TRC
Customer-Focused Solutions

RECEIVED
ENVIRONMENTAL

JUN 07 2004

PROTECTION
DEPARTMENT

REPORT OF RESULTS
INVESTIGATION OF PRIVATE WELLS
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

Prepared for

Beazer East, Inc.

Gainesville, Florida

Prepared by

TRC

Irvine, California

Project No. 29016402
June 2004

TRC
21 Technology Drive
Irvine, California 92618
Telephone 949-727-9336
Facsimile 949-727-7399

RECEIVED
ENVIRONMENTAL

JUN 07 2004

PROTECTION
DEPARTMENT

TRC
Customer-Focused Solutions

June 4, 2004

Project No. 29016402

Mr. Maher Budeir
Remedial Project Manager
South Site Management Branch
U.S. Environmental Protection Agency, Region IV
61 Forsyth Street
Atlanta, Georgia 30303-3104

Report of Results; Investigation of Private Wells

Dear Mr. Budeir:

At the request of Mike Slenska, TRC is submitting to you a copy of the above-referenced report, subsequential to the *Report on Preliminary Results; Private Well Sampling* (TRC, March 2004), on behalf of Beazer East. The report presents the results of ground water quality analyses of selected private wells performed in April 2004, according to the *Final Third Addendum to the Workplan for Additional Investigation of the Hawthorn Group Formation; Sampling of Private Wells* (TRC, January 2004).

Please feel free to contact Mike Slenska at 412-208-8867 if you have any comments or concerns.

Sincerely,

Tom Patterson
Senior Project Manager

cc: Kelsey Helton, FDEP
John Moussa, ACEPD
Brett Goodman, GRU
Mike Slenska, Beazer East
Tim Basilone, Koppers

TRC
Customer-Focused Solutions

TABLE OF CONTENTS

	PAGE NO.
LIST OF TABLES/LIST OF FIGURES	ii
1.0 INTRODUCTION	1
1.1 Organization of This Data Report	1
1.2 Background	2
2.0 FIELD ACTIVITIES	2
2.1 Private Well Access Agreements	2
2.2 Field Reconnaissance	3
2.3 Sampling and Logging Activities	4
2.3.1 Well Inspection/Mobilization	4
2.3.2 Ground Water Sampling	5
2.3.3 Gamma and Video Logging	5
3.0 RESULTS AND DISCUSSIONS	6
3.1 Chemical Analyses	6
3.2 Gamma and Video Logging	7
3.3 Further Discussion on the Geiersbach Well	9
4.0 REFERENCES	11
TABLES	
FIGURES	
APPENDIX A: LABORATORY ANALYTICAL REPORTS	
APPENDIX B: FIELD SAMPLING LOGS	
APPENDIX C: PHOTOGRAPHS OF SAMPLED PRIVATE WELLS	
APPENDIX D: VIDEO AND GAMMA RAY LOGGINGS	
APPENDIX E: ACEPD GEIERSBACH WELL SAMPLING RECORD	

All TRC paper is recyclable and made from recycled paper.

TRC
Customer-Focused Solutions

TABLE OF CONTENTS
(Continued)

LIST OF TABLES

TABLE NO.	TITLE
1	Summary Of Phone Calls/Contacts Private Wells Selected For Further Investigation
2	Accessed And Sampled Private Wells
3	Field Measurements
4	VOC Constituents
5	SVOC Constituents
6	Total and Dissolved Metal Constituents
7	Detected VOC And SVOC Constituent Concentrations At Geiersbach Well

LIST OF FIGURES

FIGURE NO.	TITLE
1	Locations of Private Wells Sampled and Not Sampled

1.0 INTRODUCTION

1. This Data Report presents the results of the sampling and characterization activities described in the *Final Third Addendum to the Workplan; Private Well Sampling; Additional Characterization of the Hawthorn Group* (the Third Workplan Addendum, TRC; January 2004). The work consisted of a field investigation of selected privately-owned wells located in the vicinity of the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida (the Site).

2. A report of preliminary sampling results (TRC, March 2004) was issued by Beazer East (Beazer) to present notable results of the chemical analyses. The final sampling results are discussed herein, along with the results of other characterization activities including gamma and video logging of wells.

3. One of the private wells (the Geiersbach well) was resampled based on the results of the initial sample analyses. The resampling procedures for the Geiersbach well are discussed in the report on preliminary results (TRC, March 2004). The results of the resampling chemical analyses are included in this report.

1.1 ORGