0200	mg/l	0.5	125	11/17/02	23:33	J.Haley	8260	3762
Chlorobenzene	< 0.0200	mg/l	100	101	11/17/02	23:33	J.Haley	8260	3762
Chloroform	< 0.0200	mg/l	6.0	102	11/17/02	23:33	J.Haley	8260	3762
1,2-Dichloroethane	< 0.0200	mg/l	0.5	96	11/17/02	23:33	J.Haley	8260	3762
1,1-Dichloroethane	< 0.0200	mg/l	0.7	96	11/17/02	23:33	J.Haley	8260	3762
Methylethylketone	< 0.100	mg/l	200	103	11/17/02	23:33	J.Haley	8260	3762
Tetrachloroethane	< 0.0200	mg/l	0.7	97	11/17/02	23:33	J.Haley	8260	3762
Trichloroethane	< 0.0200	mg/l	0.5	1030	11/17/02	23:33	J.Haley	8260	3762
Vinyl Chloride	< 0.0200	mg/l	0.2	103	11/17/02	23:33	J.Haley	8260	3762
Zero Headspace Extraction Initiated					11/15/02	15:30	B. Powell	1311	2313

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	103.	73. - 133.
VOA Surr Toluene-d8	101.	80. - 121.
VOA Surr, 4-BFB	101.	80. - 128.

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A187920
Sample ID: D4-0-2
Project: 37778-010-1003
Page 2

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
 - B - Analyte was detected in the method blank.
 - J - Estimated Value below Report Limit.
 - E - Estimated Value above the calibration limit of the instrument.
 - # - Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.

End of Sample Report.

Test America

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PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 1
Laboratory Receipt Date: 11/15/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike	Sample
VOA PARAMETERS										
Benzene	mg/l	< 0.0200	0.510	0.500	102	78. - 132.	3762	02-A187920		
Carbon tetrachloride	mg/l	< 0.0200	0.620	0.500	124	64. - 146.	3762	02-A187920		
Chlorobenzene	mg/l	< 0.0200	0.510	0.500	102	79. - 124.	3762	02-A187920		
Chloroform	mg/l	< 0.0200	0.510	0.500	102	73. - 133.	3762	02-A187920		
1,2-Dichloroethane	mg/l	< 0.0200	0.480	0.500	96	70. - 140.	3762	02-A187920		
1,1-Dichloroethane	mg/l	< 0.0200	0.480	0.500	96	68. - 141.	3762	02-A187920		
Methylethylketone	mg/l	< 0.100	2.58	2.50	103	69. - 142.	3762	02-A187920		
Tetrachloroethene	mg/l	< 0.0200	0.480	0.500	96	72. - 136.	3762	02-A187920		
Trichloroethene	mg/l	< 0.0200	0.510	0.500	102	73. - 137.	3762	02-A187920		
Vinyl Chloride	mg/l	< 0.0200	0.510	0.500	102	52. - 156.	3762	02-A187920		

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C.	Batch	Spike	Sample
PEST/PCB/HERB PARAMETERS										
Endrin	mg/l	< 0.00050	0.0138	0.0100	138	38. - 182.	4616	blank		
Endrin	mg/l	< 0.00050	0.0142	0.0100	142	38. - 182.	4616	blank		
Heptachlor	mg/l	< 0.00050	0.0126	0.0100	126	46. - 138.	4616	blank		
Heptachlor	mg/l	< 0.00050	0.0128	0.0100	128	46. - 138.	4616	blank		
Lindane	mg/l	< 0.00050	0.0126	0.0100	126	51. - 131.	4616	blank		
Lindane	mg/l	< 0.00050	0.0133	0.0100	133	51. - 131.	4616	blank		
Methoxychlor	mg/l	< 0.00050	0.0157	0.0100	157	42. - 170.	4616	blank		
Methoxychlor	mg/l	< 0.00050	0.0171	0.0100	171	42. - 170.	4616	blank		

Project QC continued . . .

Test America

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 2
Laboratory Receipt Date: 11/15/02

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.510	0.500	1.98	15.	3762
Carbon tetrachloride	mg/l	0.620	0.600	3.28	21.	3762
Chlorobenzene	mg/l	0.510	0.490	4.00	16.	3762
Chloroform	mg/l	0.510	0.510	0.00	20.	3762
1,2-Dichloroethane	mg/l	0.480	0.490	2.06	16.	3762
1,1-Dichloroethene	mg/l	0.480	0.470	2.11	19.	3762
Methylethylketone	mg/l	2.58	2.79	7.82	21.	3762
Tetrachloroethene	mg/l	0.480	0.460	4.26	23.	3762
Trichloroethene	mg/l	0.510	0.500	1.98	20.	3762
Vinyl Chloride	mg/l	0.510	0.500	1.98	28.	3762

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Endrin	mg/l	0.0138	0.0142	2.86	29.	4616
Heptachlor	mg/l	0.0126	0.0128	1.57	36.	4616
Lindane	mg/l	0.0126	0.0133	5.41	42.	4616
Methoxychlor	mg/l	0.0157	0.0171	8.54	37.	4616

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.0500	0.0480	96	78 - 127	3762

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 3
Laboratory Receipt Date: 11/15/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Carbon tetrachloride	mg/l	0.0500	0.0590	118	69 - 132	3762
Chlorobenzene	mg/l	0.0500	0.0510	102	81 - 120	3762
Chloroform	mg/l	0.0500	0.0500	100	77 - 125	3762
1,2-Dichloroethane	mg/l	0.0500	0.0500	100	71 - 135	3762
1,1-Dichloroethane	mg/l	0.0500	0.0430	86	72 - 128	3762
Methylethylketone	mg/l	0.250	0.256	102	75 - 140	3762
Tetrachloroethane	mg/l	0.0500	0.0480	96	76 - 123	3762
Trichloroethane	mg/l	0.0500	0.0490	98	78 - 125	3762
Vinyl Chloride	mg/l	0.0500	0.0450	90	61 - 140	3762

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
PEST/PCS/HERB PARAMETERS						
Chlordane	mg/l	0.0500	0.0574	115	46 - 152	4616
Endrin	mg/l	0.0100	0.0136	136	50 - 170	4616
Heptachlor	mg/l	0.0100	0.0121	121	59 - 128	4616
Lindane	mg/l	0.0100	0.0126	126 #	61 - 121	4616
Methoxychlor	mg/l	0.0100	0.0158	158	42 - 169	4616
Toxaphene	mg/l	0.100	0.120	120	44 - 159	4616

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Benzene	< 0.00200	mg/l	3762	11/17/02	23:33
Carbon tetrachloride	< 0.00200	mg/l	3762	11/17/02	23:33
Chlorobenzene	< 0.00200	mg/l	3762	11/17/02	23:33

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 4
Laboratory Receipt Date: 11/15/02

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Chloroform	0.00400	mg/l	3762	11/17/02	23:33
1,2-Dichloroethane	< 0.00200	mg/l	3762	11/17/02	23:33
1,1-Dichloroethane	< 0.00200	mg/l	3762	11/17/02	23:33
Methylethylketone	< 0.0100	mg/l	3762	11/17/02	23:33
Tetrachloroethane	< 0.00200	mg/l	3762	11/17/02	23:33
Trichloroethane	< 0.00200	mg/l	3762	11/17/02	23:33
Vinyl Chloride	< 0.00200	mg/l	3762	11/17/02	23:33
VQA Surr 1,2-DCA-d4	100.	‡ Rec	3762	11/17/02	23:33
VQA Surr Toluene-d8	100.	‡ Rec	3762	11/17/02	23:33
VQA Surr, 4-BFB	99.	‡ Rec	3762	11/17/02	23:33

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
PEST/PCB/HERB PARAMETERS					
Chlordane	< 0.00050	mg/l	4616	11/18/02	19:28
Endrin	< 0.00050	mg/l	4616	11/18/02	19:28
Heptachlor	< 0.00050	mg/l	4616	11/18/02	19:28
Lindane	< 0.00050	mg/l	4616	11/18/02	19:28
Methoxychlor	< 0.00050	mg/l	4616	11/18/02	19:28
Toxaphene	< 0.0100	mg/l	4616	11/18/02	19:28
pest surr-TCMK	48.	‡ Rec	4616	11/18/02	19:28
surr-Dibutylchloroendate	62.	‡ Rec	4616	11/18/02	19:28

‡ = Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 309365



TESTAMERICA, INC.
ATLANTA SERVICE CENTER

309151

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: URS Corp Client #: 2693

Address: ON FILE

City/State/Zip Code: _____

Project Manager: Brent Jacobs

Telephone Number: (678) 356-8205 Fax: (678) 356-0055

Sampler Name: (Print Name) STEVEN SUSTON

Sampler Signature: [Signature]

Project Name: RED PANTHER

Project #: 37778-010-1003

Site/Location ID: RED PANTHER, GA State: MS

Report To: Brent Jacobs

Invoice To: K

Quote #: _____ PO#: _____

TAT <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (surcharges may apply) Date Needed: <u>11-15-02</u> Fax Results: <u>BEAT COLE</u> <u>(920) 968-6940</u> SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	Preservation & # of Containers										Analyze For: <u>TOXIC METALS</u> <u>DRUGS</u> <u>ARSENIC</u>	QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other: _____	REMARKS	
						HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)							
D2-C1	11-13-02	1100	C	-	S													186884	
D2-C2	11-13-02	1110	C	-	S													885	* Content
D2-C3	11-13-02	1400	C	-	S													886	SUSTON
D2-C4	11-13-02	1410	C	-	S													887	(404) 822-8483 w/ Andy Questions

Special Instructions: * 24-hour TAT Fax to 838 190 701 425
* Fax Results to BEAT COLE @ (920) 968-6940

LABORATORY COMMENTS:
Init Lab Temp: _____
Rec Lab Temp: _____

Relinquished By: <u>[Signature]</u>	Date: <u>11-13-02</u>	Time: <u>1600</u>	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: <u>[Signature]</u>	Date: <u>11/14</u>	Time: <u>9:10</u>

Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
Method of Shipment: _____

TestAmerica

INCORPORATED

11/19/02

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 37778-010-1003 RED PANTHER. The Laboratory Project number is 309131.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Page 1 Collection Date
-----	-----	-----
D2-C1	02-A186884	11/13/02
D2-C2	02-A186885	11/13/02
D2-C3	02-A186886	11/13/02
D2-C4	02-A186887	11/13/02

A2LA certification number 0453.07 for analysis of wastewater and solid/hazardous waste effective 09/30/99-12/31/03.

NEIAC/Florida certification number E87358 for analysis of environmental water, soil/hazardous waste, and drinking water effective 07/01/99-06/30/03.

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Roxanne L. Connor

Report Date: 11/19/02

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A186884
 Sample ID: D2-C1
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: STEVEN SUSTEN

Date Collected: 11/13/02
 Time Collected: 11:00
 Date Received: 11/14/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Dieldrin	73.3	mg/kg	6.66	2000	11/19/02	9:02	D. Descousa	8081A	2159
Toxaphene	509.	mg/kg	83.2	500	11/19/02	9:02	D. Descousa	8081A	2159
METALS									
Arsenic	31.9	mg/kg	1.01	1	11/14/02	9:43	C. Martin	6010B	1053

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.9 gm	10.0 ml	11/14/02		M. Ricke	3550

Sample report continued . . .

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INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A186884

Sample ID: D2-C1

Project: 37778-010-1003

Page 2

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A186885
 Sample ID: D2-C2
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: STEVEN SUSTEN

Date Collected: 11/13/02
 Time Collected: 11:10
 Date Received: 11/14/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	19.0	mg/kg	3.33	1000	11/19/02	7:37	D. Descouza	8081A	2159
Toxaphene	209.	mg/kg	33.3	200	11/19/02	7:37	D. Descouza	8081A	2159
METALS									
Arsenic	119.	mg/kg	0.98	1	11/14/02	9:43	C. Martin	6010B	1053

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.4 gm	10.0 ml	11/14/02		N. Ricke	3550

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A186885

Sample ID: D2-C2

Project: 37778-010-1003

Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A186886
 Sample ID: D2-C3
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: STEVEN SUSTEN

Date Collected: 11/13/02
 Time Collected: 14:00
 Date Received: 11/14/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	91.9	mg/kg	6.66	2000	11/19/02	8:06	D. Descouza	8081A	2159
Toxaphene	1280	mg/kg	166.	1000	11/19/02	8:06	D. Descouza	8081A	2159
METALS									
Arsenic	34.7	ng/kg	0.96	1	11/14/02	9:43	C. Martin	6010B	1053

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	11/14/02		M. Ricke	3550

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 02-A186886

Sample ID: D2-C3

Project: 37778-010-1003

Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A186887
 Sample ID: D2-C4
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: STEVEN SUSTEN

Date Collected: 11/13/02
 Time Collected: 14:10
 Date Received: 11/14/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	117.	mg/kg	16.6	5000	11/19/02	8:34	D. Desouza	8081A	2159
Toxaphene	1680	mg/kg	333.	2000	11/19/02	8:34	D. Desouza	8081A	2159
METALS									
Arsenic	82.3	mg/kg	0.98	1	11/14/02	9:43	C. Martin	6010B	1053

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	11/14/02		M. Rieke	3550

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A186887

Sample ID: D2-C4

Project: 37778-010-1003

Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

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PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 1
Laboratory Receipt Date: 11/14/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
METALS								
Arsenic	mg/kg	1.57	18.0	20.0	82	80 - 120	1053	Duplicate

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
METALS						
Arsenic	mg/kg	18.0	17.9	0.56	20	1053

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val.	% Recovery	Target Range	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Dieldrin	mg/kg	0.0167	0.0153	92	64 - 146	2159
Toxaphene	mg/kg	0.333	0.340	102	64 - 154	2159

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val.	% Recovery	Target Range	Q.C. Batch
METALS						
Arsenic	mg/kg	20.0	18.0	90	80 - 120	1053

Project QC continued . . .

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 2
Laboratory Receipt Date: 11/14/02

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
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METALS

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

PEST/PCB/HERB PARAMETERS

Dieldrin	< 0.0033	mg/kg	2159	11/19/02	7:37
Toxaphene	< 0.166	mg/kg	2159	11/19/02	7:37

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

METALS

Arsenic	< 0.88	mg/kg	1053	11/14/02	9:43
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* - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 309151

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TESTAMERICA, INC.
ATLANTA SERVICE CENTER

309336
6681

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name: URS CORP. Client #: 2693

Address: ON FILE

City/State/Zip Code: _____

Project Manager: Brent Jacobs

Telephone Number: (678) 356-8205 Fax: (678) 356-0055

Sampler Name: (Print Name) Steven Susten / Rachel Aitken

Sampler Signature: Rachel Aitken

Project Name: Red Panther

Project #: 37778-010-1003

Site/Location ID: Red Panther State: MS

Report To: Brent Jacobs

Invoice To: _____

Quote #: _____ PO#: _____

TAT Standard <input checked="" type="checkbox"/> Rush (surcharges may apply) Date Needed: <u>11-18-02</u> Fax Results: <u>(Y) N</u> Bert Cole (920) 968-6940	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	Preservation & # of Containers								Analyze For:				QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other: _____	REMARKS							
						HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	Toxaphene	Dieldrin	Arsenic											
D4-C1	11-14-02	1140	C		S													187	842							
D4-C2	11-14-02	1145	C		S															43						
D4-C3	11-14-02	1155	C		S																44		OK CONTACT			
D1-C1	11-14-02	1100	C		S																	45		Steve Susten		
D1-C2	11-14-02	1110	C		S																	46		(404) 822-8483		
D3-C2	11-14-02	1405	C		S																		47		w/ Amy.	
D3-C1	11-14-02	1415	C		S																		48		QUESTIONS	
DUP-01	11-14-02	900	C		S																		1878	49		
EQB-01*	11-14-02	1400			W																					

Special Instructions:
 ** Standard turnaround for EQB-01 * 24-hour TAT (142/3)
 * FAX results to Bert Cole @ 920-968-6940 FedEx 838191165908

LABORATORY COMMENTS:
 Init Lab Temp:
 Rec Lab Temp:
 Custody Seals: Y N N/A
 Bottles Supplied by Test America: Y N
 Method of Shipment:

Relinquished By: <u>[Signature]</u>	Date: <u>11-14-02</u>	Time: <u>1600</u>	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: <u>[Signature]</u>	Date: <u>11/15/02</u>	Time: <u>9:00</u>

TestAmerica

INCORPORATED

11/20/02

URS 2693
BRENT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 37779-010-1003 RMD PANTHER. The Laboratory Project number is 309336.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Page 1 Collection Date
D4-C1	02-A187842	11/14/02
D4-C2	02-A187843	11/14/02
D4-C3	02-A187844	11/14/02
D1-C1	02-A187845	11/14/02
D1-C2	02-A187846	11/14/02
D3-C2	02-A187847	11/14/02
D3-C1	02-A187848	11/14/02
DUP-01	02-A187849	11/14/02

A2LA certification number 0453.07 for analysis of wastewater and solid/hazardous waste effective 09/30/99-12/31/03.

NELAC/Florida certification number E87358 for analysis of environmental water, soil/hazardous waste, and drinking water effective 07/01/99-06/30/03.

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Sample Identification

Lab Number

Page 2
Collection Date

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By:



Report Date: 11/20/02

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

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INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187842
 Sample ID: D4-C1
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 11:40
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	0.140	mg/kg	0.0333	10	11/19/02	19:21	D. Desouza	8081A	4819
Toxaphene	1.24	mg/kg	0.166	1	11/19/02	19:21	D. Desouza	8081A	4819
METALS									
Arsenic	59.9	mg/kg	0.97	1	11/18/02	21:09	G. McCord	6010B	2279

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.2 gm	10.0 ml	11/18/02		M. Cauthan	3550

LABORATORY COMMENTS:

ND = Not detected at the report limit.
 B = Analyte was detected in the method blank.
 J = Estimated Value below Report Limit.
 E = Estimated Value above the calibration limit of the instrument.
 \$ = Recovery outside Laboratory historical or method prescribed limits.
 All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187843
 Sample ID: D4-C2
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 11:45
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	0.0899	mg/kg	0.0333	10	11/19/02	19:50	D. Descusa	8081A	4819
Toxaphene	0.519	mg/kg	0.166	1	11/19/02	19:50	D. Descusa	8081A	4819
METALS									
Arsenic	24.4	mg/kg	1.00	1	11/18/02	21:09	G. McCord	6010B	2279

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.7 gm	10.0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
 - B = Analyte was detected in the method blank.
 - J = Estimated Value below Report Limit.
 - E = Estimated Value above the calibration limit of the instrument.
 - # = Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187844
 Sample ID: D4-C3
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 11:55
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	0.103	mg/kg	0.0333	10	11/19/02	20:20	D. Descouza	8081A	4819
Toxaphene	0.609	mg/kg	0.166	1	11/19/02	20:20	D. Descouza	8081A	4819
METALS									
Arsenic	104.	mg/kg	1.01	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
 - B = Analyte was detected in the method blank.
 - J = Estimated Value below Report Limit.
 - E = Estimated Value above the calibration limit of the instrument.
 - # = Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187845
 Sample ID: D1-C1
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 11:00
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB'S/HERBICIDES									
Dieldrin	131.	mg/kg	13.3	4000	11/19/02	20:50	D. Descouza	8081A	4819
Toxaphene	1190	mg/kg	166.	1000	11/19/02	20:50	D. Descouza	8081A	4819
METALS									
Arsenic	109.	mg/kg	0.96	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10:0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

- ND - Not detected at the report limit.
 - B - Analyte was detected in the method blank.
 - J - Estimated Value below Report Limit.
 - E - Estimated Value above the calibration limit of the instrument.
 - # - Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187846
 Sample ID: D1-C2
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 11:10
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	5.16	mg/kg	1.66	500	11/19/02	14:54	D. Descouza	8081A	4819
Toxaphene	243.	mg/kg	83.2	500	11/19/02	14:54	D. Descouza	8081A	4819
METALS									
Arsenic	47.3	mg/kg	0.97	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.1 gm	10.0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
 - B = Analyte was detected in the method blank.
 - J = Estimated Value below Report Limit.
 - E = Estimated Value above the calibration limit of the instrument.
 - S = Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187847
 Sample ID: D3-C2
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 14:05
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	0.716	ng/kg	0.166	50	11/19/02	21:49	D. Descouza	8081A	4819
Toxaphene	7.69	ng/kg	1.66	10	11/19/02	21:49	D. Descouza	8081A	4819
METALS									
Arsenic	206.	mg/kg	1.00	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.8 gm	10.0 ml	11/18/02		N. Cauthen	3550

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
 - B = Analyte was detected in the method blank.
 - J = Estimated Value below Report Limit.
 - E = Estimated Value above the calibration limit of the instrument.
 - # = Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187848
 Sample ID: D3-C1
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 14:15
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDES/PCB's/HERBICIDES									
Dieldrin	0.433	ug/kg	0.166	50	11/19/02	22:18	D. Desouza	8081A	4819
Toxaphene	3.83	ug/kg	1.66	10	11/19/02	22:18	D. Desouza	8081A	4819
METALS									
Arsenic	183.	ug/kg	0.97	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.7 gm	10.0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

ND = Not detected at the report limit.
 B = Analyte was detected in the method blank.
 J = Estimated Value below Report Limit.
 E = Estimated Value above the calibration limit of the instrument.
 # = Recovery outside Laboratory historical or method prescribed limits.
 All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A187849
 Sample ID: DUP-01
 Sample Type: Soil
 Site ID:

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: S. SUSTEN/R. AITKEN

Date Collected: 11/14/02
 Time Collected: 9:00
 Date Received: 11/15/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report	Dil	Date	Time	Analyst	Method	Batch
			Limit	Factor					
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	5.46	mg/kg	0.666	200	11/19/02	22:48	D. Descousa	8081A	4819
Toxaphene	262.	mg/kg	33.3	200	11/19/02	22:48	D. Descousa	8081A	4819
METALS									
Arsenic	51.3	mg/kg	0.96	1	11/18/02	10:50	G. McCord	6010B	2280

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.1 gm	10.0 ml	11/18/02		M. Cauthen	3550

LABORATORY COMMENTS:

- ND = Not detected at the report limit.
 - B = Analyte was detected in the method blank.
 - J = Estimated Value below Report Limit.
 - E = Estimated Value above the calibration limit of the instrument.
 - # = Recovery outside Laboratory historical or method prescribed limits.
- All results reported on a wet weight basis.
 pest surrogate diluted out.

End of Sample Report.

TestAmerica

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PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 1
Laboratory Receipt Date: 11/15/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val.	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
METALS								
Arsenic	mg/kg	< 0.95	18.7	20.0	94	80 - 120	2279	Duplicate
Arsenic	mg/kg	157.	179.	20.0	110	80 - 120	2280	Duplicate

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
METALS						
Arsenic	mg/kg	18.7	20.7	10.15	20	2279
Arsenic	mg/kg	179.	181.	1.11	20	2280

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Dieldrin	mg/kg	0.0167	0.0176	105	64 - 146	4819
Toxaphene	mg/kg	0.330	0.383	116	64 - 154	4819

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Arsenic	mg/kg	20.0	17.8	89	80 - 120	2279

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 2
Laboratory Receipt Date: 11/15/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
Arsenic	mg/kg	20.0	17.4	87	80 - 120	2280

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----

****METALS****

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

****PEST/PCB/HERB PARAMETERS****

Dieldrin	< 0.0033	mg/kg	4819	11/20/02	10:33
Toxaphene	< 0.166	mg/kg	4819	11/20/02	10:33

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

****METALS****

Arsenic	< 0.88	mg/kg	2279	11/18/02	21:09
Arsenic	< 0.88	mg/kg	2280	11/18/02	10:50

= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 309336



TESTAMERICA, INC. ATLANTA SERVICE CENTER

30826

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring

Client Name: URS Corp. Client #: 2693

Address: ON FILE City/State/Zip Code:

Project Manager: Brent Jacobs

Telephone Number: (678) 356-8205 Fax: (678) 356-0055

Sampler Name: (Print Name) Rachel Aitken

Sampler Signature: Rachel Aitken

Project Name: Red Panther

Project #: 3778-010-1003

Site/Location ID: Red Panther State: MS

Report To: Brent Jacobs

Invoice To:

Quote #: PO#:

TAT	Standard	Date Needed	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers	Analyze For	QC Deliverables	REMARKS
<input checked="" type="checkbox"/>	Rush (surcharges may apply)	11-20-02					SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	HNO ₃ HCl NaOH H ₂ SO ₄ Methanol None Other (Specify)	Toxaphene Dieldrin Arsenic	None Level 2 (Batch QC) Level 3 Level 4 Other: _____	
			D3-C3	11/13/02	1545	C	S				* Contact Steve Susen w/ Amy questions 404-822-8483

Special Instructions: * 24-hour TAT Fed ex: 878190701414 * FAX results to Bert Cole 920-968-6940

LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp: 1.0

Relinquished By: Rachel Aitken Date: 11/16/02 Time: 1800 Received By: Date: Time:

Custody Seals: Y N N/A Bottles Supplied by Test America: Y N

Relinquished By: Date: Time: Received By: Date: Time:

Method of Shipments:

Relinquished By: Date: Time: Received By: 11/19/02 Time: 1900

TestAmerica

INCORPORATED

11/21/02

URS 2693
ERBERT JACOBS
5900 WINDWARD PKWY. STE. 400
ALPHARETTA, GA 30005

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 37776-010-1003 RED PANTHER. The Laboratory Project number is 309826.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Page 1

Sample Identification	Lab Number	Collection Date
D3-C3	02-A190135	11/18/02

A2LA certification number 0453.07 for analysis of wastewater and solid/hazardous waste effective 09/30/99-12/31/03.

NELAC/Florida certification number E87358 for analysis of environmental water, soil/hazardous waste, and drinking water effective 07/01/99-06/30/03.

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Roxanne L. Connor

Report Date: 11/21/02

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

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INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A190135
 Sample ID: D3-C3
 Sample Type: Soil
 Site ID: REDPANTHER

Project: 37778-010-1003
 Project Name: RED PANTHER
 Sampler: RACHEL AITKEN

Date Collected: 11/18/02
 Time Collected: 15:45
 Date Received: 11/19/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	0.0626	mg/kg	0.0067	2	11/21/02	14:46	D. Descouza	8081A	5838
Toxaphene	ND	mg/kg	0.166	1	11/21/02	14:46	D. Descouza	8081A	5838
METALS									
Arsenic	56.5	mg/kg	0.95	1	11/20/02	18:44	G. McCord	6010B	4917

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
OC Pest	29.7 gm	10.0 ml	11/19/02		M. Lax	3850

Surrogate	% Recovery	Target Range
pest surr-TOMX	140.8	48. - 132.
pest surr-DCB	128.	46. - 140.

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A190135
Sample ID: D3-C3
Project: 37778-010-1003
Page 2

LABORATORY COMMENTS:

ND - Not Detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
E - Estimated Value above the calibration limit of the instrument.
- Recovery outside Laboratory historical or method prescribed limits.
All results reported on a wet weight basis.

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 1
Laboratory Receipt Date: 11/19/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

****PEST/PCB/HERB PARAMETERS****

Dieldrin	mg/kg	0.0626	0.0818	0.0167	115	42. - 164.	5838	02-A190135
----------	-------	--------	--------	--------	-----	------------	------	------------

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

****METALS****

Arsenic	mg/kg	< 0.96	19.9	20.0	100	80 - 120	4917	Duplicate
---------	-------	--------	------	------	-----	----------	------	-----------

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

****PEST/PCB/HERB PARAMETERS****

Dieldrin	mg/kg	0.0818	0.0841	2.77	24.	5838
----------	-------	--------	--------	------	-----	------

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

****METALS****

Arsenic	mg/kg	19.9	19.8	0.50	20	4917
---------	-------	------	------	------	----	------

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1003
Page: 2
Laboratory Receipt Date: 11/19/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Dieldrin	mg/kg	0.0167	0.0173	104	64 - 146	5838
Toxaphene	mg/kg	0.330	0.406	123	64 - 154	5838

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Arsenic	mg/kg	20.0	19.4	97	80 - 120	4917

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
PEST/PCB/HERB PARAMETERS					
Dieldrin	< 0.0033	mg/kg	5838	11/20/02	5:43
Toxaphene	< 0.166	mg/kg	5838	11/20/02	5:43

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number: 37778-010-1003

Page: 3

Laboratory Receipt Date: 11/19/02

pest surr-TOMX	110.	† Rec	8838	11/20/02	5:43
pest surr-DCB	96.	† Rec	8838	11/20/02	5:43

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****METALS****

Arsenic	< 0.88	mg/kg	4917	11/20/02	18:44
---------	--------	-------	------	----------	-------

- Value outside Laboratory historical or method-prescribed-QC-limits.

End of Report for Project 309826

TestAmerica

INCORPORATED

12/ 2/02

URS 2693
BRENT JACOBS
5900 WINDWARD PENNY. STE. 400
ALPHARETTA, GA 30005

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 37778-010-1008 RED PANTHER. The Laboratory Project number is 310714.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Page 1
		Collection Date
01-C3	02-A194149	11/22/02
D2-C5	02-A194150	11/22/02
D2-C6	02-A194151	11/22/02
D2-C7	02-A194152	11/22/02

A2LA certification number 0453.07 for analysis of wastewater and solid/hazardous waste effective 09/30/99-12/31/03.

NELAC/Florida certification number E87358 for analysis of environmental water, soil/hazardous waste, and drinking water effective 07/01/99-06/30/03.

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Paul E. Lane, Jr.

Report Date: 12/ 2/02

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A194149
 Sample ID: D1-C3
 Sample Type: Soil
 Site ID:

Project: 37778-010-1008
 Project Name: RED PANTHER
 Sampler: STEVEN S.

Date Collected: 11/22/02
 Time Collected: 10:15
 Date Received: 11/23/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	140.	mg/kg	33.3	10000	11/29/02	10:40	Henderson	8081A	4084
Toxaphene	2130	mg/kg	832.	5000	11/29/02	10:40	Henderson	8081A	4084
METALS									
Arsenic	14.5	mg/kg	0.99	1	11/30/02	17:32	C.Johnson	6010B	2152

Sample Extraction Data

Parameter	Wt./Vol.		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.9 gm	10.0 ml	11/26/02		M. Cauthen	3550

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A194149
Sample ID: D1-C3
Project: 37778-010-1008
Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
E - Estimated Value above the calibration limit of the instrument.
- Recovery outside Laboratory historical or method prescribed limits.
All results reported on a wet weight basis.
Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A194150
 Sample ID: D2-C5
 Sample Type: Soil
 Site ID:

Project: 37778-010-1008
 Project Name: RED PANTHER
 Sampler: STEVEN S.

Date Collected: 11/22/02
 Time Collected: 8:55
 Date Received: 11/23/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	13.3	mg/kg	3.33	1000	11/29/02	11:06	Henderson	8081A	4084
Toxaphene	157.	mg/kg	83.2	500	11/29/02	11:06	Henderson	8081A	4084
METALS									
Arsenic	26.8	mg/kg	0.98	1	11/30/02	17:32	C.Johnson	6010B	2152

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.2 gm	10.0 ml	11/26/02		M. Cauthen	3550

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A194150
Sample ID: D2-C5
Project: 37778-010-1008
Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
E - Estimated Value above the calibration limit of the instrument.
- Recovery outside Laboratory historical or method prescribed limits.
All results reported on a wet weight basis.
Pesticide surrogate diluted below detectable levels due to
sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A194151
 Sample ID: D2-C6
 Sample Type: Soil
 Site ID:

Project: 37778-010-1008
 Project Name: RED PANTHER
 Sampler: STEVEN S.

Date Collected: 11/22/02
 Time Collected: 8:40
 Date Received: 11/23/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	1.93	ng/kg	0.333	100	11/29/02	11:34	Henderson	8081A	4084
Toxaphene	19.0	ng/kg	8.32	50	11/29/02	11:34	Henderson	8081A	4084
METALS									
Arsenic	44.1	ng/kg	0.98	1	11/30/02	17:32	C.Johnson	6010B	2152

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	30.0 gm	10.0 ml	11/26/02		M. Cauthen	3550

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A194151
Sample ID: D2-C6
Project: 37778-010-1008
Page 2

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

H = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

URS 2693
 BRENT JACOBS
 5900 WINDWARD PKWY. STE. 400
 ALPHARETTA, GA 30005

Lab Number: 02-A194152
 Sample ID: D2-C7
 Sample Type: Soil
 Site ID:

Project: 37778-010-1008
 Project Name: RED PANTHER
 Sampler: STEVEN S.

Date Collected: 11/22/02
 Time Collected: 8:30
 Date Received: 11/23/02
 Time Received: 9:00
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES									
Dieldrin	9.66	mg/kg	3.33	1000	11/29/02	12:03	Henderson	8081A	4084
Toxaphene	378.	mg/kg	83.2	500	11/29/02	12:03	Henderson	8081A	4084
METALS									
Arsenic	42.7	mg/kg	0.96	1	11/30/02	17:32	C. Johnson	6010B	2152

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.8 gm	10.0 ml	11/26/02		N. Cauthen	3550

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A194152

Sample ID: D2-C7

Project: 37778-010-1008

Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

B - Analyte was detected in the method blank.

J - Estimated Value below Report Limit.

E - Estimated Value above the calibration limit of the instrument.

- Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Pesticide surrogate diluted below detectable levels due to sample matrix.

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1008
Project Name: RED PANTHER
Page: 1
Laboratory Receipt Date: 11/23/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
METALS								
Arsenic	mg/kg	< 0.96	17.5	20.0	88	80 - 120	2152	Duplicate

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
METALS						
Arsenic	mg/kg	17.5	18.0	2.82	20	2152

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Dieldrin	mg/kg	0.0167	0.0200	120	64 - 146	4084
Toxaphene	mg/kg	0.333	0.496	149	64 - 154	4084

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Arsenic	mg/kg	20.0	16.8	84	80 - 120	2152

Project QC continued . . .

Test America

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 37778-010-1008
Project Name: RED PANTHER
Page: 2
Laboratory Receipt Date: 11/23/02

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

****METALS****

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****PEST/PCB/HERB PARAMETERS****

Dieldrin	< 0.0033	mg/kg	4084	11/29/02	19:20
Toxaphene	< 0.166	mg/kg	4084	11/29/02	19:20

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****METALS****

Arsenic	< 0.88	mg/kg	2152	11/30/02	17:32
---------	--------	-------	------	----------	-------

- Value outside laboratory historical or method prescribed QC limits.

End of Report for Project 310714

Appendix F

Statistical Evaluation of Ditch Confirmation Sample Data



1965 Lakemont Drive, Birmingham AL 35244
 Phone 205-428-8388, fax 205-426-0694

Red Panther Project Memorandum

December 6, 2002

To: Bert Cole
 Brent Jacobs
 Cc: Bob Mowrey
 Billy Hall

From: Warner Golden

Re: Ditch Confirmation Samples
 Site Characterization Grids
 Sample QA/QC review

Current Ditch Confirmation Samples

Second round confirmation sample results have been obtained from the area of 1 foot of additional excavation in ditch areas D1-1, D2-1, D2-3 and D2-4. The second statistical run with the second results replacing the results in the first round indicates that the ditch domain fails the subsurface performance standards for toxaphene and dieldrin. The subsurface standard for arsenic passes. Therefore, the ditch domain will have to be addressed in the Phase II Work Plan. The table below shows the current results for the ditch domain.

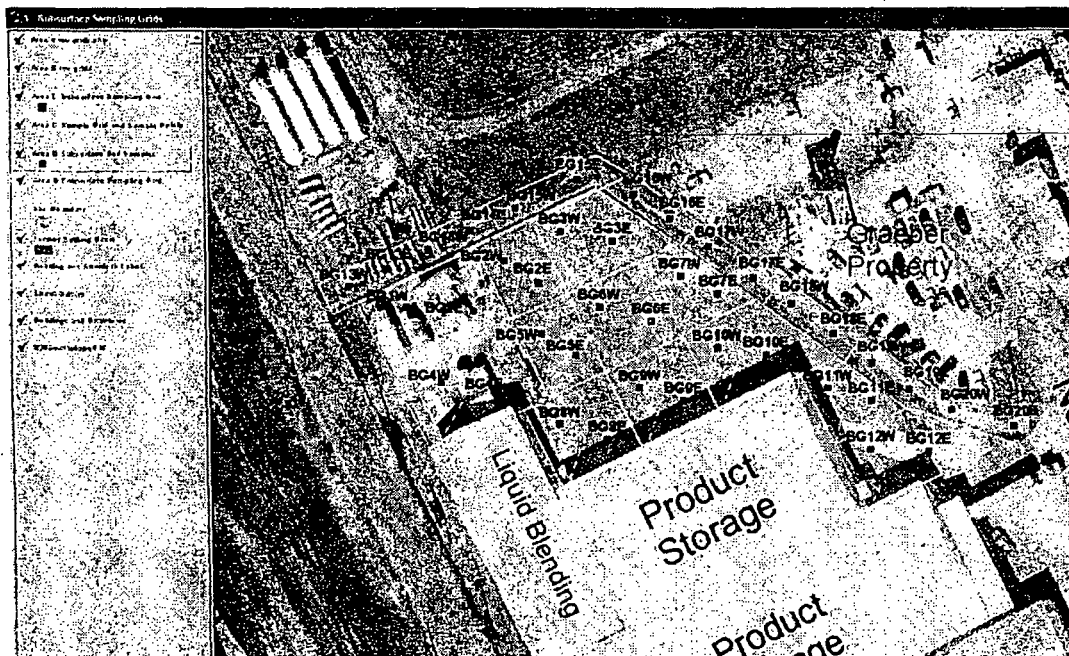
	A	B	C	D	E	F	G
1							
2	95% UCL of Mean ----->			109.9	805.1	36.7	
3	# Blocks Sampled w/ results->			12	12	12	
4	Excavated Values Mean -->			77.4	345.8	16.3	
5	Performance Standard Value->			270	220	15	
6	Student's T			1.8	1.8	1.8	
7		Grid #	Status	Arsenic	Toxaphene	Dieldrin	Backfill Status
8	1	D1-1 (D1-c3)	Sampled	14.5	3130.0	140.0	
9	2	D1-2	Sampled	47.3	243.0	9.8	
10	3	D2-1 (D2-c5)	Sampled	26.8	157.0	13.3	
11	4	D2-2	Sampled	119.0	209.0	19.0	
12	5	D2-3 (D2-c6)	Sampled	44.1	19.0	1.9	
13	6	D2-4 (D2-c7)	Sampled	42.7	378.0	9.7	
14	7	D3-1	Sampled	183.0	3.8	0.4	
15	8	D3-2	Sampled	206.0	7.7	0.7	
16	9	D3-3	Sampled	56.5	0.1	0.1	
17	10	D4-1	Sampled	59.9	1.2	0.1	
18	11	D4-2	Sampled	24.4	0.5	0.1	
19	12	D4-3	Sampled	104.0	0.6	0.1	
21							
22	Notes:						
23	Grids highlighted (D1-1, D2-2, D2-3, D2-4) were excavated additional 1 foot						
24	Grid numbers in parenthesis are second round results						



1965 Lakemont Drive, Birmingham AL 35244
Phone 205-428-8388, fax 205-426-0694

Area B Site Characterization Grids

After more careful inspection of the concrete in area B, NewFields recommends that the grids in the tank farm be sampled as originally called for in the work plan. The concrete containment found in the tank farm area covered by grids BG-1 and BG-4 is in very poor condition with several large cracks and holes. In addition, a large portion of the concrete in the NE corner has been pulled back completely. In contrast, the tank farm in area D, which is not being sampled, is in very good condition. The logic is sound for sampling the containment in poor condition and not sampling the containment in good condition. Therefore in order to avoid future questions about this area, grids BG-1 and BG-4 should be sampled at this time as originally planned.



Concrete slabs in area B have been found. NewFields recommends that these concrete slabs be cored through and the soil samples be collected as planned.

Area D Site Characterization Grids

As previously discussed, two additional grids have been added to Area D. The two grids cover the area of exposed soils in the NW corner of the area adjacent to the buildings. The subsurface samples approximate locations are shown below. The 5 aliquots for the surface samples should be collected from random locations within each grid. As with the other grids, coordinates for the actual sample location will be obtained by the surveyor following sample collection. The new grids, D-10 and D-11 are shown in the figure below.



Concrete slabs have also been found in Area D. NewFields recommends that these concrete slabs be cored through and the soil samples be collected as planned.

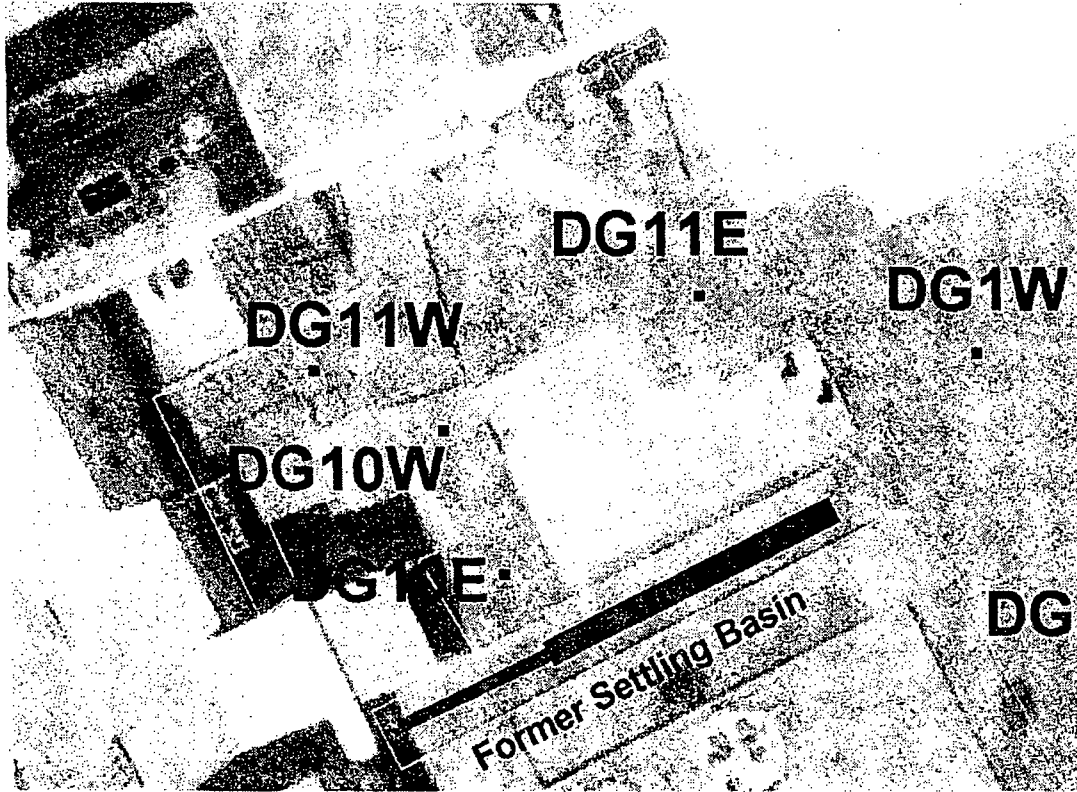
QA/QC Samples

The Work Plan calls for level III data packages from the lab with 10 percent of the samples at level IV. Please be sure to have 10 percent of the samples processed with level IV data packages.



1965 Lakemont Drive, Birmingham AL 35244
Phone 205-428-8388, fax 205-426-0694

The following figure provides a closeup view of the new grids in Area D.



**THE TUNICA LANDFILL**

6035 Bowdre Road
Robinsonville, MS 38664
(662) 363-2282
(662) 363-0170 Fax

Certificate of Disposal

Red Panther Chemical
WMI Profile Number CU4849

Be It Known By All Men,

Beginning on November 11, 2002, through December 27, 2002, 33 loads containing 854.16 tons of non-regulated solids from Red Panther 550 Patton Road in Clarksdale, Mississippi were transported by Matthews Trucking under the direction of Hepaco, Inc. 4000 North Watkins Memphis, Tennessee to Waste Management of Tunica Landfill Inc.

These loads were deposited on the landfill, the exact location determined by an agent of the landfill owner and equipment operator. Each load was placed within the confines of approved Sub-titled D Lined Area for final interment, properly destroying the entire shipment.

As previously mentioned this project to date has consisted of destruction of 33 loads and an Online Report substantiating this fact is enclosed.

I, Jeffrey H. Papasan, agent for Waste Management of Tunica Landfill Inc., certify that said destruction did occur at this facility located at 6035 Bowdre Road in Robinsonville, Mississippi.

If you should have any questions in regard to this matter please feel free to contact me at 662-363-2282.

Respectfully Submitted,


Jeffrey H. Papasan
District Manager
Waste Management of Tunica Landfill Inc

Enclosure

74460

WM THE TUNICA LANDFILL

A WASTE MANAGEMENT COMPANY
NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Name of Generator: Hepco, Inc
Address: 4000 N. Watkins
Memphis, TN 38127
Phone No.: (901) 345-6333
Waste ID. Code No.: _____

Waste Generation Location: Red Panther Chemical
Address: 550 Patton
Clarksdale, MS.
Phone No.: (901) 848-2948

Special Handling Instructions and Additional Information: _____

Trash Hunters of Tunica dba THE TUNICA LANDFILL Permit # SW-0728010468 Ticket Number: _____ Customer Number: _____

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (601) 981-5171

Waste Description	Actual Quantity	Units	Container Type
<u>Non Regulated Solids</u>		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input type="checkbox"/> Carton <input type="checkbox"/> Bag <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Box <input type="checkbox"/> Other: _____ Volume: _____

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole - As Agent for the Red Panther PRP Group
Generator Authorized Agent
[Signature] Signature
11/12/03 Shipment Date

TRANSPORTER

Truck No.: BAT 003
Transporter Name: William Martin
Address: _____

Transporter Phone No.: (901) 299-7025
Driver Name (print): William Martin
Vehicle License No./State: A 47764
Vehicle Certification: _____

With my signature, I certify that the above material was picked up at the Generator site listed above.

With my signature, I certify that the above named material was delivered without incident to the destination listed below.

[Signature] Signature
11/12/03 Pickup Date
[Signature] Signature
11/12/03 Delivery Date

DESTINATION

Site Name: Trash Hunters of Tunica, Inc dba The Tunica Landfill Phone No.: 1-877-989-2783
Site Address: 6035 Bowdre Road Robinsonville, MS 38664 Time: _____

Discrepancies: _____

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

F.C. Boyd Name (print) [Signature] Signature 11/12/03 Receipt Date

010510

White - LANDFILL Yellow - GENERATOR Pink - TRANSPORTER Goldened - CONTRACTOR

TOTAL TO DATE: 24.5970

Waste Management of Tennessee Inc.
 The Trench Landfill
 6035 Bowling Rd
 Robinson TN 37064
 615-497-8111

MATTHEWS TRUCKING

75

600110

11/17/08

HEPACO

HEPACO

Scale Wgt:

22,700.00

Tare Wgt:

20,840.00

Net Wgt:

54,360.00

HEPACO

2275 AIRPORT INTERCHANGE AVE.

Adjusted Wgt:

54,360.00

MEMPHIS

TN

38312

Adjusted Tons:

27.10

*****We will be closed Thursday November 20 in observance of
 Thanksgiving. We will reopen on Friday November 21 with normal
 hours.*****

RED PANTHER/C/DALE

Destination:

IN TURKICA LANDFILL

CU4843



000110

outside

CEMNT / CON / SOIL / SAND / DEBRIS / SLAG

27.10

TON

\$21.00

TOTAL FEES

TOTAL TAX

TOTAL AMOUNT

7-176095

THE TUNICA LANDFILL WASTE MANAGEMENT COMPANY NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Name of Generator: Hepaco, Inc.
Address: 4000 N. Watkins
Memphis, TN. 38127

Waste Generation Location: Red Panther Chemical
Address: 550 Patton
Clarksdale, MS.

Phone No.: (901) 345-6333

Phone No.: (901) 481-2948

Waste ID. Code No.: _____

Special Handling Instructions and Additional Information: _____

Trash Hunters of Tunica dba THE TUNICA LANDFILL Permit # SW-0720010450 Ticket Number: _____ Customer Number: _____

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (601) 961-5171

Waste Description	Actual Quantity	Units	Container Type
<u>Non Regulated Solids</u>		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Carton <input type="checkbox"/> Box <input type="checkbox"/> Bag <input type="checkbox"/> Other: _____ Volume: _____

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole, As Agent for
the Red Panther DRP Group
Generator Authorized Agent

Albert W. Cole - URS
Signature

11/12/02
Shipment Date

TRANSPORTER

Truck No.: TB7
Transporter Name: Bilbro Trucking
Address: SARASOTA, MS.

Transporter Phone No.: _____
Driver Name (print): Tim Bilbro
Vehicle License No./State: A34259
Vehicle Certification: US DOT 81257

With my signature, I certify that the above material was picked up at the Generator site listed above.

With my signature, I certify that the above named material was delivered without incident to the destination listed below.

Tim Bilbro 11/12/02
Signature Pickup Date

Tim Bilbro 11/12/02
Signature Delivery Date

DESTINATION

Site Name: Trash Hunters of Tunica, Inc dba The Tunica Landfill
Site Address: 6035 Bowdre Road Robinsonville, MS 38664

Phone No.: 1-877-989-2783

Discrepancies: _____

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and correct.

F.C. Bond
Name (print)

F.C. Bond
Signature

10 010678

TOTAL TO DATE: 270

DRIVER PLEASE SIGN HERE

Billy

Waste Management Of Tunica Inc.
The Tunica Landfill
6025 Bowdre Rd.
Robinsonville, MS 38664
877-999-2783

176006

ORIGINAL

MATTHEWS TRUCKING	2	Francis	03:27:01 P	03:27:01	11/12/2002
HEPACO	HEPACO			GROSS Lbs:	94,920.00
				Tare Lbs:	30,100.00
HEPACO				Net Lbs:	64,820.00
2275 AIRPORT INTERCHANGE AVE.				All Adjustments:	0.00
				Adjusted Lbs:	64,820.00
MEMPHIS	TN	38312		Adjusted Tons:	32.41
****We will be closed Thursday November 20 in observance of Thanksgiving. We will reopen on Friday November 29 with normal hours.*****					

RED PANTHER/C/DALE					
Destination:					
WM TUNICA LANDFILL					
CU4849			000110		
				outside	

CST21 \ CON./ SOIL/SAND/DEBRIS/SLAG	32.41	TON	\$21.00	\$680.61
TOTAL FEES				0.00
TOTAL TAX				0.00
TOTAL AMOUNT				\$680.61

Waste Management (1-800-)

The Pelton Company

WASTE THE TUNICA LANDFILL COMPANY

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Name of Generator: Hepaco, Inc. Waste Generation Location: Roller Drive, Oxford
 Address: 4000 N. Watkins Address: 550 Patton
Memphis, TN 38127 Oxford, MS
 Phone No.: (901) 481-2900 Phone No.: (901) 481-2948
 Waste ID. Code No.: _____
 Special Handling Instructions and Additional Information: _____

Trash Hunters of Tunica dba THE TUNICA LANDFILL Permit # SW-8728010458 Ticket Number: _____ Customer Number: _____

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (601) 961-5171

Waste Description	Actual Quantity	Units	Container Type
Non Regulated Solids		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Yards <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input type="checkbox"/> Carton <input type="checkbox"/> Bag <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Box <input type="checkbox"/> Other: _____ Volume: _____

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole - As Agent for the Red Hunter PRP Group Albert W. Cole - URS 1/12/02
 Generator Authorized Agent Signature Shipment Date

TRANSPORTER

Truck No.: R-001-2 Transporter Phone No.: (601) 500-6516
 Transporter Name: Matthews & Kopf Driver Name (print): Billy
 Address: 1250 Matthews Rd Vehicle License No./State: A 143407
Southaven Vehicle Certification: Miss 422000

With my signature, I certify that the above material was picked up at the Generator site listed above. With my signature, I certify that the above named material was delivered without incident to the destination listed below.
Billy Kopf 1/12/02 Billy Kopf 1/12/02
 Signature Pickup Date Signature Delivery Date

DESTINATION

Site Name: Trash Hunters of Tunica, Inc dba The Tunica Landfill Phone No.: (877) 986-278
 Site Address: 6035 Bowdre Road, Robinsonville, MS 38864 Time: _____

Discrepancies: _____
 I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true.
EC Bond EC Bond
 Name (print) Signature

010679 Waste Landfill Generator Transporter Contractor **TOTAL TO DATE**

DRIVER PLEASE SIGN HERE

Waste Management Of Tunica Inc.
 The Tunica Landfill
 6025 Bowdre Rd.
 Robinsonville, MS 38664
 677-889-2783

176013

ORIGINAL

HEPACO	BAT1	Francis	03:59:49 P	04:10:59	11/12/2002
--------	------	---------	------------	----------	------------

HEPACO	HEPACO	GROSS Lbs:	91,940.00	
		Tare Lbs:	32,860.00	
		Net Lbs:	59,080.00	
HEPACO		All Adjustments:	0.00	
2275 AIRPORT INTERCHANGE AVE.		Adjusted Lbs:	59,080.00	
MEMPHIS	TN	38312	Adjusted Tons:	29.54

****We will be closed Thursday November 28 in observance of Thanksgiving. We will reopen on Friday November 29 with normal hours.*****

RED PANTHER/C/DALE

Destination:

WM TUNICA LANDFILL

CU4849



000110

outside

CST21 \ CON./ SOIL/SAND/DEBRIS/SLAG	29.54	TON	\$21.00	\$620.34
TOTAL FEES				0.00
TOTAL TAX				0.00
TOTAL AMOUNT				\$620.34

W. H. HUNTER LANDFILL
NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Name of Generator: Hypress, Inc.
Address: 4000 N. Watkins
Memphis, TN. 38127
Phone No.: (901) 345-6353
Waste ID. Code No.:

Waste Generator Location:
Address: 550 E. Main
Clarendon, MS
Phone No.: (901) 481-2948

Special Handling Instructions and Additional Information:

Trash Hunter of Tunica dba THE TUNICA LANDFILL Permit # SW-4720010458 Ticket Number: Customer Number:

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (801) 861-5171

Waste Description	Actual Quantity	Units	Container Type
Non-Regulated Solids		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Carton <input type="checkbox"/> Box <input type="checkbox"/> Bag <input type="checkbox"/> Other Volume:

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole As Agent for
Tru Red Panther PRP Group
Generator Authorized Agent

Albert W. Cole - URS
Signature

11/16/10
Shipment Date

TRANSPORTER

Truck No.: BAT 1
Transporter Name:
Address:

Transporter Phone No.:
Driver Name (print):
Vehicle License No./State:
Vehicle Certification:

With my signature, I certify that the above material was picked up at the Generator site listed above.

With my signature, I certify that the above named material was delivered without incident to the destination listed above.

Signature Pickup Date

Signature Delivery Date

DESTINATION

Site Name: Trash Hunters of Tunica, Inc dba The Tunica Landfill
Site Address: 8035 Highway Road, Ridgelyville, MS 38864
Discrepancies:

Phone No.: 1-877-989-3333
Time:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and correct.
Name: Albert W. Cole Signature: Albert W. Cole

810678

TOTAL TO DATE

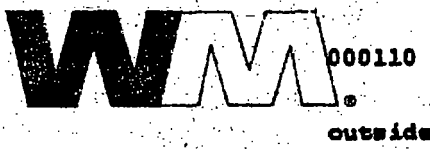
Waste Management Of Tunica Inc.
 The Tunica Landfill
 6025 Bowdye Rd.
 Robinsonville, MS 38854
 677-989-2783

176012

ORIGINAL

HEPACO	HAT 2	Francis	09:56:57 P	04:09:00	11/12/2002
HEPACO	HEPACO			GROSS Lbs:	74,420.00
				Tare Lbs:	30,380.00
HEPACO				Net Lbs:	44,040.00
2275 AIRPORT INTERCHANGE AVE.				All Adjustments:	0.00
				Adjusted Lbs:	44,040.00
MEMPHIS	TN	38312		Adjusted Tons:	22.02
****We will be closed Thursday November 28 in observance of Thanksgiving. We will reopen on Friday November 29 with normal hours.*****					

RED PANTHER/C/DALE
 Destination:
 WM TUNICA LANDFILL
 CU4849



CSTR1 \ CON./ SOIL/SAND/DEBRIS/SLAG	22.02	TON	\$21.00	\$462.42
TOTAL FEES				0.00
TOTAL TAX				0.00
TOTAL AMOUNT				\$462.42

WM THE TUNICA LANDFILL

A WASTE MANAGEMENT COMPANY
NON-HAZARDOUS WASTE MANIFEST

* 176012

GENERATOR

Name of Generator: Hepco, Inc.
 Address: 4000 N. Watkins
Memphis, TN 38127
 Phone No.: (901) ~~481~~ 345-6333
 Waste ID. Code No.: _____
 Special Handling Instructions and Additional Information: _____

Waste Generation Location: Red Panther Chemical
 Address: 550 Patton
Clarksdale, MS.
 Phone No.: (901) 481-2948

Trash Hunters of Tunica dba THE TUNICA LANDFILL Permit # SW-4720019458 Ticket Number: _____ Customer Number: _____

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (601) 961-5171

Waste Description	Actual Quantity	Units	Container Type
Non Regulated Solids		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Carton <input type="checkbox"/> Box <input type="checkbox"/> Bag <input type="checkbox"/> Other: _____ Volume: _____

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole As Agent for Red Panther PRP Group
 Generator Authorized Agent
Albert W. Cole Signature URS Shipment Date 11/2/02

TRANSPORTER

Truck No.: Bot 2
 Transporter Name: Bot's Trucking
 Address: Fox Point MS

Transporter Phone No.: (662) 453-6706
 Driver Name (print): Gene M. B...
 Vehicle License No./State: MS
 Vehicle Certification: _____

With my signature, I certify that the above material was picked up at the Generator site listed above.

With my signature, I certify that the above named material was delivered without incident to the destination listed below.

Gene M. B... Signature 11/2/02 Pickup Date
 Signature _____ Delivery Date _____

DESTINATION

Site Name: Trash Hunters of Tunica, Inc dba The Tunica Landfill Phone No.: 1-877-989-2783
 Site Address: 6035 Bowdre Road Robinsonville, MS 38864 Time: _____
 Discrepancies: _____

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

F.C. Beard Name (print) F.C. Beard Signature 11/2/02 Receipt Date

1 010677

TOTAL TO DATE: 22.02 TONS

Donal

Waste Management Of Tunica Inc.
The Tunica Landfill
6035 Bowdra Rd.
Robinsonville, MS 38664
677-289-2763

176066

ORIGINAL

MATTHEWS TRUCKING

2

Tammy

12:05:21 P

12:05:31

11/13/2002

HEPACO

HEPACO

GROSS Lbs:

81,860.00

Tare Lbs:

29,700.00

Net Lbs:

52,160.00

All Adjustments:

0.00

Adjusted Lbs:

52,160.00

HEPACO

2275 AIRPORT INTERCHANGE AVE.

Adjusted Tons:

26.08

MEMPHIS

TN

38912

****We will be closed Thursday November 28 in observance of
Thanksgiving. We will reopen on Friday November 29 with normal
hours.*****

RED PANTHER/C/DALE

Destination:

WM TUNICA LANDFILL

CU4849



000110

outside

CST21 \ CON./ SOIL/SAND/DEBRIS/SLAG

26.08

TON

\$21.00

\$547.68

TOTAL FEES

0.00

TOTAL TAX

0.00

TOTAL AMOUNT

\$547.68

NONHAZARDOUS WASTE

Name of Generator: URS
 Address: 400 W. 1st St.
Memphis, TN 38103
 Phone No.: (901) 345-6333
 Waste ID. Code No.: _____

Name of Shipper: _____
 Address: _____
Memphis, TN 38103
 Phone No.: (901) 481-2345

Special Handling Instructions and Additional Information: _____

Tech Notes of Tunnels on THE TUNNEL PERMIT # SW-872801458 Ticket Number: _____

Customer Number: _____

RESPONSIBLE AGENCY: Mississippi Dept. of Environmental Quality (601) 961-5171

Waste Description	Actual Quantity	Units	Container Type
<u>Non Regulated Solids</u>		<input type="checkbox"/> Pounds <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Cu. Yd. <input type="checkbox"/> Cu. Ft.	<input type="checkbox"/> Drum <input type="checkbox"/> Carton <input type="checkbox"/> Bag <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Box <input type="checkbox"/> Other Volume: _____

With my signature, I certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law or regulation, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Albert W. Cole - URS
As Agent for Red Mountain Site
 Generator Authorized Agent Signature Albert W. Cole - URS Shipment Date 11/10/02

TRANSPORTER

Truck No.: RM3
 Transporter Name: MATTHEWS & KEMP
 Address: SARAH MISS

Transporter Phone No.: (901) 489-6860
 Driver Name (print): Donald
 Vehicle License No./State: A4436
 Vehicle Certification: 490227

With my signature, I certify that the above material was picked up at the Generator site listed above.

With my signature, I certify that the above named material was delivered without incident to the destination listed above.

Donald
 Signature Pickup Date 11/13/02

Donald
 Signature

DESTINATION

Site Name: Red Mountain Site
 Site Address: 8035 Baydrea Road, Paducah, KY 40364

Phone No.: 1-877-999-9999

I hereby certify that the above named material has been disposed of in accordance with the following:

Name: _____
 Signature: _____
 TITLE: _____ GENERATOR TRANSPORTER SHIPPER CONTRACTOR
 TOTAL TO DATE: _____

DRIVER PLEASE SIGN HERE

Willie Boer

Waste Management Of Tunica Inc.
The Tunica Landfill
6026 Bowdre Rd.
Robinsonville, MS 38664
677-989-2782

176069

ORIGINAL

MATTHEWS TRUCKING	BAT4	Tanny	11:21:54 A	11:36:46	11/13/2002
HEPACO	HEPACO			GROSS Lbs:	85,460.00
				Tare Lbs:	33,880.00
HEPACO				Net Lbs:	51,580.00
2275 AIRPORT INTERCHANGE AVE.				All Adjustments:	0.00
				Adjusted Lbs:	51,580.00
MEMPHIS	TN	38312		Adjusted Tons:	25.79
****We will be closed Thursday November 20 in observance of Thanksgiving. We will reopen on Friday November 29 with normal hours.*****					

RED PANTHER/C/DALE

Destination:

WM TUNICA LANDFILL

CU4849



000110

OGAKOMA MISSISSIPPI

outside

CST21 \ CON./ SOIL/SAND/DEBRIS/SLAG	25.79	TON	\$21.00	\$541.59
TOTAL FEES				0.00
TOTAL TAX				0.00
TOTAL AMOUNT				\$541.59

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A186013
 Sample ID: SBP-01
 Project:
 Page 3

Analyte	Result	Units	Report	Dil	Date	Time	Analyst	Method	Batch
			Limit	Factor					
1,3,5-Trimethylbenzene	ND	mg/kg	0.00125	1	11/13/02	23:10	J. Adams	8260B	814
Vinyl chloride	ND	mg/kg	0.00125	1	11/13/02	23:10	J. Adams	8260B	814
Xylenes (Total)	ND	mg/kg	0.0012	1	11/13/02	23:10	J. Adams	8260B	814
Bromodichloromethane	ND	mg/kg	0.00125	1	11/13/02	23:10	J. Adams	8260B	814
Trichlorofluoromethane	ND	mg/kg	0.00125	1	11/13/02	23:10	J. Adams	8260B	814
PESTICIDE/PCB'S/HERBICIDES									
Aldrin	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
a-BHC	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
b-BHC	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
d-BHC	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
g-BHC, Lindane	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
4,4'-DDD	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
4,4'-DDE	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
4,4'-DDT	0.0080	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Dieldrin	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Endosulfan I	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
Endosulfan II	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Endosulfan sulfate	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Endrin	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Endrin aldehyde	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Endrin Ketone	ND	mg/kg	0.0033	1	11/14/02	19:39	Henderson	8081A	923
Heptachlor	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
Heptachlor epoxide	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
Methoxychlor	ND	mg/kg	0.0166	1	11/14/02	19:39	Henderson	8081A	923
Toxaphene	ND	mg/kg	0.166	1	11/14/02	19:39	Henderson	8081A	923
alpha-Chlordane	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
gamma-Chlordane	ND	mg/kg	0.0017	1	11/14/02	19:39	Henderson	8081A	923
METALS									
Arsenic	4.92	mg/kg	0.98	1	11/14/02	10:40	G. McCord	6010B	9783
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	85.2	%			11/13/02	14:30	K. Keller	CLP	9791

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 02-A186013

Sample ID: SBP-01

Project:

Page 4 .

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
OC Pest	29.9 gm	10.0 ml	11/13/02		M. Lax	3550
Volatile Organics	8.0 g	5.0 ml	11/12/02	8:40	K. Turner	5035

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	110.	56. - 155.
VOA Surr Toluene-d8	98.	79. - 130.
VOA Surr, 4-BFB	101.	62. - 155.
VOA Surr, DBFM	103.	74. - 127.
pest surr-TCMX	92.	48. - 132.
pest surr-DCB	88.	46. - 140.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 1

Laboratory Receipt Date: 11/13/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/kg	< 0.0020	0.0502	0.0500	100	63. - 133.	814	blank
Chlorobenzene	mg/kg	< 0.00200	0.0463	0.0500	93	65. - 129.	814	blank
1,1-Dichloroethene	mg/kg	< 0.00200	0.0536	0.0500	107	68. - 130.	814	blank
Toluene	mg/kg	< 0.0020	0.0478	0.0500	96	61. - 131.	814	blank
Trichloroethene	mg/kg	< 0.00200	0.0466	0.0500	93	62. - 131.	814	blank

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
PEST/PCB/HERB PARAMETERS								
Aldrin	mg/kg	< 0.0017	0.0143	0.0167	86	49. - 154.	923	02-A185648
g-BHC, Lindane	mg/kg	< 0.0017	0.0143	0.0167	86	46. - 159.	923	02-A185648
4,4' DDT	mg/kg	< 0.0033	0.0127	0.0167	76	44. - 163.	923	02-A185648
Dieldrin	mg/kg	< 0.0033	0.0150	0.0167	90	42. - 164.	923	02-A185648
Endrin	mg/kg	< 0.0033	0.0137	0.0167	82	53. - 149.	923	02-A185648
Heptachlor	mg/kg	< 0.0017	0.0153	0.0167	92	53. - 149.	923	02-A185648

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 2

Laboratory Receipt Date: 11/13/02

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for MS/MSD analysis for that method and the method requirements for MS/MSD analysis could not be met.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----

****METALS****

Arsenic	mg/kg	4.92	22.4	20.0	87	80 - 120	9783	Duplicate
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Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----

****VOA PARAMETERS****

Benzene	mg/kg	0.0502	0.0526	4.67	19.	814
Chlorobenzene	mg/kg	0.0463	0.0482	4.02	26.	814
1,1-Dichloroethene	mg/kg	0.0536	0.0541	0.93	18.	814
Toluene	mg/kg	0.0478	0.0497	3.90	28.	814
Trichloroethene	mg/kg	0.0466	0.0475	1.91	21.	814

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----

****PEST/PCB/HERB PARAMETERS****

Aldrin	mg/kg	0.0143	0.0143	0.00	25.	923
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Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 3

Laboratory Receipt Date: 11/13/02

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
g-BHC, Lindane	mg/kg	0.0143	0.0140	2.12	28.	923
4,4' DDT	mg/kg	0.0127	0.0127	0.00	36.	923
Dieldrin	mg/kg	0.0150	0.0147	2.02	24.	923
Endrin	mg/kg	0.0137	0.0176	24.92	25.	923
Heptachlor	mg/kg	0.0153	0.0147	4.00	30.	923

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
METALS						
Arsenic	mg/kg	22.4	22.8	1.77	20	9783

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Acetone	mg/kg	0.250	0.292	117	50 - 154	814
Benzene	mg/kg	0.0500	0.0551	110	77 - 123	814
Bromobenzene	mg/kg	0.0500	0.0555	111	72 - 121	814
Bromochloromethane	mg/kg	0.0500	0.0626	125 #	80 - 125	814
Bromoform	mg/kg	0.0500	0.0644	129 #	67 - 125	814
Bromomethane	mg/kg	0.0500	0.0536	107	47 - 156	814
2-Butanone	mg/kg	0.250	0.288	115	61 - 143	814
n-Butylbenzene	mg/kg	0.0500	0.0584	117	48 - 140	814
sec-Butylbenzene	mg/kg	0.0500	0.0578	116	68 - 126	814
t-Butylbenzene	mg/kg	0.0500	0.0581	116	72 - 124	814
Carbon disulfide	mg/kg	0.0500	0.0569	114	74 - 129	814
Carbon tetrachloride	mg/kg	0.0500	0.0550	110	74 - 129	814

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 4

Laboratory Receipt Date: 11/13/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Chlorobenzene	mg/kg	0.0500	0.0549	110	74 - 124	814
Chloroethane	mg/kg	0.0500	0.0534	107	67 - 164	814
Chloroform	mg/kg	0.0500	0.0529	106	79 - 121	814
Chloromethane	mg/kg	0.0500	0.0642	128	39 - 147	814
2-Chlorotoluene	mg/kg	0.0500	0.0554	111	67 - 127	814
4-Chlorotoluene	mg/kg	0.0500	0.0557	111	62 - 130	814
1,2-Dibromo-3-chloropropane	mg/kg	0.0500	0.0596	119	60 - 138	814
Dibromochloromethane	mg/kg	0.0500	0.0588	118	73 - 129	814
1,2-Dibromoethane	mg/kg	0.0500	0.0616	123	70 - 131	814
Dibromomethane	mg/kg	0.0500	0.0622	124	77 - 130	814
1,2-Dichlorobenzene	mg/kg	0.0500	0.0569	114	67 - 125	814
1,3-Dichlorobenzene	mg/kg	0.0500	0.0567	113	59 - 129	814
1,4-Dichlorobenzene	mg/kg	0.0500	0.0588	118	57 - 130	814
Dichlorodifluoromethane	mg/kg	0.0500	0.0681	136	44 - 148	814
1,1-Dichloroethane	mg/kg	0.0500	0.0563	113	76 - 126	814
1,2-Dichloroethane	mg/kg	0.0500	0.0561	112	71 - 133	814
1,1-Dichloroethene	mg/kg	0.0500	0.0558	112	79 - 122	814
cis-1,2-Dichloroethene	mg/kg	0.0500	0.0606	121	77 - 125	814
trans-1,2-Dichloroethene	mg/kg	0.0500	0.0564	113	76 - 124	814
1,2-Dichloropropane	mg/kg	0.0500	0.0564	113	76 - 127	814
1,3-Dichloropropane	mg/kg	0.0500	0.0582	116	78 - 125	814
2,2-Dichloropropane	mg/kg	0.0500	0.0618	124	68 - 129	814
1,1-Dichloropropene	mg/kg	0.0500	0.0545	109	80 - 120	814
cis-1,3-Dichloropropene	mg/kg	0.0500	0.0556	111	82 - 120	814
trans-1,3-Dichloropropene	mg/kg	0.0500	0.0566	113	78 - 123	814
Ethylbenzene	mg/kg	0.0500	0.0564	113	73 - 134	814
Hexachlorobutadiene	mg/kg	0.0500	0.0611	122	51 - 136	814
2-Hexanone	mg/kg	0.250	0.321	128	65 - 143	814
Isopropylbenzene	mg/kg	0.0500	0.0554	111	72 - 124	814
4-Isopropyltoluene	mg/kg	0.0500	0.0565	113	62 - 129	814
4-Methyl-2-pentanone	mg/kg	0.250	0.302	121	68 - 142	814
Methylene chloride	mg/kg	0.0500	0.0558	112	66 - 136	814

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Receipt Date: 11/13/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Naphthalene	mg/kg	0.0500	0.0600	120	54 - 135	814
n-Propylbenzene	mg/kg	0.0500	0.0548	110	65 - 129	814
Styrene	mg/kg	0.0500	0.0564	113	71 - 126	814
1,1,1,2-Tetrachloroethane	mg/kg	0.0500	0.0562	112	77 - 127	814
1,1,2,2-Tetrachloroethane	mg/kg	0.0500	0.0627	125	67 - 139	814
Tetrachloroethene	mg/kg	0.0500	0.0562	112	67 - 127	814
Toluene	mg/kg	0.0500	0.0532	106	76 - 120	814
1,2,3-Trichlorobenzene	mg/kg	0.0500	0.0583	117	46 - 140	814
1,2,4-Trichlorobenzene	mg/kg	0.0500	0.0617	123	37 - 145	814
1,1,1-Trichloroethane	mg/kg	0.0500	0.0545	109	75 - 128	814
1,1,2-Trichloroethane	mg/kg	0.0500	0.0564	113	73 - 131	814
Trichloroethene	mg/kg	0.0500	0.0540	108	78 - 121	814
1,2,3-Trichloropropane	mg/kg	0.0500	0.0636	127	66 - 138	814
1,2,4-Trimethylbenzene	mg/kg	0.0500	0.0557	111	63 - 126	814
1,3,5-Trimethylbenzene	mg/kg	0.0500	0.0563	113	66 - 128	814
Vinyl chloride	mg/kg	0.0500	0.0590	118	67 - 131	814
Xylenes (Total)	mg/kg	0.150	0.166	111	75 - 123	814
Bromodichloromethane	mg/kg	0.0500	0.0564	113	81 - 125	814
Trichlorofluoromethane	mg/kg	0.0500	0.0564	113	37 - 134	814

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
PEST/PCB/HERB PARAMETERS						
Aldrin	mg/kg	0.0167	0.0153	92	61 - 151	923
a-BHC	mg/kg	0.0167	0.0160	96	60 - 154	923
b-BHC	mg/kg	0.0167	0.0157	94	62 - 146	923
d-BHC	mg/kg	0.0167	0.0150	90	14 - 174	923
g-BHC, Lindane	mg/kg	0.0167	0.0150	90	59 - 153	923
1,4'-DDD	mg/kg	0.0167	0.0157	94	60 - 154	923

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Receipt Date: 11/13/02

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
4,4'-DDE	mg/kg	0.0167	0.0150	90	59 - 150	923
4,4'-DDT	mg/kg	0.0167	0.0147	88	55 - 148	923
Dieldrin	mg/kg	0.0167	0.0160	96	64 - 146	923
Endosulfan I	mg/kg	0.0167	0.0140	84	55 - 152	923
Endosulfan II	mg/kg	0.0167	0.0147	88	56 - 150	923
Endosulfan sulfate	mg/kg	0.0167	0.0180	108	56 - 150	923
Endrin	mg/kg	0.0167	0.0160	96	61 - 151	923
Endrin aldehyde	mg/kg	0.0167	0.0130	78	62 - 151	923
Endrin Ketone	mg/kg	0.0167	0.0147	88	63 - 145	923
Heptachlor	mg/kg	0.0167	0.0163	98	61 - 147	923
Heptachlor epoxide	mg/kg	0.0167	0.0147	88	61 - 147	923
Methoxychlor	mg/kg	0.0167	0.0196	117	57 - 147	923
Toxaphene	mg/kg	0.333	0.306	92	64 - 154	923
alpha-Chlordane	mg/kg	0.0167	0.0140	84	64 - 141	923
gamma-Chlordane	mg/kg	0.0167	0.0147	88	62 - 145	923

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Arsenic	mg/kg	20.0	18.6	93	80 - 120	9783

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						

Project QC continued

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Receipt Date: 11/13/02

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed

VOA PARAMETERS					
Acetone	< 0.0500	mg/kg	814	11/13/02	16:12
Benzene	< 0.0020	mg/kg	814	11/13/02	16:12
Bromobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Bromochloromethane	< 0.00200	mg/kg	814	11/13/02	16:12
Bromoform	< 0.00200	mg/kg	814	11/13/02	16:12
Bromomethane	< 0.00200	mg/kg	814	11/13/02	16:12
2-Butanone	< 0.0500	mg/kg	814	11/13/02	16:12
n-Butylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
sec-Butylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
t-Butylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Carbon disulfide	< 0.00200	mg/kg	814	11/13/02	16:12
Carbon tetrachloride	< 0.00200	mg/kg	814	11/13/02	16:12
Chlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Chloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
Chloroform	< 0.00200	mg/kg	814	11/13/02	16:12
Chloromethane	< 0.00200	mg/kg	814	11/13/02	16:12
2-Chlorotoluene	< 0.00200	mg/kg	814	11/13/02	16:12
4-Chlorotoluene	< 0.00200	mg/kg	814	11/13/02	16:12
1,2-Dibromo-3-chloropropane	< 0.0100	mg/kg	814	11/13/02	16:12
Dibromochloromethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,2-Dibromoethane	< 0.00200	mg/kg	814	11/13/02	16:12
Dibromomethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,2-Dichlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
1,3-Dichlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
1,4-Dichlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Dichlorodifluoromethane	< 0.00300	mg/kg	814	11/13/02	16:12
1,1-Dichloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,2-Dichloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,1-Dichloroethene	< 0.00200	mg/kg	814	11/13/02	16:12
cis-1,2-Dichloroethene	< 0.00200	mg/kg	814	11/13/02	16:12

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Receipt Date: 11/13/02

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
trans-1,2-Dichloroethene	< 0.00200	mg/kg	814	11/13/02	16:12
1,2-Dichloropropane	< 0.00200	mg/kg	814	11/13/02	16:12
1,3-Dichloropropane	< 0.00200	mg/kg	814	11/13/02	16:12
2,2-Dichloropropane	< 0.00200	mg/kg	814	11/13/02	16:12
1,1-Dichloropropene	< 0.00200	mg/kg	814	11/13/02	16:12
cis-1,3-Dichloropropene	< 0.00200	mg/kg	814	11/13/02	16:12
trans-1,3-Dichloropropene	< 0.00200	mg/kg	814	11/13/02	16:12
Ethylbenzene	< 0.0020	mg/kg	814	11/13/02	16:12
Hexachlorobutadiene	< 0.00200	mg/kg	814	11/13/02	16:12
2-Hexanone	< 0.0100	mg/kg	814	11/13/02	16:12
Isopropylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
4-Isopropyltoluene	< 0.00200	mg/kg	814	11/13/02	16:12
4-Methyl-2-pentanone	< 0.0100	mg/kg	814	11/13/02	16:12
Methylene chloride	0.00100	mg/kg	814	11/13/02	16:12
Naphthalene	< 0.00500	mg/kg	814	11/13/02	16:12
n-Propylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Styrene	< 0.00200	mg/kg	814	11/13/02	16:12
1,1,1,2-Tetrachloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,1,2,2-Tetrachloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
Tetrachloroethene	< 0.00200	mg/kg	814	11/13/02	16:12
Toluene	< 0.0020	mg/kg	814	11/13/02	16:12
1,2,3-Trichlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
1,2,4-Trichlorobenzene	< 0.00200	mg/kg	814	11/13/02	16:12
1,1,1-Trichloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
1,1,2-Trichloroethane	< 0.00200	mg/kg	814	11/13/02	16:12
Trichloroethene	< 0.00200	mg/kg	814	11/13/02	16:12
1,2,3-Trichloropropane	< 0.00200	mg/kg	814	11/13/02	16:12
1,2,4-Trimethylbenzene	< 0.0020	mg/kg	814	11/13/02	16:12
1,3,5-Trimethylbenzene	< 0.00200	mg/kg	814	11/13/02	16:12
Vinyl chloride	< 0.00200	mg/kg	814	11/13/02	16:12
Xylenes (Total)	< 0.0020	mg/kg	814	11/13/02	16:12
Bromodichloromethane	< 0.00200	mg/kg	814	11/13/02	16:12

Project QC continued . . .

TestAmerica

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PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Receipt Date: 11/13/02

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Trichlorofluoromethane	< 0.00200	mg/kg	814	11/13/02	16:12
VOA Surr 1,2-DCA-d4	113.	µ Rec	814	11/13/02	16:12
VOA Surr Toluene-d8	101.	µ Rec	814	11/13/02	16:12
VOA Surr, 4-BFB	102.	µ Rec	814	11/13/02	16:12
VOA Surr, DBFM	100.	µ Rec	814	11/13/02	16:12

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
PEST/PCB/HERB PARAMETERS					
Aldrin	< 0.0017	mg/kg	923	11/14/02	15:05
a-BHC	< 0.0017	mg/kg	923	11/14/02	15:05
b-BHC	< 0.0017	mg/kg	923	11/14/02	15:05
d-BHC	< 0.0017	mg/kg	923	11/14/02	15:05
g-BHC, Lindane	< 0.0017	mg/kg	923	11/14/02	15:05
4,4'-DDD	< 0.0033	mg/kg	923	11/14/02	15:05
4,4'-DDE	< 0.0033	mg/kg	923	11/14/02	15:05
4,4'-DDT	< 0.0033	mg/kg	923	11/14/02	15:05
Dieldrin	< 0.0033	mg/kg	923	11/14/02	15:05
Endosulfan I	< 0.0017	mg/kg	923	11/14/02	15:05
Endosulfan II	< 0.0033	mg/kg	923	11/14/02	15:05
Endosulfan sulfate	< 0.0033	mg/kg	923	11/14/02	15:05
Endrin	< 0.0033	mg/kg	923	11/14/02	15:05
Endrin aldehyde	< 0.0033	mg/kg	923	11/14/02	15:05
Endrin Ketone	< 0.0033	mg/kg	923	11/14/02	15:05
Heptachlor	< 0.0017	mg/kg	923	11/14/02	15:05
Heptachlor epoxide	< 0.0017	mg/kg	923	11/14/02	15:05
Methoxychlor	< 0.0166	mg/kg	923	11/14/02	15:05
Toxaphene	< 0.166	mg/kg	923	11/14/02	15:05
alpha-Chlordane	< 0.0017	mg/kg	923	11/14/02	15:05

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 10

Laboratory Receipt Date: 11/13/02

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
gamma-Chlordane	< 0.0017	mg/kg	923	11/14/02	15:05
pest surr-TCMX	106.	% Rec	923	11/14/02	15:05
pest surr-DCB	100.	% Rec	923	11/14/02	15:05

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****METALS****

Arsenic	< 0.88	mg/kg	9783	11/14/02	10:40
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= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 308935

Appendix I
Storm Water Analytical Data

Attention: Mr. Brent Jacobs
URS - Atlanta
235 Peachtree Street, N.E.
North Tower, Suite 2000
Atlanta, GA 30303

Report No. 166978



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Report Number **166978**

Project: Red Panther, Project#37778-010-1008

Prepared For:
URS - Atlanta
235 Peachtree Street, N.E.
North Tower, Suite 2000
Atlanta, GA 30303

Attention: Mr. Brent Jacobs

November 22, 2002
P.O. No. 37778-010-1008

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Project Manager

Quality Assurance



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Definitions of Terms

- B** - Found in Laboratory Blank
- BDL** - Below Detection Limit
- C** - Co-eluting Isomer Present
- E** - Estimated Concentration
- F** - Positively Identified Below the Reporting Limit
- H** - Results Within Limits, See Attached
- J** - Estimated Concentration
- M** - A Matrix Effect was Determined to be Present in the Sample
- ND** - None Detected
- R** - The Data is Unusable Due to the Inability to Analyze the Sample
and Meet the Quality Control Criteria
- TIC** - Tentatively Identified Compound
- U** - Not Detected at the Level Reported
- CFU** - Colony Forming Units

NOTE: Unless otherwise noted, all results are reported on an as received basis.

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Georgia (812); NELAC (E87315) scope: CWA, SDWA, RCRA expires June 30, 2003; Arkansas; California (01160CA); Connecticut (PH-0250); Florida (E87315);
Kansas (E-10334); Kentucky (90128); Louisiana (02089); New Jersey (GA001); New York (11762); North Carolina (381); Oklahoma (9907); South Carolina
(98011); Tennessee (02994); USDA Soil Import License (S-36027). For more information visit our web site at: asi-lab.com



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Laboratory Report

URS - Atlanta
235 Peachtree Street, N.E.
North Tower, Suite 2000
Atlanta, GA 30303

Attention: Mr. Brent Jacobs
Report No. 166978-1

November 22, 2002

Sample Description

URS - Atlanta

Wastewater, Grab, Red Panther, Project#37778-010-1008, Ditch Water, 11/20/2002, 14:55, received 11/21/2002

Analytical Method	Analyte	Result	Detection Limit	Units
Metals				
EPA 6010B	Total Arsenic (As)	3.6	0.03	mg/L
Pesticides				
EPA 8081A	Toxaphene	BDL	2.0	ug/L
EPA 8081A	Dieldrin	1.2	0.1	ug/L

Organochlorine Pesticides by Method EPA 8081

Spike Recovery

Batch # 85951

Matrix : AQUEOUS

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC/LCD RPD	%Recovery Range	RPD Range
4,4'-DDT	73	70	4	58 - 136	0 - 36
Endrin	69	71	3	55 - 133	0 - 35
Dieldrin	94	97	3	66 - 152	0 - 36
Aldrin	28	31	10	42 - 115	0 - 40
Note : low in lcs/lcsd but within 3sd					
Heptachlor	61	68	11	56 - 135	0 - 30
BHC-gamma (Lindane)	61	71	15	55 - 139	0 - 32

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS/MSD RPD	%Recovery Range	RPD Range
4,4'-DDT	63	75	17	42 - 118	0 - 44
Endrin	74	87	16	47 - 120	0 - 45
Dieldrin	100	117	16	54 - 140	0 - 45
Aldrin	30	37	21	26 - 105	0 - 44
Note : low in lcs/lcsd but within 3sd					
Heptachlor	68	83	20	46 - 123	0 - 47
BHC-gamma (Lindane)	69	83	18	42 - 122	0 - 46

**Organochlorine Pesticides by Method EPA 8081
Surrogate Recovery**

Batch # 85951**Matrix : AQUEOUS****% Recovery Objectives**

Surrogate #	Surrogate Name	Surrogate Range
S1	Tetrachloro-m-xylene	14 - 147
S2	Decachlorobiphenyl	10 - 136

Sample	File	S1	S2	S3	S4	S5	S6
85951BLK	112102014F	76	50				
85951LCS	112102015F	52	58				
85951LCSD	112102016F	65	38				
165166-1MS	112102017F	61	29				
165166-1MSD	112102018F	74	35				
166978-1	112102019F	84	53				
165166-1	112102020F	74	35				

Organochlorine Pesticides by Method EPA 8081
Blank Results Information**Batch # 85951****Matrix : AQUEOUS**

Analyte	Blank Hits	Lowest Sample Det. Limit	Units
Toxaphene	None	2.0	ug/L
Dieldrin	None	0.1	ug/L

Organochlorine Pesticides by Method EPA 8081
Sample Batch Information**Batch # 85951****Matrix : AQUEOUS**

Sample ID	Preparation			Notes	Analysis			Inst #
	Date	Time	By		Date	Time	By	
85951BLK	11/21/02	1130	AK		11/22/02	0003	DEB	GC6
85951LCS	11/21/02	1130	AK		11/22/02	0028	DEB	GC6
85951LCSD	11/21/02	1130	AK		11/22/02	0054	DEB	GC6
165166-1MS	11/21/02	1230	AK		11/22/02	0120	DEB	GC6
165166-1MSD	11/21/02	1230	AK		11/22/02	0146	DEB	GC6
166978-1	11/21/02	1130	AK		11/22/02	0212	DEB	GC6
165166-1	11/21/02	1230	AK		11/22/02	0238	DEB	GC6

**Single Analyte Data
Blank Results Information**

Batch Number	Analyte	Analysis Method	Preparation Method	Units	Blank Result	Matrix
84111	As	EPA 6010		mg/L	< 0.0100	AQUEOUS

Lab Control Information

Batch Number	Analyte	Analysis Method	LC % Rec.	LCD % Rec.	LC/LCD RPD	%Recovery Range	RPD Range
84111	As	EPA 6010	108	103	5	90 - 117	0 - 5

Matrix Spike Information

Batch Number	Analyte	Analysis Method	MS % Rec.	MSD % Rec.	MS/MSD RPD	%Recovery Range	RPD Range
84111	As	EPA 6010	107	106	1	76 - 124	0 - 20

Post Digestion Spike Information

Batch Number	Analyte	Analysis Method	PDS %Rec	%Recovery Range
84111	As	EPA 6010	106	76 - 124

Single Analyte Data
Sample Batch Information
Analysis : As

Batch # 84111

Matrix : AQUEOUS

Sample ID	Tag	Preparation				Analysis			
		Date	Time	By	Notes	Date	Time	By	Inst
84111LCS		11/20/02	0925	ALH	TRACE	11/21/02	1222	MLR	ICP2
84111LCSD		11/20/02	0925	ALH	TRACE	11/21/02	1227	MLR	ICP2
84111BLK		11/20/02	0925	ALH	TRACE	11/21/02	1230	MLR	ICP2
166786-24MS		11/20/02	0925	ALH	TRACE	11/21/02	1233	MLR	ICP2
166786-24MSD		11/20/02	0925	ALH	TRACE	11/21/02	1237	MLR	ICP2
166786-24PDS		11/20/02	0925	ALH	TRACE	11/21/02	1240	MLR	ICP2
166786-28DUP		11/20/02	0925	ALH	TRACE	11/21/02	1243	MLR	ICP2
166786-24		11/20/02	0925	ALH	TRACE	11/21/02	1246	MLR	ICP2
166786-28		11/20/02	0925	ALH	TRACE	11/21/02	1249	MLR	ICP2
166786-14		11/20/02	0925	ALH	TRACE	11/21/02	1253	MLR	ICP2
166786-16		11/20/02	0925	ALH	TRACE	11/21/02	1305	MLR	ICP2
166786-18		11/20/02	0925	ALH	TRACE	11/21/02	1309	MLR	ICP2
166786-20		11/20/02	0925	ALH	TRACE	11/21/02	1312	MLR	ICP2
166786-22		11/20/02	0925	ALH	TRACE	11/21/02	1315	MLR	ICP2
166786-26		11/20/02	0925	ALH	TRACE	11/21/02	1318	MLR	ICP2
166786-30		11/20/02	0925	ALH	NEAT	11/21/02	1322	MLR	ICP2
166786-32		11/20/02	0925	ALH	TRACE	11/21/02	1325	MLR	ICP2
BLK 11-21		11/21/02	0740	JAM	TRACE	11/21/02	1500	MLR	ICP2
166849-2		11/21/02	0740	JAM	TRACE	11/21/02	1503	MLR	ICP2
166849-3		11/21/02	0740	JAM	TRACE	11/21/02	1506	MLR	ICP2
166849-4		11/21/02	0740	JAM	TRACE	11/21/02	1510	MLR	ICP2
166849-5		11/21/02	0740	JAM	TRACE	11/21/02	1513	MLR	ICP2
166849-6		11/21/02	0740	JAM	TRACE	11/21/02	1516	MLR	ICP2
166849-7		11/21/02	0740	JAM	TRACE	11/21/02	1519	MLR	ICP2
166849-8		11/21/02	0740	JAM	TRACE	11/21/02	1522	MLR	ICP2
166849-9		11/21/02	0740	JAM	TRACE	11/21/02	1526	MLR	ICP2
166849-1		11/21/02	0740	JAM	TRACE	11/21/02	1529	MLR	ICP2
166978-1		11/21/02	1040	JAM	TRACE	11/21/02	1542	MLR	ICP2
166786-16RA		11/20/02	0925	ALH	TRACE	11/21/02	1659	FBS	ICP3
166786-18RA		11/20/02	0925	ALH	TRACE	11/21/02	1703	FBS	ICP3
166786-20RA		11/20/02	0925	ALH	TRACE	11/21/02	1706	FBS	ICP3
166786-22RA		11/20/02	0925	ALH	TRACE	11/21/02	1716	FBS	ICP3
166786-26RA		11/20/02	0925	ALH	TRACE	11/21/02	1719	FBS	ICP3
166849-2RA		11/21/02	0740	JAM	TRACE	11/21/02	1723	FBS	ICP3
166849-3RA		11/21/02	0740	JAM	TRACE	11/21/02	1726	FBS	ICP3
166849-4RA		11/21/02	0740	JAM	TRACE	11/21/02	1729	FBS	ICP3
166849-6RA		11/21/02	0740	JAM	TRACE	11/21/02	1733	FBS	ICP3

Single Analyte Data
Sample Batch Information
Analysis : As

Batch # 84111

Matrix : AQUEOUS

Sample ID	Tag	Preparation			Notes	Analysis			Inst
		Date	Time	By		Date	Time	By	
166849-7RA		11/21/02	0740	JAM	TRACE	11/21/02	1736	FBS	ICP3
166849-8RA		11/21/02	0740	JAM	TRACE	11/21/02	1739	FBS	ICP3
166849-9RA		11/21/02	0740	JAM	TRACE	11/21/02	1743	FBS	ICP3



~~XXXXXXXXXXXXXXXXXXXX~~

8 54 ASI Lab 166978

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: URS CORP (DAMES + MOORE) Client #:
Address: ON - FILE
City/State/Zip Code:
Project Manager: BRENT JACOBS
Telephone Number: (678) 356-8205 Fax: (678) 356-0055
Sampler Name: (Print Name) STEVEN SUSTON
Sampler Signature: [Signature]

Project Name: RED PANTHER
Project #: 37778-010-1008
Site/Location ID: RED PANTHER State: MS
Report To: BRENT JACOBS
Invoice To: BRENT JACOBS
Quote #: _____ PO#: _____

TAT Standard ← Rush (surcharges may apply) 24hr Date Needed: <u>NOON 11/22</u> Fax Results: <u>Ⓞ N</u> <u>DAVE MOORE/STEVE SUSTON</u> <u>(662) 621-9838</u> SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	Preservation & # of Containers								Analyze For	QC Deliverables None Level 2 (Setch QC) Level 3 Level 4 Other: _____	REMARKS	
						HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)					
DITCH WATER	11-20-02	1455	G	-	WW												* CONTACT SUE BARTO @ ASI OR STEVE SUSTON (404) 822-8483 w/ Questions
Special Instructions: <u>* Must have FAXED Results by Noon 11/22/02 or sooner</u> <u>FAX ASAP to DAVE MOORE/STEVE SUSTON @ (662) 621-9838</u>												LABORATORY COMMENTS Init Lab Temp: Rec Lab Temp: Custody Seals: Y N N/A Bottles Supplied by Test America: Y N Method of Shipment:					
Relinquished By: <u>[Signature]</u>	Date: <u>11-20-02</u>	Time: <u>1600</u>	Received By:		Date:	Time:											
Relinquished By:	Date:	Time:	Received By:		Date:	Time:											
Relinquished By:	Date:	Time:	Received By:		Date:	Time:											

AD 11/21/02 @ 8:30 Felix 8376 1682 0836 Col: Yes
Temp: 50 @ 8:30 Ice: Yes
pH: Labeled as per Lab. 19



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Services
110 Technology Parkway, Norcross, GA 30092
(770)734-4200 FAX (770)734-4201

LOG-IN CHECKLIST

Attn: Mr. Brent Jacobs

Client: URS - ATLANTA GA ATLANTA
Project: Red Panther, Project#37778-010-1008
Recvd : 11/21/2002

Logged By: CF

NPDES:
Work Order: 166978

OBSERVATIONS

#Samples: 1 #Containers: 3
pH: labeled pres Temp(C): 5 Ice: Yes Custody Seal(s): Intact

CHECKLIST ITEMS**

- | | |
|--|-----|
| 1. COC included with Samples | Yes |
| 2. Chain of Custody Complete | Yes |
| 3. Sample Container(s) Intact | Yes |
| 4. Sample Container(s) Match COC | Yes |
| 5. Params Designated by Client on COC | Yes |
| 6. Temperature in Compliance | Yes |
| 7. Sufficient Sample Volume for Analysis | Yes |
| 8. Zero HeadSpace Maintained for VOA Analyses | N/A |
| 9. Samples properly preserved | Yes |
| 10. Samples Received within Allowable Hold Times | Yes |

**Attention: Mr. Brent Jacobs
URS - Atlanta
235 Peachtree Street, N.E.
North Tower, Suite 2000
Atlanta, GA 30303**

Report No. 167175



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Report-Number **167175**

Project: Red Panther Clarksdale MS, Project#37778-010

Prepared For:

URS - Atlanta

235 Peachtree Street, N.E.

North Tower, Suite 2000

Atlanta, GA 30303

Attention: Mr. Brent Jacobs

December 6, 2002

P.O. No. 37778-010

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Project Manager

Quality Assurance



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Definitions of Terms

- B** - Found in Laboratory Blank
- BDL** - Below Detection Limit
- C** - Co-eluting Isomer Present
- E** - Estimated Concentration
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- J** - Estimated Concentration
- M** - A Matrix Effect was Determined to be Present in the Sample
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- R** - The Data is Unusable Due to the Inability to Analyze the Sample
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(98011); Tennessee (02994); USDA Soil Import License (S-38027). For more information visit our web site at: asi-lab.com



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Laboratory Report

URS - Atlanta
235 Peachtree Street, N.E.
North Tower, Suite 2000
Atlanta, GA 30303

Attention: Mr. Brent Jacobs
Report No. 167175-1

December 6, 2002

Sample Description

URS - Atlanta

Storm Water, Grab, Red Panther Clarksdale MS, Project#37778-010, SW-1, 11/25/2002, 13:30, received 11/26/2002

Analytical

Method	Analyte	Result	Detection Limit	Units
--------	---------	--------	-----------------	-------

Target Analyte List - Metals

Metals

EPA 6010B	Total Aluminum (Al)	1.9	0.2	mg/L
EPA 6010B	Total Antimony (Sb)	BDL	0.05	mg/L
EPA 6010B	Total Arsenic (As)	0.62	0.02	mg/L
EPA 6010B	Total Barium (Ba)	0.10	0.01	mg/L
EPA 6010B	Total Beryllium (Be)	BDL	0.005	mg/L
EPA 6010B	Total Cadmium (Cd)	BDL	0.005	mg/L
EPA 6010B	Total Calcium (Ca)	35	0.05	mg/L
EPA 6010B	Total Chromium (Cr)	BDL	0.01	mg/L
EPA 6010B	Total Cobalt (Co)	BDL	0.05	mg/L
EPA 6010B	Total Copper (Cu)	BDL	0.02	mg/L
EPA 6010B	Total Iron (Fe)	1.7	0.1	mg/L
EPA 7421	Total Lead (Pb)	BDL	0.003	mg/L
EPA 6010B	Total Magnesium (Mg)	5.8	0.05	mg/L
EPA 6010B	Total Manganese (Mn)	0.33	0.015	mg/L
EPA 7470A	Total Mercury (Hg)	BDL	0.0002	mg/L
EPA 6010B	Total Nickel (Ni)	BDL	0.02	mg/L
EPA 6010B	Total Potassium (K)	2.7	0.2	mg/L
EPA 7740	Total Selenium (Se)	BDL	0.005	mg/L
EPA 6010B	Total Silver (Ag)	BDL	0.01	mg/L
EPA 6010B	Total Sodium (Na)	31	0.05	mg/L
EPA 7841	Total Thallium (Tl)	BDL	0.01	mg/L
EPA 6010B	Total Vanadium (V)	BDL	0.05	mg/L
EPA 6010B	Total Zinc (Zn)	0.06	0.02	mg/L

Pesticides

BDL - Below Detection Limit

Page 1 of 2

Sample Description
URS - Atlanta

Storm Water, Grab, Red Panther Clarksdale MS, Project#37778-010, SW-1, 11/25/2002, 13:30, received 11/26/2002

Analytical Method	Analyte	Result	Detection Limit	Units
EPA 8081A	Aldrin	BDL	0.1	ug/L
EPA 8081A	BHC-alpha	12.2	0.1	ug/L
EPA 8081A	BHC-beta	5.8	0.1	ug/L
EPA 8081A	BHC-delta	4.6	0.1	ug/L
EPA 8081A	BHC-gamma (Lindane)	3.6	0.1	ug/L
EPA 8081A	Chlordane	BDL	0.5	ug/L
EPA 8081A	4,4'-DDD	BDL	0.2	ug/L
EPA 8081A	4,4'-DDE	BDL	0.2	ug/L
EPA 8081A	4,4'-DDT	7.8	0.2	ug/L
EPA 8081A	Dieldrin	BDL	0.1	ug/L
EPA 8081A	Endosulfan I	BDL	0.5	ug/L
EPA 8081A	Endosulfan II	BDL	0.5	ug/L
EPA 8081A	Endosulfan sulfate	BDL	0.5	ug/L
EPA 8081A	Endrin	12.0	0.2	ug/L
EPA 8081A	Endrin aldehyde	BDL	0.2	ug/L
EPA 8081A	Heptachlor	BDL	0.1	ug/L
EPA 8081A	Heptachlor epoxide	BDL	0.1	ug/L
EPA 8081A	Methoxychlor	BDL	0.3	ug/L
EPA 8081A	Toxaphene	184	5.0	ug/L
Chlorinated Herbicides				
EPA 8151A	2,4-D	BDL	5.0	ug/L
EPA 8151A	2,4-DB	BDL	0.91	ug/L
EPA 8151A	2,4,5-T	BDL	0.20	ug/L
EPA 8151A	2,4,5-TP (Silvex)	BDL	10	ug/L
EPA 8151A	Dalapon	BDL	5.8	ug/L
EPA 8151A	Dicamba	BDL	0.80	ug/L
EPA 8151A	Dichloroprop	BDL	0.65	ug/L
EPA 8151A	Dinoseb	BDL	3.9	ug/L
EPA 8151A	MCPA	BDL	250	ug/L
EPA 8151A	MCPP	BDL	190	ug/L

Chlorinated Herbicides by Method EPA 8151
Spike Recovery

Batch # 86079

Matrix : AQUEOUS

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC/LCD RPD	%Recovery Range	RPD Range
2,4,5-T	113	135	18	42 - 116	0 - 40
2,4,5-TP (Silvex)	99	121	20	43 - 103	0 - 45
2,4-D	108	132	20	37 - 115	0 - 40

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS/MSD RPD	%Recovery Range	RPD Range
2,4,5-T	100	93	7	47 - 110	0 - 26
2,4,5-TP (Silvex)	88	81	8	44 - 103	0 - 41
2,4-D	99	94	5	40 - 113	0 - 16

Chlorinated Herbicides by Method EPA 8151
Surrogate Recovery

Batch # 86079

Matrix : AQUEOUS

% Recovery Objectives

Surrogate #	Surrogate Name	Surrogate Range
S1	Dichloroacetic acid	10 - 144

Sample	File	S1	S2	S3	S4	S5	S6
86079BLK	112702B028F	63					
86079LCS	112702B029F	63					
86079LCSD	112702B030F	83					
167064-1MS	112702B031F	58					
167064-1MSD	112702B032F	73					
167064-1	112702B033F	74					
167064-3	112702B034F	67					
167064-4	112702B035F	70					
167064-6	112702B038F	61					
167064-8	112702B039F	48					
167064-10	112702B040F	78					
167064-12	112702B041F	47					
167064-13	112702B042F	135					
167064-15	112702B043F	45					
DAYBLK11/27	112702B045F	124					
167175-1	112702B098F	90					
167193-3	120302005F	70					
167193-7	120302006F	75					
167193-11	120302007F	70					
167193-11DUP	120302008F	76					
167193-12	120302009F	37					
167193-14	120302010F	62					
167193-18	120302011F	73					

Chlorinated Herbicides by Method EPA 8151
Blank Results Information

Batch # 86079

Matrix : AQUEOUS

Analyte	Blank Hits	Lowest Sample Det. Limit	Units
2,4-D	None	5.0	ug/L
2,4-DB	None	0.91	ug/L
2,4,5-T	None	0.20	ug/L
2,4,5-TP	None	10	ug/L
Dalapon	None	5.8	ug/L
Dicamba	None	0.80	ug/L
Dichloroprop	None	0.65	ug/L
Dinoseb	None	3.9	ug/L
MCPA	None	250	ug/L
MCPP	None	190	ug/L

Chlorinated Herbicides by Method EPA 8151
Sample Batch Information

Batch # 86079

Matrix : AQUEOUS

Sample ID	Preparation			Notes	Analysis			Inst #
	Date	Time	By		Date	Time	By	
86079BLK	11/26/02	1700	MP		11/28/02	0343	JG	GC1
86079LCS	11/26/02	1700	MP		11/28/02	0402	JG	GC1
86079LCSD	11/26/02	1700	MP		11/28/02	0422	JG	GC1
167064-1MS	11/26/02	1700	MP		11/28/02	0442	JG	GC1
167064-1MSD	11/26/02	1700	MP		11/28/02	0501	JG	GC1
167064-1	11/26/02	1700	MP		11/28/02	0521	JG	GC1
167064-3	11/26/02	1700	MP		11/28/02	0540	JG	GC1
167064-4	11/26/02	1700	MP		11/28/02	0600	JG	GC1
167064-6	11/26/02	1700	MP		11/28/02	0658	JG	GC1
167064-8	11/26/02	1700	MP		11/28/02	0718	JG	GC1
167064-10	11/26/02	1700	MP		11/28/02	0737	JG	GC1
167064-12	11/26/02	1700	MP		11/28/02	0757	JG	GC1
167064-13	11/26/02	1700	MP		11/28/02	0817	JG	GC1
167064-15	11/26/02	1700	MP		11/28/02	0836	JG	GC1
DAYBLK11/27	11/27/02	1200	MP		11/28/02	0915	JG	GC1
167175-1	11/27/02	1200	MP		11/28/02	0935	JG	GC1
167193-3	11/27/02	1200	MP		12/03/02	1532	JG	GC1
167193-7	11/27/02	1200	MP		12/03/02	1552	JG	GC1
167193-11	11/27/02	1200	MP		12/03/02	1612	JG	GC1
167193-11DUP	11/27/02	1200	MP		12/03/02	1632	JG	GC1
167193-12	11/27/02	1200	MP		12/03/02	1651	JG	GC1
167193-14	11/27/02	1200	MP		12/03/02	1711	JG	GC1
167193-18	11/27/02	1200	MP		12/03/02	1731	JG	GC1

**Organochlorine Pesticides by Method EPA 8081
Spike Recovery**

Batch # 86111

Matrix : AQUEOUS

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC/LCD RPD	%Recovery Range	RPD Range
4,4'-DDT	73	75	3	58 - 136	0 - 36
Endrin	75	78	4	55 - 133	0 - 35
Dieldrin	71	72	1	66 - 152	0 - 36
Aldrin	35	36	3	42 - 115	0 - 40
Note : LCS/LCSD WITHIN CONTROL LIMITS.					
Heptachlor	74	77	4	56 - 135	0 - 30
BHC-gamma (Lindane)	78	82	5	55 - 139	0 - 32

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS/MSD RPD	%Recovery Range	RPD Range
4,4'-DDT	62	60	3	42 - 118	0 - 44
Endrin	79	75	5	47 - 120	0 - 45
Dieldrin	55	73	28	54 - 140	0 - 45
Aldrin	32	31	3	26 - 105	0 - 44
Note : LCS/LCSD WITHIN CONTROL LIMITS.					
Heptachlor	75	72	4	46 - 123	0 - 47
BHC-gamma (Lindane)	82	78	5	42 - 122	0 - 46

**Organochlorine Pesticides by Method EPA 8081
Surrogate Recovery**

Batch # 86111

Matrix : AQUEOUS

% Recovery Objectives

Surrogate #	Surrogate Name	Surrogate Range
S1	Tetrachloro-m-xylene	14 - 147
S2	Decachlorobiphenyl	10 - 136

Sample	File	S1	S2	S3	S4	S5	S6
86111BLK	112702036f	80	66				
86111LCS	112702037f	75	66				
167064-3	112702042F	68	40				
86111LCSD	112702038f	79	71				
167064-4	112702043F	71	46				
167064-13MS	112702039f	92	49				
167064-13MSD	112702040f	83	48				
167064-1	112702041F	68	33				
167064-10	112702048B	59	41				
167064-12	112702049B	71	53				
167064-6	112702044F	117	50				
167064-13	112702050B	63	36				
167064-8	112702045F	86	23				
167064-15	112702051B	81	71				
167193-3	112702060B	82	16				
167193-7	112702061B	65	23				
167193-11	112702062B	87	48				
DAYBL11/27	112702058B	80	70				
167193-12	112702063F	62	13				
167193-14	112702066F	88	36				
167193-18	112702067F	47	18				
167175-1	120202002F	220	121				
167175-1D	120202005F	4	0				
Note: SURROGATES DILUTED OUT							
167175-1RA	120202A010F	0	0				
Note: RA'D FOR TOX ONLY							

**Organochlorine Pesticides by Method EPA 8081
Blank Results Information****Batch # 86111****Matrix : AQUEOUS**

Analyte	Blank Hits	Lowest Sample Det. Limit	Units
Aldrin	None	0.1	ug/L
BHC-alpha	None	0.1	ug/L
BHC-beta	None	0.1	ug/L
BHC-delta	None	0.1	ug/L
BHC-gamma	None	0.1	ug/L
Chlordane	None	0.5	ug/L
4,4'-DDD	None	0.2	ug/L
4,4'-DDE	None	0.2	ug/L
4,4'-DDT	None	0.2	ug/L
Dieldrin	None	0.1	ug/L
Endosulfan I	None	0.5	ug/L
Endosulfan II	None	0.5	ug/L
Endosulfan sulfate	None	0.5	ug/L
Endrin	None	0.2	ug/L
Endrin aldehyde	None	0.2	ug/L
Heptachlor	None	0.1	ug/L
Heptachlor epoxide	None	0.1	ug/L
Methoxychlor	None	0.3	ug/L
Toxaphene	None	5.0	ug/L

Organochlorine Pesticides by Method EPA 8081
Sample Batch Information

Batch # 86111

Matrix : AQUEOUS

Sample ID	Preparation			Notes	Analysis			Inst #
	Date	Time	By		Date	Time	By	
86111BLK	11/26/02	1745	AK		11/28/02	1448	DEB	GC6
86111LCS	11/26/02	1745	AK		11/28/02	1514	DEB	GC6
167064-3	11/26/02	1745	AK		11/28/02	1522	DEB	GC6
86111LCSD	11/26/02	1745	AK		11/28/02	1539	DEB	GC6
167064-4	11/26/02	1745	AK		11/28/02	1548	DEB	GC6
167064-13MS	11/26/02	1745	AK		11/28/02	1605	DEB	GC6
167064-13MSD	11/26/02	1745	AK		11/28/02	1631	DEB	GC6
167064-1	11/26/02	1745	AK		11/28/02	1657	DEB	GC6
167064-10	11/26/02	1745	AK		11/28/02	1722	DEB	GC6
167064-12	11/26/02	1745	AK		11/28/02	1748	DEB	GC6
167064-6	11/26/02	1745	AK		11/28/02	1814	DEB	GC6
167064-13	11/26/02	1745	AK		11/28/02	1814	DEB	GC6
167064-8	11/26/02	1745	AK		11/28/02	1840	DEB	GC6
167064-15	11/26/02	1745	AK		11/28/02	1840	DEB	GC6
167193-14	11/27/02	0845	RM		11/28/02	1905	DEB	GC6
167193-3	11/27/02	0845	RM		11/28/02	1957	DEB	GC6
167193-7	11/27/02	0845	RM		11/28/02	2023	DEB	GC6
167193-11	11/27/02	0845	RM		11/28/02	2048	DEB	GC6
DAYBL11/27	11/27/02	0845	RM		11/28/02	2257	DEB	GC6
167193-12	11/27/02	0845	RM		11/29/02	0106	DEB	GC6
167193-18	11/27/02	0845	RM		11/29/02	0405	DEB	GC6
167175-1	11/27/02	0845	RM	ONLY NEED ONE S	12/02/02	1155	DEB	GC6
167175-1D	11/27/02	0845	RM	SURROGATE S DILU	12/02/02	1313	DEB	GC6
167175-1RA	11/27/02	0845	RM		12/02/02	1734	DEB	GC6

Single Analyte Data
Blank Results Information

Batch Number	Analyte	Analysis Method	Preparation Method	Units	Blank Result	Matrix
84145	Sb	EPA 6010		mg/L	< 0.0050	AQUEOUS
84145	As	EPA 6010		mg/L	< 0.0200	AQUEOUS
84145	Ba	EPA 6010		mg/L	< 0.0100	AQUEOUS
84145	Be	EPA 6010		mg/L	< 0.0020	AQUEOUS
84145	Cd	EPA 6010		mg/L	< 0.0030	AQUEOUS
84145	Cr	EPA 6010		mg/L	< 0.0050	AQUEOUS
84145	Co	EPA 6010		mg/L	< 0.0100	AQUEOUS
84145	Cu	EPA 6010		mg/L	< 0.0100	AQUEOUS
84145	Ni	EPA 6010		mg/L	< 0.0050	AQUEOUS
84145	Ag	EPA 6010		mg/L	< 0.0070	AQUEOUS
84145	V	EPA 6010		mg/L	< 0.0040	AQUEOUS
84145	Zn	EPA 6010		mg/L	< 0.0200	AQUEOUS
84145	Al	EPA 6010		mg/L	< 0.1000	AQUEOUS
84145	Ca	EPA 6010		mg/L	< 0.0500	AQUEOUS
84145	Fe	EPA 6010		mg/L	< 0.0400	AQUEOUS
84145	Mg	EPA 6010		mg/L	< 0.0500	AQUEOUS
84145	Mn	EPA 6010		mg/L	< 0.0400	AQUEOUS
84145	K	EPA 6010		mg/L	< 0.2000	AQUEOUS
84145	Na	EPA 6010		mg/L	< 0.0500	AQUEOUS
84147	Pb	EPA 7421		mg/L	< 0.0030	AQUEOUS
84147	Tl	EPA 7841		mg/L	< 0.0020	AQUEOUS
84147	Se	EPA 7740		mg/L	< 0.0050	AQUEOUS
84744	Hg	EPA 7470		mg/L	< 0.0005	AQUEOUS

Lab Control Information

Batch Number	Analyte	Analysis Method	LC % Rec.	LCD % Rec.	LC/LCD RPD	%Recovery Range	RPD Range
84145	Sb	EPA 6010	102	103	1	86 - 113	0 - 6
84145	As	EPA 6010	105	106	1	90 - 117	0 - 5
84145	Ba	EPA 6010	104	105	1	87 - 103	0 - 5
84145	Be	EPA 6010	109	110	1	91 - 111	0 - 7
84145	Cd	EPA 6010	107	108	1	89 - 114	0 - 6
84145	Cr	EPA 6010	108	109	1	88 - 112	0 - 6
84145	Co	EPA 6010	102	103	1	90 - 106	0 - 5
84145	Cu	EPA 6010	107	108	1	92 - 107	0 - 7
84145	Ni	EPA 6010	105	106	1	89 - 108	0 - 6

**Single Analyte Data
Lab Control Information**

Batch Number	Analyte	Analysis Method	LC % Rec.	LCD % Rec.	LC/LCD RPD	%Recovery Range	RPD Range
84145	Ag	EPA 6010	104	105	1	82 - 126	0 - 27
84145	V	EPA 6010	107	108	1	88 - 108	0 - 6
84145	Zn	EPA 6010	107	108	1	90 - 113	0 - 9
84145	Al	EPA 6010	99	101	2	86 - 108	0 - 5
84145	Ca	EPA 6010	120	120	0	89 - 121	0 - 16
84145	Fe	EPA 6010	99	99	0	88 - 112	0 - 6
84145	Mg	EPA 6010	104	106	2	96 - 108	0 - 5
84145	Mn	EPA 6010	105	106	1	93 - 106	0 - 6
84145	K	EPA 6010	95	96	1	81 - 108	0 - 6
84145	Na	EPA 6010	103	102	1	85 - 104	0 - 11
84147	Pb	EPA 7421	99	98	1	76 - 119	0 - 6
84147	Tl	EPA 7841	106	106	0	87 - 120	0 - 7
84147	Se	EPA 7740	123	120	2	88 - 118	0 - 12
84744	Hg	EPA 7470	86	87	1	86 - 113	0 - 11

Matrix Spike Information

Batch Number	Analyte	Analysis Method	MS % Rec.	MSD % Rec.	MS/MSD RPD	%Recovery Range	RPD Range
84145	Sb	EPA 6010	100	98	2	76 - 124	0 - 20
84145	As	EPA 6010	102	99	3	76 - 124	0 - 20
84145	Ba	EPA 6010	103	101	2	76 - 124	0 - 20
84145	Be	EPA 6010	106	104	2	76 - 124	0 - 20
84145	Cd	EPA 6010	105	103	2	76 - 124	0 - 20
84145	Cr	EPA 6010	105	103	2	76 - 124	0 - 20
84145	Co	EPA 6010	99	97	2	76 - 124	0 - 20
84145	Cu	EPA 6010	105	102	3	76 - 124	0 - 20
84145	Ni	EPA 6010	103	101	2	76 - 124	0 - 20
84145	Ag	EPA 6010	99	98	1	76 - 124	0 - 20
84145	V	EPA 6010	105	103	2	76 - 124	0 - 20
84145	Zn	EPA 6010	103	101	2	76 - 124	0 - 20
84145	Al	EPA 6010	102	101	1	76 - 124	0 - 20
84145	Ca	EPA 6010	119	113	5	76 - 124	0 - 20
84145	Fe	EPA 6010	95	96	1	76 - 124	0 - 20
84145	Mg	EPA 6010	106	86	21	76 - 124	0 - 20
84145	Mn	EPA 6010	103	100	3	76 - 124	0 - 20
84145	K	EPA 6010	93	91	2	76 - 124	0 - 20
84145	Na	EPA 6010	111	96	14	76 - 124	0 - 20
84147	Pb	EPA 7421	83	96	15	56 - 129	0 - 14

**Single Analyte Data
Matrix Spike Information**

Batch Number	Analyte	Analysis Method	MS % Rec.	MSD % Rec.	MS/MSD RPD	%Recovery Range	RPD Range
84147	Tl	EPA 7841	74	72	3	62 - 100	0 - 7
84147	Se	EPA 7740	49	67	31	23 - 106	0 - 25
84744	Hg	EPA 7470	87	96	10	84 - 116	0 - 13

Post Digestion Spike Information

Batch Number	Analyte	Analysis Method	PDS %Rec	%Recovery Range
84145	Sb	EPA 6010	95	76 - 124
84145	As	EPA 6010	98	76 - 124
84145	Ba	EPA 6010	99	76 - 124
84145	Be	EPA 6010	103	76 - 124
84145	Cd	EPA 6010	102	76 - 124
84145	Cr	EPA 6010	102	76 - 124
84145	Co	EPA 6010	96	76 - 124
84145	Cu	EPA 6010	101	76 - 124
84145	Ni	EPA 6010	100	76 - 124
84145	Ag	EPA 6010	98	76 - 124
84145	V	EPA 6010	102	76 - 124
84145	Zn	EPA 6010	100	76 - 124
84145	Al	EPA 6010	93	76 - 124
84145	Ca	EPA 6010	110	76 - 124
84145	Fe	EPA 6010	92	76 - 124
84145	Mg	EPA 6010	80	76 - 124
84145	Mn	EPA 6010	99	76 - 124
84145	K	EPA 6010	92	76 - 124
84145	Na	EPA 6010	92	76 - 124
84147	Pb	EPA 7421	89	76 - 124
84147	Tl	EPA 7841	70	76 - 124
84147	Se	EPA 7740	57	76 - 124

Single Analyte Data
Sample Batch Information

Analysis : Sb, As, Ba, Be, Cd, Cr, Co, Cu, Ni, Ag, V, Zn, Al, Ca, Fe,

Batch # 84145

Matrix : AQUEOUS

Sample ID	Tag	Preparation				Analysis				Inst
		Date	Time	By	Notes	Date	Time	By		
84145BLK		11/27/02	0710	ALH	TRACE	12/02/02	0921	MLR	ICP2	
84145LCS		11/27/02	0710	ALH	TRACE	12/02/02	0925	MLR	ICP2	
84145LCSD		11/27/02	0710	ALH	TRACE	12/02/02	0928	MLR	ICP2	
166025AT1-1		11/27/02	0710	ALH	TRACE	12/02/02	0931	MLR	ICP2	
	^^ Dilution factor: 10									
165915AT1-1		11/27/02	0710	ALH	TRACE	12/02/02	0934	MLR	ICP2	
	^^ Dilution factor: 10									
165915AT1-3		11/27/02	0710	ALH	TRACE	12/02/02	0937	MLR	ICP2	
	^^ Dilution factor: 10									
167175-1		11/27/02	0710	ALH	TRACE	12/02/02	0941	MLR	ICP2	
167146-6MS		11/27/02	0710	ALH	TRACE	12/02/02	0950	MLR	ICP2	
167146-6MSD		11/27/02	0710	ALH	TRACE	12/02/02	0953	MLR	ICP2	
167146-6PDS		11/27/02	0710	ALH	TRACE	12/02/02	0957	MLR	ICP2	
167158-6DUP		11/27/02	0710	ALH	TRACE	12/02/02	1000	MLR	ICP2	
167146-6		11/27/02	0710	ALH	TRACE	12/02/02	1003	MLR	ICP2	
167158-6		11/27/02	0710	ALH	TRACE	12/02/02	1006	MLR	ICP2	
167064-9		11/27/02	0710	ALH	TRACE	12/02/02	1009	MLR	ICP2	
167064-11		11/27/02	0710	ALH	TRACE	12/02/02	1013	MLR	ICP2	
167064-12		11/27/02	0710	ALH	TRACE	12/02/02	1016	MLR	ICP2	
167064-14		11/27/02	0710	ALH	TRACE	12/02/02	1019	MLR	ICP2	
167064-16		11/27/02	0710	ALH	NEAT	12/02/02	1029	MLR	ICP2	
167064-17		11/27/02	0710	ALH	TRACE	12/02/02	1032	MLR	ICP2	
167146-2		11/27/02	0710	ALH	TRACE	12/02/02	1035	MLR	ICP2	
167146-4		11/27/02	0710	ALH	TRACE	12/02/02	1038	MLR	ICP2	
167146-8		11/27/02	0710	ALH	TRACE	12/02/02	1042	MLR	ICP2	
167146-10		11/27/02	0710	ALH	TRACE	12/02/02	1045	MLR	ICP2	
167158-2		11/27/02	0710	ALH	TRACE	12/02/02	1048	MLR	ICP2	
167158-4		11/27/02	0710	ALH	TRACE	12/02/02	1051	MLR	ICP2	
167158-8		11/27/02	0710	ALH	TRACE	12/02/02	1054	MLR	ICP2	
167158-10		11/27/02	0710	ALH	NEAT	12/02/02	1058	MLR	ICP2	
167064-9RA		11/27/02	0710	ALH	TRACE	12/02/02	1703	FBS	ICP3	
167064-11RA		11/27/02	0710	ALH	TRACE	12/02/02	1707	FBS	ICP3	
167064-12RA		11/27/02	0710	ALH	TRACE	12/02/02	1710	FBS	ICP3	
167064-14RA		11/27/02	0710	ALH	TRACE	12/02/02	1713	FBS	ICP3	

Single Analyte Data
Sample Batch Information
Analysis : Pb, Tl, Se

Batch # 84147

Matrix : AQUEOUS

Sample ID	Tag	Preparation			Notes	Analysis			Inst
		Date	Time	By		Date	Time	By	
167175-1	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167165-15	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167165-1	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167165-15DUP	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167165-3PDS	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167165-3MSD	Tl	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0719	DCF	AA2
167165-2MS	Tl	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0719	DCF	AA2
84147LCSD	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
84147LCS	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
84147BLK	Tl	11/27/02	0725	JAM	GFAA	12/02/02	0719	DCF	AA2
167175-1	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167150-2	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167150-1	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-17	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-15	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-11	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-10	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-9	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-8	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-7	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-4	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-1	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167146-81	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167146-80	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167146-79	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167146-78	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA1
167165-15DUP	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-3PDS	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
167165-3MSD	Pb	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0751	DCF	AA4
167165-2MS	Pb	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0751	DCF	AA4
84147LCSD	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
84147LCS	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4
84147BLK	Pb	11/27/02	0725	JAM	GFAA	12/02/02	0751	DCF	AA4

Single Analyte Data
Sample Batch Information
Analysis : Pb, Tl, Se

Batch # 84147

Matrix : AQUEOUS

Sample ID	Tag	Preparation				Analysis			
		Date	Time	By	Notes	Date	Time	By	Inst
167150-2	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167150-1	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-17	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-15	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-10	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-9	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-8	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-7	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-4	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-1	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167146-81	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167146-80	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167146-79	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167146-78	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-15DUP	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-3PDS	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167165-3MSD	As	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0818	DCF	AA3
167165-2MS	As	11/27/02	0725	JAM	AKA 167165-1	12/02/02	0818	DCF	AA3
84147LCSD	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
84147LCS	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
84147BLK	As	11/27/02	0725	JAM	GFAA	12/02/02	0818	DCF	AA3
167175-1	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167150-2	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167150-1	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-15	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-1	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167146-81	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167146-80	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167146-79	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167146-78	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-15DUP	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-3PDS	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-3MSD	Se	11/27/02	0725	JAM	AKA 167165-1	12/02/02	1102	DCF	AA1
167165-2MS	Se	11/27/02	0725	JAM	AKA 167165-1	12/02/02	1102	DCF	AA1

Single Analyte Data
Sample Batch Information
Analysis : Pb, Tl, Se

Batch # 84147

Matrix : AQUEOUS

Sample ID	Tag	Preparation				Analysis			
		Date	Time	By	Notes	Date	Time	By	Inst
84147LCSD	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
84147LCS	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
84147BLK	Se	11/27/02	0725	JAM	GFAA	12/02/02	1102	DCF	AA1
167165-17	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-15	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-11	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-10	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-9	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-8	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-7	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-4	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-1	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-15DUP	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-3PDS	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-3MSD	Cd	11/27/02	0725	JAM	AKA 167165-1	12/02/02	1402	DCF	AA4
167165-2MS	Cd	11/27/02	0725	JAM	AKA 167165-1	12/02/02	1402	DCF	AA4
84147LCSD	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
84147LCS	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
84147BLK	Cd	11/27/02	0725	JAM	GFAA	12/02/02	1402	DCF	AA4
167165-11	As	11/27/02	0725	JAM	GFAA	12/02/02	1723	DCF	AA3

Single Analyte Data
Sample Batch Information
Analysis : Hg

Batch # 84744

Matrix : AQUEOUS

Sample ID	Tag	Preparation			Notes	Analysis		By	Inst
		Date	Time	By		Date	Time		
84744BLK	Hg	11/27/02	0910	EO		11/27/02	1217	EO	HG1
84744LCS	Hg	11/27/02	0910	EO		11/27/02	1222	EO	HG1
84744LCSD	Hg	11/27/02	0910	EO		11/27/02	1302	EO	HG1
167119-3MS	Hg	11/27/02	0910	EO		11/27/02	1304	EO	HG1
167119-3MSD	Hg	11/27/02	0910	EO		11/27/02	1306	EO	HG1
167119-4DUP	Hg	11/27/02	0910	EO		11/27/02	1309	EO	HG1
167119-2	Hg	11/27/02	0910	EO		11/27/02	1312	EO	HG1
167119-1	Hg	11/27/02	0910	EO		11/27/02	1316	EO	HG1
167119-1	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1318	EO	HG1
167119-2	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1323	EO	HG1
167119-3	Hg	11/27/02	0910	EO		11/27/02	1325	EO	HG1
167119-3	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1328	EO	HG1
167119-4	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1330	EO	HG1
167119-4	Hg	11/27/02	0910	EO		11/27/02	1332	EO	HG1
167119-5	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1335	EO	HG1
167119-5	Hg	11/27/02	0910	EO		11/27/02	1337	EO	HG1
167119-6	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1400	EO	HG1
167119-6	Hg	11/27/02	0910	EO		11/27/02	1402	EO	HG1
167119-7	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1405	EO	HG1
167119-7	Hg	11/27/02	0910	EO		11/27/02	1407	EO	HG1
167119-8	Hg	11/27/02	0910	EO	DISSOLVED	11/27/02	1409	EO	HG1
167119-8	Hg	11/27/02	0910	EO		11/27/02	1411	EO	HG1
167120-1	Hg	11/27/02	0910	EO		11/27/02	1414	EO	HG1
167175-1	Hg	11/27/02	0910	EO		11/27/02	1416	EO	HG1
167122-1	Hg	11/27/02	0910	EO		11/27/02	1418	EO	HG1

36671

CHAIN OF CUSTODY RECORD



ANALYTICAL SERVICES, INC. ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS 110 TECHNOLOGY PARKWAY NORCROSS, GA 30092 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

141 PAGE: 1 OF 1

CLIENT NAME: URS - ONFILE				# OF CONTAINERS	ANALYSIS REQUESTED						FOR LAB USE ONLY	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: ON File 678-356-8800											LAB #: 167175	QUOTE #:
ATTENTION: Grant Jacobs		CC:									MATRIX CODES:	
REQUESTED COMPLETION DATE: 12/2/02		PO #: 37778-010									DW - DRINKING WATER	S - SOIL
PROJECT NAME/STATE: Red Panther, Clarksdale, MS											WW - WASTEWATER	SL - SLUDGE
PROJECT #: 37778-010										GW - GROUNDWATER	SD - SOLID	
DATE	TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION							REMARKS/ADDITIONAL INFORMATION
11/25/02	1:30	ST		X	SW-1	3	6010B	18081	15181			
SAMPLED BY AND TITLE: A. W. W. M.		DATE/TIME: 11/25/02 1:30 PM		RELINQUISHED BY: A. W. W. M.		DATE/TIME: 11/25/02 5:00 PM						
RECEIVED BY:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:						
RECEIVED BY:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:						



ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Services
110 Technology Parkway, Norcross, GA 30092
(770)734-4200 FAX (770)734-4201

LOG-IN CHECKLIST

Attn: Mr. Brent Jacobs

Client: URS - ATLANTA GA ATLANTA

Project: Red Panther Clarksdale MS. Project#37778-010

Recvd : 11/26/2002

Logged By: CF

NPDES:

Work Order: 167175

OBSERVATIONS

#Samples: 1

#Containers: 3

pH: labeled pres

Temp(C): 4

Ice: Yes

Custody Seal(s): Intact

CHECKLIST ITEMS**

- | | |
|--|-----|
| 1. COC included with Samples | Yes |
| 2. Chain of Custody Complete | Yes |
| 3. Sample Container(s) Intact | Yes |
| 4. Sample Container(s) Match COC | Yes |
| 5. Params Designated by Client on COC | Yes |
| 6. Temperature in Compliance | Yes |
| 7. Sufficient Sample Volume for Analysis | Yes |
| 8. Zero HeadSpace Maintained for VOA Analyses | N/A |
| 9. Samples properly preserved | Yes |
| 10. Samples Received within Allowable Hold Times | Yes |

Metals per SB conversation with Client.

BAM 11-26-02

Tanker 143 At 62 1/2 IN'S

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

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CE500	Manifest Date 06/06/02	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address Red Panther Chemical 550 Patton, Clarksdale, Ms 38614 (901) 481-2948 David Moore / Hepaco					
4. Generator's Phone		6. Transporter 1 Company Name Carlson's Transport, LLC			
		6. US EPA ID Number 1NR000019265			
7. Transporter 2 Company Name		8. US EPA ID Number			
9. Designated Facility Name and Site Address Excel TSD, Inc. 552 Rivergate Road Memphis, TN 38109		10. US EPA ID Number TND980847024			
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity
	a. Non-Hazardous, Non-Regulated Liquid.		No.	Type	14. Unit Wt/Vol
			00	TT	5529 G
	b.				
	c.				
d.					
15. Special Handling Instructions and Additional Information ROR No 19382 Certificate of Destruction Requested 24 HOUR EMERGENCY PHONE/CONTACT: (901) 346-6333 Allen Higginbotham					
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. 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 that is available to me and that I can afford.					
Printed/Typed Name Eddie Spars Jr		Signature <i>Eddie Spars Jr</i>		Month Day Year 11/21/02	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name Dale W Dieterle		Signature <i>Dale W Dieterle</i>		Month Day Year 11/21/02	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name Nancy Lou Emswiler		Signature <i>Nancy Lou Emswiler</i>		Month Day Year 11/21/02	

ORIGINAL-RETURN TO GENERATOR



UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C E S Q G	Manifest Duplication No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Red Panther Chemical 550 Patton, Clarksdale, Ms 38614 (901) 481-2948		David Moore / Hepaco				
4. Generator's Phone						
5. Transporter 1 Company Name Carson's Transport, LLC		6. US EPA ID Number 1 N R 0 0 0 0 1 9 2 6 8				
7. Transporter 2 Company Name		8. US EPA ID Number				
9. Designated Facility Name and Site Address Excel TSD, Inc. 552 Rivergate Road Memphis, TN 38109		10. US EPA ID Number T N D 9 8 0 8 4 7 0 2 4				
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol
	a.	Non-Hazardous, Non-Regulated Liquid, . . .	0 0	T T	0.5575	G
	b.					
	c.					
	d.					
15. Special Handling Instructions and Additional Information ROR No 19384 Certificate of Destruction Requested 24 HOUR EMERGENCY PHONE/CONTACT: (901) 345-6333 Allen Higginbotham						
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. 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 that is available to me and that I can afford.						
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
	Printed/Typed Name Eddie Jones Jr Red Panther				11/21/02	
	18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name				11/21/02		
19. Discrepancy Indication Space						
FACILITY	20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
	Printed/Typed Name Nancy Van Eman		Signature 		Month Day Year 11/21/02	

ORIGINAL-RETURN TO GENERATOR



UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C E S Q G	Manifest Document No. 5	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Red Panther Chemical 550 Patton, Clerksdale, Ms 38614-						
4. Generator's Phone (901) 481-2948 David Moore / Hepaco						
5. Transporter 1 Company Name Carson's Transport, LLC		6. US EPA ID Number 1 N R 0 0 0 0 T 9 2 6 5				
7. Transporter 2 Company Name		8. US EPA ID Number				
9. Designated Facility Name and Site Address Excel TSD, Inc. 552 Rivergate Road Memphis, TN 38109		10. US EPA ID Number T N D 9 8 0 8 4 7 0 2 4				
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol
	a.	Non-Hazardous, Non-Regulated Liquid, . . .	0 0	T T	0.5433	G
	b.					
	c.					
	d.					
15. Special Handling Instructions and Additional Information ROR No 19385 Certificate of Destruction Requested 24 HOUR EMERGENCY PHONE/CONTACT: (901) 345-6333 Allen Higginbotham						
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. 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 that is available to me and that I can afford.						
Printed/Typed Name Ed J. D. Red Panther		Signature <i>[Signature]</i>		Month Day Year 1/2/02		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Donald L. Hinson		Signature <i>[Signature]</i>		Month Day Year 1/2/02		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Nancy Van Eman						
Signature <i>[Signature]</i>		Month Day Year 1/2/02				

WASTED
[Handwritten initials]

ORIGINAL-RETURN TO GENERATOR



UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. CE500	Manifest Date/Part No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
---	--	------------------------	--------------	---

3. Generator's Name and Mailing Address Red Panther Chemical 650 Patton, Clarksdale, Ms 38614- (901) 481-2948		4. Generator's Phone David Moore / Hepco	
5. Transporter 1 Company Name Redco		6. US EPA ID Number INR00002283	
7. Transporter 2 Company Name		8. US EPA ID Number	
9. Designated Facility Name and Site Address Excel TSD, Inc. 552 Rivergate Road Memphis, TN 38109		10. US EPA ID Number TND98084702	

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers		13. Total	14. Unit
	No.	Type	Quantity	Wt/Vol
a. <input type="checkbox"/> Non-Hazardous, Non-Regulated Liquid, , ,	00	TT	0.19.00	G
b.				
c.				
d.				

15. Special Handling Instructions and Additional Information
ROR No 19386 Certificate of Destruction Requested
24 HOUR EMERGENCY PHONE/CONTACT: (901) 345-6333 Alien Higginbotham

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.
 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 that is available to me and that I can afford.

Printed/Typed Name On Behalf of Red Panther	Signature <i>[Signature]</i>	Month Day Year 1/21/02
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Dan Cox	Signature <i>[Signature]</i>	Month Day Year 1/21/02
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name
Nancy Ann Emano

Signature <i>[Signature]</i>	Month Day Year 1/21/02
---------------------------------	----------------------------------



**PHASE II FINAL DESIGN SAMPLING
DRAFT REPORT
RED PANTHER SITE
CLARKSDALE, MISSISSIPPI**

Prepared For:
Red Panther PRP Group

Prepared By:
URS
August 5, 2004

DRAFT REPORT
PHASE II FINAL DESIGN SAMPLING
RED PANTHER SITE
CLARKSDALE, MISSISSIPPI

Prepared for:
Red Panther PRP Group

August 5, 2004

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TABLES

Table 1	Area B TCLP and Totals Analytical Results
Table 2	Soil Sample Analytical Data

FIGURES

Figure 1	Site Location Map
Figure 2	Area B TCLP Soil Sample Analytical Results
Figure 3	Soil Sample Analytical Results

APPENDICES

Appendix A	Phase II Final Design Sampling Soil Boring Logs
Appendix B	Phase II Final Design Sampling Area B TCLP Analytical Data
Appendix C	Additional Sampling Analytical Data

List of Acronyms

AOC	Administrative Order on Consent
AST	Aboveground Storage Tank
BLS	Below Land Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COCs	Constituents of Concern
EPA	Environmental Protection Agency
mg/L	Milligrams Per Liter
mg/kg	Milligrams Per Kilogram
PID	Photoionization Detector
PRPs	Performing Potentially Responsible Parties
QA/QC	Quality Assurance and Quality Control
QAPP	Quality Assurance Project Plan
MBPC	Mississippi Bureau of Pollution Control
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SSHP	Site Safety and Health Plan
START	Superfund Technical Assessment and Response Team
TCLP	Toxicity Characteristic Leaching Procedure
UTS	Universal Treatment Standards

EXECUTIVE SUMMARY

This report presents the results of the Phase II Final Design Sampling activities conducted in June 2004 at the Red Panther Superfund Site in Clarksdale, Mississippi. The Final Design Sampling activities were performed from June 28, 2004 to June 29, 2004. The Final Design Sampling was conducted to collect composite soil samples from the 2-6' below land surface (bls) intervals and 6-10' bls intervals that require excavation. The purpose of the sampling was to determine the appropriate disposal methodology for the soils in Area B during the Phase II Removal. Additional sampling was also performed during the sampling event to evaluate surface soils in two drainage ditches bordering the site, the breezeway area in Area D, and the contents of a silo in Area D. The Final Design Sampling was done in accordance with the schedule established at the June 2, 2004 meeting with EPA held at the Red Panther site.

A total of 7 composite soil samples were collected from Area B for TCLP and volatile organic compounds (VOCs), semivolatile organic (SVOCs), and RCRA metals testing to determine the appropriate disposal methodology for the Phase II Removal (Figure 2). The locations of the TCLP samples were based on the final excavation cutlines provided by Newfields. The TCLP analytical results were compared to the regulatory limits to evaluate which soils may be designated a characteristic hazardous waste if excavated. The analytical results are presented on Table 1 and shown on Figure 2. The analytical results indicate that 5 of the 7 samples (AB TCLP 14 2-6', AB TCLP 14 6-10', AB TCLP 15 2-6', AB TCLP 16 2-6', and AB TCLP 17 6-10') exceeded the TCLP regulatory limits for arsenic.

Additional sampling was performed during the Final Design Sampling event to evaluate surface soils in other areas of the site and to evaluate the contents of a silo in Area D. Two drainage ditches, one east of Normandy Avenue and one bordering the southern side of the site (former Sasse Street) were sampled to evaluate if the soils in the drainage ditches exceeded the surface soil performance standards. Two Direct Push Technology (DPTs) borings were installed in each ditch (Figure 3) to collect soil samples for the evaluation. Samples were collected from the 0-1' and 1-2' bls intervals in each ditch. The samples were analyzed for the surface soil constituents of concern (COCs) arsenic by EPA Method 6010 and dieldrin, toxaphene, and total chlorinated pesticides by EPA Method 8081A. The analytical results are presented on Table 2 and shown on Figure 3.

Samples were also collected from the breezeway area and the contents of the silo in Area D. The breezeway is an open area underneath the raised floor of one of the buildings in Area D. Two composite surface soil samples (0-1' bls) were collected from the breezeway and analyzed for the surface soil COCs arsenic, dieldrin, toxaphene, and total chlorinated pesticides. The analytical results of these samples are presented on Table 2 and shown on Figure 3. The results

indicate the soils in the breezeway area exceeded the surface soil performance standards

The contents of the silo in Area D were also sampled for TCLP and VOCs, SVOCs, and RCRA metals testing to evaluate the disposal of the silo contents. The TCLP results indicate the contents of the silo are nonhazardous and only contained a low concentration of toluene (4.4 milligrams per kilogram). The results are presented on Table 1 and shown on Figure 3.

1.0 INTRODUCTION

This report presents the results of the Phase II Final Design Sampling activities conducted in June 2004 at the Red Panther Superfund Site in Clarksdale, Mississippi. The Final Design Sampling was conducted to collect composite soil samples from the 2-6' below land surface (bls) intervals and 6-10' bls intervals that require excavation. The purpose of the sampling was to determine the appropriate disposal methodology for the soils in Area B during the Phase II Removal. Additional sampling was also performed during the sampling event to evaluate surface soils in two drainage ditches bordering the site, the breezeway area in Area D, and the contents of a silo in Area D.

1.1 Background Information

The Red Panther Superfund site is located in Clarksdale, Coahoma County, Mississippi (Figure 1). The site occupies approximately 6.5 acres off Normandy Avenue and Patton Street, on the south side of the city of Clarksdale. The facility is bordered on the west by East Tallahatchie Avenue, to the south by Springer International, to the north by Graeber Brothers, and to the east by Normandy Avenue. Presently, Coahoma Inc. still uses a portion of the facility as a warehouse.

In 1999, the EPA Superfund Technical Assessment and Response Team (START) conducted surface and subsurface sampling at the site. The sampling effort focused on the drainage ditches (Area A), the former onsite septic tank and drain field (Area B), and the railroad spur located behind the facility at the loading dock area (Area C). Based on the results of the sampling, EPA concluded the site had been impacted by arsenic and organochlorine pesticides and their degradation products including toxaphene, 4,4'-DDT, chlordane, aldrin, dieldrin, endrin, and endosulfan II. Contamination was also found offsite in six drainage ditches.

The Administrative Order on Consent (AOC) between EPA Region IV and the Performing PRPs was finalized in September 2001. The constituents of concern (COCs) for the Red Panther site include arsenic, toxaphene, dieldrin, and total chlorinated pesticides (for surface soils only). The AOC required the work be performed in two Phases. Phase I consisted of the following four components:

- Excavation of surface soils from drainage ditches between the Red Panther property boundaries and Route 49 and the disposal or temporary stockpiling of the excavated material,
- Characterization of onsite soils and the remaining ditch soils,
- Design of Phase II removal activities, and

- Preparation of a Phase II Work Plan detailing additional removal tasks necessary to complete the requirements of the AOC.

Phase II of the removal action consists of the onsite soil removal activities.

In 2001, the PRPs retained Newfields and URS to prepare a Phase I Removal Action Work Plan, including a Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP), Site Safety and Health Plan (SSHP), and to ascertain acceptable surface and subsurface soil performance standards prior to conducting the Phase I Removal Action at the facility. The Phase I Work Plan was submitted to EPA Region IV on May 24, 2002 and was subsequently approved on September 4, 2002.

Ditch soil characterization work was performed in June 2002 in accordance with the work plan. Soil samples were collected from six drainage ditches that border or are directly affected by runoff drainage from the site. Composite soil samples were collected from the 0-1 and 1-2 foot interval bls and analyzed for total chlorinated pesticides and arsenic. In August 2002, a technical memo was prepared and submitted to EPA Region IV requesting several modifications to the Phase I Work Plan based on the results of the ditch characterization sampling. Specifically, the modifications involved addressing Ditches 5 and 6 under the Phase II Work Plan instead of Phase I, installing a security fence around Ditches 5 and 6 to prevent public access, and establishing eight soil sampling grids in Ditches 5 and 6. EPA Region IV approved the modifications as part of the original work plan. A revised schedule was submitted to EPA in October 2002, based on the results of the ditch characterization sampling to extend the due date of the Site Soil Characterization report. EPA Region IV approved this request on October 30, 2002.

The Phase I Removal Action was performed in November and December of 2002. During the Removal Action approximately 825 tons of soil was removed from the offsite Ditches 1, 2, 3, and 4. The excavated soils were disposed offsite as a nonhazardous waste at the Waste Management, Robinson (Tunica) Mississippi, Subtitle D landfill. After the soils were removed, confirmation soil sampling was performed to determine if the ditches met the subsurface soil performance standards. Based on the confirmation analytical data, Ditches 3 and 4 met the subsurface soil performance standards and were subsequently backfilled. A portion of Ditch 1 (65 feet) still exceeds the subsurface soil standards for toxaphene and dieldrin. This portion of the ditch was also backfilled, and the soils exceeding the performance standards will be addressed in the Phase II Work Plan. The Phase I Removal Action was documented in a report entitled Phase I Removal Action (dated March 18, 2003). The report was submitted to EPA and approved on April 10, 2003.

In December 2002, URS performed the soil characterization, which consisted of sampling the

surface and subsurface soils and analyzing the samples for the site constituents of concern (COCs). This report (Report Phase I Soil Characterization, March 18, 2003) was submitted to EPA in March 2003 and approved on April 10, 2003.

In July 2003, Newfields submitted a Phase II Preliminary Design Work Plan to EPA Region IV. The Phase II Preliminary Design Work Plan presented the preliminary excavation cutlines based on the site characterization data, a Performance Standards Verification Plan to confirm achievement of the project performance standards, and the supplemental sampling to be performed to confirm the lateral boundaries of the excavation cutlines and further characterization of the site soils for disposal purposes. On November 14, 2003 EPA Region IV provided comments on the Phase II Preliminary Design Work Plan based upon EPA's site visit in October 2003. On December 15, 2003, the PRP's responses to EPA's November 14, 2003 comments were forwarded to EPA. On January 16, 2004, a conference call was held between EPA, Newfields, and URS to discuss the response to comments on the Draft Phase II Preliminary Design Work Plan and implementation of the Supplemental Sampling. EPA subsequently issued a letter on February 13, 2004 documenting any remaining EPA issues or comments on the Phase II Work Plan and the approval of the Supplemental Sampling.

In February of 2004 URS performed the Supplemental Sampling which consisted of collecting additional soil samples to confirm the lateral boundaries of the excavation cutlines in Areas B, C, and D, evaluation and sampling of the 8 ASTs in the Area B Tank Farm, and collecting composite soil samples from Areas B, C, and D for assessment of the soils management and disposal final design. The results of this sampling was presented in a report entitled "*Phase II Supplemental Sampling Draft Report, Red Panther Site, Clarksdale, Mississippi*" dated May 13, 2004.

On June 2, 2004 a meeting was held between representatives of EPA, Alston & Bird, Newfields, and URS to review the February 2004 Supplemental Sampling results and to finalize a schedule for the Phase II Removal. The results of the meeting were documented in a letter to EPA dated June 11, 2004.

In June 2004, URS performed the Phase II Final Design Sampling, which included TCLP testing of the subsurface soils (soils greater than 2 feet below land surface) in Area B, additional ditch sampling east and south of the facility, and sampling of the "breezeway" and the contents of the silo in Area D. Specifically, 7 subsurface TCLP samples were collected in Area B where the soils exceeded the performance standards and require excavation. The TCLP samples were collected from the 2-6 foot bls interval and 6-10 foot bls interval of the planned excavations in Area B. The samples were analyzed for the complete list of TCLP parameters and for total RCRA metals, VOC, and SVOCs to evaluate the disposal options for these soils. The samples collected from the breezeway and the two drainage ditches were analyzed for the surface soil

COCs for comparison to the performance standards. This report presents the results of the Final Design Sampling.

2.0 PHASE II FINAL DESIGN SAMPLING

2.1 Purpose

The scope of work for the Phase II Final Design Sampling included the following:

- collecting additional TCLP composite soil samples from the subsurface soils in Area B to evaluate the disposal options for these soils, and
- collecting surface soil samples from the breezeway area in Area D and from two drainage ditches bordering the eastern and southern portions of the site to evaluate if these soils exceeded the surface soil performance standards.

2.2 Phase II Final Design Sampling Activities

The Phase II Final Design Sampling activities were performed from June 28, 2004 to June 29, 2004. All sampling was performed in accordance with the Phase II Preliminary Design Work Plan. All sampling equipment and DPT equipment was decontaminated in accordance with the procedures outlined in the SAP and QAPP. The investigative derived waste generated during the investigation was containerized and stored onsite, pending disposal during the Phase II Removal Action.

Prior to the start of the sampling, URS marked the sample locations. URS retained W.L Burle Engineers Inc. to install the soil borings utilizing a DPT rig and to survey the boring locations at the completion of the Phase II Final Design Sampling. Atlanta Environmental Services (AES) performed the laboratory analysis of the samples.

2.3 TCLP Sampling

Seven soil intervals in Area B requiring excavation were individually sampled during the TCLP sampling event (TCLP 14 2-6', AB TCLP 14 6-10', AB TCLP 15 2-6', AB TCLP 16 2-6', AB TCLP 17 2-6', AB TCLP 17 2-6', AB TCLP 6-10', and AB TCLP 18 2-6'). A composite of the seven intervals was formed and analyzed prior to analyzing the individual samples. The composite TCLP sample was formed by compositing the aliquots from each of the seven soil intervals into one sample (AB TCLP Comp). The remaining aliquot from each individual sample was then utilized to form a sample for that interval. The TCLP samples were submitted to AES in Atlanta, Georgia for analytical testing of total VOCs, SVOCs, chlorinated pesticides, RCRA metals and TCLP testing for VOCs, SVOCs, pesticides, herbicides, and RCRA metals.

The composite sample (AB TCLP Comp) was analyzed first and the individual samples placed

on hold at the laboratory pending the results of the composite sample. After the results of the composite sample indicated the TCLP regulatory limits for arsenic (5.0 mg/L) were exceeded, the individual samples were released from hold for analysis.

The analytical results for the TCLP samples are presented on Table 1 and shown on Figure 2. A copy of the analytical data is provided in Appendix A. The TCLP analytical results for the individual intervals were compared to the regulatory limits to evaluate which soils may be designated a characteristic hazardous waste if excavated. The analytical results from Area B indicated that five of the seven samples (AB TCLP 14 2-6', AB TCLP 14 6-10', AB TCLP 15 2-6', AB TCLP 16 2-6', and AB TCLP 17 6-10') exceeded the TCLP regulatory limits for arsenic and would be classified as a characteristic waste.

After evaluating the TCLP data, the totals data for the samples exceeding the TCLP regulatory limits were compared to the Universal Treatment Standards (UTS). If a material is designated as a hazardous waste by TCLP testing, then the underlying constituents in the waste must be evaluated to determine if treatment for any underlying constituents is required. If an underlying constituent exceeds ten times its UTS then the waste would have to be treated for that constituent (in addition to the constituent failing TCLP) until the concentration is less than ten times the UTS before the soils could be landfilled.

Review of the TCLP and totals data indicates the UTS for underlying constituents were not exceeded in the five composite samples that exceeded the TCLP regulatory limits for arsenic.

2.4 Additional Sampling

DPT borings were installed in the drainage ditch east of Normandy Avenue and in the drainage ditch south of the former Sasse Street, which forms the southern border of Area D. Two DPTs were installed in each ditch (Figure 3) to evaluate the surface soils (0-2' bls). Soil samples were collected from these borings at 0-2' bls. Surface soil sampling was also performed in the breezeway area in Area D. Two surface soil samples (0-1' bls) were collected from the soils in the breezeway. One sample was collected from the eastern side and one from the western side of the breezeway. The silo in Area D was sampled to evaluate the contents for disposal during the Phase II Removal.

The surface soil samples were collected and handled using standard sampling protocol procedures as outlined in the SAP and QAPP. A URS Engineer logged the borings and the soils classified according to the Unified Soil Classification System. Copies of the boring logs are included in Appendix A. The soil samples were submitted to AES in Atlanta, Georgia for analytical testing. The soil samples from the drainage ditches and the breezeway were analyzed for the surface soil COCs arsenic by EPA Method 6010 and dieldrin, toxaphene, and total

chlorinated pesticides by EPA Method 8081A. The silo sample was submitted for TCLP and VOCs, SVOCs, and RCRA metals analysis.

The analytical results of the surface soil samples are presented on Table 2. A copy of the chain-of-custodies and the analytical data are provided in Appendix C. The analytical results for the COCs (arsenic, dieldrin, toxaphene, and total chlorinated pesticides) in the ditches and the breezeway are shown on Figure 3. The analytical results for the silo sample are presented on table 1 and shown on Figure 2. The analytical results of the silo sample indicate the contents are nonhazardous and only contained low concentrations of toluene.

2.5 Investigative Derived Waste

All decontamination fluids were collected and stored onsite in 55-gallon drums. These drums were properly labeled identifying the contents of the drums. The drums are stored in Area B inside the fenced-in area. The soil cuttings generated from the installation of the soil borings were stored along with soil stockpiled from Ditch 1. The drums of decontamination fluids and the soil cuttings will be disposed of offsite during Phase II Removal

Table 1
 TCLP Analytical Results for Area B
 Phase II Final Design Sampling Draft Report
 June 2004

Red Panther Site
 Clarkdale, Mississippi

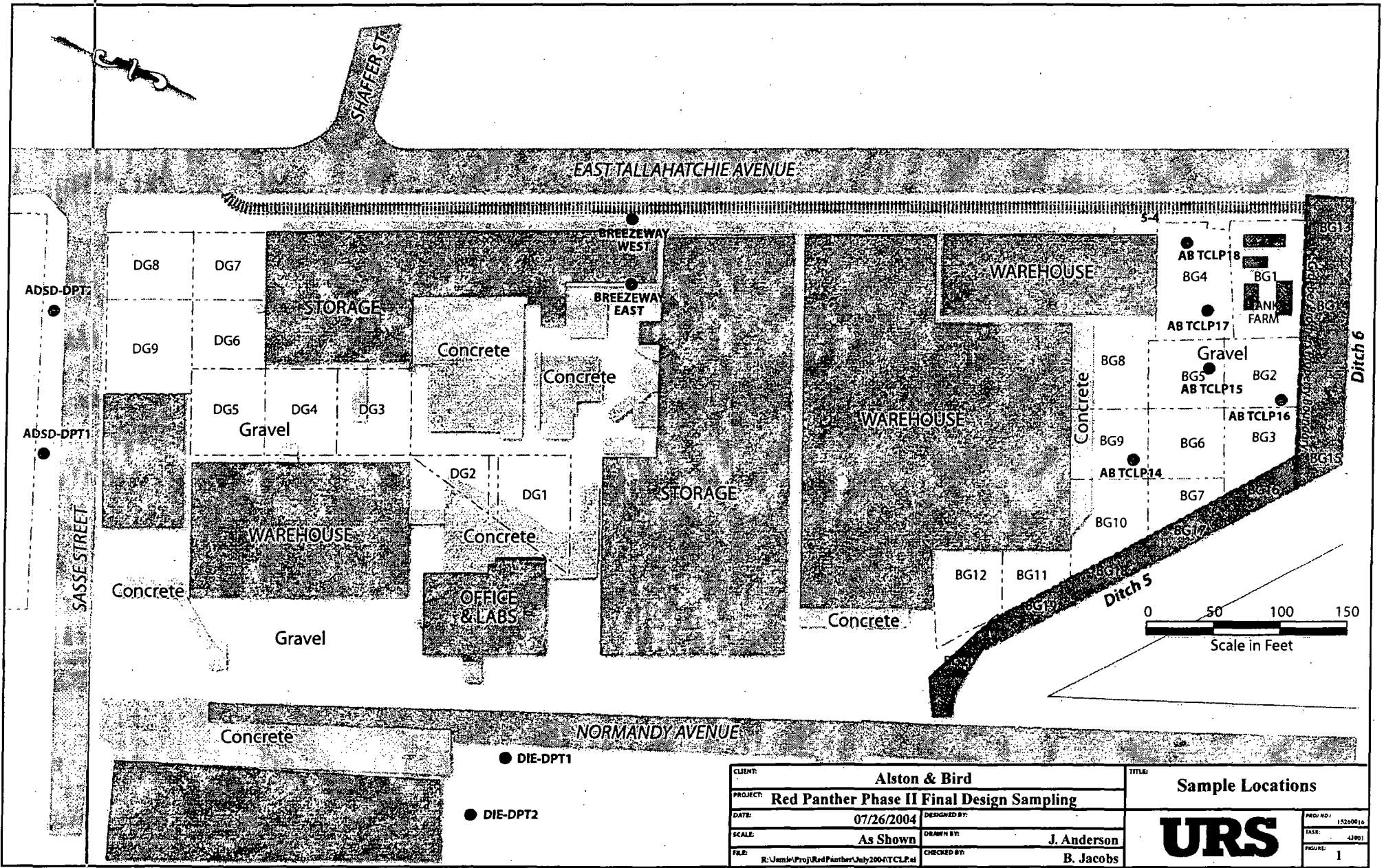
Constituent	Analytical Method	Units	TCLP Regulatory Limit (mg/L)	Universal Treatment Standard (mg/kg)	AB TCLP COMP (Area B)	AB TCLP 14 2-4 (Area B)	AB TCLP 14 6-10 (Area B)	AB TCLP 15 2-4 (Area B)	AB TCLP 16 2-4 (Area B)	AB TCLP 17 2-4 (Area B)	AB TCLP 17 6-10 (Area B)	AB TCLP 18 2-4 (Area B)	Area D Site
Total Pesticides													
8081A													
4,4'-DDD		mg/kg	NA	0.0870	BRL	0.0650	BRL	0.027	0.0890	0.012	0.0053	BRL	BRL
4,4'-DDE		mg/kg	NA	0.0870	BRL	0.024	BRL	BRL	0.0600	0.061	0.016	BRL	BRL
4,4'-DDT		mg/kg	NA	0.0870	0.180	0.028	BRL	0.0074	0.1300	BRL	0.01	BRL	BRL
aldrin		mg/kg	NA	0.0660	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
α-BHC		mg/kg	NA	0.0660	0.220	BRL	BRL	BRL	0.410	BRL	BRL	0.003	BRL
α-chloro-dane		mg/kg	NA	0.2600	BRL	BRL	BRL	BRL	0.0580	BRL	BRL	BRL	BRL
β-BHC		mg/kg	NA	0.0660	0.052	0.011	BRL	0.011	0.1200	BRL	BRL	0.0056	BRL
δ-BHC		mg/kg	NA	0.0660	0.063	BRL	BRL	BRL	0.0950	BRL	BRL	BRL	BRL
Dieldrin		mg/kg	NA	0.1300	BRL	0.0220	BRL	BRL	BRL	BRL	0.033	BRL	BRL
Endosulfan I		mg/kg	NA	0.0660	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endosulfan II		mg/kg	NA	0.1300	BRL	BRL	0.0060	BRL	BRL	BRL	BRL	BRL	BRL
Endosulfan sulfate		mg/kg	NA	0.1300	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin		mg/kg	NA	0.1300	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin aldehyde		mg/kg	NA	0.1300	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin Ketone		mg/kg	NA	0.1300	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
γ-BHC (Lindane)		mg/kg	NA	0.0660	0.074	BRL	BRL	BRL	0.140	BRL	BRL	BRL	BRL
γ-chloro-dane		mg/kg	NA	0.2600	BRL	BRL	BRL	BRL	0.0330	BRL	BRL	BRL	BRL
Heptachlor		mg/kg	NA	0.0660	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Heptachlor epoxide		mg/kg	NA	0.0660	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Methoxychlor		mg/kg	NA	0.1800	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Toxaphene		mg/kg	NA	2.6000	BRL	BRL	0.310	BRL	1.40	BRL	0.140	BRL	BRL
Total VOC's													
8260B													
acetone		mg/kg	NA	160.00	BRL	BRL	BRL	BRL	0.084	BRL	BRL	BRL	BRL
benzene		mg/kg	NA	10.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
chloroform		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
chlorobenzene		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
cyclohexane		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
m,p-xylene		mg/kg	NA	30.00	3.700	0.620	1.500	44.0	0.017	2.70	8.10	1.90	BRL
o-xylene		mg/kg	NA	30.00	1.700	0.360	1.000	13.00	0.027	19.00	6.10	1.10	BRL
ethylbenzene		mg/kg	NA	10.00	0.670	0.140	0.310	0.50	0.0048	0.40	1.80	0.22	BRL
toluene		mg/kg	NA	10.00	BRL	BRL	BRL	BRL	0.0098	BRL	0.18	BRL	4.4
isopropylbenzene		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	1.40	0.36	BRL	BRL
methylcyclohexane		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
1,2,4-trichlorobenzene		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
1,2-dichlorobenzene		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
1,3-dichlorobenzene		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
1,4-dichlorobenzene		mg/kg	NA	6.00	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Total SVOC's													
8270C													
arazine		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
bis(2-ethylhexyl)phthalate		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
2-methylnaphthalene		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
naphthalene		mg/kg	NA	5.60	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
phenol		mg/kg	NA	6.20	0.450	BRL	BRL	BRL	0.940	BRL	BRL	BRL	BRL
4-Nitrophenol		mg/kg	NA	NS	4.1	BRL	BRL	BRL	6.3	BRL	BRL	BRL	BRL
hexachlorobutadiene		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
methylcyclohexane		mg/kg	NA	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Total Metals													
6010B													
arsenic		mg/L	NA	-	1060.00	2630.00	1720.00	1530.0	858.0	240.0	568.0	181.0	BRL
berium		mg/L	NA	-	204.00	180.00	142.00	225.0	281.0	212.0	262.0	175.0	15
cadmium		mg/L	NA	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
chromium		mg/L	NA	-	23.80	13.40	23.40	17.00	24.80	11.60	17.90	21.90	24
lead		mg/L	NA	-	11.40	9.79	16.90	14.30	13.40	11.90	11.50	8.9	BRL
selenium		mg/L	NA	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
silver		mg/L	NA	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
mercury		mg/L	NA	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL

Table 1
 TCLP Analytical Results for Area B
 Phase II Final Design Sampling Draft Report
 June 2004
 Red Panther Site
 Clarkdale, Mississippi

Constituent	Analytical Method	Units	TCLP Regulatory Limit (mg/L)	Universal Treatment Standard (mg/kg)	AB TCLP COMP (Area B)	AB TCLP 14 2-6 (Area B)	AB TCLP 14 6-10 (Area B)	AB TCLP 15 2-6 (Area B)	AB TCLP 16 2-6 (Area B)	AB TCLP 17 2-6 (Area B)	AB TCLP 17 6-10 (Area B)	AB TCLP 18 2-6 (Area B)	Area D Site
TCLP Analytical Results		6010B/9260/9270/9081A/9151A											
TCLP Volatiles		mg/L			BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
TCLP Semivolatiles		mg/L			BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
TCLP Pesticides													
and Herbicides	2,4,5-TP Silvex	mg/L	1		BRL	BRL	BRL	0.040	BRL	BRL	BRL	BRL	BRL
	2,4-D	mg/L	10		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	chloridane	mg/L	0.03		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	endrin	mg/L	0.02		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	gamma-BHC (lindane)	mg/L	0.4		0.0018	BRL	BRL	BRL	0.0038	BRL	BRL	BRL	BRL
	heptachlor	mg/L	0.008		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	methoxychlor	mg/L	10		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	toxaphene	mg/L	0.5		BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
TCLP Metals													
	Arsenic	mg/L	5.0	5.0	14.500	21.100	15.000	11.10	10.40	1.13	5.630	0.724	BRL
	barium	mg/L	100.0	12.0	BRL	BRL	0.667	BRL	BRL	0.674	0.756	BRL	BRL
	cadmium	mg/L	1.0	0.11	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	chromium	mg/L	5.0	0.6	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	lead	mg/L	5.0	0.75	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	selenium	mg/L	1.0	3.7	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
	silver	mg/L	5.0	0.14	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Hazardous Waste					Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
Waste Code					D004	D004	D004	D004	D004		D004		
Exceeding 10X LLR					No	No	No	No	No	NA	No	NA	NA
Note: Universal Treatment Standard applies to hazardous waste Universal Treatment Standard for metals is listed under TCLP values Bolded value exceeds standard mg/kg - milligrams per kilogram mg/L - milligrams per liter NA - Not Analyzed NS - No Standard BRL - Below Laboratory Reporting Limits													

Table 2
 Soil Sample Analytical Data
 Phase II Final Design Sampling
 Red Panther Site
 Clarksdale, Mississippi

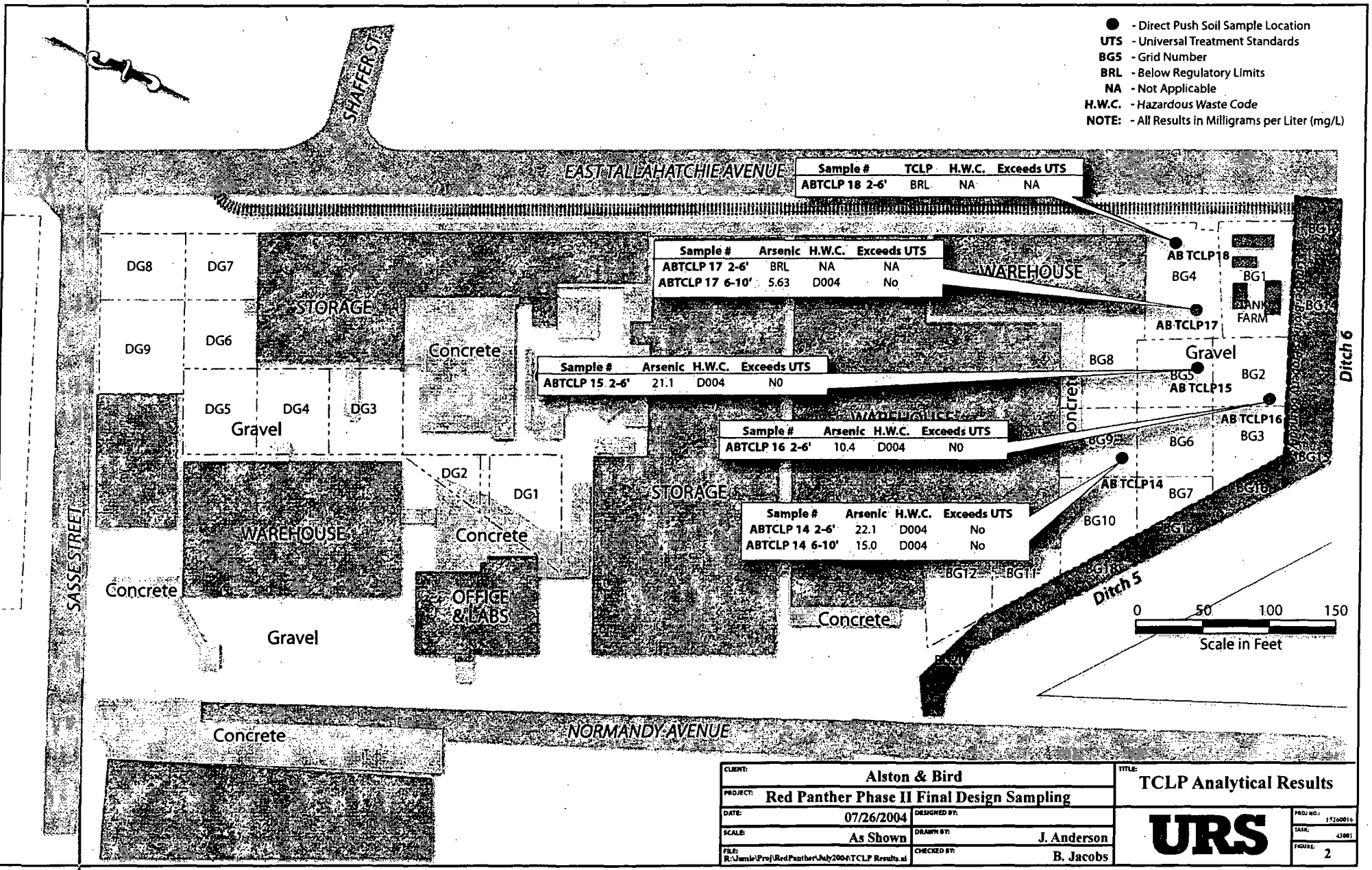
Constituent	Analytical Method	Units	D1E DPT1		D1E DPT2		ADSD DPT1		ADSD DPT2		Breezeway East	Breezeway West
			0-1	1-2	0-1	1-2	0-1	1-2	0-1	1-1	0-1	0-1
Pesticides												
4,4'-DDD		mg/kg	BRL	0.0066	BRL	BRL	3.1	0.024	20	8.1	BRL	1,300
4,4'-DDE		mg/kg	BRL	0.019	0.0075	0.0063	0.67	0.011	8.5	BRL	BRL	BRL
4,4'-DDT		mg/kg	BRL	0.012	0.005	BRL	1.5	0.01	81	130	1,200	9,000
aldrin		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
p-BHC		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
alpha-chlordane		mg/kg	BRL	BRL	BRL	BRL	0.0029	BRL	BRL	BRL	BRL	BRL
o-BHC		mg/kg	0.0028	0.0052	BRL	BRL	BRL	0.003	BRL	BRL	BRL	BRL
delta-BHC		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Dieldrin		mg/kg	0.023	0.071	0.015	BRL	2.4	0.088	19	13	940	620
Endosulfan I		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endosulfan II		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	16	BRL	BRL	BRL
Endosulfan sulfate		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin		mg/kg	BRL	0.0076	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin aldehyde		mg/kg	BRL	100	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Endrin Ketone		mg/kg	BRL	BRL	BRL	BRL	BRL	0.0052	BRL	BRL	BRL	BRL
gamma-BHC (Lindane)		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
gamma-chlordane		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Heptachlor		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Heptachlor epoxide		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Methoxychlor		mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Toxaphene		mg/kg	BRL	0.23	BRL	BRL	BRL	0.21	260	340	BRL	12,000
Total Pesticides		mg/kg	0.0258	100.35	0.0275	0.0063	7.67	0.3541	295.0	491.1	4,140	23,820
Metals												
	6010B											
Arsenic		mg/kg	9.62	10	11.8	30.4	72.8	7.04	28.8	11.6	174	755
Note: ug/kg - micrograms per kilogram mg/kg - milligrams per kilogram BRL - Below Laboratory Reporting Limit												



CLIENT:	Alston & Bird		TITLE:	Sample Locations		
PROJECT:	Red Panther Phase II Final Design Sampling				PROJ. NO.:	15260016
DATE:	07/26/2004	DESIGNED BY:				
SCALE:	As Shown	DRAWN BY:	J. Anderson			
FILE:	R:\Jm\proj\Red Panther July 2004\TCLP.d	CHECKED BY:	B. Jacobs			
					TASK:	43901
					FIGURE:	1

URS

- - Direct Push Soil Sample Location
- UTS - Universal Treatment Standards
- BG5 - Grid Number
- BRL - Below Regulatory Limits
- NA - Not Applicable
- H.W.C. - Hazardous Waste Code
- NOTE: - All Results in Milligrams per Liter (mg/L)



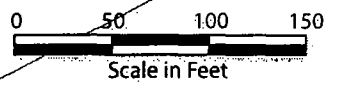
Sample #	TCLP	H.W.C.	Exceeds UTS
ABTCLP 18 2-6'	BRL	NA	NA

Sample #	Arsenic	H.W.C.	Exceeds UTS
ABTCLP 17 2-6'	BRL	NA	NA
ABTCLP 17 6-10'	5.63	D004	No

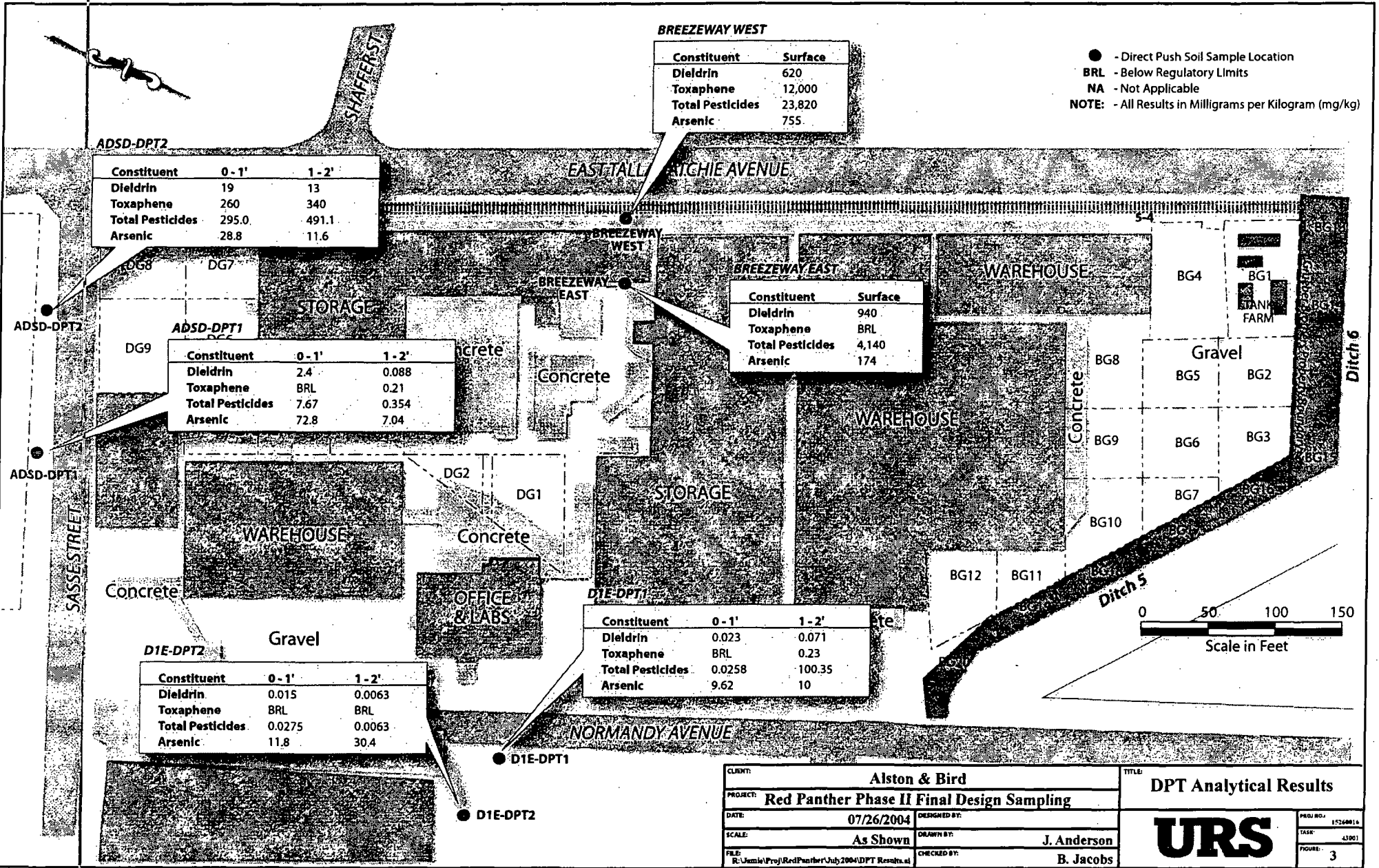
Sample #	Arsenic	H.W.C.	Exceeds UTS
ABTCLP 15 2-6'	21.1	D004	NO

Sample #	Arsenic	H.W.C.	Exceeds UTS
ABTCLP 16 2-6'	10.4	D004	NO

Sample #	Arsenic	H.W.C.	Exceeds UTS
ABTCLP 14 2-6'	22.1	D004	No
ABTCLP 14 6-10'	15.0	D004	No



CLIENT:	Alston & Bird		TITLE:	TCLP Analytical Results	
PROJECT:	Red Panther Phase II Final Design Sampling				
DATE:	07/26/2004	DESIGNED BY:			
SCALE:	As Shown	DRAWN BY:	J. Anderson		
FILE:	R:\Jamil\Proj\Red Panther\July2004\TCLP Results.xls	CHECKED BY:	B. Jacobs		
			URS	PROJ NO.:	15200010
				TASK:	43001
				FIGURE:	2



CLIENT:	Alston & Bird		TITLE:	DPT Analytical Results		
PROJECT:	Red Panther Phase II Final Design Sampling				PROJ NO:	15268016
DATE:	07/26/2004	DESIGNED BY:				
SCALE:	As Shown	DRAWN BY:	J. Anderson			
FILE:	R:\umia\proj\Red Panther\July2004\DPT Results.d				CHECKED BY:	B. Jacobs
					TASK:	43901
					FIGURE:	3


Appendix A

**Phase II Final Design Sampling
Soil Boring Logs**

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER D1E DPT -1
 PROJECT NAME Red Panther DATE DRILLED 6/28/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burt Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		21	CORE 1					GRASS cover, with topsoil, 6" of standing water. CLAYEY SILT; some very fine sand, dark brownish gray, moist, soft to firm.	
						ML		grades lighter brown Collected composite sample, 0 - 1' bgs for As, Total Pesticides.	
								Geoprobe terminated at 2' bgs. Composite sample collected, 1 - 2' bgs for As, Total Pesticides.	

BORING WELL RP. GPJ DM ATLMT.GDT 7/17/04

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER D1E DPT -2
 PROJECT NAME Red Panther DATE DRILLED 6/28/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burie Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		24	CORE 1					<p>GRASS cover, with wet topsoil</p> <p>SILTY CLAY; dark gray grading to brown and light gray, soft to firm</p> <p>grades soft, moist, low plasticity</p> <p>Collected composite sample from 0 to 1' bgs for As, Total Pesticides.</p> <p>SILTY SAND to SANDY SILT; very fine grained sand, gray to medium brown, medium dense, moist to wet.</p> <p>Collected composite sample from 1' to 2' bgs for As, Total Pesticides.</p>	
								Geoprobe terminated at 4' bgs	

BORING WELL REF. GPJ DM ATLNT.GDT. 7/17/04

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER ADSD DPT-1
 PROJECT NAME Red Panther DATE DRILLED 6/28/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		32	CORE 1					GRASS cover, with wet topsoil and roots, standing water.	
						ML		SANDY SILT; very fine grained sand, trace of fine orange gravel, dark gray to light brown, medium dense, moist, some odor. Collected composite sample from 0 to 1' bgs for As, Total Pesticides.	
						SM		SILTY SAND; very fine grained, light brown and gray, soft to medium dense, moist, pesticide odor.	
								Geoprobe terminated at 4' bgs Collected composite sample from 1 to 2' bgs for As, Total Pesticides.	

BORING WELL RP... \GPJ DM ATLMT.GBT 7/17/04

URS

BORINGWELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORINGWELL NUMBER ADSD DPT-2
 PROJECT NAME Red Panther DATE DRILLED 6/28/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		36	CORE 1					GRASS cover, with sandy topsoil, roots, fine gravel. Pesticide odor.	
						ML		SILT lens; soft, dark gray	
						ML		SANDY SILT; very fine grained sand, dark gray, dry. Collected composite sample, 0 - 1' bgs for As, Total Pesticides.	
						ML		CLAYEY SILT; medium brown and gray, moist, stiff. Pesticide odor throughout boring.	
								Geoprobe terminated at 4' bgs. Composite sample collected, 1 - 2' bgs for As, Total Pesticides.	

BORING WELL RPO... GPJ DM ATLNT.GDT 7/17/04



BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 **BORING/WELL NUMBER** AB TCLP-14
PROJECT NAME Red Panther **DATE DRILLED** 6/28/04
LOCATION Clarksdale, MS **CASING TYPE/DIAMETER** N/A
DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push **SCREEN TYPE/SLOT** N/A
SAMPLING METHOD 4' Macro, Acetate Liner **GRAVEL PACK TYPE** N/A
GROUND ELEVATION _____ **GROUT TYPE/QUANTITY** N/A
TOP OF CASING _____ **DEPTH TO WATER** _____
LOGGED BY M. Allard **GROUND WATER ELEVATION** _____
REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		36	CORE 1					CONCRETE slab, with gravel base.	
						SP		SAND; fine grained, gray.	
						ML		SILT; with fine gravel, dark brown to black, dry, firm	
						ML		SANDY SILT; very fine grained, gray to medium brown, stiff, dry.	
		48	CORE 2			ML		CLAYEY SILT; brownish gray to medium brown, soft, moist, non plastic, very strong pesticide odor. Collected composite sample from 2' to 6' bgs for TCLP Metals, Pesticides, VOCs, SVOCs.	
					5			grades mottled light gray and orange-brown, soft, wet, increasing clay content.	
		24	CORE 3			CH		CLAY; high plasticity, stiff to very stiff, gray with orange-brown mottles, perched water zone at 6.5' bgs.	▽
								grades blue-gray with orange stringers, very stiff, strong pesticide odor. Collected composite sample from 6' to 10' bgs for TCLP Metals, Pesticides, VOCs, SVOCs.	
					10			Geoprobe terminated at 10' bgs. NOTE: drilled two holes side by side to allow enough material for composite sample.	

BORING WELL RP. GFI DM. ATINT. GDT. 7/17/04

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER AB TCLP-15
 PROJECT NAME Red Panther DATE DRILLED 6/28/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (Inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		48	CORE 1					SAND AND GRAVEL cover, hard-packed, gravelly medium grained sand, orange and brown, fine to coarse gravel SAND; fine grained, medium brown, loose, dry.	
								SANDY SILT; very fine grained, dark gray to dark brown, dry, firm, crumbly, strong pesticide odor.	
								grades with increasing silt, less sand, orange-brown and gray SILTY CLAY; soft to firm, moist, low plasticity, mottled gray and orange brown, strong pesticide odor.	
		48	CORE 2		5			wet at 6' bgs, perched water zone Collected composite sample from 2' to 6' bgs for TCLP Metals, Pesticides, VOCs, SVOCs. CLAY; high plasticity, stiff to very stiff, mottled gray and orange brown	▽
								Geoprobe terminated at 8' bgs NOTE: drilled two holes side by side to allow enough material for composite sample.	

BORING WELL RPT. GPJ DW ATLANT.GDT 7/17/04



BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER AB TCLP-16
 PROJECT NAME Red Panther DATE DRILLED 6/29/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		48	CORE 1					SAND AND GRAVEL cover, hard-packed, gravelly medium grained sand, gray, fine to coarse gravel SAND; fine grained, with fine gravel, dark orange, loose, dry.	
						SP			
						ML		SANDY SILT; very fine grained, trace of clay, dark gray to dark brown, dry, stiff, strong odor. White lenses of buried product to 2.5' bgs.	
		48	CORE 2					grades with increasing clay content, sand grades out, light gray, soft SILTY CLAY; stiff, moist, low plasticity, mottled gray and orange brown, strong pesticide odor.	
					5	CL			
						CH		Collected composite sample from 2' to 6' bgs for TCLP Metals, Pesticides, VOCs, SVOCs. CLAY; high plasticity, stiff to very stiff, mottled gray and orange brown	
								Geoprobe terminated at 8' bgs NOTE: drilled two holes side by side to allow enough material for composite sample.	

BORING WELL RPT. 4.GPJ DM ATLNT.GDT 7/17/04

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER AB TCLP-17
 PROJECT NAME Red Panther DATE DRILLED 6/29/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4' Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.





PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		30	CORE 1					CONCRETE slab, with gravel base.	
								NO RECOVERY; trace of orange and tan sand, fine gravel.	
						ML		CLAYEY SILT; dark gray to black, soft, wet, non plastic, pesticide odor.	
						ML		SILT; with very fine sand, zone of fine gravel, wet, some odor.	
								SILTY CLAY; firm, moist, low plasticity, dark greenish gray.	
		32	CORE 2		5	CL		grades with medium brown mottling, moist, firm, some odor.	
								Collected composite sample from 2' to 6' bgs for TCLP Metals, Pesticides, VOCs, SVOCs.	
		24	CORE 3			CH		CLAY; high plasticity, stiff to very stiff, gray with orange-brown mottles, perched water zone at 6.5' bgs. grades blue-gray with orange stringers, very stiff, strong pesticide odor. Collected composite sample from 6' to 10' bgs for TCLP Metals, Pesticides, VOCs, SVOCs.	
					10			Geoprobe terminated at 10' bgs. NOTE: drilled two holes side by side to allow enough material for composite sample.	

BORING WELL RPA. 4.GPJ DM AT/LT.GDT 7/17/04

URS

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 15260016 BORING/WELL NUMBER AB TCLP-18
 PROJECT NAME Red Panther DATE DRILLED 6/29/04
 LOCATION Clarksdale, MS CASING TYPE/DIAMETER N/A
 DRILLING METHOD Geoprobe, John Deere Tractor Mounted, Direct Push SCREEN TYPE/SLOT N/A
 SAMPLING METHOD 4" Macro, Acetate Liner GRAVEL PACK TYPE N/A
 GROUND ELEVATION _____ GROUT TYPE/QUANTITY N/A
 TOP OF CASING _____ DEPTH TO WATER _____
 LOGGED BY M. Allard GROUND WATER ELEVATION _____
 REMARKS Drilled by Burle Engineers, Inc.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	INTERVAL	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	ELEVATION (feet)
		32	CORE 1					CONCRETE slab, with gravel base.	
								NO RECOVERY; trace of orange and gray sand, fine gravel.	
						ML		CLAYEY SILT; some fine sand, dark brownish gray, firm, dry, non plastic, somewhat crumbly pesticide odor.	
		36	CORE 2		5	CL		SILTY CLAY; firm, dry to moist, low plasticity, mottled olive gray and orange-brown, some odor. grades to light gray with orange-brown mottling, some odor. Perched water zone at 6.5' bgs. Collected composite sample from 2' to 6' bgs for TCLP Metals, Pesticides, VOCs, SVOCs.	▽
						CH		CLAY; high plasticity, stiff to very stiff, gray with orange-brown mottles.	
								Geoprobe terminated at 8' bgs. NOTE: drilled two holes side by side to allow enough material for composite sample.	

BORING WELL REP. GPJ DM ATLNT.GDT 7/17/04

Appendix B

**Phase II Final Design Sampling
Area B TCLP Analytical Data**



AES
July 16, 2004

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Brent Jacobs
URS
400 Northpark Town Center
1000 Abernathy Road Nor
Atlanta, GA 30328

TEL: (678) 808-8915
FAX (678) 808-8400

RE: Red Panthers Pesticide Site

Order No.: 0407035

Dear Brent Jacobs:

Analytical Environmental Services, Inc. received 10 samples on 7/1/2004 9:55:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 06/01/04-04/30/05.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 02/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 131 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Allison Cantrell
Project Manager

CLIENT: URS
Project: Red Panthers Pesticide Site
Lab Order: 0407035

CASE NARRATIVE.

Per Brent Jacobs request on 07/09/04, multiple samples and fractions were taken off hold for additional analyses. All additional parameters will be analyzed at standard turnaround time per client request. Client requested Full TCLP, Volatile, Semivolatile, 8 RCRA Metals, and Pesticide analyses for all samples with sample ID "TCLP."

Sample Receipt Non-Conformance:

A Trip Blank was provided but is not listed on the COC. Per client and project history, trip blank will be analyzed.

One vial was received broken for each sample: "AB TCLP 18 2-6", "AB TCLP Comp".

Metals Analysis by Method 6010B:

Matrix spike recoveries for barium and lead on sample 0407058-002B were outside control limits biased low. LCS recovery was within control limits indicating possible matrix interference.

Matrix spike recoveries for arsenic and selenium on sample 0407035-009C were outside control limits biased low. LCS recovery was within control limits indicating possible matrix interference.

Volatile Organic Compounds Analysis by Method 1311:

Percent recovery for the surrogate spiking compound 4-Bromofluorobenzene on sample 0407035-006D was outside control limits biased high due to suspected matrix interference. All other surrogate recoveries were within control limits.

Semi Volatile Organics Analysis by Method 8270C:

LCS-47390 recovery for pentachlorophenol was outside control limits biased high. Target analyte was not detected in the analytical samples and data is reportable with high bias.

Matrix spike recoveries for four spiking compounds and two surrogate compounds on sample 0407035-009B were outside control limits biased low due to matrix interference. LCS recovery was within control limits except as described above.

Matrix spike duplicate recoveries for three spiking compounds and one surrogate compound on sample 0407035-009B were outside control limits biased low due to matrix interference. LCS recovery was within control limits except as described above.

Volatile Organic Compounds Analysis by Method 8260B:

CLIENT: URS
Project: Red Panthers Pesticide Site
Lab Order: 0407035

CASE NARRATIVE

Due to sample matrix, samples 0407035-001A, -003A, -004A, -005A, and -006A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Pesticide Analysis by Method 8081:

Due to sample matrix interference, samples 0407035-006B, -007A, -008A, -009B, -009BMS and -009BMSD required dilution during analysis resulting in elevated reporting limits, and surrogate and spiking compound recoveries outside control limits.

Dieldrin value for the QC sample 0406F09-006BMS is "E" qualified indicating an estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

"NC" (Not Confirmed) qualifier indicates tentative target compound ID due to >40% relative percent difference between primary and confirmation column. SW-846 requires that the highest value be reported and the data qualified when significant disagreement between columns occurs.

Percent recovery for the surrogate spiking compounds Decachlorobiphenyl and Tetrachloro-m-xylene on sample 0407035-002 was outside control limits biased low due to suspected matrix interference. All other surrogate recoveries were within control limits.

Herbicide Analysis by Method 8151:

Due to sample matrix interference, samples 0407035-009B, -009BMS and -009BMSD required dilution during analysis resulting in elevated reporting limits and surrogate and spiking compound recoveries outside control limits.

COMPANY: URS Atlanta		ADDRESS: On File			ANALYSIS REQUESTED														
PHONE: 770 630 0913 678 808 8915		FAX: 678 808 8400			FULL TCLP SUPER 8220C RCRA Metals VOL 8260B SOBIA AS 6010B 8151 (Mercury)														
SAMPLED BY: Brent Jacobs		SIGNATURE: <i>[Signature]</i>			REMARKS														
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	PRESERVATION										No # of Containers		
		DATE	TIME																
	AB TCLP 15 2-6	6/29/04	0820		X	S												Prep + Hold	10
	AB TCLP 16 2-6	6/29/04	0915		X	S												Prep + Hold	10
	AB TCLP 17 2-6	6/29/04	1015		X	S												Prep + Hold	10
	AB TCLP 17 6-10	6/29/04	1030		X	S												Prep + Hold	10
	AB TCLP 18 2-6	6/29/04	1140		X	S												Prep + Hold	10
	AB TCLP Comp	6/29/04	1200		X	S	X	X	X	X	X								10
	Drainway East	6/29/04	1430		X	S													2
	Drainway West	6/29/04	1505		X	S													2
	Silo Area D	6/29/04	1545		X	O	X	X	X	X	X							Maybe product	8
RELINQUISHED BY: <i>[Signature]</i>		DATE/TIME: 7/1/04 0600		RECEIVED BY: <i>[Signature]</i>		DATE/TIME: 7/1/04 9:55		PROJECT INFORMATION										RECEIPT	
1: <i>[Signature]</i>		2: <i>[Signature]</i>		3: <i>[Signature]</i>		PROJECT NAME: Red Panther		PROJECT #:										Total # of Containers	
SPECIAL INSTRUCTIONS/COMMENTS: <i>[Signature]</i>		SHIPMENT METHOD		PROJECT MANAGER: Brent Jacobs		INVOICE TO: (IF DIFFERENT FROM ABOVE)		SITE ADDRESS:										Turnaround Time Request <input checked="" type="radio"/> Standard 3-5 Business Days <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Next Business Day Rush <input type="radio"/> 2 Business Day Rush <input type="radio"/> Other	
PO#: <i>[Signature]</i>		CLIENT: FedEx UPS MAIL COURIER		GREYHOUND OTHER		ON File		PROGRAM (see codes):										DATA PACKAGE: I II III IV	

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
 PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify) NA = None
 PROGRAM: FLUST FLDC ALUST TNUST MSUST NCUST SCUST GAUST GACONV FLCONV
 White Copy - ORIGINAL; Yellow Copy - LAB; Pink Copy - CLIENT

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client URS Atlanta

Work Order Number 0407035

Checklist completed by Nyene Babane Signature Date 7/1/04

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 4.3°C Cooler #2 4.4°C Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 15 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 8:20:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-001 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	0.049	0.0050		mg/L	47327	1	7/12/2004 8:45:00 PM
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 8:45:00 PM
Surr: DCAA	82.4	22.8-136		%REC	47327	1	7/12/2004 8:45:00 PM
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 6:35:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 6:35:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 6:35:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 6:35:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 6:35:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 6:35:00 PM
Surr: Decachlorobiphenyl	61.5	10-121		%REC	47326	1	7/2/2004 6:35:00 PM
Surr: Tetrachloro-m-xylene	116	10.9-125		%REC	47326	1	7/2/2004 6:35:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	27	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
4,4'-DDE	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
4,4'-DDT	7.4	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Aldrin	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
alpha-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
beta-BHC	11	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
delta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Dieldrin	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endosulfan I	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endosulfan II	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endrin	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Endrin ketone	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
gamma-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Heptachlor	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Methoxychlor	BRL	22		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Toxaphene	BRL	220		µg/Kg-dry	47539	1	7/15/2004 10:30:00 PI
Surr: Decachlorobiphenyl	98.0	11.2-135		%REC	47539	1	7/15/2004 10:30:00 PI
Surr: Tetrachloro-m-xylene	112	16.4-135		%REC	47539	1	7/15/2004 10:30:00 PI
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: EM	
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 15 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 8:20:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-001 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	21.1	0.250	*	mg/L	47333	1	7/2/2004 4:38:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 4:38:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 4:38:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 4:38:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 4:38:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 4:38:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 4:38:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	1530	5.29		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Barium	225	5.29		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Cadmium	BRL	2.65		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Chromium	17.0	2.65		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Lead	14.3	5.29		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Selenium	BRL	5.29		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
Silver	BRL	2.65		mg/Kg-dry	47534	1	7/9/2004 11:42:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.116		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 2:27:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 2:27:00 PM
Surr: 2,4,6-Tribromophenol	89.0	19-124		%REC	47325	1	7/14/2004 2:27:00 PM
Surr: 2-Fluorobiphenyl	88.5	26-115		%REC	47325	1	7/14/2004 2:27:00 PM
Surr: 2-Fluorophenol	77.7	10-121		%REC	47325	1	7/14/2004 2:27:00 PM
Surr: 4-Terphenyl-d14	89.0	18-137		%REC	47325	1	7/14/2004 2:27:00 PM
Surr: Nitrobenzene-d5	88.5	15-120		%REC	47325	1	7/14/2004 2:27:00 PM
Surr: Phenol-d5	71.3	18-113		%REC	47325	1	7/14/2004 2:27:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS
 Lab Order: 0407035
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-001

Client Sample ID: AB TCLP 15 2-6
 Collection Date: 6/29/2004 8:20:00 AM
 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4,5-Trichlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4,6-Trichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4-Dichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4-Dimethylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4-Dinitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,4-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2,6-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Chloronaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Chlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Methylnaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
2-Nitrophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
3,3'-Dichlorobenzidine	BRL	860		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
3-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4,6-Dinitro-2-methylphenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Bromophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Chloro-3-methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Chloroaniline	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Chlorophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
4-Nitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Acenaphthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Acenaphthylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Acetophenone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Atrazine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benz(a)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benzaldehyde	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benzo(a)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benzo(b)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benzo(g,h,i)perylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Benzo(k)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Bis(2-chloroethoxy)methane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Bis(2-chloroethyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Bis(2-chloroisopropyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Bis(2-ethylhexyl)phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Butyl benzyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 15 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 8:20:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-001 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Carbazole	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Chrysene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Dibenz(a,h)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Dibenzofuran	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Diethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Dimethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Di-n-butyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Di-n-octyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Fluorene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Hexachlorobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Hexachlorobutadiene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Hexachlorocyclopentadiene	BRL	850		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Hexachloroethane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Indeno(1,2,3-cd)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Isophorone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Naphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Nitrobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
N-Nitrosodi-n-propylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
N-Nitrosodiphenylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Pentachlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Phenanthrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Phenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 5:54:00 PM
Surr: 2,4,6-Tribromophenol	88.0	35.5-131		%REC	47515	1	7/9/2004 5:54:00 PM
Surr: 2-Fluorobiphenyl	73.6	12.9-120		%REC	47515	1	7/9/2004 5:54:00 PM
Surr: 2-Fluorophenol	70.5	10-119		%REC	47515	1	7/9/2004 5:54:00 PM
Surr: 4-Terphenyl-d14	61.7	41.5-128		%REC	47515	1	7/9/2004 5:54:00 PM
Surr: Nitrobenzene-d5	70.5	10-121		%REC	47515	1	7/9/2004 5:54:00 PM
Surr: Phenol-d5	64.6	12.6-121		%REC	47515	1	7/9/2004 5:54:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 1:45:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS
Lab Order: 0407035
Project: Red Panthers Pesticide Site
Lab ID: 0407035-001

Client Sample ID: AB TCLP 15 2-6
Collection Date: 6/29/2004 8:20:00 AM
Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 1:45:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 1:45:00 PM
Surr: 4-Bromofluorobenzene	101	63.1-121		%REC	47510	20	7/9/2004 1:45:00 PM
Surr: Dibromofluoromethane	99.0	69.5-126		%REC	47510	20	7/9/2004 1:45:00 PM
Surr: Toluene-d8	92.9	74.2-120		%REC	47510	20	7/9/2004 1:45:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: AD	
1,1,1-Trichloroethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,1,2,2-Tetrachloroethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,1,2-Trichloroethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,1-Dichloroethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,1-Dichloroethene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2,4-Trichlorobenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2-Dibromo-3-chloropropane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2-Dibromoethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2-Dichlorobenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2-Dichloroethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,2-Dichloropropane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,3-Dichlorobenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
1,4-Dichlorobenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
2-Butanone	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
2-Hexanone	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
4-Methyl-2-pentanone	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Acetone	BRL	37000		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Benzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Bromodichloromethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Bromoform	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Bromomethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Carbon disulfide	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Carbon tetrachloride	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Chlorobenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Chloroethane	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Chloroform	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Chloromethane	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
cis-1,2-Dichloroethene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
cis-1,3-Dichloropropene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Cyclohexane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Dibromochloromethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Dichlorodifluoromethane	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Ethylbenzene	9500	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Freon-113	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 15 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 8:20:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-001 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
Isopropylbenzene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
m,p-Xylene	44000	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Methyl acetate	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Methyl tert-butyl ether	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Methylcyclohexane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Methylene chloride	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
o-Xylene	13000	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Styrene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Tetrachloroethene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Toluene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
trans-1,2-Dichloroethene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
trans-1,3-Dichloropropene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Trichloroethene	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Trichlorofluoromethane	BRL	1800		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Vinyl chloride	BRL	3700		µg/Kg-dry	47602	500	7/12/2004 10:59:00 A
Surr: 4-Bromofluorobenzene	107	65.3-133		%REC	47602	500	7/12/2004 10:59:00 A
Surr: Dibromofluoromethane	103	80.1-121		%REC	47602	500	7/12/2004 10:59:00 A
Surr: Toluene-d8	105	67.8-145		%REC	47602	500	7/12/2004 10:59:00 A
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	22.4	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 16 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 9:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 9:10:00 PM
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 9:10:00 PM
Surr: DCAA	96.2	22.8-136		%REC	47327	1	7/12/2004 9:10:00 PM
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 7:04:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 7:04:00 PM
gamma-BHC	0.0038	0.00050		mg/L	47326	1	7/2/2004 7:04:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 7:04:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 7:04:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 7:04:00 PM
Surr: Decachlorobiphenyl	70.4	10-121		%REC	47326	1	7/2/2004 7:04:00 PM
Surr: Tetrachloro-m-xylene	103	10.9-125		%REC	47326	1	7/2/2004 7:04:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	89	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
4,4'-DDE	60	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
4,4'-DDT	530	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Aldrin	BRL	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
alpha-BHC	410	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
alpha-Chlordane	58	23	NC	µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
beta-BHC	120	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
delta-BHC	95	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Dieldrin	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endosulfan I	BRL	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endosulfan II	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endosulfan sulfate	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endrin	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endrin aldehyde	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Endrin ketone	BRL	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
gamma-BHC	140	45		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
gamma-Chlordane	33	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Heptachlor	BRL	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Heptachlor epoxide	BRL	23		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Methoxychlor	BRL	230		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Toxaphene	1400	910		µg/Kg-dry	47539	10	7/14/2004 7:17:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47539	10	7/14/2004 7:17:00 PM
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47539	10	7/14/2004 7:17:00 PM
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: EM	
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 16 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 9:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	10.4	0.250	*	mg/L	47333	1	7/2/2004 4:42:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 4:42:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 4:42:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 4:42:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 4:42:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 4:42:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 4:42:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	858	5.44		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Barium	281	5.44		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Cadmium	BRL	2.72		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Chromium	24.8	2.72		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Lead	13.6	5.44		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Selenium	BRL	5.44		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
Silver	BRL	2.72		mg/Kg-dry	47534	1	7/9/2004 11:46:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.124		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 3:05:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 3:05:00 PM
Surr: 2,4,6-Tribromophenol	91.8	19-124		%REC	47325	1	7/14/2004 3:05:00 PM
Surr: 2-Fluorobiphenyl	90.4	26-115		%REC	47325	1	7/14/2004 3:05:00 PM
Surr: 2-Fluorophenol	83.9	10-121		%REC	47325	1	7/14/2004 3:05:00 PM
Surr: 4-Terphenyl-d14	89.1	18-137		%REC	47325	1	7/14/2004 3:05:00 PM
Surr: Nitrobenzene-d5	91.3	15-120		%REC	47325	1	7/14/2004 3:05:00 PM
Surr: Phenol-d5	73.6	18-113		%REC	47325	1	7/14/2004 3:05:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 162-6
 Lab Order: 0407035 Collection Date: 6/29/2004 9:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4,5-Trichlorophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4,6-Trichlorophenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4-Dichlorophenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4-Dimethylphenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4-Dinitrophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,4-Dinitrotoluene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2,6-Dinitrotoluene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Chloronaphthalene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Chlorophenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Methylnaphthalene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Methylphenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
2-Nitrophenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
3,3'-Dichlorobenzidine	BRL	910		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
3-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4,6-Dinitro-2-methylphenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Bromophenyl phenyl ether	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Chloro-3-methylphenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Chloroaniline	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Chlorophenyl phenyl ether	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Methylphenol	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
4-Nitrophenol	6300	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Acenaphthene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Acenaphthylene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Acetophenone	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Anthracene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Atrazine	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benz(a)anthracene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benzaldehyde	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benzo(a)pyrene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benzo(b)fluoranthene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benzo(g,h,i)perylene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Benzo(k)fluoranthene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Bis(2-chloroethoxy)methane	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Bis(2-chloroethyl)ether	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Bis(2-chloroisopropyl)ether	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Bis(2-ethylhexyl)phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Butyl benzyl phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS
 Lab Order: 0407035
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002

Client Sample ID: AB TCLP 16 2-6
 Collection Date: 6/29/2004 9:15:00 AM
 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Carbazole	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Chrysene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Dibenz(a,h)anthracene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Dibenzofuran	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Diethyl phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Dimethyl phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Di-n-butyl phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Di-n-octyl phthalate	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Fluoranthene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Fluorene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Hexachlorobenzene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Hexachlorobutadiene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Hexachlorocyclopentadiene	BRL	890		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Hexachloroethane	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Indeno(1,2,3-cd)pyrene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Isophorone	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Naphthalene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Nitrobenzene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
N-Nitrosodi-n-propylamine	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
N-Nitrosodiphenylamine	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Pentachlorophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Phenanthrene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Phenol	940	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Pyrene	BRL	450		µg/Kg-dry	47515	1	7/9/2004 6:32:00 PM
Surr: 2,4,6-Tribromophenol	104	35.5-131		%REC	47515	1	7/9/2004 6:32:00 PM
Surr: 2-Fluorobiphenyl	82.5	12.9-120		%REC	47515	1	7/9/2004 6:32:00 PM
Surr: 2-Fluorophenol	78.4	10-119		%REC	47515	1	7/9/2004 6:32:00 PM
Surr: 4-Terphenyl-d14	69.5	41.5-128		%REC	47515	1	7/9/2004 6:32:00 PM
Surr: Nitrobenzene-d5	79.5	10-121		%REC	47515	1	7/9/2004 6:32:00 PM
Surr: Phenol-d5	78.2	12.6-121		%REC	47515	1	7/9/2004 6:32:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 2:12:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 16 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 9:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:12:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 2:12:00 PM
Surr: 4-Bromofluorobenzene	99.0	63.1-121		%REC	47510	20	7/9/2004 2:12:00 PM
Surr: Dibromofluoromethane	101	69.5-126		%REC	47510	20	7/9/2004 2:12:00 PM
Surr: Toluene-d8	95.5	74.2-120		%REC	47510	20	7/9/2004 2:12:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: NWH	
1,1,1-Trichloroethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,1,2,2-Tetrachloroethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,1,2-Trichloroethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,1-Dichloroethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,1-Dichloroethene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2,4-Trichlorobenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2-Dibromo-3-chloropropane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2-Dibromoethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2-Dichlorobenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2-Dichloroethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,2-Dichloropropane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,3-Dichlorobenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
1,4-Dichlorobenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
2-Butanone	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
2-Hexanone	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
4-Methyl-2-pentanone	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Acetone	84	83		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Benzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Bromodichloromethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Bromoform	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Bromomethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Carbon disulfide	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Carbon tetrachloride	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Chlorobenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Chloroethane	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Chloroform	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Chloromethane	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
cis-1,2-Dichloroethene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
cis-1,3-Dichloropropene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Cyclohexane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Dibromochloromethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Dichlorodifluoromethane	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Ethylbenzene	4.8	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Freon-113	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 16 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 9:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-002 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: NWH		
Isopropylbenzene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
m,p-Xylene	17	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Methyl acetate	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Methyl tert-butyl ether	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Methylcyclohexane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Methylene chloride	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
o-Xylene	27	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Styrene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Tetrachloroethene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Toluene	9.8	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
trans-1,2-Dichloroethene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
trans-1,3-Dichloropropene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Trichloroethene	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Trichlorofluoromethane	BRL	4.1		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Vinyl chloride	BRL	8.3		µg/Kg-dry	47532	1	7/12/2004 2:41:00 PM
Surr: 4-Bromofluorobenzene	68.7	65.3-133		%REC	47532	1	7/12/2004 2:41:00 PM
Surr: Dibromofluoromethane	96.6	80.1-121		%REC	47532	1	7/12/2004 2:41:00 PM
Surr: Toluene-d8	93.3	67.8-145		%REC	47532	1	7/12/2004 2:41:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	26.2	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 172-6
 Lab Order: 0407035 Collection Date: 6/29/2004 10:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 9:36:00 PM
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 9:36:00 PM
Surr: DCAA	79.4	22.8-136		%REC	47327	1	7/12/2004 9:36:00 PM
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 9:58:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 9:58:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 9:58:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 9:58:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 9:58:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 9:58:00 PM
Surr: Decachlorobiphenyl	66.7	10-121		%REC	47326	1	7/2/2004 9:58:00 PM
Surr: Tetrachloro-m-xylene	68.3	10.9-125		%REC	47326	1	7/2/2004 9:58:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	12	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
4,4'-DDE	61	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
4,4'-DDT	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Aldrin	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
alpha-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
alpha-Chlordane	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
beta-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
delta-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Dieldrin	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endosulfan I	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endosulfan II	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endosulfan sulfate	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endrin	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endrin aldehyde	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Endrin ketone	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
gamma-BHC	BRL	4.2		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
gamma-Chlordane	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Heptachlor	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Heptachlor epoxide	BRL	2.1		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Methoxychlor	BRL	21		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Toxaphene	BRL	210		µg/Kg-dry	47539	1	7/15/2004 10:59:00 PM
Surr: Decachlorobiphenyl	65.4	11.2-135		%REC	47539	1	7/15/2004 10:59:00 PM
Surr: Tetrachloro-m-xylene	49.7	16.4-135		%REC	47539	1	7/15/2004 10:59:00 PM
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: EM	
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 172-6
 Lab Order: 0407035 Collection Date: 6/29/2004 10:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	1.13	0.250		mg/L	47333	1	7/2/2004 5:15:00 PM
Barium	0.674	0.500		mg/L	47333	1	7/2/2004 5:15:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 5:15:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 5:15:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 5:15:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 5:15:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 5:15:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	240	3.25		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Barium	212	3.25		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Cadmium	BRL	1.63		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Chromium	11.6	1.63		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Lead	11.9	3.25		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Selenium	BRL	3.25		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
Silver	BRL	1.63		mg/Kg-dry	47534	1	7/9/2004 11:51:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.112		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 3:43:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 3:43:00 PM
Surr: 2,4,6-Tribromophenol	80.0	19-124		%REC	47325	1	7/14/2004 3:43:00 PM
Surr: 2-Fluorobiphenyl	87.1	26-115		%REC	47325	1	7/14/2004 3:43:00 PM
Surr: 2-Fluorophenol	78.5	10-121		%REC	47325	1	7/14/2004 3:43:00 PM
Surr: 4-Terphenyl-d14	86.6	18-137		%REC	47325	1	7/14/2004 3:43:00 PM
Surr: Nitrobenzene-d5	85.0	15-120		%REC	47325	1	7/14/2004 3:43:00 PM
Surr: Phenol-d5	69.0	18-113		%REC	47325	1	7/14/2004 3:43:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS
 Lab Order: 0407035
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003

Client Sample ID: AB TCLP 17 2-6
 Collection Date: 6/29/2004 10:15:00 AM
 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4,5-Trichlorophenol	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4,6-Trichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4-Dichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4-Dimethylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4-Dinitrophenol	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,4-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2,6-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Chloronaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Chlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Methylnaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Nitroaniline	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
2-Nitrophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
3,3'-Dichlorobenzidine	BRL	850		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
3-Nitroaniline	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4,6-Dinitro-2-methylphenol	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Bromophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Chloro-3-methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Chloroaniline	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Chlorophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Nitroaniline	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
4-Nitrophenol	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Acenaphthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Acenaphthylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Acetophenone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Atrazine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benz(a)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benzaldehyde	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benzo(a)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benzo(b)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benzo(g,h,i)perylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Benzo(k)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Bis(2-chloroethoxy)methane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Bis(2-chloroethyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Bis(2-chloroisopropyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Bis(2-ethylhexyl)phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Butyl benzyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 10:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Carbazole	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Chrysene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Dibenz(a,h)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Dibenzofuran	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Diethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Dimethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Di-n-butyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Di-n-octyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Fluorene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Hexachlorobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Hexachlorobutadiene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Hexachlorocyclopentadiene	BRL	830		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Hexachloroethane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Indeno(1,2,3-cd)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Isophorone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Naphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Nitrobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
N-Nitrosodi-n-propylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
N-Nitrosodiphenylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Pentachlorophenol	BRL	2100		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Phenanthrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Phenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 7:10:00 PM
Surr: 2,4,6-Tribromophenol	92.3	35.5-131		%REC	47515	1	7/9/2004 7:10:00 PM
Surr: 2-Fluorobiphenyl	75.0	12.9-120		%REC	47515	1	7/9/2004 7:10:00 PM
Surr: 2-Fluorophenol	71.6	10-119		%REC	47515	1	7/9/2004 7:10:00 PM
Surr: 4-Terphenyl-d14	66.0	41.5-128		%REC	47515	1	7/9/2004 7:10:00 PM
Surr: Nitrobenzene-d5	71.5	10-121		%REC	47515	1	7/9/2004 7:10:00 PM
Surr: Phenol-d5	69.1	12.6-121		%REC	47515	1	7/9/2004 7:10:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 2:40:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 172-6
 Lab Order: 0407035 Collection Date: 6/29/2004 10:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 2:40:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 2:40:00 PM
Surr: 4-Bromofluorobenzene	94.3	63.1-121		%REC	47510	20	7/9/2004 2:40:00 PM
Surr: Dibromofluoromethane	94.3	69.5-126		%REC	47510	20	7/9/2004 2:40:00 PM
Surr: Toluene-d8	95.3	74.2-120		%REC	47510	20	7/9/2004 2:40:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: AD	
1,1,1-Trichloroethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,1,2,2-Tetrachloroethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,1,2-Trichloroethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,1-Dichloroethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,1-Dichloroethene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2,4-Trichlorobenzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2-Dibromo-3-chloropropane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2-Dibromoethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2-Dichlorobenzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2-Dichloroethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,2-Dichloropropane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,3-Dichlorobenzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
1,4-Dichlorobenzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
2-Butanone	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
2-Hexanone	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
4-Methyl-2-pentanone	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Acetone	BRL	3700		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Benzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Bromodichloromethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Bromoform	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Bromomethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Carbon disulfide	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Carbon tetrachloride	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Chlorobenzene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Chloroethane	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Chloroform	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Chloromethane	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
cis-1,2-Dichloroethene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
cis-1,3-Dichloropropene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Cyclohexane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Dibromochloromethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Dichlorodifluoromethane	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Ethylbenzene	400	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Freon-113	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 172-6
 Lab Order: 0407035 Collection Date: 6/29/2004 10:15:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-003 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
Isopropylbenzene	1400	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
m,p-Xylene	2700	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Methyl acetate	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Methyl tert-butyl ether	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Methylcyclohexane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Methylene chloride	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
o-Xylene	19000	1900		µg/Kg-dry	47602	500	7/12/2004 12:20:00 PM
Styrene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Tetrachloroethene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Toluene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
trans-1,2-Dichloroethene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
trans-1,3-Dichloropropene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Trichloroethene	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Trichlorofluoromethane	BRL	190		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Vinyl chloride	BRL	370		µg/Kg-dry	47602	50	7/12/2004 2:36:00 PM
Surr: 4-Bromofluorobenzene	121	65.3-133		%REC	47602	50	7/12/2004 2:36:00 PM
Surr: 4-Bromofluorobenzene	106	65.3-133		%REC	47602	500	7/12/2004 12:20:00 PM
Surr: Dibromofluoromethane	107	80.1-121		%REC	47602	50	7/12/2004 2:36:00 PM
Surr: Dibromofluoromethane	107	80.1-121		%REC	47602	500	7/12/2004 12:20:00 PM
Surr: Toluene-d8	109	67.8-145		%REC	47602	50	7/12/2004 2:36:00 PM
Surr: Toluene-d8	108	67.8-145		%REC	47602	500	7/12/2004 12:20:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	20.8	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
		Rpt Limit Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS **Client Sample ID:** AB TCLP 17 6-10
Lab Order: 0407035 **Collection Date:** 6/29/2004 10:30:00 AM
Project: Red Panthers Pesticide Site
Lab ID: 0407035-004 **Matrix:** SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 10:02:00 PI
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 10:02:00 PI
Surr: DCAA	89.3	22.8-136		%REC	47327	1	7/12/2004 10:02:00 PI
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 10:27:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 10:27:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 10:27:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 10:27:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 10:27:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 10:27:00 PM
Surr: Decachlorobiphenyl	66.8	10-121		%REC	47326	1	7/2/2004 10:27:00 PM
Surr: Tetrachloro-m-xylene	64.0	10.9-125		%REC	47326	1	7/2/2004 10:27:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	5.3	4.3	NC	µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
4,4'-DDE	16	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
4,4'-DDT	10	4.3	NC	µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
alpha-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
beta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Dieldrin	33	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endosulfan II	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Endrin ketone	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
gamma-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Toxaphene	140	87		µg/Kg-dry	47539	1	7/14/2004 8:16:00 PM
Surr: Decachlorobiphenyl	73.6	11.2-135		%REC	47539	1	7/14/2004 8:16:00 PM
Surr: Tetrachloro-m-xylene	89.6	16.4-135		%REC	47539	1	7/14/2004 8:16:00 PM
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: EM	
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 6-10
 Lab Order: 0407035 Collection Date: 6/29/2004 10:30:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-004 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	5.63	0.250	*	mg/L	47333	1	7/2/2004 5:21:00 PM
Barium	0.756	0.500		mg/L	47333	1	7/2/2004 5:21:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 5:21:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 5:21:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 5:21:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 5:21:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 5:21:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	568	5.91		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Barium	262	5.91		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Cadmium	BRL	2.95		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Chromium	17.9	2.95		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Lead	12.4	5.91		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Selenium	BRL	5.91		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
Silver	BRL	2.95		mg/Kg-dry	47534	1	7/9/2004 11:55:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.118		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 4:22:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 4:22:00 PM
Surr: 2,4,6-Tribromophenol	89.7	19-124		%REC	47325	1	7/14/2004 4:22:00 PM
Surr: 2-Fluorobiphenyl	88.9	26-115		%REC	47325	1	7/14/2004 4:22:00 PM
Surr: 2-Fluorophenol	78.7	10-121		%REC	47325	1	7/14/2004 4:22:00 PM
Surr: 4-Terphenyl-d14	93.3	18-137		%REC	47325	1	7/14/2004 4:22:00 PM
Surr: Nitrobenzene-d5	90.5	15-120		%REC	47325	1	7/14/2004 4:22:00 PM
Surr: Phenol-d5	70.7	18-113		%REC	47325	1	7/14/2004 4:22:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 G-10
 Lab Order: 0407035 Collection Date: 6/29/2004 10:30:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-004 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4,5-Trichlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4,6-Trichlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4-Dichlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4-Dimethylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4-Dinitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,4-Dinitrotoluene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2,6-Dinitrotoluene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Chloronaphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Chlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Methylnaphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
2-Nitrophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
3,3'-Dichlorobenzidine	BRL	870		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
3-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4,6-Dinitro-2-methylphenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Bromophenyl phenyl ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Chloro-3-methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Chloroaniline	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Chlorophenyl phenyl ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
4-Nitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Acenaphthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Acenaphthylene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Acetophenone	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Atrazine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benz(a)anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benzaldehyde	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benzo(a)pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benzo(b)fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benzo(g,h,i)perylene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Benzo(k)fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Bis(2-chloroethoxy)methane	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Bis(2-chloroethyl)ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Bis(2-chloroisopropyl)ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Bis(2-ethylhexyl)phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Butyl benzyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 6-10
 Lab Order: 0407035 Collection Date: 6/29/2004 10:30:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-004 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Carbazole	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Chrysene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Dibenz(a,h)anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Dibenzofuran	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Diethyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Dimethyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Di-n-butyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Di-n-octyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Fluorene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Hexachlorobenzene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Hexachlorobutadiene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Hexachlorocyclopentadiene	BRL	860		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Hexachloroethane	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Indeno(1,2,3-cd)pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Isophorone	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Naphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Nitrobenzene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
N-Nitrosodi-n-propylamine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
N-Nitrosodiphenylamine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Pentachlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Phenanthrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Phenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 7:48:00 PM
Surr: 2,4,6-Tribromophenol	90.6	35.5-131		%REC	47515	1	7/9/2004 7:48:00 PM
Surr: 2-Fluorobiphenyl	74.7	12.9-120		%REC	47515	1	7/9/2004 7:48:00 PM
Surr: 2-Fluorophenol	66.0	10-119		%REC	47515	1	7/9/2004 7:48:00 PM
Surr: 4-Terphenyl-d14	65.3	41.5-128		%REC	47515	1	7/9/2004 7:48:00 PM
Surr: Nitrobenzene-d5	71.4	10-121		%REC	47515	1	7/9/2004 7:48:00 PM
Surr: Phenol-d5	61.5	12.6-121		%REC	47515	1	7/9/2004 7:48:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 3:08:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 6-10
 Lab Order: 0407035 Collection Date: 6/29/2004 10:30:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-004 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:08:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 3:08:00 PM
Surr: 4-Bromofluorobenzene	93.8	63.1-121		%REC	47510	20	7/9/2004 3:08:00 PM
Surr: Dibromofluoromethane	98.7	69.5-126		%REC	47510	20	7/9/2004 3:08:00 PM
Surr: Toluene-d8	99.2	74.2-120		%REC	47510	20	7/9/2004 3:08:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: AD	
1,1,1-Trichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,1,2,2-Tetrachloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,1,2-Trichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,1-Dichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,1-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2,4-Trichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2-Dibromo-3-chloropropane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2-Dibromoethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2-Dichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,2-Dichloropropane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,3-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
1,4-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
2-Butanone	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
2-Hexanone	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
4-Methyl-2-pentanone	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Acetone	BRL	3500		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Benzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Bromodichloromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Bromoform	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Bromomethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Carbon disulfide	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Carbon tetrachloride	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Chlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Chloroethane	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Chloroform	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Chloromethane	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
cis-1,2-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
cis-1,3-Dichloropropene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Cyclohexane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Dibromochloromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Dichlorodifluoromethane	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Ethylbenzene	1800	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Freon-113	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 17 6-10
 Lab Order: 0407035 Collection Date: 6/29/2004 10:30:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-004 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
Isopropylbenzene	360	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
m,p-Xylene	8100	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Methyl acetate	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Methyl tert-butyl ether	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Methylcyclohexane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Methylene chloride	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
o-Xylene	6100	1700		µg/Kg-dry	47602	500	7/12/2004 11:53:00 A
Styrene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Tetrachloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Toluene	180	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
trans-1,2-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
trans-1,3-Dichloropropene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Trichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Trichlorofluoromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Vinyl chloride	BRL	350		µg/Kg-dry	47602	50	7/12/2004 1:42:00 PM
Surr: 4-Bromofluorobenzene	119	65.3-133		%REC	47602	50	7/12/2004 1:42:00 PM
Surr: 4-Bromofluorobenzene	103	65.3-133		%REC	47602	500	7/12/2004 11:53:00 A
Surr: Dibromofluoromethane	109	80.1-121		%REC	47602	50	7/12/2004 1:42:00 PM
Surr: Dibromofluoromethane	103	80.1-121		%REC	47602	500	7/12/2004 11:53:00 A
Surr: Toluene-d8	111	67.8-145		%REC	47602	50	7/12/2004 1:42:00 PM
Surr: Toluene-d8	107	67.8-145		%REC	47602	500	7/12/2004 11:53:00 A
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	23.2	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 18 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 11:40:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-005 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A (SW3510B)		Analyst: WDP			
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 10:28:00 PI
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 10:28:00 PI
Surr: DCAA	84.0	22.8-136		%REC	47327	1	7/12/2004 10:28:00 PI
PESTICIDES, TCLP		SW1311/8081A (SW3510B)		Analyst: JMZ			
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 10:57:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 10:57:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 10:57:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 10:57:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 10:57:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 10:57:00 PM
Surr: Decachlorobiphenyl	67.0	10-121		%REC	47326	1	7/2/2004 10:57:00 PM
Surr: Tetrachloro-m-xylene	69.1	10.9-125		%REC	47326	1	7/2/2004 10:57:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A		Analyst: JMZ			
4,4'-DDD	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
4,4'-DDE	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
4,4'-DDT	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
alpha-BHC	3.0	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
beta-BHC	5.6	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Dieldrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endosulfan II	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Endrin ketone	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
gamma-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Toxaphene	BRL	220		µg/Kg-dry	47539	1	7/14/2004 8:45:00 PM
Surr: Decachlorobiphenyl	67.6	11.2-135		%REC	47539	1	7/14/2004 8:45:00 PM
Surr: Tetrachloro-m-xylene	57.3	16.4-135		%REC	47539	1	7/14/2004 8:45:00 PM
MERCURY, TCLP		SW1311/7470A (SW7470A)		Analyst: EM			
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 18 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 11:40:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-005 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	0.724	0.250		mg/L	47333	1	7/2/2004 5:26:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 5:26:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 5:26:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 5:26:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 5:26:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 5:26:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 5:26:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	183	5.05		mg/Kg-dry	47534	1	7/10/2004
Barium	175	5.05		mg/Kg-dry	47534	1	7/10/2004
Cadmium	BRL	2.52		mg/Kg-dry	47534	1	7/10/2004
Chromium	21.9	2.52		mg/Kg-dry	47534	1	7/10/2004
Lead	11.5	5.05		mg/Kg-dry	47534	1	7/10/2004
Selenium	BRL	5.05		mg/Kg-dry	47534	1	7/10/2004
Silver	BRL	2.52		mg/Kg-dry	47534	1	7/10/2004
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.124		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 5:00:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 5:00:00 PM
Surr: 2,4,6-Tribromophenol	82.6	19-124		%REC	47325	1	7/14/2004 5:00:00 PM
Surr: 2-Fluorobiphenyl	90.1	26-115		%REC	47325	1	7/14/2004 5:00:00 PM
Surr: 2-Fluorophenol	84.1	10-121		%REC	47325	1	7/14/2004 5:00:00 PM
Surr: 4-Terphenyl-d14	90.6	18-137		%REC	47325	1	7/14/2004 5:00:00 PM
Surr: Nitrobenzene-d5	92.8	15-120		%REC	47325	1	7/14/2004 5:00:00 PM
Surr: Phenol-d5	74.6	18-113		%REC	47325	1	7/14/2004 5:00:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
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 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS **Client Sample ID:** AB TCLP 18 2-6
Lab Order: 0407035 **Collection Date:** 6/29/2004 11:40:00 AM
Project: Red Panthers Pesticide Site
Lab ID: 0407035-005 **Matrix:** SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4,5-Trichlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4,6-Trichlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4-Dichlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4-Dimethylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4-Dinitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,4-Dinitrotoluene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2,6-Dinitrotoluene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Chloronaphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Chlorophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Methylnaphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
2-Nitrophenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
3,3'-Dichlorobenzidine	BRL	860		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
3-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4,6-Dinitro-2-methylphenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Bromophenyl phenyl ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Chloro-3-methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Chloroaniline	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Chlorophenyl phenyl ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Methylphenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
4-Nitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Acenaphthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Acenaphthylene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Acetophenone	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Atrazine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benz(a)anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benzaldehyde	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benzo(a)pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benzo(b)fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benzo(g,h,i)perylene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Benzo(k)fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Bis(2-chloroethoxy)methane	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Bis(2-chloroethyl)ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Bis(2-chloroisopropyl)ether	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Bis(2-ethylhexyl)phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Butyl benzyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 18 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 11:40:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-005 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
Caprolactam	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Carbazole	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Chrysene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Dibenz(a,h)anthracene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Dibenzofuran	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Diethyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Dimethyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Di-n-butyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Di-n-octyl phthalate	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Fluoranthene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Fluorene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Hexachlorobenzene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Hexachlorobutadiene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Hexachlorocyclopentadiene	BRL	850		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Hexachloroethane	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Indeno(1,2,3-cd)pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Isophorone	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Naphthalene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Nitrobenzene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
N-Nitrosodi-n-propylamine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
N-Nitrosodiphenylamine	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Pentachlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Phenanthrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Phenol	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Pyrene	BRL	430		µg/Kg-dry	47515	1	7/9/2004 8:26:00 PM
Surr: 2,4,6-Tribromophenol	91.3	35.5-131		%REC	47515	1	7/9/2004 8:26:00 PM
Surr: 2-Fluorobiphenyl	77.1	12.9-120		%REC	47515	1	7/9/2004 8:26:00 PM
Surr: 2-Fluorophenol	65.1	10-119		%REC	47515	1	7/9/2004 8:26:00 PM
Surr: 4-Terphenyl-d14	66.0	41.5-128		%REC	47515	1	7/9/2004 8:26:00 PM
Surr: Nitrobenzene-d5	64.3	10-121		%REC	47515	1	7/9/2004 8:26:00 PM
Surr: Phenol-d5	63.0	12.6-121		%REC	47515	1	7/9/2004 8:26:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)			Analyst: TMP
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 3:36:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS **Client Sample ID:** AB TCLP 18 2-6
Lab Order: 0407035 **Collection Date:** 6/29/2004 11:40:00 AM
Project: Red Panthers Pesticide Site
Lab ID: 0407035-005 **Matrix:** SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 3:36:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 3:36:00 PM
Surr: 4-Bromofluorobenzene	86.8	63.1-121		%REC	47510	20	7/9/2004 3:36:00 PM
Surr: Dibromofluoromethane	97.2	69.5-126		%REC	47510	20	7/9/2004 3:36:00 PM
Surr: Toluene-d8	98.1	74.2-120		%REC	47510	20	7/9/2004 3:36:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: AD	
1,1,1-Trichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,1,2,2-Tetrachloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,1,2-Trichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,1-Dichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,1-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2,4-Trichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2-Dibromo-3-chloropropane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2-Dibromoethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2-Dichloroethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,2-Dichloropropane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,3-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
1,4-Dichlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
2-Butanone	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
2-Hexanone	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
4-Methyl-2-pentanone	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Acetone	BRL	3400		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Benzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Bromodichloromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Bromoform	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Bromomethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Carbon disulfide	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Carbon tetrachloride	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Chlorobenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Chloroethane	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Chloroform	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Chloromethane	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
cis-1,2-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
cis-1,3-Dichloropropene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Cyclohexane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Dibromochloromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Dichlorodifluoromethane	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Ethylbenzene	220	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Freon-113	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP 18 2-6
 Lab Order: 0407035 Collection Date: 6/29/2004 11:40:00 AM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-005 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
Isopropylbenzene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
m,p-Xylene	1900	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Methyl acetate	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Methyl tert-butyl ether	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Methylcyclohexane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Methylene chloride	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
o-Xylene	1300	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Styrene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Tetrachloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Toluene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
trans-1,2-Dichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
trans-1,3-Dichloropropene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Trichloroethene	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Trichlorofluoromethane	BRL	170		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Vinyl chloride	BRL	340		µg/Kg-dry	47602	50	7/12/2004 2:09:00 PM
Surr: 4-Bromofluorobenzene	110	65.3-133		%REC	47602	50	7/12/2004 2:09:00 PM
Surr: Dibromofluoromethane	107	80.1-121		%REC	47602	50	7/12/2004 2:09:00 PM
Surr: Toluene-d8	110	67.8-145		%REC	47602	50	7/12/2004 2:09:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	22.6	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP COMP
 Lab Order: 0407035 Collection Date: 6/29/2004 12:00:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-006 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/6/2004 5:20:00 PM
2,4-D	BRL	0.0050		mg/L	47327	1	7/6/2004 5:20:00 PM
Surr: DCAA	113	22.8-136		%REC	47327	1	7/6/2004 5:20:00 PM
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 11:26:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 11:26:00 PM
gamma-BHC	0.0018	0.00050		mg/L	47326	1	7/2/2004 11:26:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 11:26:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 11:26:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 11:26:00 PM
Surr: Decachlorobiphenyl	73.3	10-121		%REC	47326	1	7/2/2004 11:26:00 PM
Surr: Tetrachloro-m-xylene	117	10.9-125		%REC	47326	1	7/2/2004 11:26:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
4,4'-DDE	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
4,4'-DDT	180	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Aldrin	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
alpha-BHC	220	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
alpha-Chlordane	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
beta-BHC	52	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
delta-BHC	63	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Dieldrin	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endosulfan I	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endosulfan II	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endosulfan sulfate	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endrin	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endrin aldehyde	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Endrin ketone	BRL	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
gamma-BHC	74	44		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
gamma-Chlordane	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Heptachlor	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Heptachlor epoxide	BRL	22		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Methoxychlor	BRL	220		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Toxaphene	BRL	2200		µg/Kg-dry	47378	10	7/8/2004 6:59:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47378	10	7/8/2004 6:59:00 PM
Surr: Tetrachloro-m-xylene	106	16.4-135		%REC	47378	10	7/8/2004 6:59:00 PM
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: BB	
Mercury	BRL	0.00400		mg/L	47396	1	7/7/2004 12:49:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP COMP
 Lab Order: 0407035 Collection Date: 6/29/2004 12:00:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-006 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	14.5	0.250	*	mg/L	47333	1	7/2/2004 5:30:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 5:30:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 5:30:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 5:30:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 5:30:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 5:30:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 5:30:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	1060	5.79		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Barium	204	5.79		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Cadmium	BRL	2.90		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Chromium	23.8	2.90		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Lead	11.4	5.79		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Selenium	BRL	5.79		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
Silver	BRL	2.90		mg/Kg-dry	47324	1	7/2/2004 3:18:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: CDW	
Mercury	BRL	0.115		mg/Kg-dry	47355	1	7/6/2004 11:10:00 AM
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
m-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
o-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
p-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/6/2004 11:11:00 AM
Pyridine	BRL	0.10		mg/L	47325	1	7/6/2004 11:11:00 AM
Surr: 2,4,6-Tribromophenol	96.8	19-124		%REC	47325	1	7/6/2004 11:11:00 AM
Surr: 2-Fluorobiphenyl	91.6	26-115		%REC	47325	1	7/6/2004 11:11:00 AM
Surr: 2-Fluorophenol	85.1	10-121		%REC	47325	1	7/6/2004 11:11:00 AM
Surr: 4-Terphenyl-d14	97.9	18-137		%REC	47325	1	7/6/2004 11:11:00 AM
Surr: Nitrobenzene-d5	92.7	15-120		%REC	47325	1	7/6/2004 11:11:00 AM
Surr: Phenol-d5	80.8	18-113		%REC	47325	1	7/6/2004 11:11:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP COMP
 Lab Order: 0407035 Collection Date: 6/29/2004 12:00:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-006 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4,5-Trichlorophenol	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4,6-Trichlorophenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4-Dichlorophenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4-Dimethylphenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4-Dinitrophenol	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,4-Dinitrotoluene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2,6-Dinitrotoluene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Chloronaphthalene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Chlorophenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Methylnaphthalene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Methylphenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Nitroaniline	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
2-Nitrophenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
3,3'-Dichlorobenzidine	BRL	880		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
3-Nitroaniline	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4,6-Dinitro-2-methylphenol	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Bromophenyl phenyl ether	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Chloro-3-methylphenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Chloroaniline	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Chlorophenyl phenyl ether	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Methylphenol	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Nitroaniline	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
4-Nitrophenol	4100	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Acenaphthene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Acenaphthylene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Acetophenone	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Anthracene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Atrazine	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benz(a)anthracene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benzaldehyde	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benzo(a)pyrene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benzo(b)fluoranthene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benzo(g,h,i)perylene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Benzo(k)fluoranthene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Bis(2-chloroethoxy)methane	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Bis(2-chloroethyl)ether	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Bis(2-chloroisopropyl)ether	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Bis(2-ethylhexyl)phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Butyl benzyl phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS
 Lab Order: 0407035
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-006

Client Sample ID: AB TCLP COMP
 Collection Date: 6/29/2004 12:00:00 PM
 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Carbazole	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Chrysene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Dibenz(a,h)anthracene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Dibenzofuran	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Diethyl phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Dimethyl phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Di-n-butyl phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Di-n-octyl phthalate	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Fluoranthene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Fluorene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Hexachlorobenzene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Hexachlorobutadiene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Hexachlorocyclopentadiene	BRL	860		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Hexachloroethane	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Indeno(1,2,3-cd)pyrene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Isophorone	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Naphthalene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Nitrobenzene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
N-Nitrosodi-n-propylamine	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
N-Nitrosodiphenylamine	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Pentachlorophenol	BRL	2200		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Phenanthrene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Phenol	450	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Pyrene	BRL	430		µg/Kg-dry	47344	1	7/6/2004 2:07:00 PM
Surr: 2,4,6-Tribromophenol	83.6	35.5-131		%REC	47344	1	7/6/2004 2:07:00 PM
Surr: 2-Fluorobiphenyl	74.1	12.9-120		%REC	47344	1	7/6/2004 2:07:00 PM
Surr: 2-Fluorophenol	72.5	10-119		%REC	47344	1	7/6/2004 2:07:00 PM
Surr: 4-Terphenyl-d14	81.1	41.5-128		%REC	47344	1	7/6/2004 2:07:00 PM
Surr: Nitrobenzene-d5	69.1	10-121		%REC	47344	1	7/6/2004 2:07:00 PM
Surr: Phenol-d5	67.0	12.6-121		%REC	47344	1	7/6/2004 2:07:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: NWH	
1,1-Dichloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
2-Butanone	BRL	0.20		mg/L	47244	20	7/2/2004 6:31:00 PM
Benzene	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
Chlorobenzene	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
Chloroform	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: AB TCLP COMP
 Lab Order: 0407035 Collection Date: 6/29/2004 12:00:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-006 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: NWH	
Trichloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:31:00 PM
Vinyl chloride	BRL	0.040		mg/L	47244	20	7/2/2004 6:31:00 PM
Surr: 4-Bromofluorobenzene	155	63.1-121	S	%REC	47244	20	7/2/2004 6:31:00 PM
Surr: Dibromofluoromethane	98.2	69.5-126		%REC	47244	20	7/2/2004 6:31:00 PM
Surr: Toluene-d8	98.6	74.2-120		%REC	47244	20	7/2/2004 6:31:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: TMP	
1,1,1-Trichloroethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,1,1,2-Tetrachloroethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,1,2-Trichloroethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,1-Dichloroethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,1-Dichloroethene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2,4-Trichlorobenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2-Dibromo-3-chloropropane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2-Dibromoethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2-Dichlorobenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2-Dichloroethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,2-Dichloropropane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,3-Dichlorobenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
1,4-Dichlorobenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
2-Butanone	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
2-Hexanone	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
4-Methyl-2-pentanone	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Acetone	BRL	6500		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Benzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Bromodichloromethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Bromoform	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Bromomethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Carbon disulfide	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Carbon tetrachloride	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Chlorobenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Chloroethane	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Chloroform	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Chloromethane	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
cis-1,2-Dichloroethene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
cis-1,3-Dichloropropene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Cyclohexane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Dibromochloromethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Dichlorodifluoromethane	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Ethylbenzene	670	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Freon-113	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS	Client Sample ID: AB TCLP COMP
Lab Order: 0407035	Collection Date: 6/29/2004 12:00:00 PM
Project: Red Panthers Pesticide Site	
Lab ID: 0407035-006	Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: TMP		
Isopropylbenzene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
m,p-Xylene	3700	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Methyl acetate	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Methyl tert-butyl ether	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Methylcyclohexane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Methylene chloride	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
o-Xylene	1700	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Styrene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Tetrachloroethene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Toluene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
trans-1,2-Dichloroethene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
trans-1,3-Dichloropropene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Trichloroethene	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Trichlorofluoromethane	BRL	330		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Vinyl chloride	BRL	650		µg/Kg-dry	47452	50	7/7/2004 10:47:00 AM
Surr: 4-Bromofluorobenzene	116	65.3-133		%REC	47452	50	7/7/2004 10:47:00 AM
Surr: Dibromofluoromethane	116	80.1-121		%REC	47452	50	7/7/2004 10:47:00 AM
Surr: Toluene-d8	113	67.8-145		%REC	47452	50	7/7/2004 10:47:00 AM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	23.6	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A (SW3510B)		Analyst: WDP			
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/6/2004 6:11:00 PM
2,4-D	BRL	0.0050		mg/L	47327	1	7/6/2004 6:11:00 PM
Surr: DCAA	134	22.8-136		%REC	47327	1	7/6/2004 6:11:00 PM
PESTICIDES, TCLP		SW1311/8081A (SW3510B)		Analyst: JMZ			
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 11:55:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 11:55:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 11:55:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 11:55:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 11:55:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 11:55:00 PM
Surr: Decachlorobiphenyl	84.1	10-121		%REC	47326	1	7/2/2004 11:55:00 PM
Surr: Tetrachloro-m-xylene	14.8	10.9-125		%REC	47326	1	7/2/2004 11:55:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A		Analyst: WDP			
4,4'-DDD	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
4,4'-DDE	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
4,4'-DDT	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Aldrin	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
alpha-BHC	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
alpha-Chlordane	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
beta-BHC	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Chlordane	BRL	500		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
delta-BHC	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Dieldrin	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endosulfan I	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endosulfan II	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endosulfan sulfate	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endrin	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endrin aldehyde	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Endrin ketone	BRL	9.9		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
gamma-BHC	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
gamma-Chlordane	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Heptachlor	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Heptachlor epoxide	BRL	5.0		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Methoxychlor	BRL	50		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Toxaphene	BRL	500		mg/Kg-dry	47391	100	7/8/2004 2:16:00 AM
Surr: Decachlorobiphenyl	0	30-150	S	%REC	47391	100	7/8/2004 2:16:00 AM
Surr: Tetrachloro-m-xylene	0	30-150	S	%REC	47391	100	7/8/2004 2:16:00 AM
CHLORINATED HERBICIDES		SW8151A		Analyst: WDP			
2,4,5-T	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A			Analyst: WDP		
2,4,5-TP (Silvex)	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
2,4-D	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
2,4-DB	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
Dalapon	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
Dicamba	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
Dichlorprop	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
Dinoseb	BRL	53000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
MCPA	BRL	530000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
MCPP	BRL	530000		µg/Kg-dry	47385	100	7/12/2004 7:02:00 PM
Surr: DCAA	0	20-127	S	%REC	47385	100	7/12/2004 7:02:00 PM
MERCURY, TCLP		SW1311/7470A (SW7470A)			Analyst: BB		
Mercury	BRL	0.00400		mg/L	47396	1	7/7/2004 12:50:50 PM
ICP METALS, TCLP		SW1311/6010B (SW3010A)			Analyst: CDW		
Arsenic	BRL	0.250		mg/L	47333	1	7/2/2004 5:35:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 5:35:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 5:35:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 5:35:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 5:35:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 5:35:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 5:35:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	BRL	4.2		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Barium	15	4.2		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Cadmium	BRL	2.1		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Chromium	24	2.1		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Lead	8.9	4.2		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Selenium	BRL	4.2		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
Silver	BRL	2.1		mg/Kg-dry	47372	1	7/6/2004 5:30:00 PM
TOTAL MERCURY - WASTE		SW7471A (SW7471A)			Analyst: EM		
Mercury	BRL	0.101		mg/Kg-dry	47354	1	7/7/2004 9:41:00 AM
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C (SW3510)			Analyst: YH		
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/6/2004 12:26:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/6/2004 12:26:00 PM
Surr: 2,4,6-Tribromophenol	78.1	19-124		%REC	47325	1	7/6/2004 12:26:00 PM
Surr: 2-Fluorobiphenyl	71.7	26-115		%REC	47325	1	7/6/2004 12:26:00 PM
Surr: 2-Fluorophenol	70.2	10-121		%REC	47325	1	7/6/2004 12:26:00 PM
Surr: 4-Terphenyl-d14	66.3	18-137		%REC	47325	1	7/6/2004 12:26:00 PM
Surr: Nitrobenzene-d5	78.5	15-120		%REC	47325	1	7/6/2004 12:26:00 PM
Surr: Phenol-d5	72.8	18-113		%REC	47325	1	7/6/2004 12:26:00 PM
TCL-SEMIVOLATILE ORGANICS		SW8270C				Analyst: EP	
1,1'-Biphenyl	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4,5-Trichlorophenol	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4,6-Trichlorophenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4-Dichlorophenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4-Dimethylphenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4-Dinitrophenol	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,4-Dinitrotoluene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2,6-Dinitrotoluene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Chloronaphthalene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Chlorophenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Methylnaphthalene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Methylphenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Nitroaniline	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
2-Nitrophenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
3,3'-Dichlorobenzidine	BRL	680		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
3-Nitroaniline	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4,6-Dinitro-2-methylphenol	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Bromophenyl phenyl ether	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Chloro-3-methylphenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Chloroaniline	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Chlorophenyl phenyl ether	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Methylphenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Nitroaniline	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
4-Nitrophenol	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Acenaphthene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Acenaphthylene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C			Analyst: EP		
Acetophenone	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Anthracene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Atrazine	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benz(a)anthracene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benzaldehyde	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benzo(a)pyrene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benzo(b)fluoranthene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benzo(g,h,i)perylene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Benzo(k)fluoranthene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Bis(2-chloroethoxy)methane	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Bis(2-chloroethyl)ether	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Bis(2-chloroisopropyl)ether	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Bis(2-ethylhexyl)phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Butyl benzyl phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Caprolactam	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Carbazole	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Chrysene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Dibenz(a,h)anthracene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Dibenzofuran	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Diethyl phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Dimethyl phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Di-n-butyl phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Di-n-octyl phthalate	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Fluoranthene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Fluorene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Hexachlorobenzene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Hexachlorobutadiene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Hexachlorocyclopentadiene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Hexachloroethane	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Indeno(1,2,3-cd)pyrene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Isophorone	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Naphthalene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Nitrobenzene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
N-Nitrosodi-n-propylamine	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
N-Nitrosodiphenylamine	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Pentachlorophenol	BRL	510		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Phenanthrene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Phenol	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Pyrene	BRL	100		mg/Kg-dry	47390	1	7/6/2004 4:34:00 PM
Surr: 2,4,6-Tribromophenol	0	35.5-131	S	%REC	47390	1	7/6/2004 4:34:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C			Analyst: EP		
Surr: 2-Fluorobiphenyl	39.2	12.9-120		%REC	47390	1	7/6/2004 4:34:00 PM
Surr: 2-Fluorophenol	22.6	10-119		%REC	47390	1	7/6/2004 4:34:00 PM
Surr: 4-Terphenyl-d14	35.6	41.5-128	S	%REC	47390	1	7/6/2004 4:34:00 PM
Surr: Nitrobenzene-d5	39.1	10-121		%REC	47390	1	7/6/2004 4:34:00 PM
Surr: Phenol-d5	31.7	12.6-121		%REC	47390	1	7/6/2004 4:34:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: NWH	
1,1-Dichloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
2-Butanone	BRL	0.20		mg/L	47244	20	7/2/2004 6:58:00 PM
Benzene	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Chlorobenzene	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Chloroform	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Trichloroethene	BRL	0.10		mg/L	47244	20	7/2/2004 6:58:00 PM
Vinyl chloride	BRL	0.040		mg/L	47244	20	7/2/2004 6:58:00 PM
Surr: 4-Bromofluorobenzene	120	63.1-121		%REC	47244	20	7/2/2004 6:58:00 PM
Surr: Dibromofluoromethane	98.3	69.5-126		%REC	47244	20	7/2/2004 6:58:00 PM
Surr: Toluene-d8	99.3	74.2-120		%REC	47244	20	7/2/2004 6:58:00 PM
TCL VOLATILE ORGANICS		SW8260B		Analyst: JTC			
1,1,1-Trichloroethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,1,2,2-Tetrachloroethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,1,2-Trichloroethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,1-Dichloroethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,1-Dichloroethene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2,4-Trichlorobenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2-Dibromo-3-chloropropane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2-Dibromoethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2-Dichlorobenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2-Dichloroethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,2-Dichloropropane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,3-Dichlorobenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
1,4-Dichlorobenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
2-Butanone	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
2-Hexanone	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
4-Methyl-2-pentanone	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Acetone	BRL	11000		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Benzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Bromodichloromethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: SILO AREA D
 Lab Order: 0407035 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-009 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: JTC		
Bromoform	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Bromomethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Carbon disulfide	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Carbon tetrachloride	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Chlorobenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Chloroethane	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Chloroform	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Chloromethane	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
cis-1,2-Dichloroethene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
cis-1,3-Dichloropropene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Cyclohexane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Dibromochloromethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Dichlorodifluoromethane	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Ethylbenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Freon-113	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Isopropylbenzene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
m,p-Xylene	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Methyl acetate	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Methyl tert-butyl ether	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Methylcyclohexane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Methylene chloride	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
o-Xylene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Styrene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Tetrachloroethene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Toluene	4400	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
trans-1,2-Dichloroethene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
trans-1,3-Dichloropropene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Trichloroethene	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Trichlorofluoromethane	BRL	2700		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Vinyl chloride	BRL	5400		µg/Kg-dry	47359	50	7/2/2004 1:40:00 PM
Surr: 4-Bromofluorobenzene	100	65.3-133		%REC	47359	50	7/2/2004 1:40:00 PM
Surr: Dibromofluoromethane	113	80.1-121		%REC	47359	50	7/2/2004 1:40:00 PM
Surr: Toluene-d8	109	67.8-145		%REC	47359	50	7/2/2004 1:40:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	6.84	0		wt%	1		7/2/2004 10:15:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS **Client Sample ID:** TRIP BLANK
Lab Order: 0407035 **Collection Date:** 6/29/2004
Project: Red Panthers Pesticide Site
Lab ID: 0407035-010 **Matrix:** WATER

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			(SW5030B)		Analyst: JTC
1,1,1-Trichloroethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2,4-Trichlorobenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2-Dibromo-3-chloropropane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2-Dibromoethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2-Dichlorobenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,3-Dichlorobenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
1,4-Dichlorobenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
2-Butanone	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
2-Hexanone	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
Acetone	BRL	20		µg/L	47360	1	7/2/2004 1:15:00 PM
Benzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Bromodichloromethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Bromoform	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Bromomethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Carbon disulfide	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Chlorobenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Chloroethane	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
Chloroform	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Chloromethane	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
cis-1,2-Dichloroethene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Cyclohexane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Dibromochloromethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Dichlorodifluoromethane	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
Ethylbenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Freon-113	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
Isopropylbenzene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
m,p-Xylene	BRL	10		µg/L	47360	1	7/2/2004 1:15:00 PM
Methyl acetate	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Methyl tert-butyl ether	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Methylcyclohexane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Methylene chloride	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS	Client Sample ID: TRIP BLANK
Lab Order: 0407035	Collection Date: 6/29/2004
Project: Red Panthers Pesticide Site	
Lab ID: 0407035-010	Matrix: WATER

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			(SW5030B)		Analyst: JTC
o-Xylene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Styrene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Tetrachloroethene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Toluene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
trans-1,2-Dichloroethene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Trichloroethene	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Trichlorofluoromethane	BRL	5.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Vinyl chloride	BRL	2.0		µg/L	47360	1	7/2/2004 1:15:00 PM
Surr: 4-Bromofluorobenzene	104	63.1-121		%REC	47360	1	7/2/2004 1:15:00 PM
Surr: Dibromofluoromethane	116	69.5-126		%REC	47360	1	7/2/2004 1:15:00 PM
Surr: Toluene-d8	109	74.2-120		%REC	47360	1	7/2/2004 1:15:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47244

Sample ID MB-47244	SampType: MBLK	TestCode: 1311_V	Units: mg/L	Prep Date: 6/29/2004	RunNo: 52710						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 6/29/2004	SeqNo: 1012041						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.136	0	1	0	114	63.1	121	0	0		
Surr: Dibromofluoromethane	0.8576	0	1	0	85.8	69.5	126	0	0		
Surr: Toluene-d8	0.9196	0	1	0	92	74.2	120	0	0		

Sample ID MB-47244	SampType: MBLK	TestCode: 1311_V	Units: mg/L	Prep Date: 6/29/2004	RunNo: 52868						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 7/2/2004	SeqNo: 1015467						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.173	0	1	0	117	63.1	121	0	0		

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 BRL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not NELAC certified

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47244

Sample ID MB-47244	SampType: MBLK	TestCode: 1311_V	Units: mg/L	Prep Date: 6/29/2004	RunNo: 52868						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 7/2/2004	SeqNo: 1015467						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.9586	0	1	0	95.9	69.5	126	0	0		
Surr: Toluene-d8	0.9646	0	1	0	96.5	74.2	120	0	0		

Sample ID LCS-47244	SampType: LCS	TestCode: 1311_V	Units: mg/L	Prep Date: 6/29/2004	RunNo: 52710						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 6/29/2004	SeqNo: 1012042						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8844	0.10	1	0	88.4	61	131	0	0		*
1,2-Dichloroethane	0.9644	0.10	1	0	96.4	76	129	0	0		*
2-Butanone	2.975	0.20	2	0	149	25	161	0	0		
Benzene	1.069	0.10	1	0	107	77	126	0	0		*
Carbon tetrachloride	1.087	0.10	1	0	109	66	131	0	0		*
Chlorobenzene	0.989	0.10	1	0	98.9	80	121	0	0		
Chloroform	0.8794	0.10	1	0	87.9	76	129	0	0		
Tetrachloroethene	0.9982	0.10	1	0	99.8	64	133	0	0		*
Trichloroethene	1.109	0.10	1	0	111	71	125	0	0		*
Vinyl chloride	0.6902	0.040	1	0	69	45	131	0	0		*
Surr: 4-Bromofluorobenzene	0.974	0	1	0	97.4	63.1	121	0	0		
Surr: Dibromofluoromethane	0.7546	0	1	0	75.5	69.5	126	0	0		
Surr: Toluene-d8	0.9528	0	1	0	95.3	74.2	120	0	0		

Sample ID 0406C40-003BMS	SampType: MS	TestCode: 1311_V	Units: mg/L	Prep Date: 6/29/2004	RunNo: 52710						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 6/29/2004	SeqNo: 1012048						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8532	0.10	1	0	85.3	61	131	0	0		*
1,2-Dichloroethane	0.9114	0.10	1	0	91.1	76	129	0	0		*
2-Butanone	2.737	0.20	2	0	137	25	161	0	0		
Benzene	0.9514	0.10	1	0	95.1	77	126	0	0		*
Carbon tetrachloride	0.9186	0.10	1	0	91.9	66	131	0	0		*
Chlorobenzene	0.883	0.10	1	0	88.3	80	121	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47244

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0406C40-003BMS	MS	1311_V	mg/L	6/29/2004	52710						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 6/29/2004	SeqNo: 1012048						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	0.7886	0.10	1	0	78.9	76	129	0	0		
Tetrachloroethene	0.8646	0.10	1	0	86.5	64	133	0	0		
Trichloroethene	0.9682	0.10	1	0	96.8	71	125	0	0		
Vinyl chloride	0.5246	0.040	1	0	52.5	45	131	0	0		
Surr: 4-Bromofluorobenzene	0.99	0	1	0	99	63.1	121	0	0		
Surr: Dibromofluoromethane	0.7454	0	1	0	74.5	69.5	126	0	0		
Surr: Toluene-d8	0.9466	0	1	0	94.7	74.2	120	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0406A66-001C	DUP	1311_V	mg/L	6/29/2004	52710						
Client ID:	Batch ID: 47244	TestNo: SW1311/8260		Analysis Date: 6/29/2004	SeqNo: 1012045						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
1,2-Dichloroethane	BRL	0.10	0	0	0	0	0	0	0	30	
2-Butanone	BRL	0.20	0	0	0	0	0	0	0	30	
Benzene	BRL	0.10	0	0	0	0	0	0	0	30	
Carbon tetrachloride	BRL	0.10	0	0	0	0	0	0	0	30	
Chlorobenzene	BRL	0.10	0	0	0	0	0	0	0	30	
Chloroform	BRL	0.10	0	0	0	0	0	0	0	30	
Tetrachloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Trichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Vinyl chloride	BRL	0.040	0	0	0	0	0	0	0	30	
Surr: 4-Bromofluorobenzene	1.22	0	1	0	122	71.8	143	1.201	0	0	
Surr: Dibromofluoromethane	0.85	0	1	0	85	80.3	123	0.8604	0	0	
Surr: Toluene-d8	0.9356	0	1	0	93.6	70.1	142	0.936	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47324

Sample ID MB-47324	SampType: MBLK	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47324	TestNo: SW6010B		Analysis Date: 7/2/2004	SeqNo: 1014934

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID LCS-47324	SampType: LCS	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47324	TestNo: SW6010B		Analysis Date: 7/2/2004	SeqNo: 1014933

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.41	5.00	50	0	96.8	80	120	0	0		
Barium	48.49	5.00	50	0.086	96.8	80	120	0	0		
Cadmium	50.52	2.50	50	0.0315	101	80	120	0	0		
Chromium	50.77	2.50	50	0.6355	100	80	120	0	0		
Lead	49.29	5.00	50	0.0825	98.4	80	120	0	0		
Selenium	47.75	5.00	50	0	95.5	80	120	0	0		
Silver	4.674	2.50	5	0	93.5	80	120	0	0		

Sample ID 0407058-002BMS	SampType: MS	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47324	TestNo: SW6010B		Analysis Date: 7/2/2004	SeqNo: 1014939

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.95	4.85	48.49	0.7766	87	75	125	0	0		
Barium	126.9	4.85	48.49	93.37	69.2	75	125	0	0		S
Cadmium	42.41	2.42	48.49	0.1961	87.1	75	125	0	0		
Chromium	105.3	2.42	48.49	68.1	76.8	75	125	0	0		
Lead	97.25	4.85	48.49	61.67	73.4	75	125	0	0		S
Selenium	41.05	4.85	48.49	0	84.7	75	125	0	0		
Silver	4.188	2.42	4.849	0	86.4	75	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47324

Sample ID 0407058-002BDUP	SampType: DUP	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47324	TestNo: SW6010B		Analysis Date: 7/2/2004	SeqNo: 1014936

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	4.82	0	0	0	0	0	0.7766	0	20	
Barium	91.29	4.82	0	0	0	0	0	93.37	2.25	20	
Cadmium	BRL	2.41	0	0	0	0	0	0.1961	0	20	
Chromium	65.56	2.41	0	0	0	0	0	68.1	3.79	20	
Lead	61.77	4.82	0	0	0	0	0	61.67	0.160	20	
Selenium	BRL	4.82	0	0	0	0	0	0	0	20	
Silver	BRL	2.41	0	0	0	0	0	0	0	20	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID MB-47325	SampType: MBLK	TestCode: 1311_B	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52918
Client ID:	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/8/2004	SeqNo: 1016483

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m-cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-cresol	BRL	0.10									
p-cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.9002	0	1	0	90	19	124	0	0		
Surr: 2-Fluorobiphenyl	0.4312	0	0.5	0	86.2	26	115	0	0		
Surr: 2-Fluorophenol	0.7768	0	1	0	77.7	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4629	0	0.5	0	92.6	18	137	0	0		
Surr: Nitrobenzene-d5	0.433	0	0.5	0	86.6	15	120	0	0		
Surr: Phenol-d5	0.7522	0	1	0	75.2	18	113	0	0		

Sample ID LCS-47325	SampType: LCS	TestCode: 1311_B	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52918
Client ID:	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/8/2004	SeqNo: 1016487

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.8786	0.10	1	0	87.9	60.9	103	0	0		
2,4,5-Trichlorophenol	0.9409	0.10	1	0	94.1	59	122	0	0		
2,4,6-Trichlorophenol	0.9736	0.10	1	0	97.4	74.6	112	0	0		
2,4-Dinitrotoluene	0.9526	0.10	1	0	95.3	71.5	108	0	0		
Cresols, Total	2.812	0.10	3	0	93.7	55.9	110	0	0		
Hexachlorobenzene	0.9773	0.10	1	0	97.7	72.5	124	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47325	LCS	1311_B	mg/L	7/2/2004	52918						
Client ID:	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/6/2004	SeqNo: 1016487						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	0.9025	0.10	1	0	90.2	53.5	127	0	0		
Hexachloroethane	0.8678	0.10	1	0	86.8	45.2	115	0	0		
m-cresol	0.9363	0.10	1	0	93.6	52.1	110	0	0		
Nitrobenzene	0.8966	0.10	1	0	89.7	63.3	115	0	0		
o-cresol	0.9396	0.10	1	0	94	65.4	111	0	0		
p-cresol	0.9363	0.10	1	0	93.6	52.1	110	0	0		
Pentachlorophenol	0.935	0.50	1	0	93.5	61	134	0	0		
Pyridine	0.5924	0.10	1	0	59.2	10	116	0	0		
Surr: 2,4,6-Tribromophenol	0.9488	0	1	0	94.9	21.8	131	0	0		
Surr: 2-Fluorobiphenyl	0.4351	0	0.5	0	87	6.97	122	0	0		
Surr: 2-Fluorophenol	0.7872	0	1	0	78.7	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4889	0	0.5	0	97.8	18	137	0	0		
Surr: Nitrobenzene-d5	0.4401	0	0.5	0	88	15	120	0	0		
Surr: Phenol-d5	0.7596	0	1	0	76	18	113	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0407035-008EMS	MS	1311_B	mg/L	7/2/2004	52918						
Client ID: AB TCLP COMP	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/6/2004	SeqNo: 1016492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.9316	0.10	1	0	93.2	61.6	104	0	0		
2,4,5-Trichlorophenol	1.014	0.10	1	0	101	66.1	122	0	0		
2,4,6-Trichlorophenol	1.013	0.10	1	0	101	73.7	119	0	0		
2,4-Dinitrotoluene	0.9991	0.10	1	0	99.9	74.1	109	0	0		
Cresols, Total	2.967	0.10	3	0	98.9	54.9	115	0	0		
Hexachlorobenzene	1.006	0.10	1	0	101	71.3	126	0	0		
Hexachlorobutadiene	0.953	0.10	1	0	95.3	49	129	0	0		
Hexachloroethane	0.9189	0.10	1	0	91.9	47.4	117	0	0		
m-cresol	0.9883	0.10	1	0	98.8	42.4	121	0	0		
Nitrobenzene	0.9397	0.10	1	0	94	57.5	121	0	0		
o-cresol	0.99	0.10	1	0	99	67.2	111	0	0		
p-cresol	0.9883	0.10	1	0	98.8	39.8	122	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID	0407035-006EMS	SampType: MS	TestCode: 1311_B	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52918					
Client ID:	AB TCLP COMP	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/6/2004	SeqNo: 1016492					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	1.027	0.50	1	0	103	62.9	148	0	0		
Pyridine	0.7386	0.10	1	0	73.9	10	127	0	0		
Surr: 2,4,6-Tribromophenol	0.986	0	1	0	98.6	19	124	0	0		
Surr: 2-Fluorobiphenyl	0.4435	0	0.5	0	88.7	14.2	111	0	0		
Surr: 2-Fluorophenol	0.8332	0	1	0	83.3	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4905	0	0.5	0	98.1	18	137	0	0		
Surr: Nitrobenzene-d5	0.4456	0	0.5	0	89.1	15	120	0	0		
Surr: Phenol-d5	0.792	0	1	0	79.2	18	113	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47326

Sample ID MB-47326	SampType: MBLK	TestCode: 1311_P	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015228						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	BRL	0.010									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.003765	0	0.005	0	75.3	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003808	0	0.005	0	76.2	10.9	125	0	0		

Sample ID LCS-47326-1	SampType: LCS	TestCode: 1311_P	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015229						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	0.007208	0.0010	0.008	0	90.1	51.8	144	0	0		
gamma-BHC	0.006405	0.00050	0.008	0	80.1	44.7	127	0	0		
Heptachlor	0.00582	0.00050	0.008	0	72.8	40.5	122	0	0		
Heptachlor epoxide	0.00677	0.00050	0.008	0	84.6	56	137	0	0		
Methoxychlor	0.0285	0.0050	0.03	0	95	46	166	0	0		
Surr: Decachlorobiphenyl	0.00372	0	0.005	0	74.4	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003639	0	0.005	0	72.8	10.9	125	0	0		

Sample ID LCS-47326-2	SampType: LCS	TestCode: 1311_P	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015230						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	0.04267	0.010	0.04	0.00929	83.5	56	186	0	0		
Toxaphene	0.06778	0.050	0.08	0	84.7	53	132	0	0		
Surr: Decachlorobiphenyl	0.003757	0	0.005	0	75.1	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003271	0	0.005	0	65.4	10.9	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47326

Sample ID 0406F09-009CMS-1		SampType: MS	TestCode: 1311_P		Units: mg/L	Prep Date: 7/2/2004			RunNo: 52849		
Client ID:		Batch ID: 47326	TestNo: SW1311/8081			Analysis Date: 7/2/2004			SeqNo: 1015232		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	0.007683	0.0010	0.008	0	96	50	148	0	0		
gamma-BHC	0.006874	0.00050	0.008	0	85.9	52.1	124	0	0		
Heptachlor	0.006241	0.00050	0.008	0	78	43.2	131	0	0		
Heptachlor epoxide	0.01078	0.00050	0.008	0	135	50	145	0	0		
Methoxychlor	0.02992	0.0050	0.03	0	99.7	10	205	0	0		
Surr: Decachlorobiphenyl	0.003541	0	0.005	0	70.8	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.004349	0	0.005	0	87	10.9	125	0	0		

Sample ID 0406F09-009CMS-2		SampType: MS	TestCode: 1311_P		Units: mg/L	Prep Date: 7/2/2004			RunNo: 52849		
Client ID:		Batch ID: 47326	TestNo: SW1311/8081			Analysis Date: 7/2/2004			SeqNo: 1015233		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	0.04162	0.010	0.04	0	104	55	182	0	0		
Toxaphene	0.07212	0.050	0.08	0	90.2	45	137	0	0		
Surr: Decachlorobiphenyl	0.003405	0	0.005	0	68.1	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.005188	0	0.005	0	104	10.9	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47327

Sample ID MB-47327	SampType: MBLK	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID:	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016699						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	BRL	0.0050									
2,4-D	BRL	0.0050									
Surr: DCAA	0.04104	0	0.05	0	82.1	22.8	136	0	0		

Sample ID LCS-47327	SampType: LCS	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID:	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016701						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	0.04109	0.0050	0.05	0	82.2	44.9	138	0	0		
2,4-D	0.05563	0.0050	0.05	0	111	47.5	142	0	0		
Surr: DCAA	0.04714	0	0.05	0	94.3	22.8	136	0	0		

Sample ID 0407035-006EMS	SampType: MS	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID: AB TCLP COMP	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016703						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	0.04815	0.0050	0.05	0	96.3	50.2	134	0	0		
2,4-D	0.04968	0.0050	0.05	0.004612	90.1	53.8	141	0	0		
Surr: DCAA	0.05159	0	0.05	0	103	22.8	136	0	0		

Qualifiers:

B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47333

Sample ID MB-47333	SampType: MBLK	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830						
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015009						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID LCS-47333	SampType: LCS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830						
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	4.858	0.250	5	0	97.2	85	115	0	0		
Cadmium	4.798	0.0250	5	0	96	85	115	0	0		
Chromium	4.628	0.0500	5	0	92.6	85	115	0	0		
Lead	4.67	0.0500	5	0	93.4	85	115	0	0		
Selenium	4.98	0.100	5	0	99.6	85	115	0	0		
Silver	0.4564	0.0250	0.5	0	91.3	85	115	0	0		

Sample ID LCS-47333	SampType: LCS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52859						
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/6/2004	SeqNo: 1015430						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Barium	4.333	0.500	5	0.01205	86.4	85	115	0	0		
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Sample ID 0408E74-001AMS	SampType: MS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830						
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015013						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	5.055	0.250	5	0	101	50	150	0	0		
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Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47333

Sample ID 0406E74-001AMS	SampType: MS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015013

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	7.986	0.500	5	4.38	72.1	50	150	0	0		
Cadmium	6.259	0.0250	5	1.655	92.1	50	150	0	0		
Chromium	4.879	0.0500	5	0.05875	96.4	50	150	0	0		
Lead	4.792	0.0500	5	0.06115	94.6	50	150	0	0		
Selenium	5.143	0.100	5	0	103	50	150	0	0		
Silver	0.4868	0.0250	0.5	0	97.4	50	150	0	0		

Sample ID 0406E74-001ADUP	SampType: DUP	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830
Client ID:	Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015012

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	0.250	0	0	0	0	0	0	0	30	
Barium	3.486	0.500	0	0	0	0	0	4.38	22.7	30	
Cadmium	1.31	0.0250	0	0	0	0	0	1.655	23.3	30	
Chromium	BRL	0.0500	0	0	0	0	0	0.05875	0	30	
Lead	0.0501	0.0500	0	0	0	0	0	0.06115	19.9	30	
Selenium	BRL	0.100	0	0	0	0	0	0	0	30	
Silver	BRL	0.0250	0	0	0	0	0	0	0	30	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID MB-47344	SampType: MBLK	TestCode: 8270_PP_S	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52922						
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016554						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,4-Trichlorobenzene	BRL	330									
1,2-Dichlorobenzene	BRL	330									
1,3-Dichlorobenzene	BRL	330									
1,4-Dichlorobenzene	BRL	330									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	670									
2,6-Dinitrotoluene	BRL	670									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Nitrophenol	BRL	1700									
3,3'-Dichlorobenzidine	BRL	670									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Anthracene	BRL	330									
Benz(a)anthracene	BRL	330									
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID MB-47344	SampType: MBLK	TestCode: 8270_PP_S	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52922
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016554

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl benzyl phthalate	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
DI-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
N-Nitrosodi-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Pentachlorophenol	BRL	670									
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2640	0	3333	0	79.2	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1218	0	1667	0	73.1	12.9	120	0	0		
Surr: 2-Fluorophenol	2187	0	3333	0	65.6	10	119	0	0		
Surr: 4-Terphenyl-d14	1379	0	1667	0	82.8	41.5	128	0	0		
Surr: Nitrobenzene-d5	1102	0	1667	0	66.1	10	121	0	0		
Surr: phenol-d5	2076	0	3333	0	62.3	12.6	121	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID MB-47344	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52922
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016548

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	BRL	330									
2,4,5-Trichlorophenol	BRL	1700									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	330									
2,6-Dinitrotoluene	BRL	330									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Methylnaphthalene	BRL	330									
2-Methylphenol	BRL	330									
2-Nitroaniline	BRL	1700									
2-Nitrophenol	BRL	330									
3,3'-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	1700									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chloroaniline	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Methylphenol	BRL	330									
4-Nitroaniline	BRL	1700									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Acetophenone	BRL	330									
Anthracene	BRL	330									
Atrazine	BRL	330									
Benz(a)anthracene	BRL	330									
Benzaldehyde	BRL	330									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID MB-47344	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52922						
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016548						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									
Butyl benzyl phthalate	BRL	330									
Caprolactam	BRL	330									
Carbazole	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Dibenzofuran	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
Di-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
N-Nitrosodi-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Pentachlorophenol	BRL	1700									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47344	MBLK	8270_TCL4.2	µg/Kg	7/2/2004	52922						
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016548						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2640	0	3333	0	79.2	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1218	0	1667	0	73.1	12.9	120	0	0		
Surr: 2-Fluorophenol	2187	0	3333	0	65.6	10	119	0	0		
Surr: 4-Terphenyl-d14	1379	0	1667	0	82.8	41.5	128	0	0		
Surr: Nitrobenzene-d5	1102	0	1667	0	66.1	10	121	0	0		
Surr: Phenol-d5	2076	0	3333	0	62.3	12.6	121	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47344	LCS	8270_TCL4.2	µg/Kg	7/2/2004	52922						
Client ID:	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016550						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	2518	330	3333	0	75.5	33	123	0	0		
2-Chlorophenol	2582	330	3333	0	77.5	10	120	0	0		
4-Chloro-3-methylphenol	2762	330	3333	0	82.9	10	138	0	0		
4-Nitrophenol	4045	1700	3333	0	121	24.3	135	0	0		
Acenaphthene	2481	330	3333	0	74.4	17.5	122	0	0		
N-Nitrosodi-n-propylamine	2562	330	3333	0	76.9	10	129	0	0		
Pentachlorophenol	2349	1700	3333	0	70.5	38.4	128	0	0		
Phenol	2586	330	3333	0	77.6	10	120	0	0		
Pyrene	2712	330	3333	0	81.4	58.6	120	0	0		
Surr: 2,4,6-Tribromophenol	2720	0	3333	0	81.6	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1244	0	1667	0	74.6	12.9	120	0	0		
Surr: 2-Fluorophenol	2176	0	3333	0	65.3	10	119	0	0		
Surr: 4-Terphenyl-d14	1390	0	1667	0	83.4	41.5	128	0	0		
Surr: Nitrobenzene-d5	1150	0	1667	0	69	10	121	0	0		
Surr: Phenol-d5	2434	0	3333	0	73	12.6	121	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID 0407035-006BMS		SampType: MS		TestCode: 8270_TCL4.2		Units: µg/Kg-dry		Prep Date: 7/2/2004		RunNo: 52922	
Client ID: AB TCLP COMP		Batch ID: 47344		TestNo: SW8270C				Analysis Date: 7/6/2004		SeqNo: 1016552	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	3477	430	4357	0	79.8	29	123	0	0		
2-Chlorophenol	3349	430	4357	0	76.9	10	121	0	0		
4-Chloro-3-methylphenol	3755	430	4357	0	86.2	13.6	141	0	0		
4-Nitrophenol	9800	2200	4357	4138	130	10.4	152	0	0		E
Acenaphthene	3361	430	4357	0	77.2	13.9	121	0	0		
N-Nitrosodi-n-propylamine	3342	430	4357	0	76.7	10	130	0	0		
Pentachlorophenol	3336	2200	4357	0	76.6	30	133	0	0		
Phenol	3874	430	4357	451	78.6	10	120	0	0		
Pyrene	3626	430	4357	0	83.2	42.4	128	0	0		
Surr: 2,4,6-Tribromophenol	3597	0	4357	0	82.6	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1639	0	2178	0	75.3	12.9	120	0	0		
Surr: 2-Fluorophenol	3021	0	4357	0	69.4	10	119	0	0		
Surr: 4-Terphenyl-d14	1813	0	2178	0	83.2	41.5	128	0	0		
Surr: Nitrobenzene-d5	1574	0	2178	0	72.3	10	121	0	0		
Surr: Phenol-d5	3173	0	4357	0	72.8	12.6	121	0	0		

Sample ID 0407035-006BMSD		SampType: MSD		TestCode: 8270_TCL4.2		Units: µg/Kg-dry		Prep Date: 7/2/2004		RunNo: 52922	
Client ID: AB TCLP COMP		Batch ID: 47344		TestNo: SW8270C				Analysis Date: 7/6/2004		SeqNo: 1016553	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	3598	430	4359	0	82.5	29	123	3477	3.44	26.1	
2-Chlorophenol	3439	430	4360	0	78.9	10	121	3349	2.65	53.1	
4-Chloro-3-methylphenol	4021	430	4360	0	92.2	13.6	141	3755	6.84	34.7	
4-Nitrophenol	9301	2200	4360	4138	118	10.4	152	9800	5.23	28.7	E
Acenaphthene	3487	430	4360	0	80	13.9	121	3361	3.67	49	
N-Nitrosodi-n-propylamine	3521	430	4360	0	80.8	10	130	3342	5.21	46.5	
Pentachlorophenol	3514	2200	4360	0	80.6	30	133	3336	5.21	26.9	
Phenol	4030	430	4360	451	82.1	10	120	3874	3.95	47.1	
Pyrene	3628	430	4360	0	83.2	42.4	128	3626	0.0546	23.9	
Surr: 2,4,6-Tribromophenol	3750	0	4360	0	86	35.5	131	3597	0	0	
Surr: 2-Fluorobiphenyl	1692	0	2180	0	77.6	12.9	120	1639	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47344

Sample ID 0407035-006BMSD	SampType: MSD	TestCode: 8270_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/2/2004	RunNo: 52922
Client ID: AB TCLP COMP	Batch ID: 47344	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016553

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	3077	0	4360	0	70.6	10	119	3021	0	0	
Surr: 4-Terphenyl-d14	1841	0	2180	0	84.4	41.5	128	1813	0	0	
Surr: Nitrobenzene-d5	1645	0	2180	0	75.5	10	121	1574	0	0	
Surr: Phenol-d5	3402	0	4360	0	78	12.6	121	3173	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47354

Sample ID MB-47354	SampType: MBLK	TestCode: 7471A_X	Units: mg/Kg	Prep Date: 7/7/2004	RunNo: 52949						
Client ID:	Batch ID: 47354	TestNo: SW7471A		Analysis Date: 7/7/2004	SeqNo: 1017107						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.100	0	0	0	0	0	0	0	0	
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Sample ID LCS-47354	SampType: LCS	TestCode: 7471A_X	Units: mg/Kg	Prep Date: 7/7/2004	RunNo: 52949						
Client ID:	Batch ID: 47354	TestNo: SW7471A		Analysis Date: 7/7/2004	SeqNo: 1017110						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.3841	0.100	0.4	0	96	85	115	0	0		
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Sample ID 0407035-009CMS	SampType: MS	TestCode: 7471A_X	Units: mg/Kg-dry	Prep Date: 7/7/2004	RunNo: 52949						
Client ID: SILO AREA D	Batch ID: 47354	TestNo: SW7471A		Analysis Date: 7/7/2004	SeqNo: 1017112						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.3632	0.0964	0.3854	0	94.2	70	130	0	0		
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Sample ID 0407035-009CMSD	SampType: MSD	TestCode: 7471A_X	Units: mg/Kg-dry	Prep Date: 7/7/2004	RunNo: 52949						
Client ID: SILO AREA D	Batch ID: 47354	TestNo: SW7471A		Analysis Date: 7/7/2004	SeqNo: 1017113						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4003	0.105	0.4182	0	95.7	70	130	0.3632	9.73	30	
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Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47355

Sample ID MB-47355	SampType: MBLK	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52886						
Client ID:	Batch ID: 47355	TestNo: SW7471A		Analysis Date: 7/6/2004	SeqNo: 1015719						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.100	0	0	0	0	0	0	0	0	
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Sample ID LCS-47355	SampType: LCS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52886						
Client ID:	Batch ID: 47355	TestNo: SW7471A		Analysis Date: 7/6/2004	SeqNo: 1015720						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4304	0.100	0.4	0.04345	96.7	80	120	0	0		
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Sample ID 0407058-001BMS	SampType: MS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52886						
Client ID:	Batch ID: 47355	TestNo: SW7471A		Analysis Date: 7/6/2004	SeqNo: 1015722						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4833	0.0940	0.376	0.04332	117	70	130	0	0		
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Sample ID 0407058-001BMSD	SampType: MSD	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52886						
Client ID:	Batch ID: 47355	TestNo: SW7471A		Analysis Date: 7/6/2004	SeqNo: 1015723						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4195	0.0938	0.3752	0.04332	100	70	130	0.4833	14.1	30	
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Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 BRL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not NELAC certified

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47359

Sample ID MB-47359	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015334

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	1000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47359

Sample ID MB-47359	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015334

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2709	0	2500	0	108	65.3	133	0	0		
Surr: Dibromofluoromethane	2847	0	2500	0	114	80.1	121	0	0		
Surr: Toluene-d8	2708	0	2500	0	108	67.8	145	0	0		

Sample ID LCS-47359	SampType: LCS	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015336

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	2358	250	2500	0	94.3	58.8	139	0	0		
Benzene	2348	250	2500	0	93.9	77.6	128	0	0		
Chlorobenzene	2627	250	2500	0	105	80.4	131	0	0		
Toluene	2716	250	2500	0	109	79.4	132	0	0		
Trichloroethene	2768	250	2500	0	111	81.8	147	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47359

Sample ID	LCS-47359	SampType: LCS	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/2/2004	RunNo: 52855					
Client ID:		Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015336					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	2660	0	2500	0	106	65.3	133	0	0		
Surr: Dibromofluoromethane	2808	0	2500	0	112	80.1	121	0	0		
Surr: Toluene-d8	2634	0	2500	0	105	67.8	145	0	0		

Sample ID	0407035-009AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/2/2004	RunNo: 52855					
Client ID:	SILO AREA D	Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015348					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	27370	2700	26840	0	102	46.3	140	0	0		
Benzene	25760	2700	26840	0	96	58.7	138	0	0		
Chlorobenzene	28850	2700	26840	0	108	55.3	141	0	0		
Toluene	36510	2700	26840	4428	120	52.1	144	0	0		
Trichloroethene	30450	2700	26840	0	113	65.4	148	0	0		
Surr: 4-Bromofluorobenzene	26940	0	26840	0	100	65.3	133	0	0		
Surr: Dibromofluoromethane	29720	0	26840	0	111	80.1	121	0	0		
Surr: Toluene-d8	29470	0	26840	0	110	67.8	145	0	0		

Sample ID	0407035-009AMSD	SampType: MSD	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/2/2004	RunNo: 52855					
Client ID:	SILO AREA D	Batch ID: 47359	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015350					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23730	2700	26840	0	88.4	46.3	140	27370	14.2	22.9	
Benzene	26160	2700	26840	0	97.5	58.7	138	25760	1.53	16.8	
Chlorobenzene	27130	2700	26840	0	101	55.3	141	28850	6.17	23.5	
Toluene	35590	2700	26840	4428	116	52.1	144	36510	2.55	18.6	
Trichloroethene	30030	2700	26840	0	112	65.4	148	30450	1.40	21.4	
Surr: 4-Bromofluorobenzene	28040	0	26840	0	104	65.3	133	26940	0	0	
Surr: Dibromofluoromethane	29740	0	26840	0	111	80.1	121	29720	0	0	
Surr: Toluene-d8	29750	0	26840	0	111	67.8	145	29470	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47360

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47360	MBLK	8260B_W	µg/L	7/2/2004	52855						
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015330						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloroethene, Total	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	10									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	20									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47360

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47360	MBLK	8260B_W	µg/L	7/2/2004	52855						
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015330						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Hexachlorobutadiene	BRL	5.0									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	10									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
Naphthalene	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	54.84	5.0	50	0	110	63.1	121	0	0		
Surr: Dibromofluoromethane	56.97	5.0	50	0	114	69.5	126	0	0		
Surr: Toluene-d8	52.84	5.0	50	0	106	74.2	120	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47360	LCS	8260B_W	µg/L	7/2/2004	52855						
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015332						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	43.5	5.0	50	0	87	58.1	142	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47360

Sample ID LCS-47360	SampType: LCS	TestCode: 8260B_W	Units: µg/L	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015332

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43.96	5.0	50	0	87.9	74	127	0	0		
Chlorobenzene	51.21	5.0	50	0	102	79.8	118	0	0		
Toluene	52.22	5.0	50	0	104	78.5	124	0	0		
Trichloroethene	56.1	5.0	50	0	112	74.2	138	0	0		
Surr: 4-Bromofluorobenzene	51.3	5.0	50	0	103	63.1	121	0	0		
Surr: Dibromofluoromethane	54.37	5.0	50	0	109	69.5	126	0	0		
Surr: Toluene-d8	52.43	5.0	50	0	105	74.2	120	0	0		

Sample ID 0407054-001AMS	SampType: MS	TestCode: 8260B_W	Units: µg/L	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015361

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	42.82	5.0	50	0	85.6	51.1	151	0	0		
Benzene	45.73	5.0	50	0	91.5	68.9	131	0	0		
Chlorobenzene	48.66	5.0	50	0	97.3	75.4	123	0	0		
Toluene	53.28	5.0	50	0	107	74.8	128	0	0		
Trichloroethene	54.56	5.0	50	0	109	66.3	145	0	0		
Surr: 4-Bromofluorobenzene	53.05	5.0	50	0	106	63.1	121	0	0		
Surr: Dibromofluoromethane	55.23	5.0	50	0	110	69.5	126	0	0		
Surr: Toluene-d8	54.58	5.0	50	0	109	74.2	120	0	0		

Sample ID 0407054-001AMSD	SampType: MSD	TestCode: 8260B_W	Units: µg/L	Prep Date: 7/2/2004	RunNo: 52855
Client ID:	Batch ID: 47360	TestNo: SW8260B		Analysis Date: 7/2/2004	SeqNo: 1015364

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	43.87	5.0	50	0	87.7	51.1	151	42.82	2.42	14.3	
Benzene	44.7	5.0	50	0	89.4	68.9	131	45.73	2.28	10	
Chlorobenzene	47.12	5.0	50	0	94.2	75.4	123	48.66	3.22	10	
Toluene	51.38	5.0	50	0	103	74.8	128	53.28	3.63	10	
Trichloroethene	51.33	5.0	50	0	103	66.3	145	54.56	6.10	11	
Surr: 4-Bromofluorobenzene	52.1	5.0	50	0	104	63.1	121	53.05	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47360

Sample ID 0407054-001AMSD	SampType: MSD	TestCode: 8260B_W	Units: µg/L	Prep Date: 7/2/2004	RunNo: 52855						
Client ID:	Batch ID: 47360	TestNo: SW8260B	Analysis Date: 7/2/2004	SeqNo: 1015364							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	55.3	5.0	50	0	111	69.5	126	55.23	0	0	
Surr: Toluene-d8	53.27	5.0	50	0	107	74.2	120	54.58	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 BRL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not NELAC certified

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47372

Sample ID MB-47372	SampType: MBLK	TestCode: 6010B_X	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52911
Client ID:	Batch ID: 47372	TestNo: SW6010B		Analysis Date: 7/6/2004	SeqNo: 1016302

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	5.0									
Barium	BRL	5.0									
Cadmium	BRL	2.5									
Chromium	BRL	2.5									
Lead	BRL	5.0									
Selenium	BRL	5.0									
Silver	BRL	2.5									

Sample ID LCS-47372	SampType: LCS	TestCode: 6010B_X	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52911
Client ID:	Batch ID: 47372	TestNo: SW6010B		Analysis Date: 7/6/2004	SeqNo: 1016301

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.44	5.0	50	0	103	85	115	0	0		
Barium	50.21	5.0	50	0	100	85	115	0	0		
Cadmium	52.22	2.5	50	0	104	85	115	0	0		
Chromium	52.08	2.5	50	0	104	85	115	0	0		
Lead	50.95	5.0	50	0	102	85	115	0	0		
Selenium	50.51	5.0	50	0	101	85	115	0	0		
Silver	5.03	2.5	5	0	101	85	115	0	0		

Sample ID 0407035-009CMS	SampType: MS	TestCode: 6010B_X	Units: mg/Kg-dry	Prep Date: 7/6/2004	RunNo: 52911
Client ID: SILO AREA D	Batch ID: 47372	TestNo: SW6010B		Analysis Date: 7/6/2004	SeqNo: 1016305

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.096	4.0	40.09	0	20.2	75	125	0	0		S
Barium	47.6	4.0	40.09	15.22	80.8	75	125	0	0		
Cadmium	35.69	2.0	40.09	0	89	75	125	0	0		
Chromium	58.15	2.0	40.09	24.08	85	75	125	0	0		
Lead	40.71	4.0	40.09	8.878	79.4	75	125	0	0		
Selenium	BRL	4.0	40.09	0	0	75	125	0	0		S
Silver	3.655	2.0	4.009	0	91.2	75	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47372

Sample ID	0407035-009CDUP	SampType:	DUP	TestCode:	6010B_X	Units:	mg/Kg-dry	Prep Date:	7/6/2004	RunNo:	52911
Client ID:	SILO AREA D	Batch ID:	47372	TestNo:	SW6010B			Analysis Date:	7/6/2004	SeqNo:	1016304

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	4.4	0	0	0	0	0	0	0	20	
Barium	14.93	4.4	0	0	0	0	0	15.22	1.92	20	
Cadmium	BRL	2.2	0	0	0	0	0	0	0	20	
Chromium	22.56	2.2	0	0	0	0	0	24.08	6.51	20	
Lead	8.688	4.4	0	0	0	0	0	8.878	2.16	20	
Selenium	BRL	4.4	0	0	0	0	0	0	0	20	
Sliver	BRL	2.2	0	0	0	0	0	0	0	20	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47378

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47378	MBLK	8081_TCL_S	µg/Kg	7/6/2004	53058						
Client ID:	Batch ID: 47378	TestNo: SW8081A		Analysis Date: 7/9/2004	SeqNo: 1019341						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	BRL	3.3									
4,4'-DDE	BRL	3.3									
4,4'-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	3.3									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	15.75	0	16.67	0	94.5	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	13.79	0	16.67	0	82.7	16.4	135	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47378	LCS	8081_TCL_S	µg/Kg	7/6/2004	53058						
Client ID:	Batch ID: 47378	TestNo: SW8081A		Analysis Date: 7/9/2004	SeqNo: 1019342						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	44.27	3.3	41.67	0	106	57.4	131	0	0		
Aldrin	15.82	1.7	16.67	0	94.9	51.3	150	0	0		
Dieldrin	43.24	3.3	41.67	0	104	70.8	124	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47378

Sample ID: LCS-47378		SampType: LCS		TestCode: 8081_TCL_S		Units: µg/Kg		Prep Date: 7/8/2004		RunNo: 53058	
Client ID:		Batch ID: 47378		TestNo: SW8081A		Analysis Date: 7/9/2004		SeqNo: 1019342			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	45.97	3.3	41.67	0	110	59.5	117	0	0		
gamma-BHC	14.13	3.3	16.67	0	84.8	52.8	115	0	0		
Heptachlor	20.5	1.7	16.67	0	123	36.7	153	0	0		
Surr: Decachlorobiphenyl	16.21	0	16.67	0	97.3	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	12.96	0	16.67	0	77.7	16.4	135	0	0		

Sample ID: 0407120-010BMS		SampType: MS		TestCode: 8081_TCL_S		Units: µg/Kg		Prep Date: 7/8/2004		RunNo: 53058	
Client ID:		Batch ID: 47378		TestNo: SW8081A		Analysis Date: 7/9/2004		SeqNo: 1019344			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	42.36	3.3	41.61	7.305	84.2	37.4	131	0	0		
Aldrin	14.71	1.7	16.65	0	88.3	53.1	134	0	0		
Dieldrin	41.11	3.3	41.61	0	98.8	10	163	0	0		
Endrin	44	3.3	41.61	0	106	10.2	148	0	0		
gamma-BHC	12.72	3.3	16.65	0	76.4	37.1	125	0	0		
Heptachlor	18.84	1.7	16.65	0	113	41	140	0	0		
Surr: Decachlorobiphenyl	15	0	16.65	0	90.1	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	11.11	0	16.65	0	66.7	16.4	135	0	0		

Sample ID: 0407120-010BMSD		SampType: MSD		TestCode: 8081_TCL_S		Units: µg/Kg		Prep Date: 7/8/2004		RunNo: 53058	
Client ID:		Batch ID: 47378		TestNo: SW8081A		Analysis Date: 7/9/2004		SeqNo: 1019345			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	44.06	3.3	41.64	7.305	88.3	37.4	131	42.36	3.93	29.9	
Aldrin	15.8	1.7	16.66	0	94.8	53.1	134	14.71	7.14	35.3	
Dieldrin	42.31	3.3	41.64	0	102	10	163	41.11	2.86	26	
Endrin	44.26	3.3	41.64	0	106	10.2	148	44	0.577	25.4	
gamma-BHC	14.47	3.3	16.66	0	86.9	37.1	125	12.72	12.9	37.4	
Heptachlor	13.53	1.7	16.66	0	81.2	41	140	18.84	32.8	33.8	
Surr: Decachlorobiphenyl	15.72	0	16.66	0	94.3	11.2	135	15	0	0	
Surr: Tetrachloro-m-xylene	13.89	0	16.66	0	83.4	16.4	135	11.11	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47385

Sample ID MB-47385	SampType: MBLK	TestCode: 8151_TCL_X	Units: µg/Kg	Prep Date: 7/6/2004	RunNo: 53081
Client ID:	Batch ID: 47385	TestNo: SW8151A		Analysis Date: 7/9/2004	SeqNo: 1019896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	BRL	500									
2,4,5-TP (Silvex)	BRL	500									
2,4-D	BRL	500									
2,4-DB	BRL	500									
Dalapon	BRL	500									
Dicamba	BRL	500									
Dichlorprop	BRL	500									
Dinoseb	BRL	500									
MCPA	BRL	5000									
MCPP	BRL	5000									
Surr: DCAA	5018	0	5000	0	100	20	127	0	0		

Sample ID LCS-47385	SampType: LCS	TestCode: 8151_TCL_X	Units: µg/Kg	Prep Date: 7/6/2004	RunNo: 53081
Client ID:	Batch ID: 47385	TestNo: SW8151A		Analysis Date: 7/9/2004	SeqNo: 1019898

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	4839	500	5000	0	96.8	19	125	0	0		
2,4,5-TP (Silvex)	4760	500	5000	0	95.2	25	120	0	0		
2,4-D	4677	500	5000	0	93.5	18	139	0	0		
Dicamba	4562	500	5000	0	91.2	28	123	0	0		
Dichlorprop	6200	500	5000	0	124	11	142	0	0		
Surr: DCAA	5312	0	5000	0	106	20	127	0	0		

Sample ID 0407035-009BMS	SampType: MS	TestCode: 8151_TCL_X	Units: µg/Kg-dry	Prep Date: 7/6/2004	RunNo: 53130
Client ID: SILO AREA D	Batch ID: 47385	TestNo: SW8151A		Analysis Date: 7/12/2004	SeqNo: 1020968

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	BRL	51000	5112	0	0	40	150	0	0		S
2,4,5-TP (Silvex)	BRL	51000	5112	0	0	40	150	0	0		S
2,4-D	BRL	51000	5112	930.1	-18.2	40	150	0	0		S
Dicamba	BRL	51000	5112	0	0	40	150	0	0		S

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47385

Sample ID 0407035-009BMS		SampType: MS		TestCode: 8151_TCL_X		Units: µg/Kg-dry		Prep Date: 7/6/2004		RunNo: 53130	
Client ID: SILO AREA D		Batch ID: 47385		TestNo: SW8151A				Analysis Date: 7/12/2004		SeqNo: 1020968	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorprop	BRL	51000	5112	4894	-95.7	40	150	0	0		S
Surr: DCAA	BRL	0	5112	0	0	20	127	0	0		S

Sample ID 0407035-009BMSD		SampType: MSD		TestCode: 8151_TCL_X		Units: µg/Kg-dry		Prep Date: 7/6/2004		RunNo: 53130	
Client ID: SILO AREA D		Batch ID: 47385		TestNo: SW8151A				Analysis Date: 7/12/2004		SeqNo: 1020969	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	BRL	54000	5367	0	0	40	150	0	0	48	S
2,4,5-TP (Silvex)	BRL	54000	5367	0	0	40	150	0	0	41	S
2,4-D	BRL	54000	5367	930.1	-17.3	40	150	0	0	45	S
Dicamba	BRL	54000	5367	0	0	40	150	0	0	42	S
Dichlorprop	BRL	54000	5367	4894	-91.2	40	150	0	0	40	S
Surr: DCAA	BRL	0	5367	0	0	20	127	0	0	0	S

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47390

Sample ID MB-47390	SampType: MBLK	TestCode: 8270_TCL4.2	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52920
Client ID:	Batch ID: 47390	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016529

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	BRL	100									
2,4,5-Trichlorophenol	BRL	500									
2,4,6-Trichlorophenol	BRL	100									
2,4-Dichlorophenol	BRL	100									
2,4-Dimethylphenol	BRL	100									
2,4-Dinitrophenol	BRL	500									
2,4-Dinitrotoluene	BRL	100									
2,6-Dinitrotoluene	BRL	100									
2-Chloronaphthalene	BRL	100									
2-Chlorophenol	BRL	100									
2-Methylnaphthalene	BRL	100									
2-Methylphenol	BRL	100									
2-Nitroaniline	BRL	500									
2-Nitrophenol	BRL	100									
3,3'-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	500									
4,6-Dinitro-2-methylphenol	BRL	500									
4-Bromophenyl phenyl ether	BRL	100									
4-Chloro-3-methylphenol	BRL	100									
4-Chloroaniline	BRL	100									
4-Chlorophenyl phenyl ether	BRL	100									
4-Methylphenol	BRL	100									
4-Nitroaniline	BRL	500									
4-Nitrophenol	BRL	500									
Acenaphthene	BRL	100									
Acenaphthylene	BRL	100									
Acetophenone	BRL	100									
Anthracene	BRL	100									
Atrazine	BRL	100									
Benz(a)anthracene	BRL	100									
Benzaldehyde	BRL	100									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47390

Sample ID MB-47390	SampType: MBLK	TestCode: 8270_TCL4.2	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52920						
Client ID:	Batch ID: 47390	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016529						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	BRL	100									
Benzo(b)fluoranthene	BRL	100									
Benzo(g,h,i)perylene	BRL	100									
Benzo(k)fluoranthene	BRL	100									
Bis(2-chloroethoxy)methane	BRL	100									
Bis(2-chloroethyl)ether	BRL	100									
Bis(2-chloroisopropyl)ether	BRL	100									
Bis(2-ethylhexyl)phthalate	BRL	100									
Butyl benzyl phthalate	BRL	100									
Caprolactam	BRL	100									
Carbazole	BRL	100									
Chrysene	BRL	100									
Dibenz(a,h)anthracene	BRL	100									
Dibenzofuran	BRL	100									
Diethyl phthalate	BRL	100									
Dimethyl phthalate	BRL	100									
Di-n-butyl phthalate	BRL	100									
Di-n-octyl phthalate	BRL	100									
Fluoranthene	BRL	100									
Fluorene	BRL	100									
Hexachlorobenzene	BRL	100									
Hexachlorobutadiene	BRL	100									
Hexachlorocyclopentadiene	BRL	100									
Hexachloroethane	BRL	100									
Indeno(1,2,3-cd)pyrene	BRL	100									
Isophorone	BRL	100									
Naphthalene	BRL	100									
Nitrobenzene	BRL	100									
N-Nitrosodi-n-propylamine	BRL	100									
N-Nitrosodiphenylamine	BRL	100									
Pentachlorophenol	BRL	500									

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 BRL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not NELAC certified

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47390

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47390	MBLK	8270_TCL4.2	mg/Kg	7/6/2004	52920						
Client ID:	Batch ID: 47390	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016529						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	BRL	100									
Phenol	BRL	100									
Pyrene	BRL	100									
Surr: 2,4,6-Tribromophenol	1003	0	1000	0	100	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	459.3	0	500	0	91.9	12.9	120	0	0		
Surr: 2-Fluorophenol	838.4	0	1000	0	83.8	10	119	0	0		
Surr: 4-Terphenyl-d14	453.6	0	500	0	90.7	41.5	128	0	0		
Surr: Nitrobenzene-d5	480	0	500	0	96	10	121	0	0		
Surr: Phenol-d5	903.2	0	1000	0	90.3	12.6	121	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47390	LCS	8270_TCL4.2	mg/Kg	7/6/2004	52920						
Client ID:	Batch ID: 47390	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016530						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	997.8	100	1000	0	99.8	33	123	0	0		
2-Chlorophenol	940.5	100	1000	0	94	10	118	0	0		
4-Chloro-3-methylphenol	1061	100	1000	0	106	10	138	0	0		
4-Nitrophenol	1077	500	1000	0	108	24.3	135	0	0		
Acenaphthene	931.5	100	1000	0	93.2	17.5	122	0	0		
N-Nitrosodi-n-propylamine	1063	100	1000	0	106	10	129	0	0		
Pentachlorophenol	1382	500	1000	0	138	38.5	128	0	0		S
Phenol	966.4	100	1000	0	96.6	10	115	0	0		
Pyrene	953.5	100	1000	0	95.4	58.6	117	0	0		
Surr: 2,4,6-Tribromophenol	1110	0	1000	0	111	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	496	0	500	0	99.2	12.9	120	0	0		
Surr: 2-Fluorophenol	935.3	0	1000	0	93.5	10	119	0	0		
Surr: 4-Terphenyl-d14	485.8	0	500	0	97.2	41.5	128	0	0		
Surr: Nitrobenzene-d5	534.8	0	500	0	107	10	121	0	0		
Surr: Phenol-d5	1003	0	1000	0	100	12.6	121	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47390

Sample ID 0407035-009BMS		SampType: MS		TestCode: 8270_TCL4.2		Units: mg/Kg-dry		Prep Date: 7/6/2004		RunNo: 52920	
Client ID: SILO AREA D		Batch ID: 47390		TestNo: SW8270C				Analysis Date: 7/6/2004		SeqNo: 1016532	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	311.9	110	1073	0	29.1	29	123	0	0		
2-Chlorophenol	303.9	110	1073	0	28.3	10	121	0	0		
4-Chloro-3-methylphenol	BRL	110	1073	0	0	13.6	141	0	0		S
4-Nitrophenol	BRL	540	1073	0	0	10.4	152	0	0		S
Acenaphthene	469.8	110	1073	0	43.8	13.9	121	0	0		
N-Nitrosodi-n-propylamine	474.3	110	1073	0	44.2	10	130	0	0		
Pentachlorophenol	BRL	540	1073	0	0	30	133	0	0		S
Phenol	316.1	110	1073	0	29.4	10	119	0	0		
Pyrene	438.5	110	1073	0	40.9	42.4	128	0	0		S
Surr: 2,4,6-Tribromophenol	BRL	0	1073	0	0	35.5	131	0	0		S
Surr: 2-Fluorobiphenyl	243.2	0	536.7	0	45.3	12.9	120	0	0		
Surr: 2-Fluorophenol	173.8	0	1073	0	16.2	10	119	0	0		
Surr: 4-Terphenyl-d14	220.1	0	536.7	0	41	41.5	128	0	0		S
Surr: Nitrobenzene-d5	224.1	0	536.7	0	41.8	10	121	0	0		
Surr: Phenol-d5	307.8	0	1073	0	28.7	12.6	121	0	0		

Sample ID 0407035-009BMSD		SampType: MSD		TestCode: 8270_TCL4.2		Units: mg/Kg-dry		Prep Date: 7/6/2004		RunNo: 52920	
Client ID: SILO AREA D		Batch ID: 47390		TestNo: SW8270C				Analysis Date: 7/6/2004		SeqNo: 1016533	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	323.5	100	1022	0	31.6	29	123	311.9	3.63	26.1	
2-Chlorophenol	329.7	100	1022	0	32.2	10	121	303.9	8.15	53.1	
4-Chloro-3-methylphenol	BRL	100	1022	0	0	13.6	141	0	0	34.7	S
4-Nitrophenol	BRL	510	1022	0	0	10.4	152	0	0	28.7	S
Acenaphthene	563.7	100	1022	0	55.1	13.9	121	469.8	18.2	49	
N-Nitrosodi-n-propylamine	572.1	100	1022	0	56	10	130	474.3	18.7	46.5	
Pentachlorophenol	BRL	510	1022	0	0	30	133	0	0	26.9	S
Phenol	349.7	100	1022	0	34.2	10	119	316.1	10.1	47.1	
Pyrene	515.4	100	1022	0	50.4	42.4	128	438.5	16.1	23.9	
Surr: 2,4,6-Tribromophenol	BRL	0	1022	0	0	35.5	131	0	0	0	S
Surr: 2-Fluorobiphenyl	280.8	0	511.2	0	54.9	12.9	120	243.2	0	0	

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47390

Sample ID 0407035-009BMSD	SampType: MSD	TestCode: 8270_TCL4.2	Units: mg/Kg-dry	Prep Date: 7/6/2004	RunNo: 52920
Client ID: SILO AREA D	Batch ID: 47390	TestNo: SW8270C		Analysis Date: 7/6/2004	SeqNo: 1016533

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	112.5	0	1022	0	11	10	119	173.8	0	0	
Surr: 4-Terphenyl-d14	249	0	511.2	0	48.7	41.5	128	220.1	0	0	
Surr: Nitrobenzene-d5	258.4	0	511.2	0	50.6	10	121	224.1	0	0	
Surr: Phenol-d5	310.9	0	1022	0	30.4	12.6	121	307.8	0	0	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47391

Sample ID MB-47391	SampType: MBLK	TestCode: 8081_TCL_X	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52958
Client ID:	Batch ID: 47391	TestNo: SW8081A		Analysis Date: 7/8/2004	SeqNo: 1017769

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	BRL	0.10									
4,4'-DDE	BRL	0.10									
4,4'-DDT	BRL	0.10									
Aldrin	BRL	0.050									
alpha-BHC	BRL	0.050									
alpha-Chlordane	BRL	0.050									
beta-BHC	BRL	0.050									
Chlordane	BRL	5.0									
delta-BHC	BRL	0.050									
Dieldrin	BRL	0.10									
Endosulfan I	BRL	0.050									
Endosulfan II	BRL	0.10									
Endosulfan sulfate	BRL	0.10									
Endrin	BRL	0.10									
Endrin aldehyde	BRL	0.10									
Endrin ketone	BRL	0.10									
gamma-BHC	BRL	0.050									
gamma-Chlordane	BRL	0.050									
Heptachlor	BRL	0.050									
Heptachlor epoxide	BRL	0.050									
Methoxychlor	BRL	0.50									
Toxaphene	BRL	5.0									
Surr: Decachlorobiphenyl	0.4698	0	0.5	0	94	30	150	0	0		
Surr: Tetrachloro-m-xylene	0.5282	0	0.5	0	106	30	150	0	0		

Sample ID LCS-47391	SampType: LCS	TestCode: 8081_TCL_X	Units: mg/Kg	Prep Date: 7/6/2004	RunNo: 52958
Client ID:	Batch ID: 47391	TestNo: SW8081A		Analysis Date: 7/8/2004	SeqNo: 1017771

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	1.104	0.10	1.25	0	88.3	38	127	0	0		
Aldrin	0.5041	0.050	0.5	0	101	40	120	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47391

Sample ID	LCS-47391	SampType:	LCS	TestCode:	8081_TCL_X	Units:	mg/Kg	Prep Date:	7/6/2004	RunNo:	52958			
Client ID:		Batch ID:	47391	TestNo:	SW8081A			Analysis Date:	7/8/2004	SeqNo:	1017771			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dieldrin		1.298		0.10	1.25	0		104	52	126	0	0		
Endrin		1.254		0.10	1.25	0		100	56	121	0	0		
gamma-BHC		0.5316		0.050	0.5	0		106	56	123	0	0		
Heptachlor		0.4702		0.050	0.5	0		94	40	131	0	0		
Surr: Decachlorobiphenyl		0.4768		0	0.5	0		95.4	30	150	0	0		
Surr: Tetrachloro-m-xylene		0.5322		0	0.5	0		106	30	150	0	0		

Sample ID	0407035-009BMS	SampType:	MS	TestCode:	8081_TCL_X	Units:	mg/Kg-dry	Prep Date:	7/6/2004	RunNo:	52958			
Client ID:	SILO AREA D	Batch ID:	47391	TestNo:	SW8081A			Analysis Date:	7/8/2004	SeqNo:	1017776			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT		BRL		11	1.342	1.601		-119	38	127	0	0		S
Aldrin		BRL		5.4	0.5367	0		0	40	120	0	0		S
Dieldrin		BRL		11	1.342	0		0	52	126	0	0		S
Endrin		BRL		11	1.342	0		0	56	121	0	0		S
gamma-BHC		BRL		5.4	0.5367	0		0	56	123	0	0		S
Heptachlor		BRL		5.4	0.5367	0		0	40	131	0	0		S
Surr: Decachlorobiphenyl		BRL		0	0.5367	0		0	30	150	0	0		S
Surr: Tetrachloro-m-xylene		BRL		0	0.5367	0		0	30	150	0	0		S

Sample ID	0407035-009BMSD	SampType:	MSD	TestCode:	8081_TCL_X	Units:	mg/Kg-dry	Prep Date:	7/6/2004	RunNo:	52958			
Client ID:	SILO AREA D	Batch ID:	47391	TestNo:	SW8081A			Analysis Date:	7/8/2004	SeqNo:	1017778			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT		BRL		10	1.266	1.601		-126	38	127	1.647	0	0	S
Aldrin		BRL		5.1	0.5063	0		0	40	120	0.7648	0	0	S
Dieldrin		BRL		10	1.266	0		0	52	126	1.51	0	0	S
Endrin		BRL		10	1.266	0		0	56	121	3.99	0	0	S
gamma-BHC		BRL		5.1	0.5063	0		0	56	123	1.056	0	0	S
Heptachlor		BRL		5.1	0.5063	0		0	40	131	0.4663	0	0	S
Surr: Decachlorobiphenyl		BRL		0	0.5063	0		0	30	150	0.2938	0	0	S

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47391

Sample ID	0407035-009BMSD	SampType:	MSD	TestCode:	8081_TCL_X	Units:	mg/Kg-dry	Prep Date:	7/6/2004	RunNo:	52958		
Client ID:	SILO AREA D	Batch ID:	47391	TestNo:	SW8081A			Analysis Date:	7/8/2004	SeqNo:	1017778		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr:	Tetrachloro-m-xylene	BRL		0	0.5063	0	0	30	150	0.4536	0	0	S

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 BRL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not NELAC certified

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47396

Sample ID MB-47396	SampType: MBLK	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/7/2004	RunNo: 52940						
Client ID:	Batch ID: 47396	TestNo: SW1311/7470		Analysis Date: 7/7/2004	SeqNo: 1016867						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury BRL 0.00400

Sample ID LCS-47396	SampType: LCS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/7/2004	RunNo: 52940						
Client ID:	Batch ID: 47396	TestNo: SW1311/7470		Analysis Date: 7/7/2004	SeqNo: 1016868						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.04443 0.00400 0.04 0 111 80 120 0 0

Sample ID 0406E74-001AMS	SampType: MS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/7/2004	RunNo: 52940						
Client ID:	Batch ID: 47396	TestNo: SW1311/7470		Analysis Date: 7/7/2004	SeqNo: 1016870						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.04465 0.00400 0.04 0 112 80 120 0 0

Sample ID 0406E74-001AMSD	SampType: MSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/7/2004	RunNo: 52940						
Client ID:	Batch ID: 47396	TestNo: SW1311/7470		Analysis Date: 7/7/2004	SeqNo: 1016871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.04452 0.00400 0.04 0 111 80 120 0.04465 0.293 20

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47452

Sample ID MB-47452	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/7/2004	RunNo: 52994
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/8/2004	SeqNo: 1017899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47452

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47452	MBLK	8260_TCL4.2	µg/Kg	7/7/2004	52994						
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/8/2004	SeqNo: 1017899						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2886	0	2500	0	115	65.3	133	0	0		
Surr: Dibromofluoromethane	2196	0	2500	0	87.9	80.1	121	0	0		
Surr: Toluene-d8	2150	0	2500	0	86	67.8	145	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0407035-006AMS	MS	8260_TCL4.2	µg/Kg-dry	7/7/2004	52945						
Client ID: AB TCLP COMP	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017048						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	3280	330	3272	0	100	46.3	140	0	0		
Benzene	3214	330	3272	0	98.2	58.7	138	0	0		
Chlorobenzene	3240	330	3272	0	99	55.3	141	0	0		
Toluene	3628	330	3272	0	111	52.1	144	0	0		
Trichloroethene	3722	330	3272	0	114	65.4	148	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47452

Sample ID: 0407035-006AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/7/2004	RunNo: 52945						
Client ID: AB TCLP COMP	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017048						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	3837	0	3272	0	117	65.3	133	0	0		
Surr: Dibromofluoromethane	3710	0	3272	0	113	80.1	121	0	0		
Surr: Toluene-d8	3771	0	3272	0	115	67.8	145	0	0		

Sample ID: 0407035-006AMSD	SampType: MSD	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/7/2004	RunNo: 52945						
Client ID: AB TCLP COMP	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017050						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	3043	330	3272	0	93	46.3	140	3280	7.49	22.9	
Benzene	2936	330	3272	0	89.7	58.7	138	3214	9.02	16.8	
Chlorobenzene	3005	330	3272	0	91.9	55.3	141	3240	7.50	23.5	
Toluene	3508	330	3272	0	107	52.1	144	3628	3.36	18.6	
Trichloroethene	3312	330	3272	0	101	65.4	148	3722	11.7	21.4	
Surr: 4-Bromofluorobenzene	3754	0	3272	0	115	65.3	133	3837	0	0	
Surr: Dibromofluoromethane	3395	0	3272	0	104	80.1	121	3710	0	0	
Surr: Toluene-d8	3471	0	3272	0	106	67.8	145	3771	0	0	

Sample ID: MB-47452	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/7/2004	RunNo: 52945						
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017043						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47452

Sample ID MB-47452	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/7/2004	RunNo: 52945
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017043

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethene, Total	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Hexachlorobutadiene	BRL	250									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47452

Sample ID MB-47452	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/7/2004	RunNo: 52945						
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017043						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	BRL	1000									
Naphthalene	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Xylenes, Total	BRL	250									
Surr: 4-Bromofluorobenzene	2588	250	2500	0	104	65.3	133	0	0		
Surr: Dibromofluoromethane	2862	250	2500	0	114	80.1	121	0	0		
Surr: Toluene-d8	2692	250	2500	0	108	67.8	145	0	0		

Sample ID LCS-47452	SampType: LCS	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/7/2004	RunNo: 52945						
Client ID:	Batch ID: 47452	TestNo: SW8260B		Analysis Date: 7/7/2004	SeqNo: 1017045						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	2392	250	2500	0	95.7	58.8	139	0	0		
Benzene	2393	250	2500	0	95.7	77.6	128	0	0		
Chlorobenzene	2527	250	2500	0	101	80.4	131	0	0		
Toluene	2784	250	2500	0	111	79.4	132	0	0		
Trichloroethene	2812	250	2500	0	112	81.8	147	0	0		
Surr: 4-Bromofluorobenzene	2618	250	2500	0	105	65.3	133	0	0		
Surr: Dibromofluoromethane	2850	250	2500	0	114	80.1	121	0	0		
Surr: Toluene-d8	2666	250	2500	0	107	67.8	145	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID MB-47510	SampType: MBLK	TestCode: 1311_V	Units: mg/L	Prep Date: 7/8/2004	RunNo: 53034						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/9/2004	SeqNo: 1018655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.037	0	1	0	104	63.1	121	0	0		
Surr: Dibromofluoromethane	1.125	0	1	0	113	69.5	126	0	0		
Surr: Toluene-d8	1.094	0	1	0	109	74.2	120	0	0		

Sample ID MB-47510	SampType: MBLK	TestCode: 1311_V	Units: mg/L	Prep Date: 7/8/2004	RunNo: 53162						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/13/2004	SeqNo: 1021652						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.085	0	1	0	109	63.1	121	0	0		
Surr: Dibromofluoromethane	1.009	0	1	0	101	69.5	126	0	0		
Surr: Toluene-d8	1.042	0	1	0	104	74.2	120	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47510	LCS	1311_V	mg/L	7/8/2004	53034						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/9/2004	SeqNo: 1018657						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8024	0.10	1	0	80.2	61	131	0	0		*
1,2-Dichloroethane	1.119	0.10	1	0	112	76	129	0	0		*
2-Butanone	1.065	0.20	1	0	106	25	161	0	0		*
Benzene	0.8986	0.10	1	0	89.9	77	126	0	0		*
Carbon tetrachloride	1.489	0.10	2	0	74.5	66	131	0	0		*
Chlorobenzene	1.006	0.10	1	0	101	80	121	0	0		*
Chloroform	0.9448	0.10	1	0	94.5	76	129	0	0		*
Tetrachloroethene	1.071	0.10	1	0	107	64	133	0	0		*
Trichloroethene	1.103	0.10	1	0	110	71	125	0	0		*
Vinyl chloride	0.8064	0.040	1	0	80.6	45	131	0	0		*
Surr: 4-Bromofluorobenzene	1.081	0	1	0	108	63.1	121	0	0		*
Surr: Dibromofluoromethane	0.9614	0	1	0	96.1	69.5	126	0	0		*
Surr: Toluene-d8	1.008	0	1	0	101	74.2	120	0	0		*

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0407089-002CMS	MS	1311_V	mg/L	7/8/2004	53034						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/9/2004	SeqNo: 1018661						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8472	0.10	1	0	84.7	61	131	0	0		*
1,2-Dichloroethane	1.095	0.10	1	0	110	76	129	0	0		*
2-Butanone	1.132	0.20	1	0	113	25	161	0	0		*
Benzene	0.9002	0.10	1	0	90	77	126	0	0		*
Carbon tetrachloride	1.513	0.10	2	0	75.6	66	131	0	0		*
Chlorobenzene	1.024	0.10	1	0	102	80	121	0	0		*
Chloroform	0.941	0.10	1	0	94.1	76	129	0	0		*
Tetrachloroethene	1.074	0.10	1	0	107	64	133	0	0		*
Trichloroethene	1.058	0.10	1	0	106	71	125	0	0		*
Vinyl chloride	0.939	0.040	1	0	93.9	45	131	0	0		*
Surr: 4-Bromofluorobenzene	1.122	0	1	0	112	63.1	121	0	0		*
Surr: Dibromofluoromethane	0.9608	0	1	0	96.1	69.5	126	0	0		*
Surr: Toluene-d8	0.9854	0	1	0	98.5	74.2	120	0	0		*

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID 0407089-002C	SampType: DUP	TestCode: 1311_V	Units: mg/L		Prep Date: 7/8/2004	RunNo: 53034					
Client ID:	Batch ID: 47510	TestNo: SW1311/8260			Analysis Date: 7/9/2004	SeqNo: 1018711					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
1,2-Dichloroethane	BRL	0.10	0	0	0	0	0	0	0	30	
2-Butanone	BRL	0.20	0	0	0	0	0	0	0	30	
Benzene	BRL	0.10	0	0	0	0	0	0	0	30	
Carbon tetrachloride	BRL	0.10	0	0	0	0	0	0	0	30	
Chlorobenzene	BRL	0.10	0	0	0	0	0	0	0	30	
Chloroform	BRL	0.10	0	0	0	0	0	0	0	30	
Tetrachloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Trichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Vinyl chloride	BRL	0.040	0	0	0	0	0	0	0	30	
Surr: 4-Bromofluorobenzene	0.894	0	1	0	89.4	71.8	143	0.8594	0	0	
Surr: Dibromofluoromethane	0.9678	0	1	0	96.8	80.3	123	0.984	0	0	
Surr: Toluene-d8	0.9578	0	1	0	95.8	70.1	142	0.9346	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID MB-47515	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	BRL	330									
2,4,5-Trichlorophenol	BRL	1700									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	330									
2,6-Dinitrotoluene	BRL	330									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Methylnaphthalene	BRL	330									
2-Methylphenol	BRL	330									
2-Nitroaniline	BRL	1700									
2-Nitrophenol	BRL	330									
3,3'-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	1700									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chloroaniline	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Methylphenol	BRL	330									
4-Nitroaniline	BRL	1700									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Acetophenone	BRL	330									
Anthracene	BRL	330									
Atrazine	BRL	330									
Benz(a)anthracene	BRL	330									
Benzaldehyde	BRL	330									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID MB-47515	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									
Butyl benzyl phthalate	BRL	330									
Caprolactam	BRL	330									
Carbazole	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Dibenzofuran	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
Di-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
N-Nitrosodl-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Pentachlorophenol	BRL	1700									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47515	MBLK	8270_TCL4.2	µg/Kg	7/9/2004	53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2913	0	3333	0	87.4	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1222	0	1667	0	73.3	12.9	120	0	0		
Surr: 2-Fluorophenol	2221	0	3333	0	66.6	10	119	0	0		
Surr: 4-Terphenyl-d14	1392	0	1667	0	83.5	41.5	128	0	0		
Surr: Nitrobenzene-d5	1126	0	1667	0	67.6	10	121	0	0		
Surr: Phenol-d5	2204	0	3333	0	66.1	12.6	121	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47515	LCS	8270_TCL4.2	µg/Kg	7/9/2004	53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019510						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	2881	330	3333	0	86.4	33	123	0	0		
2-Chlorophenol	2566	330	3333	0	77	10	120	0	0		
4-Chloro-3-methylphenol	2928	330	3333	0	87.8	10	138	0	0		
4-Nitrophenol	3667	1700	3333	0	110	24.3	135	0	0		
Acenaphthene	2733	330	3333	0	82	17.5	122	0	0		
N-Nitrosodi-n-propylamine	2841	330	3333	0	85.2	10	129	0	0		
Pentachlorophenol	3144	1700	3333	0	94.3	38.4	128	0	0		
Phenol	2628	330	3333	0	78.8	10	120	0	0		
Pyrene	2891	330	3333	0	86.7	58.6	120	0	0		
Surr: 2,4,6-Tribromophenol	3076	0	3333	0	92.3	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1287	0	1667	0	77.2	12.9	120	0	0		
Surr: 2-Fluorophenol	2118	0	3333	0	63.5	10	119	0	0		
Surr: 4-Terphenyl-d14	1426	0	1667	0	85.6	41.5	128	0	0		
Surr: Nitrobenzene-d5	1242	0	1667	0	74.5	10	121	0	0		
Surr: Phenol-d5	1993	0	3333	0	59.8	12.6	121	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID 0407302-005AMS		SampType: MS	TestCode: 8270_TCL4.2			Units: µg/Kg	Prep Date: 7/9/2004			RunNo: 53071		
Client ID:		Batch ID: 47515	TestNo: SW8270C			Analysis Date: 7/9/2004			SeqNo: 1019513			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
2,4-Dinitrotoluene	2340	330	3329	0	70.3	29	123	0	0			
2-Chlorophenol	2340	330	3329	0	70.3	10	121	0	0			
4-Chloro-3-methylphenol	2608	330	3329	0	78.3	13.6	141	0	0			
4-Nitrophenol	2535	1700	3329	0	76.1	10.4	152	0	0			
Acenaphthene	2244	330	3329	0	67.4	13.9	121	0	0			
N-Nitrosodi-n-propylamine	2493	330	3329	0	74.9	10	130	0	0			
Pentachlorophenol	2565	1700	3329	0	77	30	133	0	0			
Phenol	2336	330	3329	0	70.2	10	120	0	0			
Pyrene	2246	330	3329	74.26	65.2	42.4	128	0	0			
Surr: 2,4,6-Tribromophenol	2503	0	3329	0	75.2	35.5	131	0	0			
Surr: 2-Fluorobiphenyl	1096	0	1664	0	65.8	12.9	120	0	0			
Surr: 2-Fluorophenol	2034	0	3329	0	61.1	10	119	0	0			
Surr: 4-Terphenyl-d14	1071	0	1664	0	64.4	41.5	128	0	0			
Surr: Nitrobenzene-d5	1142	0	1664	0	68.6	10	121	0	0			
Surr: Phenol-d5	2290	0	3329	0	68.8	12.6	121	0	0			

Sample ID 0407302-005AMSD		SampType: MSD	TestCode: 8270_TCL4.2			Units: µg/Kg	Prep Date: 7/9/2004			RunNo: 53071		
Client ID:		Batch ID: 47515	TestNo: SW8270C			Analysis Date: 7/9/2004			SeqNo: 1019514			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
2,4-Dinitrotoluene	1982	330	3329	0	59.5	29	123	2340	16.6	26.1		
2-Chlorophenol	2049	330	3329	0	61.6	10	121	2340	13.2	53.1		
4-Chloro-3-methylphenol	2408	330	3329	0	72.3	13.6	141	2608	7.96	34.7		
4-Nitrophenol	2189	1700	3329	0	65.8	10.4	152	2535	14.6	28.7		
Acenaphthene	2009	330	3329	0	60.4	13.9	121	2244	11.0	49		
N-Nitrosodi-n-propylamine	2111	330	3329	0	63.4	10	130	2493	16.6	46.5		
Pentachlorophenol	2217	1700	3329	0	66.6	30	133	2565	14.5	26.9		
Phenol	2046	330	3329	0	61.5	10	120	2336	13.2	47.1		
Pyrene	1976	330	3329	74.26	57.1	42.4	128	2246	12.8	23.9		
Surr: 2,4,6-Tribromophenol	2150	0	3329	0	64.6	35.5	131	2503	0	0		
Surr: 2-Fluorobiphenyl	967	0	1664	0	58.1	12.9	120	1096	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID 0407302-005AMSD	SampType: MSD	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	1819	0	3329	0	54.8	10	119	2034	0	0	
Surr: 4-Terphenyl-d14	938.4	0	1664	0	58.4	41.5	128	1071	0	0	
Surr: Nitrobenzene-d5	1107	0	1664	0	66.5	10	121	1142	0	0	
Surr: Phenol-d5	1932	0	3329	0	58	12.6	121	2290	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID MB-47532	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53068
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/9/2004	SeqNo: 1019439

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	10									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47532	MBLK	8260_TCL4.2	µg/Kg	7/9/2004	53068						
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/9/2004	SeqNo: 1019439						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	10									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	36.1	0	50	0	72.2	65.3	133	0	0		
Surr: Dibromofluoromethane	51.54	0	50	0	103	80.1	121	0	0		
Surr: Toluene-d8	45.5	0	50	0	91	67.8	145	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47532	MBLK	8260_TCL4.2	µg/Kg	7/9/2004	53134						
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1021030						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID MB-47532	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53134
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1021030

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	10									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	10									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID MB-47532	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53134						
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1021030						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	37.33	0	50	0	74.7	65.3	133	0	0		
Surr: Dibromofluoromethane	50.92	0	50	0	102	80.1	121	0	0		
Surr: Toluene-d8	44.8	0	50	0	89.6	67.8	145	0	0		

Sample ID 0407302-001AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53134						
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1021037						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	66.96	5.0	50	0	134	46.3	140	0	0		
Benzene	49.06	5.0	50	0	98.1	58.7	138	0	0		
Chlorobenzene	45.96	5.0	50	0	91.9	55.3	141	0	0		
Toluene	44.71	5.0	50	0	89.4	52.1	144	0	0		
Trichloroethene	52.17	5.0	50	0	104	65.4	148	0	0		
Surr: 4-Bromofluorobenzene	35.54	0	50	0	71.1	65.3	133	0	0		
Surr: Dibromofluoromethane	50.58	0	50	0	101	80.1	121	0	0		
Surr: Toluene-d8	44.82	0	50	0	89.6	67.8	145	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID 0407302-001AMSD		SampType: MSD	TestCode: 8260_TCL4.2			Units: µg/Kg	Prep Date: 7/9/2004			RunNo: 53134	
Client ID:		Batch ID: 47532	TestNo: SW8260B			Analysis Date: 7/12/2004			SeqNo: 1021038		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	65.05	5.0	50	0	130	46.3	140	66.96	2.89	22.9	
Benzene	48.53	5.0	50	0	97.1	58.7	138	49.06	1.09	16.8	
Chlorobenzene	47.39	5.0	50	0	94.8	55.3	141	45.96	3.06	23.5	
Toluene	43.8	5.0	50	0	87.6	52.1	144	44.71	2.06	18.6	
Trichloroethane	51.03	5.0	50	0	102	65.4	148	52.17	2.21	21.4	
Surr: 4-Bromofluorobenzene	36.2	0	50	0	72.4	65.3	133	35.54	0	0	
Surr: Dibromofluoromethane	50.16	0	50	0	100	80.1	121	50.58	0	0	
Surr: Toluene-d8	44.55	0	50	0	89.1	67.8	145	44.82	0	0	

Sample ID MB-47532		SampType: MBLK	TestCode: 8260B_S			Units: µg/Kg	Prep Date: 7/9/2004			RunNo: 53073	
Client ID:		Batch ID: 47532	TestNo: SW8260B			Analysis Date: 7/9/2004			SeqNo: 1019558		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloroethene, Total	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	10									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47532	MBLK	8260B_S	µg/Kg	7/9/2004	53073						
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/9/2004	SeqNo: 1019558						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Hexachlorobutadiene	BRL	5.0									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	10									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
Naphthalene	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47532

Sample ID MB-47532	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53073
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/9/2004	SeqNo: 1019558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.89	5.0	50	0	81.8	65.3	133	0	0		
Surr: Dibromofluoromethane	43.87	5.0	50	0	87.7	80.1	121	0	0		
Surr: Toluene-d8	43.66	5.0	50	0	87.3	67.8	145	0	0		

Sample ID LCS-47532	SampType: LCS	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53073
Client ID:	Batch ID: 47532	TestNo: SW8260B		Analysis Date: 7/9/2004	SeqNo: 1019561

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	58.27	5.0	50	0	117	58.8	139	0	0		
Benzene	57.57	5.0	50	0	115	77.6	128	0	0		
Chlorobenzene	58.99	5.0	50	0	118	80.4	131	0	0		
Toluene	58.55	5.0	50	0	117	79.4	132	0	0		
Trichloroethene	57.46	5.0	50	0	115	81.8	147	0	0		
Surr: 4-Bromofluorobenzene	40.48	5.0	50	0	81	65.3	133	0	0		
Surr: Dibromofluoromethane	43.98	5.0	50	0	88	80.1	121	0	0		
Surr: Toluene-d8	43.83	5.0	50	0	87.7	67.8	145	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47534

Sample ID MB-47534	SampType: MBLK	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/9/2004	RunNo: 53065
Client ID:	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019656

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID LCS-47534	SampType: LCS	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/9/2004	RunNo: 53065
Client ID:	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.91	5.00	50	0	93.8	80	120	0	0		
Barium	46.73	5.00	50	0.118	93.2	80	120	0	0		
Cadmium	47.8	2.50	50	0.023	95.6	80	120	0	0		
Chromium	48.19	2.50	50	0.441	95.5	80	120	0	0		
Lead	46.9	5.00	50	0	93.8	80	120	0	0		
Selenium	44.62	5.00	50	0	89.2	80	120	0	0		
Silver	4.526	2.50	5	0	90.5	80	120	0	0		

Sample ID 0406F09-002AMS	SampType: MS	TestCode: 6010B_S	Units: mg/Kg-dry	Prep Date: 7/9/2004	RunNo: 53065
Client ID:	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019659

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	56.95	5.17	51.75	10.05	90.6	75	125	0	0		
Barium	226.3	5.17	51.75	168.7	111	75	125	0	0		
Cadmium	48.02	2.59	51.75	0.426	92	75	125	0	0		
Chromium	66.33	2.59	51.75	17.3	94.7	75	125	0	0		
Lead	62.12	5.17	51.75	13.8	93.4	75	125	0	0		
Selenium	43.83	5.17	51.75	0	84.7	75	125	0	0		
Silver	4.66	2.59	5.175	0	90.1	75	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47534

Sample ID	0406F09-002ADUP	SampType:	DUP	TestCode:	6010B_S	Units:	mg/Kg-dry	Prep Date:	7/9/2004	RunNo:	53065
Client ID:		Batch ID:	47534	TestNo:	SW6010B			Analysis Date:	7/9/2004	SeqNo:	1019658

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.142	5.06	0	0	0	0	0	10.05	9.41	20	
Barium	171.2	5.06	0	0	0	0	0	168.7	1.45	20	
Cadmium	BRL	2.53	0	0	0	0	0	0.426	0	20	
Chromium	18.31	2.53	0	0	0	0	0	17.3	5.65	20	
Lead	12.92	5.06	0	0	0	0	0	13.8	6.53	20	
Selenium	BRL	5.06	0	0	0	0	0	0	0	20	
Silver	BRL	2.53	0	0	0	0	0	0	0	20	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47539

Sample ID MB-47539	SampType: MBLK	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53208
Client ID:	Batch ID: 47539	TestNo: SW8081A		Analysis Date: 7/14/2004	SeqNo: 1022516

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	BRL	3.3									
4,4'-DDE	BRL	3.3									
4,4'-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	3.3									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	11.62	0	16.67	0	69.7	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	13.78	0	16.67	0	82.6	16.4	135	0	0		

Sample ID LCS-47539	SampType: LCS	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53208
Client ID:	Batch ID: 47539	TestNo: SW8081A		Analysis Date: 7/14/2004	SeqNo: 1022517

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	39.22	3.3	41.67	0	94.1	57.4	131	0	0		
Aldrin	13.79	1.7	16.67	0	82.7	51.3	150	0	0		
Dieldrin	39.17	3.3	41.67	0	94	70.8	124	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47539

Sample ID	LCS-47539	SampType:	LCS	TestCode:	8081_TCL_S	Units:	µg/Kg	Prep Date:	7/9/2004	RunNo:	53208			
Client ID:		Batch ID:	47539	TestNo:	SW8081A			Analysis Date:	7/14/2004	SeqNo:	1022517			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Endrin	39.86	3.3	41.67	0	95.7	59.5	117	0	0					
gamma-BHC	14.02	3.3	16.67	0	84.1	52.8	115	0	0					
Heptachlor	12.69	1.7	16.67	0	76.1	36.7	153	0	0					
Surr: Decachlorobiphenyl	11.97	0	16.67	0	71.8	11.2	135	0	0					
Surr: Tetrachloro-m-xylene	13.95	0	16.67	0	83.7	16.4	135	0	0					

Sample ID	0406F09-006BMS	SampType:	MS	TestCode:	8081_TCL_S	Units:	µg/Kg-dry	Prep Date:	7/9/2004	RunNo:	53208			
Client ID:		Batch ID:	47539	TestNo:	SW8081A			Analysis Date:	7/14/2004	SeqNo:	1023608			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

4,4'-DDT	59.75	4.2	52.68	10.46	93.6	37.4	131	0	0					
Aldrin	17.48	2.1	21.07	1.064	77.9	53.1	134	0	0					
Dieldrin	135.1	4.2	52.68	87.58	90.3	10	163	0	0					E
Endrin	64.14	4.2	52.68	0	122	10.2	148	0	0					
gamma-BHC	16.38	4.2	21.07	0	77.7	37.1	125	0	0					
Heptachlor	15.12	2.1	21.07	0	71.8	41	140	0	0					
Surr: Decachlorobiphenyl	14.21	0	21.07	0	67.4	11.2	135	0	0					
Surr: Tetrachloro-m-xylene	13.14	0	21.07	0	62.4	16.4	135	0	0					

Sample ID	0406F09-006BMSD	SampType:	MSD	TestCode:	8081_TCL_S	Units:	µg/Kg-dry	Prep Date:	7/9/2004	RunNo:	53208			
Client ID:		Batch ID:	47539	TestNo:	SW8081A			Analysis Date:	7/14/2004	SeqNo:	1023609			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

4,4'-DDT	58.23	4.2	52.59	10.46	90.8	37.4	131	59.75	2.57	29.9				
Aldrin	17.79	2.1	21.04	1.064	79.5	53.1	134	17.48	1.76	35.3				
Dieldrin	133.7	4.2	52.59	87.58	87.7	10	163	135.1	1.06	26				
Endrin	62.95	4.2	52.59	0	120	10.2	148	64.14	1.86	25.4				
gamma-BHC	16.55	4.2	21.04	0	78.7	37.1	125	16.38	1.08	37.4				
Heptachlor	15.41	2.1	21.04	0	73.2	41	140	15.12	1.85	33.8				
Surr: Decachlorobiphenyl	13.1	0	21.04	0	62.3	11.2	135	14.21	0	0				
Surr: Tetrachloro-m-xylene	15.4	0	21.04	0	73.2	16.4	135	13.14	0	0				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023178

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2754	0	2500	0	110	65.3	133	0	0		
Surr: Dibromofluoromethane	2514	0	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2626	0	2500	0	105	67.8	145	0	0		

Sample ID 0407035-001AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117
Client ID: AB TCLP 15 2-6	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24930	1800	18380	0	136	46.3	140	0	0		
Benzene	21500	1800	18380	0	117	58.7	138	0	0		
Chlorobenzene	19520	1800	18380	0	106	55.3	141	0	0		
Toluene	21680	1800	18380	0	118	52.1	144	0	0		
Trichloroethene	20350	1800	18380	0	111	65.4	148	0	0		

Qualifiers: B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID 0407035-001AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117						
Client ID: AB TCLP 15 2-6	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020551						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	19550	0	18380	0	106	65.3	133	0	0		
Surr: Dibromofluoromethane	18950	0	18380	0	103	80.1	121	0	0		
Surr: Toluene-d8	19440	0	18380	0	106	67.8	145	0	0		

Sample ID 0407035-001AMSD	SampType: MSD	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117						
Client ID: AB TCLP 15 2-6	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020553						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24450	1800	18380	0	133	46.3	140	24930	1.97	22.9	
Benzene	21830	1800	18380	0	119	58.7	138	21500	1.54	16.8	
Chlorobenzene	20840	1800	18380	0	113	55.3	141	19520	6.54	23.5	
Toluene	22670	1800	18380	0	123	52.1	144	21680	4.49	18.6	
Trichloroethene	21150	1800	18380	0	115	65.4	148	20350	3.84	21.4	
Surr: 4-Bromofluorobenzene	20310	0	18380	0	110	65.3	133	19550	0	0	
Surr: Dibromofluoromethane	19040	0	18380	0	104	80.1	121	18950	0	0	
Surr: Toluene-d8	19930	0	18380	0	108	67.8	145	19440	0	0	

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020558						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	1000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID	MB-47602	SampType:	MBLK	TestCode:	8260_TCL4.2	Units:	µg/Kg	Prep Date:	7/12/2004	RunNo:	53117
Client ID:		Batch ID:	47602	TestNo:	SW8260B			Analysis Date:	7/12/2004	SeqNo:	1020558
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2461	0	2500	0	98.4	65.3	133	0	0		
Surr: Dibromofluoromethane	2630	0	2500	0	105	80.1	121	0	0		
Surr: Toluene-d8	2668	0	2500	0	107	67.8	145	0	0		

Sample ID	MB-47602	SampType:	MBLK	TestCode:	8260_TCL4.2	Units:	µg/Kg	Prep Date:	7/12/2004	RunNo:	53225
Client ID:		Batch ID:	47602	TestNo:	SW8260B			Analysis Date:	7/14/2004	SeqNo:	1023173
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	1000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0407035
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023173						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2754	0	2500	0	110	65.3	133	0	0		
Surr: Dibromofluoromethane	2514	0	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2626	0	2500	0	105	67.8	145	0	0		

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020532						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloroethene, Total	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8280B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8280B		Analysis Date: 7/12/2004	SeqNo: 1020532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Hexachlorobutadiene	BRL	250									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	1000									
Naphthalene	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	BRL	500									
Xylenes, Total	BRL	250									
Surr: 4-Bromofluorobenzene	2461	250	2500	0	98.4	65.3	133	0	0		
Surr: Dibromofluoromethane	2630	250	2500	0	105	80.1	121	0	0		
Surr: Toluene-d8	2668	250	2500	0	107	67.8	145	0	0		

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/15/2004	SeqNo: 1023837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloroethene, Total	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromofom	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253
Client ID:	Batch ID: 47602	TestNo: SW8280B		Analysis Date: 7/15/2004	SeqNo: 1023837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Hexachlorobutadiene	BRL	250									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	1000									
Naphthalene	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/15/2004	SeqNo: 1023837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Xylenes, Total	BRL	250									
Surr: 4-Bromofluorobenzene	2703	250	2500	0	108	65.3	133	0	0		
Surr: Dibromofluoromethane	2534	250	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2644	250	2500	0	106	67.8	145	0	0		

Sample ID LCS-47602	SampType: LCS	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020533

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	3460	250	2500	0	138	58.8	139	0	0		
Benzene	2940	250	2500	0	118	77.6	128	0	0		
Chlorobenzene	2742	250	2500	0	110	80.4	131	0	0		
Toluene	3020	250	2500	0	121	79.4	132	0	0		
Trichloroethene	2847	250	2500	0	114	81.8	147	0	0		
Surr: 4-Bromofluorobenzene	2511	250	2500	0	100	65.3	133	0	0		
Surr: Dibromofluoromethane	2590	250	2500	0	104	80.1	121	0	0		
Surr: Toluene-d8	2588	250	2500	0	104	67.8	145	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47624

Sample ID MB-47624	SampType: MBLK	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021483						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.100	0	0	0	0	0	0	0	0	
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Sample ID LCS-47624	SampType: LCS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021484						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4211	0.100	0.4	0.02169	99.8	80	120	0	0		
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Sample ID 0407303-001BMS	SampType: MS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021486						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4083	0.0988	0.395	0.03561	94.4	70	130	0	0		
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Sample ID 0407303-001BMSD	SampType: MSD	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021487						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.3943	0.0929	0.3715	0.03561	96.5	70	130	0.4083	3.51	30	
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Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0407035
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47670

Sample ID MB-47670	SampType: MBLK	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022943						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.00400	0	0	0	0	0	0	0	0	
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Sample ID LCS-47670	SampType: LCS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022945						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04147	0.00400	0.04	0.000667	102	80	120	0	0		
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Sample ID 0407035-002CMS	SampType: MS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID: AB TCLP 16 2-6	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022950						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04206	0.00400	0.04	0.000954	103	80	120	0	0		
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Sample ID 0407035-002CMSD	SampType: MSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID: AB TCLP 16 2-6	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04174	0.00400	0.04	0.000954	102	80	120	0.04206	0.776	20	
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Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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AES

July 19, 2004

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Brent Jacobs
URS
400 Northpark Town Center
1000 Abernathy Road Nor
Atlanta, GA 30328

TEL: (678) 808-8915

FAX (678) 808-8400

RE: Red Panthers Pesticide Site

Order No.: 0406F09

Dear Brent Jacobs:

Analytical Environmental Services, Inc. received 10 samples on 6/30/2004 9:55:00 AM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 06/01/04-04/30/05.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 02/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 61 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Allison Cantrell

Project Manager

COMPANY: URS Atlanta		ADDRESS: On File		ANALYSIS REQUESTED												REMARKS Dry weight Needed	No. of Containers		
PHONE: 678 808 8915		FAX: 678 808 8400		Arsenic 60908 Pesticides 80881A Full TCLP VOCs 82600 SVOCs 82700 PCBs 82400															
SAMPLED BY: Brent B Jacobs		SIGNATURE: <i>Brent B Jacobs</i>		PRESERVATION															
#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)													
	D1E DPT1 0-1	6/29/04	1410	X		S	X	X											
	D1E DPT1 1-2	6/29/04	1420	X		S													
	D1E DPT2 0-1	6/29/04	1440	X		S	X	X											
	D1E DPT2 1-2	6/29/04	1445	X		S													
	ADSD DPT2 0-1	6/29/04	1510	X		S	X	X											
	ADSD DPT1 1-2	6/29/04	1515	X		S													
	ADSD DPT2 0-1	6/29/04	1540	X		S	X	X											
	ADSD DPT2 1-2	6/29/04	1545	X		S													
	AB TCLP14 2-6	6/29/04	1640		X	S													
	AB TCLP14 6-10	6/29/04			X	S													
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		DATE/TIME:		PROJECT INFORMATION										RECEIPT	
1:				Viktor V. Iebshy		6/30/04 9:55		PROJECT NAME: Red Panther										Total # of Containers	
2:								PROJECT #:										Turnaround Time Request	
3:								FAC ID#:										Standard 3-5 Business Days	
								SITE ADDRESS:										Same Day Rush (auth req.)	
SPECIAL INSTRUCTIONS COMMENTS:				SHIPMENT METHOD				PROJECT MANAGER: Brent Jacobs										Next Business Day Rush	
* Report on dry weight basis				OUT VIA:				INVOICE TO:										2 Business Day Rush	
				IN VIA:				(IF DIFFERENT FROM ABOVE) Same as above										Other	
PO#:				CLIENT FedEx UPS MAIL COURIER														PROGRAM (see codes):	
QUOTE CONTRACT #:				GREYHOUND OTHER														DATA PACKAGE: I II III IV	

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify) NA = None

PROGRAM: FLUST FLIX ALUST TNUST MSUST NCUST SCUST GAUST GACONV FLCONV

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client URS Atlanta

Work Order Number 0406 F09

Checklist completed by Viktor Vitebsky 6/30/04
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 3.0°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No ^{AOG} 6/30/04
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Was TAT marked on the COC? Yes No
- Proceed with Standard TAT as per project history? Yes No Not Applicable
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

CLIENT: URS
Project: Red Panthers Pesticide Site
Lab Order: 0406F09

CASE NARRATIVE

Per Brent Jacobs 7/1/04, prep samples TCLP 14 2-6 and TCLP 14 6-10 for TCLP Analysis.

Per Brent Jacobs request on 07/09/04, multiple samples and fractions were taken off hold for additional analyses. All additional parameters will be analyzed at standard turnaround time per client request.

Analyze the samples listed below for Dieldrin, Toxaphene, and As.

D1E DPT1 1-2

D1E DPT2 1-2

ADSD DPT1 1-2

ADSD DPT2 1-2

Also, analyze samples TCLP14 2-6 and TCLP 14 6-10 for Full TCLP, totals for RCRA metals, VOCs, SVOCs, and Pesticides.

Per Brent Jacobs 7/14/04, report all 8081 compounds for all samples in this workorder. Dieldrin and Toxaphene only were previously requested.

Pesticide Analysis by Method 8081:

"NC" (Not Confirmed) qualifier indicates tentative target compound ID due to >40% relative percent difference between primary and confirmation column. SW-846 requires that the highest value be reported and the data qualified when significant disagreement between columns occurs.

Percent recovery for the surrogate spiking compounds Decachlorobiphenyl and Tetrachloro-m-xylene on sample 0406F09-005, -007 and -008 were outside control limits biased low due to suspected matrix interference. All other surrogate recoveries were within control limits.

Dieldrin value for the QC sample 0406F09-006BMS is "E" qualified indicating an estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

Volatile Organic Compounds Analysis by Method 8260B:

Sample 0406F09-010A was analyzed outside holding time of 14 days.

Due to sample matrix, samples 0406F09-009A and -010A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: AB TCLP14 2-6
 Lab Order: 0406F09 Collection Date: 6/28/2004 4:40:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 10:53:00 PT
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 10:53:00 PT
Surr: DCAA	109	22.8-136		%REC	47327	1	7/12/2004 10:53:00 PT
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 4:37:00 PM
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 4:37:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 4:37:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 4:37:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 4:37:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 4:37:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 4:37:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 4:37:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 4:37:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 4:37:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 4:37:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 4:37:00 PM
Surr: Decachlorobiphenyl	63.1	10-121		%REC	47326	1	7/2/2004 4:37:00 PM
Surr: Decachlorobiphenyl	63.1	10-121		%REC	47326	1	7/2/2004 4:37:00 PM
Surr: Tetrachloro-m-xylene	93.3	10.9-125		%REC	47326	1	7/2/2004 4:37:00 PM
Surr: Tetrachloro-m-xylene	93.3	10.9-125		%REC	47326	1	7/2/2004 4:37:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	65	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
4,4'-DDE	24	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
4,4'-DDT	28	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Aldrin	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
alpha-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
alpha-Chlordane	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
beta-BHC	11	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
delta-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Dieldrin	23	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endosulfan I	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endosulfan II	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Endrin ketone	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
gamma-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
gamma-Chlordane	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Heptachlor	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: AB TCLP14 2-6
 Lab Order: 0406F09 Collection Date: 6/28/2004 4:40:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A		Analyst: JMZ			
Heptachlor epoxide	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Methoxychlor	BRL	21		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Toxaphene	BRL	210		µg/Kg-dry	47539	1	7/14/2004 5:48:00 PM
Surr: Decachlorobiphenyl	55.1	11.2-135		%REC	47539	1	7/14/2004 5:48:00 PM
Surr: Tetrachloro-m-xylene	81.5	16.4-135		%REC	47539	1	7/14/2004 5:48:00 PM
MERCURY, TCLP		SW1311/7470A (SW7470A)		Analyst: EM			
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM
ICP METALS, TCLP		SW1311/6010B (SW3010A)		Analyst: CDW			
Arsenic	22.1	0.250	*	mg/L	47333	1	7/2/2004 4:30:00 PM
Barium	BRL	0.500		mg/L	47333	1	7/2/2004 4:30:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 4:30:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 4:30:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 4:30:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 4:30:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 4:30:00 PM
METALS, TOTAL		SW6010B (SW3050B)		Analyst: CDW			
Arsenic	2650	41.9		mg/Kg-dry	47534	10	7/12/2004 1:28:00 PM
Barium	180	4.19		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
Cadmium	BRL	2.10		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
Chromium	13.4	2.10		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
Lead	9.79	4.19		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
Selenium	BRL	4.19		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
Silver	BRL	2.10		mg/Kg-dry	47534	1	7/9/2004 11:33:00 PM
TOTAL MERCURY		SW7471A (SW7471A)		Analyst: EM			
Mercury	BRL	0.121		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C (SW3510)		Analyst: YH			
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Cresols, Total	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
m-cresol	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
o-cresol	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
p-cresol	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: AB TCLP14 2-6
 Lab Order: 0406F09 Collection Date: 6/28/2004 4:40:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-009 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/15/2004 11:03:00 A
Pyridine	BRL	0.10		mg/L	47325	1	7/15/2004 11:03:00 A
Surr: 2,4,6-Tribromophenol	89.9	19-124		%REC	47325	1	7/15/2004 11:03:00 A
Surr: 2-Fluorobiphenyl	91.5	26-115		%REC	47325	1	7/15/2004 11:03:00 A
Surr: 2-Fluorophenol	82.7	10-121		%REC	47325	1	7/15/2004 11:03:00 A
Surr: 4-Terphenyl-d14	93.4	18-137		%REC	47325	1	7/15/2004 11:03:00 A
Surr: Nitrobenzene-d5	91.1	15-120		%REC	47325	1	7/15/2004 11:03:00 A
Surr: Phenol-d5	74.8	18-113		%REC	47325	1	7/15/2004 11:03:00 A
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
1,1'-Biphenyl	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4,5-Trichlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4,6-Trichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4-Dichlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4-Dimethylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4-Dinitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,4-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2,6-Dinitrotoluene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Chloronaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Chlorophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Methylnaphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
2-Nitrophenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
3,3'-Dichlorobenzidine	BRL	860		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
3-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4,6-Dinitro-2-methylphenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Bromophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Chloro-3-methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Chloroaniline	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Chlorophenyl phenyl ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Methylphenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Nitroaniline	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
4-Nitrophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Acenaphthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Acenaphthylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Acetophenone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Atrazine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Benz(a)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Benzaldehyde	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
 Lab Order: 0406F09
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-009

Client Sample ID: AB TCLP14 2-6
 Collection Date: 6/28/2004 4:40:00 PM
 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
Benzo(a)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Benzo(b)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Benzo(g,h,i)perylene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Benzo(k)fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Bis(2-chloroethoxy)methane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Bis(2-chloroethyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Bis(2-chloroisopropyl)ether	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Bis(2-ethylhexyl)phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Butyl benzyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Caprolactam	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Carbazole	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Chrysene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Dibenz(a,h)anthracene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Dibenzofuran	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Diethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Dimethyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Di-n-butyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Di-n-octyl phthalate	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Fluoranthene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Fluorene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Hexachlorobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Hexachlorobutadiene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Hexachlorocyclopentadiene	BRL	840		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Hexachloroethane	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Indeno(1,2,3-cd)pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Isophorone	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Naphthalene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Nitrobenzene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
N-Nitrosodi-n-propylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
N-Nitrosodiphenylamine	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Pentachlorophenol	BRL	2200		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Phenanthrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Phenol	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Pyrene	BRL	420		µg/Kg-dry	47515	1	7/9/2004 4:39:00 PM
Surr: 2,4,6-Tribromophenol	95.5	35.5-131		%REC	47515	1	7/9/2004 4:39:00 PM
Surr: 2-Fluorobiphenyl	81.3	12.9-120		%REC	47515	1	7/9/2004 4:39:00 PM
Surr: 2-Fluorophenol	72.6	10-119		%REC	47515	1	7/9/2004 4:39:00 PM
Surr: 4-Terphenyl-d14	66.0	41.5-128		%REC	47515	1	7/9/2004 4:39:00 PM
Surr: Nitrobenzene-d5	73.4	10-121		%REC	47515	1	7/9/2004 4:39:00 PM
Surr: Phenol-d5	69.4	12.6-121		%REC	47515	1	7/9/2004 4:39:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
Lab Order: 0406F09
Project: Red Panthers Pesticide Site
Lab ID: 0406F09-009

Client Sample ID: AB TCLP14 2-6
Collection Date: 6/28/2004 4:40:00 PM
Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 4:04:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:04:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 4:04:00 PM
Surr: 4-Bromofluorobenzene	80.2	63.1-121		%REC	47510	20	7/9/2004 4:04:00 PM
Surr: Dibromofluoromethane	95.1	69.5-126		%REC	47510	20	7/9/2004 4:04:00 PM
Surr: Toluene-d8	96.1	74.2-120		%REC	47510	20	7/9/2004 4:04:00 PM
TCL VOLATILE ORGANICS		SW8260B				Analyst: AD	
1,1,1-Trichloroethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,1,1,2,2-Tetrachloroethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,1,2-Trichloroethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,1-Dichloroethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,1-Dichloroethene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2,4-Trichlorobenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2-Dibromo-3-chloropropane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2-Dibromoethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2-Dichlorobenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2-Dichloroethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,2-Dichloropropane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,3-Dichlorobenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
1,4-Dichlorobenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
2-Butanone	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
2-Hexanone	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
4-Methyl-2-pentanone	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Acetone	BRL	3200		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Benzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Bromodichloromethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Bromoform	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Bromomethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Carbon disulfide	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Carbon tetrachloride	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Chlorobenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Chloroethane	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Chloroform	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: AB TCLP14 2-6
 Lab Order: 0406F09 Collection Date: 6/28/2004 4:40:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-009 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B		Analyst: AD			
Chloromethane	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
cis-1,2-Dichloroethene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
cis-1,3-Dichloropropene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Cyclohexane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Dibromochloromethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Dichlorodifluoromethane	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Ethylbenzene	140	140		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Freon-113	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Isopropylbenzene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
m,p-Xylene	620	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Methyl acetate	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Methyl tert-butyl ether	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Methylcyclohexane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Methylene chloride	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
o-Xylene	360	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Styrene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Tetrachloroethene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Toluene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
trans-1,2-Dichloroethene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
trans-1,3-Dichloropropene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Trichloroethene	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Trichlorofluoromethane	BRL	160		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Vinyl chloride	BRL	320		µg/Kg-dry	47602	50	7/12/2004 4:38:00 PM
Surr: 4-Bromofluorobenzene	107	65.3-133		%REC	47602	50	7/12/2004 4:38:00 PM
Surr: Dibromofluoromethane	103	80.1-121		%REC	47602	50	7/12/2004 4:38:00 PM
Surr: Toluene-d8	110	67.8-145		%REC	47602	50	7/12/2004 4:38:00 PM
PERCENT MOISTURE		D2216		Analyst: AAN			
Percent Moisture	21.9	0		wt%	1		7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
 Lab Order: 0406F09
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-010

Client Sample ID: AB TCLP14 6-10
 Collection Date: 6/28/2004
 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
HERBICIDES, TCLP		SW1311/8151A		(SW3510B)		Analyst: WDP	
2,4,5-TP (Silvex)	BRL	0.0050		mg/L	47327	1	7/12/2004 11:19:00 PT
2,4-D	BRL	0.050		mg/L	47327	1	7/12/2004 11:19:00 PT
Surr: DCAA	112	22.8-136		%REC	47327	1	7/12/2004 11:19:00 PT
PESTICIDES, TCLP		SW1311/8081A		(SW3510B)		Analyst: JMZ	
Chlordane	BRL	0.010		mg/L	47326	1	7/2/2004 6:05:00 PM
Endrin	BRL	0.0010		mg/L	47326	1	7/2/2004 6:05:00 PM
gamma-BHC	BRL	0.00050		mg/L	47326	1	7/2/2004 6:05:00 PM
Heptachlor	BRL	0.00050		mg/L	47326	1	7/2/2004 6:05:00 PM
Methoxychlor	BRL	0.0050		mg/L	47326	1	7/2/2004 6:05:00 PM
Toxaphene	BRL	0.050		mg/L	47326	1	7/2/2004 6:05:00 PM
Surr: Decachlorobiphenyl	51.4	10-121		%REC	47326	1	7/2/2004 6:05:00 PM
Surr: Tetrachloro-m-xylene	89.9	10.9-125		%REC	47326	1	7/2/2004 6:05:00 PM
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A				Analyst: JMZ	
4,4'-DDD	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
4,4'-DDE	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
4,4'-DDT	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Aldrin	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
alpha-BHC	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
alpha-Chlordane	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
beta-BHC	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
delta-BHC	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Dieldrin	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endosulfan I	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endosulfan II	6.0	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endosulfan sulfate	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endrin	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endrin aldehyde	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Endrin ketone	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
gamma-BHC	BRL	4.6		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
gamma-Chlordane	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Heptachlor	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Heptachlor epoxide	BRL	2.3		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Methoxychlor	BRL	23		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Toxaphene	310	230		µg/Kg-dry	47539	1	7/14/2004 6:18:00 PM
Surr: Decachlorobiphenyl	76.6	11.2-135		%REC	47539	1	7/14/2004 6:18:00 PM
Surr: Tetrachloro-m-xylene	92.3	16.4-135		%REC	47539	1	7/14/2004 6:18:00 PM
MERCURY, TCLP		SW1311/7470A		(SW7470A)		Analyst: EM	
Mercury	BRL	0.00400		mg/L	47670	1	7/14/2004 2:34:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
Lab Order: 0406F09
Project: Red Panthers Pesticide Site
Lab ID: 0406F09-010

Client Sample ID: AB TCLP14 6-10
Collection Date: 6/28/2004
Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
ICP METALS, TCLP		SW1311/6010B		(SW3010A)		Analyst: CDW	
Arsenic	15.0	0.250	*	mg/L	47333	1	7/2/2004 4:34:00 PM
Barium	0.667	0.500		mg/L	47333	1	7/2/2004 4:34:00 PM
Cadmium	BRL	0.0250		mg/L	47333	1	7/2/2004 4:34:00 PM
Chromium	BRL	0.0500		mg/L	47333	1	7/2/2004 4:34:00 PM
Lead	BRL	0.0500		mg/L	47333	1	7/2/2004 4:34:00 PM
Selenium	BRL	0.100		mg/L	47333	1	7/2/2004 4:34:00 PM
Silver	BRL	0.0250		mg/L	47333	1	7/2/2004 4:34:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	1720	5.80		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Barium	142	5.80		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Cadmium	BRL	2.90		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Chromium	23.4	2.90		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Lead	16.9	5.80		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Selenium	BRL	5.80		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
Silver	BRL	2.90		mg/Kg-dry	47534	1	7/9/2004 11:37:00 PM
TOTAL MERCURY		SW7471A		(SW7471A)		Analyst: EM	
Mercury	BRL	0.129		mg/Kg-dry	47624	1	7/13/2004 10:30:00 A
SEMIVOLATILES ORGANICS, TCLP		SW1311/8270C		(SW3510)		Analyst: YH	
1,4-Dichlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
2,4,5-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
2,4,6-Trichlorophenol	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
2,4-Dinitrotoluene	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Cresols, Total	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Hexachlorobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Hexachlorobutadiene	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Hexachloroethane	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
m-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Nitrobenzene	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
o-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
p-cresol	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Pentachlorophenol	BRL	0.50		mg/L	47325	1	7/14/2004 6:15:00 PM
Pyridine	BRL	0.10		mg/L	47325	1	7/14/2004 6:15:00 PM
Surr: 2,4,6-Tribromophenol	83.1	19-124		%REC	47325	1	7/14/2004 6:15:00 PM
Surr: 2-Fluorobiphenyl	89.6	26-115		%REC	47325	1	7/14/2004 6:15:00 PM
Surr: 2-Fluorophenol	83.8	10-121		%REC	47325	1	7/14/2004 6:15:00 PM
Surr: 4-Terphenyl-d14	89.9	18-137		%REC	47325	1	7/14/2004 6:15:00 PM
Surr: Nitrobenzene-d5	92.9	15-120		%REC	47325	1	7/14/2004 6:15:00 PM
Surr: Phenol-d5	72.3	18-113		%REC	47325	1	7/14/2004 6:15:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
 Lab Order: 0406F09
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-010

Client Sample ID: AB TCLP14 6-10
 Collection Date: 6/28/2004
 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)			Analyst: YH
1,1'-Biphenyl	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4,5-Trichlorophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4,6-Trichlorophenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4-Dichlorophenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4-Dimethylphenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4-Dinitrophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,4-Dinitrotoluene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2,6-Dinitrotoluene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Chloronaphthalene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Chlorophenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Methylnaphthalene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Methylphenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
2-Nitrophenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
3,3'-Dichlorobenzidine	BRL	920		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
3-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4,6-Dinitro-2-methylphenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Bromophenyl phenyl ether	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Chloro-3-methylphenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Chloroaniline	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Chlorophenyl phenyl ether	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Methylphenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Nitroaniline	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
4-Nitrophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Acenaphthene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Acenaphthylene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Acetophenone	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Anthracene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Atrazine	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benz(a)anthracene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benzaldehyde	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benzo(a)pyrene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benzo(b)fluoranthene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benzo(g,h,i)perylene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Benzo(k)fluoranthene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Bis(2-chloroethoxy)methane	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Bis(2-chloroethyl)ether	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Bis(2-chloroisopropyl)ether	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Bis(2-ethylhexyl)phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Butyl benzyl phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit
 E Value above quantitation range
 H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits
 N Analyte not NELAC certified
 P NELAC analyte certification pending
 Rpt Limit Reporting Limit
 S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: AB TCLP14 6-10
 Lab Order: 0406F09 Collection Date: 6/28/2004
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-010 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		SW8270C		(SW3550A)		Analyst: YH	
Caprolactam	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Carbazole	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Chrysene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Dibenz(a,h)anthracene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Dibenzofuran	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Diethyl phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Dimethyl phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Di-n-butyl phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Di-n-octyl phthalate	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Fluoranthene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Fluorene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Hexachlorobenzene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Hexachlorobutadiene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Hexachlorocyclopentadiene	BRL	910		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Hexachloroethane	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Indeno(1,2,3-cd)pyrene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Isophorone	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Naphthalene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Nitrobenzene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
N-Nitrosodi-n-propylamine	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
N-Nitrosodiphenylamine	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Pentachlorophenol	BRL	2300		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Phenanthrene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Phenol	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Pyrene	BRL	460		µg/Kg-dry	47515	1	7/9/2004 5:16:00 PM
Surr: 2,4,6-Tribromophenol	94.6	35.5-131		%REC	47515	1	7/9/2004 5:16:00 PM
Surr: 2-Fluorobiphenyl	76.4	12.9-120		%REC	47515	1	7/9/2004 5:16:00 PM
Surr: 2-Fluorophenol	67.9	10-119		%REC	47515	1	7/9/2004 5:16:00 PM
Surr: 4-Terphenyl-d14	65.0	41.5-128		%REC	47515	1	7/9/2004 5:16:00 PM
Surr: Nitrobenzene-d5	67.3	10-121		%REC	47515	1	7/9/2004 5:16:00 PM
Surr: Phenol-d5	64.9	12.6-121		%REC	47515	1	7/9/2004 5:16:00 PM
VOLATILES, TCLP		SW1311/8260B		(SW5030B)		Analyst: TMP	
1,1-Dichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
1,2-Dichloroethane	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
2-Butanone	BRL	0.20		mg/L	47510	20	7/9/2004 4:31:00 PM
Benzene	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
Carbon tetrachloride	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
Chlorobenzene	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
Chloroform	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
Tetrachloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
Lab Order: 0406F09
Project: Red Panthers Pesticide Site
Lab ID: 0406F09-010

Client Sample ID: AB TCLP14 6-10
Collection Date: 6/28/2004
Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
VOLATILES, TCLP		SW1311/8260B (SW5030B)			Analyst: TMP		
Trichloroethene	BRL	0.10		mg/L	47510	20	7/9/2004 4:31:00 PM
Vinyl chloride	BRL	0.040		mg/L	47510	20	7/9/2004 4:31:00 PM
Surr: 4-Bromofluorobenzene	84.7	63.1-121		%REC	47510	20	7/9/2004 4:31:00 PM
Surr: Dibromofluoromethane	98.7	69.5-126		%REC	47510	20	7/9/2004 4:31:00 PM
Surr: Toluene-d8	95.8	74.2-120		%REC	47510	20	7/9/2004 4:31:00 PM
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
1,1,1-Trichloroethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,1,2,2-Tetrachloroethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,1,2-Trichloroethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,1-Dichloroethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,1-Dichloroethene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2,4-Trichlorobenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2-Dibromo-3-chloropropane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2-Dibromoethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2-Dichlorobenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2-Dichloroethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,2-Dichloropropane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,3-Dichlorobenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
1,4-Dichlorobenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
2-Butanone	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
2-Hexanone	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
4-Methyl-2-pentanone	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Acetone	BRL	3800	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Benzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Bromodichloromethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Bromoform	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Bromomethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Carbon disulfide	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Carbon tetrachloride	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Chlorobenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Chloroethane	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Chloroform	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Chloromethane	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
cis-1,2-Dichloroethene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
cis-1,3-Dichloropropene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Cyclohexane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Dibromochloromethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Dichlorodifluoromethane	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Ethylbenzene	310	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Freon-113	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS
 Lab Order: 0406F09
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-010

Client Sample ID: AB TCLP14 6-10
 Collection Date: 6/28/2004
 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B			Analyst: AD		
Isopropylbenzene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
m,p-Xylene	1500	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Methyl acetate	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Methyl tert-butyl ether	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Methylcyclohexane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Methylene chloride	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
o-Xylene	1000	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Styrene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Tetrachloroethene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Toluene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
trans-1,2-Dichloroethene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
trans-1,3-Dichloropropene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Trichloroethene	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Trichlorofluoromethane	BRL	190	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Vinyl chloride	BRL	380	H	µg/Kg-dry	47602	50	7/12/2004 4:11:00 PM
Surr: 4-Bromofluorobenzene	108	65.3-133	H	%REC	47602	50	7/12/2004 4:11:00 PM
Surr: Dibromofluoromethane	105	80.1-121	H	%REC	47602	50	7/12/2004 4:11:00 PM
Surr: Toluene-d8	111	67.8-145	H	%REC	47602	50	7/12/2004 4:11:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	27.7	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- BRL Below Reporting Limit
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- N Analyte not NELAC certified
- P NELAC analyte certification pending
- Rpt Limit Reporting Limit
- S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47306

Sample ID MB-47306	SampType: MBLK	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/1/2004	RunNo: 52802						
Client ID:	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014305						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	BRL	3.3									
4,4'-DDE	BRL	3.3									
4,4'-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	3.3									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	15.72	0	16.67	0	94.3	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	10.63	0	16.67	0	63.7	16.4	135	0	0		

Sample ID LCS-47306	SampType: LCS	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/1/2004	RunNo: 52802						
Client ID:	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	31.83	3.3	41.67	0	76.4	57.4	131	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Bclow Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47306

Sample ID LCS-47306	SampType: LCS	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/1/2004	RunNo: 52802
Client ID:	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014307

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	11.1	1.7	16.67	0	66.6	51.3	150	0	0		
Dieldrin	35.04	3.3	41.67	0	84.1	70.8	124	0	0		
Endrin	33.37	3.3	41.67	0	80.1	59.5	117	0	0		
gamma-BHC	12.12	3.3	16.67	0	72.7	52.8	115	0	0		
Heptachlor	11.31	1.7	16.67	0	67.8	36.7	153	0	0		
Surr: Decachlorobiphenyl	15.43	0	16.67	0	92.6	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	12.05	0	16.67	0	72.3	16.4	135	0	0		

Sample ID 0406F09-001BMS	SampType: MS	TestCode: 8081_TCL_S	Units: µg/Kg-dry	Prep Date: 7/1/2004	RunNo: 52802
Client ID: D1 E DPT1 0-1	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014362

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	45.01	4.4	54.59	2.127	78.5	37.4	131	0	0		
Aldrin	15.4	2.2	21.84	0	70.5	53.1	134	0	0		
Dieldrin	69.46	4.4	54.59	23.34	84.5	10	163	0	0		
Endrin	49.73	4.4	54.59	1.949	87.5	10.2	148	0	0		
gamma-BHC	16.79	4.4	21.84	0	76.9	37.1	125	0	0		
Heptachlor	15.75	2.2	21.84	0	72.1	41	140	0	0		
Surr: Decachlorobiphenyl	21.25	0	21.84	0	97.3	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	15.79	0	21.84	0	72.3	16.4	135	0	0		

Sample ID 0406F09-001BMSD	SampType: MSD	TestCode: 8081_TCL_S	Units: µg/Kg-dry	Prep Date: 7/1/2004	RunNo: 52802
Client ID: D1 E DPT1 0-1	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014397

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	44.7	4.4	54.59	2.127	78	37.4	131	45.01	0.699	29.9	
Aldrin	15.75	2.2	21.84	0	72.1	53.1	134	15.4	2.22	35.3	
Dieldrin	65.4	4.4	54.59	23.34	77	10	163	69.46	6.02	26	
Endrin	47.84	4.4	54.59	1.949	84.1	10.2	148	49.73	3.87	25.4	
gamma-BHC	16.77	4.4	21.84	0	76.8	37.1	125	16.79	0.107	37.4	
Heptachlor	15.54	2.2	21.84	0	71.2	41	140	15.75	1.35	33.8	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47306

Sample ID 0406F09-001BMSD	SampType: MSD	TestCode: 8081_TCL_S	Units: µg/Kg-dry	Prep Date: 7/1/2004	RunNo: 52802						
Client ID: D1 E DPT1 0-1	Batch ID: 47306	TestNo: SW8081A		Analysis Date: 7/1/2004	SeqNo: 1014397						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	20.6	0	21.84	0	94.3	11.2	135	21.25	0	0	
Surr: Tetrachloro-m-xylene	16.6	0	21.84	0	76	16.4	135	15.79	0	0	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47318

Sample ID: MB-47318	SampType: MBLK	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/1/2004	RunNo: 52791
Client ID:	Batch ID: 47318	TestNo: SW6010B		Analysis Date: 7/1/2004	SeqNo: 1014490
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	BRL	5.00			
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Sample ID: LCS-47318	SampType: LCS	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/1/2004	RunNo: 52791
Client ID:	Batch ID: 47318	TestNo: SW6010B		Analysis Date: 7/1/2004	SeqNo: 1014489
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	47.93	5.00	50	0	95.9	80	120	0	0
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Sample ID: 0406F09-007AMS	SampType: MS	TestCode: 6010B_S	Units: mg/Kg-dry	Prep Date: 7/1/2004	RunNo: 52791
Client ID: ADSD DPT2 0-1	Batch ID: 47318	TestNo: SW6010B		Analysis Date: 7/1/2004	SeqNo: 1014493
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	67.75	4.05	40.5	28.83	96.1	75	125	0	0
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Sample ID: 0406F09-007ADUP	SampType: DUP	TestCode: 6010B_S	Units: mg/Kg-dry	Prep Date: 7/1/2004	RunNo: 52791
Client ID: ADSD DPT2 0-1	Batch ID: 47318	TestNo: SW6010B		Analysis Date: 7/1/2004	SeqNo: 1014492
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	27.82	3.80	0	0	0	0	0	28.83	3.59	20
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Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47325	MBLK	1311_B	mg/L	7/2/2004	52918						
Client ID:	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/6/2004	SeqNo: 1016483						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m-cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-cresol	BRL	0.10									
p-cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.9002	0	1	0	90	19	124	0	0		
Surr: 2-Fluorobiphenyl	0.4312	0	0.5	0	86.2	26	115	0	0		
Surr: 2-Fluorophenol	0.7768	0	1	0	77.7	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4629	0	0.5	0	92.6	18	137	0	0		
Surr: Nitrobenzene-d5	0.433	0	0.5	0	86.6	15	120	0	0		
Surr: Phenol-d5	0.7522	0	1	0	75.2	18	113	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47325	LCS	1311_B	mg/L	7/2/2004	52918						
Client ID:	Batch ID: 47325	TestNo: SW1311/8270		Analysis Date: 7/6/2004	SeqNo: 1016487						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.8786	0.10	1	0	87.9	60.9	103	0	0		
2,4,5-Trichlorophenol	0.9409	0.10	1	0	94.1	59	122	0	0		
2,4,6-Trichlorophenol	0.9736	0.10	1	0	97.4	74.6	112	0	0		
2,4-Dinitrotoluene	0.9526	0.10	1	0	95.3	71.5	108	0	0		
Cresols, Total	2.812	0.10	3	0	93.7	55.9	110	0	0		
Hexachlorobenzene	0.9773	0.10	1	0	97.7	72.5	124	0	0		

Qualifiers:

B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID	SampType	TestCode	Units: mg/L			Prep Date: 7/2/2004				RunNo: 52918	
Client ID:	Batch ID:	TestNo:				Analysis Date: 7/6/2004				SeqNo: 1016487	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	0.9025	0.10	1	0	90.2	53.5	127	0	0		
Hexachloroethane	0.8678	0.10	1	0	86.8	45.2	115	0	0		
m-cresol	0.9363	0.10	1	0	93.6	52.1	110	0	0		
Nitrobenzene	0.8966	0.10	1	0	89.7	63.3	115	0	0		
o-cresol	0.9396	0.10	1	0	94	65.4	111	0	0		
p-cresol	0.9363	0.10	1	0	93.6	52.1	110	0	0		
Pentachlorophenol	0.935	0.50	1	0	93.5	61	134	0	0		
Pyridine	0.5924	0.10	1	0	59.2	10	116	0	0		
Surr: 2,4,6-Tribromophenol	0.9488	0	1	0	94.9	21.8	131	0	0		
Surr: 2-Fluorobiphenyl	0.4351	0	0.5	0	87	6.97	122	0	0		
Surr: 2-Fluorophenol	0.7872	0	1	0	78.7	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4889	0	0.5	0	97.8	18	137	0	0		
Surr: Nitrobenzene-d5	0.4401	0	0.5	0	88	15	120	0	0		
Surr: Phenol-d5	0.7596	0	1	0	76	18	113	0	0		

Sample ID	SampType	TestCode	Units: mg/L			Prep Date: 7/2/2004				RunNo: 52918	
Client ID:	Batch ID:	TestNo:				Analysis Date: 7/6/2004				SeqNo: 1016492	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.9316	0.10	1	0	93.2	61.6	104	0	0		
2,4,5-Trichlorophenol	1.014	0.10	1	0	101	66.1	122	0	0		
2,4,6-Trichlorophenol	1.013	0.10	1	0	101	73.7	119	0	0		
2,4-Dinitrotoluene	0.9991	0.10	1	0	99.9	74.1	109	0	0		
Cresols, Total	2.967	0.10	3	0	98.9	54.9	115	0	0		
Hexachlorobenzene	1.006	0.10	1	0	101	71.3	126	0	0		
Hexachlorobutadiene	0.953	0.10	1	0	95.3	49	129	0	0		
Hexachloroethane	0.9189	0.10	1	0	91.9	47.4	117	0	0		
m-cresol	0.9883	0.10	1	0	98.8	42.4	121	0	0		
Nitrobenzene	0.9397	0.10	1	0	94	57.5	121	0	0		
o-cresol	0.99	0.10	1	0	99	67.2	111	0	0		
p-cresol	0.9883	0.10	1	0	98.8	39.8	122	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47325

Sample ID 0407035-006EMS		SampType: MS		TestCode: 1311_B		Units: mg/L		Prep Date: 7/2/2004		RunNo: 52918	
Client ID:		Batch ID: 47325		TestNo: SW1311/8270				Analysis Date: 7/6/2004		SeqNo: 1016492	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	1.027	0.50	1	0	103	62.9	148	0	0		
Pyridine	0.7388	0.10	1	0	73.9	10	127	0	0		
Surr: 2,4,6-Tribromophenol	0.986	0	1	0	98.6	19	124	0	0		
Surr: 2-Fluorobiphenyl	0.4435	0	0.5	0	88.7	14.2	111	0	0		
Surr: 2-Fluorophenol	0.8332	0	1	0	83.3	10	121	0	0		
Surr: 4-Terphenyl-d14	0.4905	0	0.5	0	98.1	18	137	0	0		
Surr: Nitrobenzene-d5	0.4456	0	0.5	0	89.1	15	120	0	0		
Surr: Phenol-d5	0.792	0	1	0	79.2	18	113	0	0		

Qualifiers: B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47326

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47326	MBLK	1311_P	mg/L	7/2/2004	52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015228						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	BRL	0.010									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.003785	0	0.005	0	75.3	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003808	0	0.005	0	76.2	10.9	125	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47326-1	LCS	1311_P	mg/L	7/2/2004	52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015229						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	0.007208	0.0010	0.008	0	90.1	51.8	144	0	0		
gamma-BHC	0.006405	0.00050	0.008	0	80.1	44.7	127	0	0		
Heptachlor	0.00582	0.00050	0.008	0	72.8	40.5	122	0	0		
Heptachlor epoxide	0.00677	0.00050	0.008	0	84.6	56	137	0	0		
Methoxychlor	0.0285	0.0050	0.03	0	95	46	166	0	0		
Surr: Decachlorobiphenyl	0.00372	0	0.005	0	74.4	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003639	0	0.005	0	72.8	10.9	125	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47326-2	LCS	1311_P	mg/L	7/2/2004	52849						
Client ID:	Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015230						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	0.04267	0.010	0.04	0.00929	83.5	56	186	0	0		
Toxaphene	0.06778	0.050	0.08	0	84.7	53	132	0	0		
Surr: Decachlorobiphenyl	0.003757	0	0.005	0	75.1	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.003271	0	0.005	0	65.4	10.9	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47326

Sample ID 0406F09-009CMS-1		SampType: MS	TestCode: 1311_P	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52849					
Client ID: AB TCLP14 2-6		Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015232					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	0.007683	0.0010	0.008	0	96	50	148	0	0		
gamma-BHC	0.006874	0.00050	0.008	0	85.9	52.1	124	0	0		
Heptachlor	0.006241	0.00050	0.008	0	78	43.2	131	0	0		
Heptachlor epoxide	0.01078	0.00050	0.008	0	135	50	145	0	0		
Methoxychlor	0.02992	0.0050	0.03	0	99.7	10	205	0	0		
Surr: Decachlorobiphenyl	0.003541	0	0.005	0	70.8	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.004349	0	0.005	0	87	10.9	125	0	0		

Sample ID 0406F09-009CMS-2		SampType: MS	TestCode: 1311_P	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52849					
Client ID: AB TCLP14 2-6		Batch ID: 47326	TestNo: SW1311/8081		Analysis Date: 7/2/2004	SeqNo: 1015233					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	0.04162	0.010	0.04	0	104	55	182	0	0		
Toxaphene	0.07212	0.050	0.08	0	90.2	45	137	0	0		
Surr: Decachlorobiphenyl	0.003405	0	0.005	0	68.1	10	121	0	0		
Surr: Tetrachloro-m-xylene	0.005188	0	0.005	0	104	10.9	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47327

Sample ID MB-47327	SampType: MBLK	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID:	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016699						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2,4,5-TP (Silvex)	BRL	0.0050									
2,4-D	BRL	0.0050									
Surr: DCAA	0.04104	0	0.05	0	82.1	22.8	136	0	0		

Sample ID LCS-47327	SampType: LCS	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID:	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016701						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2,4,5-TP (Silvex)	0.04109	0.0050	0.05	0	82.2	44.9	138	0	0		
2,4-D	0.05563	0.0050	0.05	0	111	47.5	142	0	0		
Surr: DCAA	0.04714	0	0.05	0	94.3	22.8	136	0	0		

Sample ID 0407035-006EMS	SampType: MS	TestCode: 1311_H	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52933						
Client ID:	Batch ID: 47327	TestNo: SW1311/8151		Analysis Date: 7/6/2004	SeqNo: 1016703						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2,4,5-TP (Silvex)	0.04815	0.0050	0.05	0	96.3	50.2	134	0	0		
2,4-D	0.04968	0.0050	0.05	0.004612	90.1	53.8	141	0	0		
Surr: DCAA	0.05159	0	0.05	0	103	22.8	136	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47333

Sample ID	MB-47333	SampType: MBLK	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830
Client ID:		Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015009

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID	LCS-47333	SampType: LCS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830
Client ID:		Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.858	0.250	5	0	97.2	85	115	0	0		
Cadmium	4.798	0.0250	5	0	96	85	115	0	0		
Chromium	4.628	0.0500	5	0	92.6	85	115	0	0		
Lead	4.67	0.0500	5	0	93.4	85	115	0	0		
Selenium	4.98	0.100	5	0	99.6	85	115	0	0		
Silver	0.4564	0.0250	0.5	0	91.3	85	115	0	0		

Sample ID	LCS-47333	SampType: LCS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52859
Client ID:		Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/6/2004	SeqNo: 1015430

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	4.333	0.500	5	0.01205	86.4	85	115	0	0		

Sample ID	0406E74-001AMS	SampType: MS	TestCode: 1311_M	Units: mg/L	Prep Date: 7/2/2004	RunNo: 52830
Client ID:		Batch ID: 47333	TestNo: SW1311/6010		Analysis Date: 7/2/2004	SeqNo: 1015013

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.055	0.250	5	0	101	50	150	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47333

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
0406E74-001AMS	MS	1311_M	mg/L	7/2/2004	52830						
Client ID:	Batch ID:	TestNo:		Analysis Date:	SeqNo:						
	47333	SW1311/6010		7/2/2004	1015013						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	7.986	0.500	5	4.38	72.1	50	150	0	0		
Cadmium	6.259	0.0250	5	1.655	92.1	50	150	0	0		
Chromium	4.879	0.0500	5	0.05875	96.4	50	150	0	0		
Lead	4.792	0.0500	5	0.06115	94.6	50	150	0	0		
Selenium	5.143	0.100	5	0	103	50	150	0	0		
Silver	0.4868	0.0250	0.5	0	97.4	50	150	0	0		

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
0406E74-001ADUP	DUP	1311_M	mg/L	7/2/2004	52830						
Client ID:	Batch ID:	TestNo:		Analysis Date:	SeqNo:						
	47333	SW1311/6010		7/2/2004	1015012						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	BRL	0.250	0	0	0	0	0	0	0	30	
Barium	3.486	0.500	0	0	0	0	0	4.38	22.7	30	
Cadmium	1.31	0.0250	0	0	0	0	0	1.655	23.3	30	
Chromium	BRL	0.0500	0	0	0	0	0	0.05875	0	30	
Lead	0.0501	0.0500	0	0	0	0	0	0.06115	19.9	30	
Selenium	BRL	0.100	0	0	0	0	0	0	0	30	
Silver	BRL	0.0250	0	0	0	0	0	0	0	30	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47510	MBLK	1311_V	mg/L	7/8/2004	53034						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/9/2004	SeqNo: 1018655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.037	0	1	0	104	63.1	121	0	0		
Surr: Dibromofluoromethane	1.125	0	1	0	113	69.5	126	0	0		
Surr: Toluene-d8	1.094	0	1	0	109	74.2	120	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47510	MBLK	1311_V	mg/L	7/8/2004	53162						
Client ID:	Batch ID: 47510	TestNo: SW1311/8260		Analysis Date: 7/13/2004	SeqNo: 1021652						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	1.085	0	1	0	109	63.1	121	0	0		
Surr: Dibromofluoromethane	1.009	0	1	0	101	69.5	126	0	0		
Surr: Toluene-d8	1.042	0	1	0	104	74.2	120	0	0		

Qualifiers: B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID LCS-47510		SampType: LCS		TestCode: 1311_V		Units: mg/L		Prep Date: 7/8/2004		RunNo: 53034	
Client ID:		Batch ID: 47510		TestNo: SW1311/8260		Analysis Date: 7/9/2004		SeqNo: 1018857			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8024	0.10	1	0	80.2	61	131	0	0		*
1,2-Dichloroethane	1.119	0.10	1	0	112	76	129	0	0		*
2-Butanone	1.065	0.20	1	0	106	25	161	0	0		*
Benzene	0.8986	0.10	1	0	89.9	77	126	0	0		*
Carbon tetrachloride	1.489	0.10	2	0	74.5	66	131	0	0		*
Chlorobenzene	1.006	0.10	1	0	101	80	121	0	0		*
Chloroform	0.9448	0.10	1	0	94.5	76	129	0	0		*
Tetrachloroethene	1.071	0.10	1	0	107	64	133	0	0		*
Trichloroethene	1.103	0.10	1	0	110	71	125	0	0		*
Vinyl chloride	0.8064	0.040	1	0	80.6	45	131	0	0		*
Surr: 4-Bromofluorobenzene	1.081	0	1	0	108	63.1	121	0	0		*
Surr: Dibromofluoromethane	0.9614	0	1	0	96.1	69.5	126	0	0		*
Surr: Toluene-d8	1.008	0	1	0	101	74.2	120	0	0		*

Sample ID 0407089-002CMS		SampType: MS		TestCode: 1311_V		Units: mg/L		Prep Date: 7/8/2004		RunNo: 53034	
Client ID:		Batch ID: 47510		TestNo: SW1311/8260		Analysis Date: 7/9/2004		SeqNo: 1018661			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.8472	0.10	1	0	84.7	61	131	0	0		*
1,2-Dichloroethane	1.095	0.10	1	0	110	76	129	0	0		*
2-Butanone	1.132	0.20	1	0	113	25	161	0	0		*
Benzene	0.9002	0.10	1	0	90	77	126	0	0		*
Carbon tetrachloride	1.513	0.10	2	0	75.6	66	131	0	0		*
Chlorobenzene	1.024	0.10	1	0	102	80	121	0	0		*
Chloroform	0.941	0.10	1	0	94.1	76	129	0	0		*
Tetrachloroethene	1.074	0.10	1	0	107	64	133	0	0		*
Trichloroethene	1.058	0.10	1	0	106	71	125	0	0		*
Vinyl chloride	0.939	0.040	1	0	93.9	45	131	0	0		*
Surr: 4-Bromofluorobenzene	1.122	0	1	0	112	63.1	121	0	0		*
Surr: Dibromofluoromethane	0.9608	0	1	0	96.1	69.5	126	0	0		*
Surr: Toluene-d8	0.9854	0	1	0	98.5	74.2	120	0	0		*

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47510

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
0407089-002C	DUP	1311_V	mg/L	7/8/2004	53034						
Client ID:	Batch ID:	TestNo:			SeqNo:						
	47510	SW1311/8260			1018711						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
1,2-Dichloroethane	BRL	0.10	0	0	0	0	0	0	0	30	
2-Butanone	BRL	0.20	0	0	0	0	0	0	0	30	
Benzene	BRL	0.10	0	0	0	0	0	0	0	30	
Carbon tetrachloride	BRL	0.10	0	0	0	0	0	0	0	30	
Chlorobenzene	BRL	0.10	0	0	0	0	0	0	0	30	
Chloroform	BRL	0.10	0	0	0	0	0	0	0	30	
Tetrachloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Trichloroethene	BRL	0.10	0	0	0	0	0	0	0	30	
Vinyl chloride	BRL	0.040	0	0	0	0	0	0	0	30	
Surr: 4-Bromofluorobenzene	0.894	0	1	0	89.4	71.8	143	0.8594	0	0	
Surr: Dibromofluoromethane	0.9678	0	1	0	96.8	80.3	123	0.984	0	0	
Surr: Toluene-d8	0.9578	0	1	0	95.8	70.1	142	0.9346	0	0	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID MB-47515	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1'-Biphenyl	BRL	330									
2,4,5-Trichlorophenol	BRL	1700									
2,4,6-Trichlorophenol	BRL	330									
2,4-Dichlorophenol	BRL	330									
2,4-Dimethylphenol	BRL	330									
2,4-Dinitrophenol	BRL	1700									
2,4-Dinitrotoluene	BRL	330									
2,6-Dinitrotoluene	BRL	330									
2-Chloronaphthalene	BRL	330									
2-Chlorophenol	BRL	330									
2-Methylnaphthalene	BRL	330									
2-Methylphenol	BRL	330									
2-Nitroaniline	BRL	1700									
2-Nitrophenol	BRL	330									
3,3'-Dichlorobenzidine	BRL	670									
3-Nitroaniline	BRL	1700									
4,6-Dinitro-2-methylphenol	BRL	1700									
4-Bromophenyl phenyl ether	BRL	330									
4-Chloro-3-methylphenol	BRL	330									
4-Chloroaniline	BRL	330									
4-Chlorophenyl phenyl ether	BRL	330									
4-Methylphenol	BRL	330									
4-Nitroaniline	BRL	1700									
4-Nitrophenol	BRL	1700									
Acenaphthene	BRL	330									
Acenaphthylene	BRL	330									
Acetophenone	BRL	330									
Anthracene	BRL	330									
Atrazine	BRL	330									
Benz(a)anthracene	BRL	330									
Benzaldehyde	BRL	330									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID MB-47515	SampType: MBLK	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	BRL	330									
Benzo(b)fluoranthene	BRL	330									
Benzo(g,h,i)perylene	BRL	330									
Benzo(k)fluoranthene	BRL	330									
Bis(2-chloroethoxy)methane	BRL	330									
Bis(2-chloroethyl)ether	BRL	330									
Bis(2-chloroisopropyl)ether	BRL	330									
Bis(2-ethylhexyl)phthalate	BRL	330									
Butyl benzyl phthalate	BRL	330									
Caprolactam	BRL	330									
Carbazole	BRL	330									
Chrysene	BRL	330									
Dibenz(a,h)anthracene	BRL	330									
Dibenzofuran	BRL	330									
Diethyl phthalate	BRL	330									
Dimethyl phthalate	BRL	330									
Di-n-butyl phthalate	BRL	330									
Di-n-octyl phthalate	BRL	330									
Fluoranthene	BRL	330									
Fluorene	BRL	330									
Hexachlorobenzene	BRL	330									
Hexachlorobutadiene	BRL	330									
Hexachlorocyclopentadiene	BRL	660									
Hexachloroethane	BRL	330									
Indeno(1,2,3-cd)pyrene	BRL	330									
Isophorone	BRL	330									
Naphthalene	BRL	330									
Nitrobenzene	BRL	330									
N-Nitrosodi-n-propylamine	BRL	330									
N-Nitrosodiphenylamine	BRL	330									
Pentachlorophenol	BRL	1700									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47515	MBLK	8270_TCL4.2	µg/Kg	7/9/2004	53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019508						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	BRL	330									
Phenol	BRL	330									
Pyrene	BRL	330									
Surr: 2,4,6-Tribromophenol	2913	0	3333	0	87.4	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1222	0	1667	0	73.3	12.9	120	0	0		
Surr: 2-Fluorophenol	2221	0	3333	0	66.6	10	119	0	0		
Surr: 4-Terphenyl-d14	1392	0	1667	0	83.5	41.5	128	0	0		
Surr: Nitrobenzene-d5	1126	0	1667	0	67.6	10	121	0	0		
Surr: Phenol-d5	2204	0	3333	0	66.1	12.6	121	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
LCS-47515	LCS	8270_TCL4.2	µg/Kg	7/9/2004	53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019510						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	2881	330	3333	0	86.4	33	123	0	0		
2-Chlorophenol	2566	330	3333	0	77	10	120	0	0		
4-Chloro-3-methylphenol	2928	330	3333	0	87.8	10	138	0	0		
4-Nitrophenol	3687	1700	3333	0	110	24.3	135	0	0		
Acenaphthene	2733	330	3333	0	82	17.5	122	0	0		
N-Nitrosodi-n-propylamine	2841	330	3333	0	85.2	10	129	0	0		
Pentachlorophenol	3144	1700	3333	0	94.3	38.4	128	0	0		
Phenol	2628	330	3333	0	78.8	10	120	0	0		
Pyrene	2891	330	3333	0	86.7	58.6	120	0	0		
Surr: 2,4,6-Tribromophenol	3076	0	3333	0	92.3	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1287	0	1667	0	77.2	12.9	120	0	0		
Surr: 2-Fluorophenol	2118	0	3333	0	63.5	10	119	0	0		
Surr: 4-Terphenyl-d14	1426	0	1667	0	85.6	41.5	128	0	0		
Surr: Nitrobenzene-d5	1242	0	1667	0	74.5	10	121	0	0		
Surr: Phenol-d5	1993	0	3333	0	59.8	12.6	121	0	0		

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID 0407302-005AMS		SampType: MS		TestCode: 8270_TCL4.2		Units: µg/Kg		Prep Date: 7/9/2004		RunNo: 53071	
Client ID:		Batch ID: 47515		TestNo: SW8270C		Analysis Date: 7/9/2004		SeqNo: 1019513			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	2340	330	3329	0	70.3	29	123	0	0		
2-Chlorophenol	2340	330	3329	0	70.3	10	121	0	0		
4-Chloro-3-methylphenol	2608	330	3329	0	78.3	13.6	141	0	0		
4-Nitrophenol	2535	1700	3329	0	76.1	10.4	152	0	0		
Acenaphthene	2244	330	3329	0	67.4	13.9	121	0	0		
N-Nitrosodi-n-propylamine	2493	330	3329	0	74.9	10	130	0	0		
Pentachlorophenol	2565	1700	3329	0	77	30	133	0	0		
Phenol	2336	330	3329	0	70.2	10	120	0	0		
Pyrene	2246	330	3329	74.26	65.2	42.4	128	0	0		
Surr: 2,4,6-Tribromophenol	2503	0	3329	0	75.2	35.5	131	0	0		
Surr: 2-Fluorobiphenyl	1096	0	1664	0	65.8	12.9	120	0	0		
Surr: 2-Fluorophenol	2034	0	3329	0	61.1	10	119	0	0		
Surr: 4-Terphenyl-d14	1071	0	1664	0	64.4	41.5	128	0	0		
Surr: Nitrobenzene-d5	1142	0	1664	0	68.6	10	121	0	0		
Surr: Phenol-d5	2290	0	3329	0	68.8	12.6	121	0	0		

Sample ID 0407302-005AMSD		SampType: MSD		TestCode: 8270_TCL4.2		Units: µg/Kg		Prep Date: 7/9/2004		RunNo: 53071	
Client ID:		Batch ID: 47515		TestNo: SW8270C		Analysis Date: 7/9/2004		SeqNo: 1019514			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	1982	330	3329	0	59.5	29	123	2340	16.6	26.1	
2-Chlorophenol	2049	330	3329	0	61.6	10	121	2340	13.2	53.1	
4-Chloro-3-methylphenol	2408	330	3329	0	72.3	13.6	141	2608	7.96	34.7	
4-Nitrophenol	2189	1700	3329	0	65.8	10.4	152	2535	14.6	28.7	
Acenaphthene	2009	330	3329	0	60.4	13.9	121	2244	11.0	49	
N-Nitrosodi-n-propylamine	2111	330	3329	0	63.4	10	130	2493	16.6	46.5	
Pentachlorophenol	2217	1700	3329	0	66.6	30	133	2565	14.5	26.9	
Phenol	2046	330	3329	0	61.5	10	120	2336	13.2	47.1	
Pyrene	1976	330	3329	74.26	57.1	42.4	128	2246	12.8	23.9	
Surr: 2,4,6-Tribromophenol	2150	0	3329	0	64.6	35.5	131	2503	0	0	
Surr: 2-Fluorobiphenyl	967	0	1664	0	58.1	12.9	120	1096	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47515

Sample ID 0407302-005AMSD	SampType: MSD	TestCode: 8270_TCL4.2	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53071						
Client ID:	Batch ID: 47515	TestNo: SW8270C		Analysis Date: 7/9/2004	SeqNo: 1019514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	1819	0	3329	0	54.6	10	119	2034	0	0	
Surr: 4-Terphenyl-d14	938.4	0	1664	0	56.4	41.5	128	1071	0	0	
Surr: Nitrobenzene-d5.	1107	0	1664	0	66.5	10	121	1142	0	0	
Surr: Phenol-d5	1932	0	3329	0	58	12.6	121	2290	0	0	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47534

Sample ID MB-47534	SampType: MBLK	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/9/2004	RunNo: 53065						
Client ID:	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019656						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	BRL	5.00									
Barium	BRL	5.00									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Lead	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									

Sample ID LCS-47534	SampType: LCS	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 7/9/2004	RunNo: 53065						
Client ID:	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	46.91	5.00	50	0	93.8	80	120	0	0		
Barium	46.73	5.00	50	0.118	93.2	80	120	0	0		
Cadmium	47.8	2.50	50	0.023	95.6	80	120	0	0		
Chromium	48.19	2.50	50	0.441	95.5	80	120	0	0		
Lead	46.9	5.00	50	0	93.8	80	120	0	0		
Selenium	44.62	5.00	50	0	89.2	80	120	0	0		
Silver	4.526	2.50	5	0	90.5	80	120	0	0		

Sample ID 0406F09-002AMS	SampType: MS	TestCode: 6010B_S	Units: mg/Kg-dry	Prep Date: 7/9/2004	RunNo: 53065						
Client ID: D1 E DPT1 1-2	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019659						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	56.95	5.17	51.75	10.05	90.6	75	125	0	0		
Barium	226.3	5.17	51.75	168.7	111	75	125	0	0		
Cadmium	48.02	2.59	51.75	0.426	92	75	125	0	0		
Chromium	66.33	2.59	51.75	17.3	94.7	75	125	0	0		
Lead	62.12	5.17	51.75	13.8	93.4	75	125	0	0		
Selenium	43.83	5.17	51.75	0	84.7	75	125	0	0		
Silver	4.66	2.59	5.175	0	90.1	75	125	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47534

Sample ID 0406F09-002ADUP	SampType: DUP	TestCode: 6010B_S	Units: mg/Kg-dry	Prep Date: 7/9/2004	RunNo: 53065
Client ID: D1 E DPT1 1-2	Batch ID: 47534	TestNo: SW6010B		Analysis Date: 7/9/2004	SeqNo: 1019658

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.142	5.06	0	0	0	0	0	10.05	9.41	20	
Barium	171.2	5.06	0	0	0	0	0	168.7	1.45	20	
Cadmium	BRL	2.53	0	0	0	0	0	0.426	0	20	
Chromium	18.31	2.53	0	0	0	0	0	17.3	5.65	20	
Lead	12.92	5.06	0	0	0	0	0	13.8	6.53	20	
Selenium	BRL	5.06	0	0	0	0	0	0	0	20	
Silver	BRL	2.53	0	0	0	0	0	0	0	20	

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47539

Sample ID MB-47539	SampType: MBLK	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53208
Client ID:	Batch ID: 47539	TestNo: SW8081A		Analysis Date: 7/14/2004	SeqNo: 1022516

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	BRL	3.3									
4,4'-DDE	BRL	3.3									
4,4'-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	3.3									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	11.62	0	16.67	0	69.7	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	13.78	0	16.67	0	82.6	16.4	135	0	0		

Sample ID LCS-47539	SampType: LCS	TestCode: 8081_TCL_S	Units: µg/Kg	Prep Date: 7/9/2004	RunNo: 53208
Client ID:	Batch ID: 47539	TestNo: SW8081A		Analysis Date: 7/14/2004	SeqNo: 1022517

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	39.22	3.3	41.67	0	94.1	57.4	131	0	0		
Aldrin	13.79	1.7	16.67	0	82.7	51.3	150	0	0		
Dieldrin	39.17	3.3	41.67	0	94	70.8	124	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47539

Sample ID LCS-47539		SampType: LCS		TestCode: 8081_TCL_S		Units: µg/Kg		Prep Date: 7/9/2004		RunNo: 53208	
Client ID:		Batch ID: 47539		TestNo: SW8081A		Analysis Date: 7/14/2004		SeqNo: 1022517			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	39.86	3.3	41.67	0	95.7	59.5	117	0	0		
gamma-BHC	14.02	3.3	16.67	0	84.1	52.8	115	0	0		
Heptachlor	12.69	1.7	16.67	0	76.1	36.7	153	0	0		
Surr: Decachlorobiphenyl	11.97	0	16.67	0	71.8	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	13.95	0	16.67	0	83.7	16.4	135	0	0		

Sample ID 0406F09-006BMS		SampType: MS		TestCode: 8081_TCL_S		Units: µg/Kg-dry		Prep Date: 7/9/2004		RunNo: 53208	
Client ID: ADSD DPT1 1-2		Batch ID: 47539		TestNo: SW8081A		Analysis Date: 7/14/2004		SeqNo: 1023608			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	59.75	4.2	52.68	10.46	93.6	37.4	131	0	0		
Aldrin	17.48	2.1	21.07	1.064	77.9	53.1	134	0	0		
Dieldrin	135.1	4.2	52.68	87.58	90.3	10	163	0	0		E
Endrin	64.14	4.2	52.68	0	122	10.2	148	0	0		
gamma-BHC	16.38	4.2	21.07	0	77.7	37.1	125	0	0		
Heptachlor	15.12	2.1	21.07	0	71.8	41	140	0	0		
Surr: Decachlorobiphenyl	14.21	0	21.07	0	67.4	11.2	135	0	0		
Surr: Tetrachloro-m-xylene	13.14	0	21.07	0	62.4	16.4	135	0	0		

Sample ID 0406F09-006BMSD		SampType: MSD		TestCode: 8081_TCL_S		Units: µg/Kg-dry		Prep Date: 7/9/2004		RunNo: 53208	
Client ID: ADSD DPT1 1-2		Batch ID: 47539		TestNo: SW8081A		Analysis Date: 7/14/2004		SeqNo: 1023609			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDT	58.23	4.2	52.59	10.46	90.8	37.4	131	59.75	2.57	29.9	
Aldrin	17.79	2.1	21.04	1.064	79.5	53.1	134	17.48	1.76	35.3	
Dieldrin	133.7	4.2	52.59	87.58	87.7	10	163	135.1	1.06	26	
Endrin	62.95	4.2	52.59	0	120	10.2	148	64.14	1.86	25.4	
gamma-BHC	16.55	4.2	21.04	0	78.7	37.1	125	16.38	1.08	37.4	
Heptachlor	15.41	2.1	21.04	0	73.2	41	140	15.12	1.85	33.8	
Surr: Decachlorobiphenyl	13.1	0	21.04	0	62.3	11.2	135	14.21	0	0	
Surr: Tetrachloro-m-xylene	15.4	0	21.04	0	73.2	16.4	135	13.14	0	0	

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID	SampType	TestCode	Units	Prep Date	RunNo						
MB-47602	MBLK	8260_TCL4.2	µg/Kg	7/12/2004	53225						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023176						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2754	0	2500	0	110	65.3	133	0	0		
Surr: Dibromofluoromethane	2514	0	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2626	0	2500	0	105	67.8	145	0	0		

Sample ID 0407035-001AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24930	1800	18380	0	136	46.3	140	0	0		
Benzene	21500	1800	18380	0	117	58.7	138	0	0		
Chlorobenzene	19520	1800	18380	0	106	55.3	141	0	0		
Toluene	21680	1800	18380	0	118	52.1	144	0	0		
Trichloroethene	20350	1800	18380	0	111	65.4	148	0	0		

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID: 0407035-001AMS	SampType: MS	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020551						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	19550	0	18380	0	106	65.3	133	0	0		
Surr: Dibromofluoromethane	18950	0	18380	0	103	80.1	121	0	0		
Surr: Toluene-d8	19440	0	18380	0	106	67.8	145	0	0		

Sample ID: 0407035-001AMSD	SampType: MSD	TestCode: 8260_TCL4.2	Units: µg/Kg-dry	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020553						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24450	1800	18380	0	133	46.3	140	24930	1.97	22.9	
Benzene	21830	1800	18380	0	119	58.7	138	21500	1.54	16.8	
Chlorobenzene	20840	1800	18380	0	113	55.3	141	19520	6.54	23.5	
Toluene	22870	1800	18380	0	123	52.1	144	21680	4.49	18.6	
Trichloroethene	21150	1800	18380	0	115	65.4	148	20350	3.84	21.4	
Surr: 4-Bromofluorobenzene	20310	0	18380	0	110	65.3	133	19550	0	0	
Surr: Dibromofluoromethane	19040	0	18380	0	104	80.1	121	18950	0	0	
Surr: Toluene-d8	19930	0	18380	0	108	67.8	145	19440	0	0	

Sample ID: MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020558						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2 Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B	Analysis Date: 7/12/2004	SeqNo: 1020558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	1000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020558

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2461	0	2500	0	98.4	65.3	133	0	0		
Surr: Dibromofluoromethane	2630	0	2500	0	105	80.1	121	0	0		
Surr: Toluene-d8	2668	0	2500	0	107	67.8	145	0	0		

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,1,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	1000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260_TCL4.2	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53225
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/14/2004	SeqNo: 1023173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									
Surr: 4-Bromofluorobenzene	2754	0	2500	0	110	65.3	133	0	0		
Surr: Dibromofluoromethane	2514	0	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2626	0	2500	0	105	67.8	145	0	0		

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloroethene, Total	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									

Qualifiers: B Analyte detected in the associated Method Blank BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits N Analyte not NELAC certified
 R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	BRL	250									
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Hexachlorobutadiene	BRL	250									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	1000									
Naphthalene	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	BRL	500									
Xylenes, Total	BRL	250									
Surr: 4-Bromofluorobenzene	2461	250	2500	0	98.4	65.3	133	0	0		
Surr: Dibromofluoromethane	2630	250	2500	0	105	80.1	121	0	0		
Surr: Toluene-d8	2668	250	2500	0	107	67.8	145	0	0		

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/15/2004	SeqNo: 1023837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	BRL	250									
1,1,2,2-Tetrachloroethane	BRL	250									
1,1,2-Trichloroethane	BRL	250									
1,1-Dichloroethane	BRL	250									
1,1-Dichloroethene	BRL	250									
1,2,4-Trichlorobenzene	BRL	250									
1,2-Dibromo-3-chloropropane	BRL	250									
1,2-Dibromoethane	BRL	250									
1,2-Dichlorobenzene	BRL	250									
1,2-Dichloroethane	BRL	250									
1,2-Dichloroethene, Total	BRL	250									
1,2-Dichloropropane	BRL	250									
1,3-Dichlorobenzene	BRL	250									
1,4-Dichlorobenzene	BRL	250									
2-Butanone	BRL	500									
2-Hexanone	BRL	500									
4-Methyl-2-pentanone	BRL	500									
Acetone	BRL	5000									
Benzene	BRL	250									
Bromodichloromethane	BRL	250									
Bromoform	BRL	250									

Qualifiers:	B Analyte detected in the associated Method Blank	BRL Below Reporting Limit	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	N Analyte not NELAC certified
	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits	

CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/15/2004	SeqNo: 1023837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	BRL	250									
Carbon disulfide	BRL	500									
Carbon tetrachloride	BRL	250									
Chlorobenzene	BRL	250									
Chloroethane	BRL	500									
Chloroform	BRL	250									
Chloromethane	BRL	500									
cis-1,2-Dichloroethene	BRL	250									
cis-1,3-Dichloropropene	BRL	250									
Cyclohexane	BRL	250									
Dibromochloromethane	BRL	250									
Dichlorodifluoromethane	BRL	500									
Ethylbenzene	BRL	250									
Freon-113	BRL	500									
Hexachlorobutadiene	BRL	250									
Isopropylbenzene	BRL	250									
m,p-Xylene	BRL	500									
Methyl acetate	BRL	250									
Methyl tert-butyl ether	BRL	250									
Methylcyclohexane	BRL	250									
Methylene chloride	BRL	1000									
Naphthalene	BRL	250									
o-Xylene	BRL	250									
Styrene	BRL	250									
Tetrachloroethene	BRL	250									
Toluene	BRL	250									
trans-1,2-Dichloroethene	BRL	250									
trans-1,3-Dichloropropene	BRL	250									
Trichloroethene	BRL	250									
Trichlorofluoromethane	BRL	250									
Vinyl chloride	BRL	500									

Qualifiers:	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47602

Sample ID MB-47602	SampType: MBLK	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53253						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/15/2004	SeqNo: 1023837						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Xylenes, Total	BRL	250									
Surr: 4-Bromofluorobenzene	2703	250	2500	0	108	65.3	133	0	0		
Surr: Dibromofluoromethane	2534	250	2500	0	101	80.1	121	0	0		
Surr: Toluene-d8	2644	250	2500	0	106	67.8	145	0	0		

Sample ID LCS-47602	SampType: LCS	TestCode: 8260B_S	Units: µg/Kg	Prep Date: 7/12/2004	RunNo: 53117						
Client ID:	Batch ID: 47602	TestNo: SW8260B		Analysis Date: 7/12/2004	SeqNo: 1020533						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	3460	250	2500	0	138	58.8	139	0	0		
Benzene	2940	250	2500	0	118	77.6	128	0	0		
Chlorobenzene	2742	250	2500	0	110	80.4	131	0	0		
Toluene	3020	250	2500	0	121	79.4	132	0	0		
Trichloroethene	2847	250	2500	0	114	81.8	147	0	0		
Surr: 4-Bromofluorobenzene	2511	250	2500	0	100	65.3	133	0	0		
Surr: Dibromofluoromethane	2590	250	2500	0	104	80.1	121	0	0		
Surr: Toluene-d8	2588	250	2500	0	104	67.8	145	0	0		

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
Work Order: 0406F09
Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47624

Sample ID MB-47624	SampType: MBLK	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021483						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.100	0	0	0	0	0	0	0	0	
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Sample ID LCS-47624	SampType: LCS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021484						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4211	0.100	0.4	0.02169	99.8	80	120	0	0		
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Sample ID 0407303-001BMS	SampType: MS	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021486						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.4083	0.0988	0.395	0.03561	94.4	70	130	0	0		
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Sample ID 0407303-001BMSD	SampType: MSD	TestCode: 7471A_S	Units: mg/Kg	Prep Date: 7/13/2004	RunNo: 53151						
Client ID:	Batch ID: 47624	TestNo: SW7471A		Analysis Date: 7/13/2004	SeqNo: 1021487						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.3943	0.0929	0.3715	0.03561	96.5	70	130	0.4083	3.51	30	
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Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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CLIENT: URS
 Work Order: 0406F09
 Project: Red Panthers Pesticide Site

ANALYTICAL QC SUMMARY REPORT

BatchID: 47670

Sample ID MB-47670	SampType: MBLK	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022943						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.00400	0	0	0	0	0	0	0	0	
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Sample ID LCS-47670	SampType: LCS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022945						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04147	0.00400	0.04	0.000667	102	80	120	0	0		
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Sample ID 0407035-002CMS	SampType: MS	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022950						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04206	0.00400	0.04	0.000954	103	80	120	0	0		
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Sample ID 0407035-002CMSD	SampType: MSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 7/14/2004	RunNo: 53218						
Client ID:	Batch ID: 47670	TestNo: SW1311/7470		Analysis Date: 7/14/2004	SeqNo: 1022952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.04174	0.00400	0.04	0.000954	102	80	120	0.04206	0.776	20	
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Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits	BRL Below Reporting Limit J Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits	E Value above quantitation range N Analyte not NELAC certified
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Appendix C

**Phase II Final Design Sampling
Additional Sampling Analytical Data**

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: D1 E DPT1 0-1
 Lab Order: 0406F09 Collection Date: 6/28/2004 2:10:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-001 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A		Analyst: WDP			
4,4'-DDD	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
4,4'-DDE	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
4,4'-DDT	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
alpha-BHC	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
beta-BHC	2.8	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Dieldrin	23	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endosulfan II	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endosulfan sulfate	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endrin	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endrin aldehyde	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Endrin ketone	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
gamma-BHC	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Toxaphene	BRL	220		µg/Kg-dry	47306	1	7/1/2004 3:40:00 PM
Surr: Decachlorobiphenyl	97.1	11.2-135		%REC	47306	1	7/1/2004 3:40:00 PM
Surr: Tetrachloro-m-xylene	75.0	16.4-135		%REC	47306	1	7/1/2004 3:40:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	9.62	5.11		mg/Kg-dry	47318	1	7/1/2004 6:07:00 PM
PERCENT MOISTURE		D2216		Analyst: AAN			
Percent Moisture	23.8	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: D1 E DPT1 1-2
 Lab Order: 0406F09 Collection Date: 6/29/2004 2:20:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-002 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: JMZ		
4,4'-DDD	6.6	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
4,4'-DDE	19	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
4,4'-DDT	12	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
alpha-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
beta-BHC	5.2	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Dieldrin	71	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endosulfan II	BRL	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endosulfan sulfate	BRL	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endrin	7.6	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endrin aldehyde	BRL	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Endrin ketone	BRL	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
gamma-BHC	BRL	4.4		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Toxaphene	230	220		µg/Kg-dry	47539	1	7/14/2004 4:19:00 PM
Surr: Decachlorobiphenyl	71.1	11.2-135		%REC	47539	1	7/14/2004 4:19:00 PM
Surr: Tetrachloro-m-xylene	71.5	16.4-135		%REC	47539	1	7/14/2004 4:19:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	10.0	4.95		mg/Kg-dry	47534	1	7/9/2004 10:55:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	24.4	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: D1 E DPT2 0-1
 Lab Order: 0406F09 Collection Date: 6/29/2004 2:40:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-003 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A		Analyst: WDP			
4,4'-DDD	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
4,4'-DDE	7.5	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
4,4'-DDT	5.0	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
alpha-BHC	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
beta-BHC	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Dieldrin	15	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endosulfan II	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endosulfan sulfate	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endrin	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endrin aldehyde	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Endrin ketone	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
gamma-BHC	BRL	4.4		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Toxaphene	BRL	220		µg/Kg-dry	47306	1	7/1/2004 5:40:00 PM
Surr: Decachlorobiphenyl	104	11.2-135		%REC	47306	1	7/1/2004 5:40:00 PM
Surr: Tetrachloro-m-xylene	71.2	16.4-135		%REC	47306	1	7/1/2004 5:40:00 PM
METALS, TOTAL		SW6010B		(SW3050B)		Analyst: CDW	
Arsenic	11.8	5.17		mg/Kg-dry	47318	1	7/1/2004 6:11:00 PM
PERCENT MOISTURE		D2216		Analyst: AAN			
Percent Moisture	23.9	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: D1 E DPT2 1-2
 Lab Order: 0406F09 Collection Date: 6/29/2004 2:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-004 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: JMZ		
4,4'-DDD	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
4,4'-DDE	6.3	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
4,4'-DDT	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Aldrin	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
alpha-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
alpha-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
beta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
delta-BHC	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Dieldrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endosulfan I	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endosulfan II	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endrin	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Endrin ketone	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
gamma-BHC	BRL	4.3		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
gamma-Chlordane	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Heptachlor	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Heptachlor epoxide	BRL	2.2		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Methoxychlor	BRL	22		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Toxaphene	BRL	220		µg/Kg-dry	47539	1	7/14/2004 4:49:00 PM
Surr: Decachlorobiphenyl	72.8	11.2-135		%REC	47539	1	7/14/2004 4:49:00 PM
Surr: Tetrachloro-m-xylene	104	16.4-135		%REC	47539	1	7/14/2004 4:49:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	30.4	4.49		mg/Kg-dry	47534	1	7/9/2004 11:08:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	23.1	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: ADSD DPT1 0-1
 Lab Order: 0406F09 Collection Date: 6/29/2004 3:10:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-005 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: WDP		
4,4'-DDD	3100	430		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
4,4'-DDE	670	430		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
4,4'-DDT	1500	430		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
Aldrin	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
alpha-BHC	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
alpha-Chlordane	BRL	210		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
beta-BHC	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
delta-BHC	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Dieldrin	2400	430		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
Endosulfan I	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Endosulfan II	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Endosulfan sulfate	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Endrin	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Endrin aldehyde	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Endrin ketone	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
gamma-BHC	BRL	4.3		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
gamma-Chlordane	BRL	210		µg/Kg-dry	47306	100	7/2/2004 3:42:00 PM
Heptachlor	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Heptachlor epoxide	BRL	2.1		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Methoxychlor	BRL	21		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Toxaphene	BRL	210		µg/Kg-dry	47306	1	7/1/2004 6:09:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47306	100	7/2/2004 3:42:00 PM
Surr: Decachlorobiphenyl	76.1	11.2-135		%REC	47306	1	7/1/2004 6:09:00 PM
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47306	100	7/2/2004 3:42:00 PM
Surr: Tetrachloro-m-xylene	59.5	16.4-135		%REC	47306	1	7/1/2004 6:09:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	72.8	3.98		mg/Kg-dry	47318	1	7/1/2004 6:15:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	22.5	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: ADSD DPT1 1-2
 Lab Order: 0406F09 Collection Date: 6/29/2004 3:15:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-006 Matrix: SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: JMZ		
4,4'-DDD	24	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
4,4'-DDE	11	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
4,4'-DDT	10	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Aldrin	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
alpha-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
alpha-Chlordane	2.9	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
beta-BHC	3.0	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
delta-BHC	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Dieldrin	88	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endosulfan I	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endosulfan II	BRL	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endosulfan sulfate	BRL	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endrin	BRL	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endrin aldehyde	BRL	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Endrin ketone	5.2	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
gamma-BHC	BRL	4.2		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
gamma-Chlordane	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Heptachlor	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Heptachlor epoxide	BRL	2.1		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Methoxychlor	BRL	21		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Toxaphene	210	210		µg/Kg-dry	47539	1	7/14/2004 2:50:00 PM
Surr: Decachlorobiphenyl	65.0	11.2-135		%REC	47539	1	7/14/2004 2:50:00 PM
Surr: Tetrachloro-m-xylene	48.7	16.4-135		%REC	47539	1	7/14/2004 2:50:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	7.04	5.06		mg/Kg-dry	47534	1	7/9/2004 11:13:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	21.0	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
BRL	Below Reporting Limit	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
N	Analyte not NELAC certified	P	NELAC analyte certification pending
Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS **Client Sample ID:** ADSD DPT2 0-1
Lab Order: 0406F09 **Collection Date:** 6/29/2004 3:40:00 PM
Project: Red Panthers Pesticide Site
Lab ID: 0406F09-007 **Matrix:** SOIL

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: WDP		
4,4'-DDD	20000	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
4,4'-DDE	8500	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
4,4'-DDT	81000	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Aldrin	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
alpha-BHC	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
alpha-Chlordane	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
beta-BHC	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
delta-BHC	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Dieldrin	19000	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endosulfan I	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endosulfan II	16000	4200	NC	µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endosulfan sulfate	BRL	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endrin	BRL	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endrin aldehyde	BRL	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Endrin ketone	BRL	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
gamma-BHC	BRL	4200		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
gamma-Chlordane	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Heptachlor	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Heptachlor epoxide	BRL	2100		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Methoxychlor	BRL	21000		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Toxaphene	260000	210000		µg/Kg-dry	47306	1000	7/2/2004 4:13:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47306	1000	7/2/2004 4:13:00 PM
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47306	1000	7/2/2004 4:13:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	28.8	3.99		mg/Kg-dry	47318	1	7/1/2004 5:53:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	19.8	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 19-Jul-04

CLIENT: URS Client Sample ID: ADSD DPT2 1-2
 Lab Order: 0406F09 Collection Date: 6/29/2004 3:45:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0406F09-008 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: JMZ		
4,4'-DDD	8100	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
4,4'-DDE	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
4,4'-DDT	130000	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Aldrin	BRL	22000		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
alpha-BHC	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
alpha-Chlordane	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
beta-BHC	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
delta-BHC	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Dieldrin	13000	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endosulfan I	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endosulfan II	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endosulfan sulfate	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endrin	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endrin aldehyde	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Endrin ketone	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
gamma-BHC	BRL	4300		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
gamma-Chlordane	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Heptachlor	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Heptachlor epoxide	BRL	2200		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Methoxychlor	BRL	22000		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Toxaphene	340000	220000		µg/Kg-dry	47539	1000	7/15/2004 10:01:00 PI
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47539	1000	7/15/2004 10:01:00 PI
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47539	1000	7/15/2004 10:01:00 PI
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	11.6	5.85		mg/Kg-dry	47534	1	7/9/2004 11:17:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	22.8	0		wt%		1	7/9/2004 6:30:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: BREEZEWAY EAST
 Lab Order: 0407035 Collection Date: 6/29/2004 2:30:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-007 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUND		SW8081A			Analyst: JMZ		
4,4'-DDD	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
4,4'-DDE	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
4,4'-DDT	3200000	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Aldrin	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
alpha-BHC	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
alpha-Chlordane	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
beta-BHC	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
delta-BHC	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Dieldrin	940000	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endosulfan I	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endosulfan II	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endosulfan sulfate	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endrin	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endrin aldehyde	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Endrin ketone	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
gamma-BHC	BRL	460000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
gamma-Chlordane	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Heptachlor	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Heptachlor epoxide	BRL	230000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Methoxychlor	BRL	2300000		µg/Kg-dry	47378	100000	7/8/2004 5:00:00 PM
Toxaphene	BRL	2300000		µg/Kg-dry	47378	10000	7/8/2004 4:30:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47378	10000	7/8/2004 4:30:00 PM
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47378	10000	7/8/2004 4:30:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	174	4.51		mg/Kg-dry	47324	1	7/2/2004 3:21:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	27.8	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: URS Client Sample ID: BREEZEWAY WEST
 Lab Order: 0407035 Collection Date: 6/29/2004 3:05:00 PM
 Project: Red Panthers Pesticide Site
 Lab ID: 0407035-008 Matrix: SOIL

Analyses	Result	Rpt Limit	Qual	Units	BatchID	DF	Date Analyzed
CHLORINATED PESTICIDES, TARGET COMPOUN		SW8081A			Analyst: JMZ		
4,4'-DDD	1300000	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
4,4'-DDE	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
4,4'-DDT	9900000	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Aldrin	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
alpha-BHC	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
alpha-Chlordane	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
beta-BHC	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
delta-BHC	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Dieldrin	620000	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endosulfan I	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endosulfan II	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endosulfan sulfate	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endrin	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endrin aldehyde	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Endrin ketone	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
gamma-BHC	BRL	590000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
gamma-Chlordane	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Heptachlor	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Heptachlor epoxide	BRL	290000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Methoxychlor	BRL	2900000		µg/Kg-dry	47378	100000	7/8/2004 5:30:00 PM
Toxaphene	12000000	2900000		µg/Kg-dry	47378	10000	7/8/2004 6:00:00 PM
Surr: Decachlorobiphenyl	0	11.2-135	S	%REC	47378	100000	7/8/2004 5:30:00 PM
Surr: Tetrachloro-m-xylene	0	16.4-135	S	%REC	47378	100000	7/8/2004 5:30:00 PM
METALS, TOTAL		SW6010B (SW3050B)			Analyst: CDW		
Arsenic	755	7.73		mg/Kg-dry	47324	1	7/2/2004 3:25:00 PM
PERCENT MOISTURE		D2216			Analyst: AAN		
Percent Moisture	43.3	0		wt%		1	7/2/2004 10:15:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 BRL Below Reporting Limit E Value above quantitation range
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 N Analyte not NELAC certified P NELAC analyte certification pending
 Rpt Limit Reporting Limit S Spike Recovery outside accepted recovery limits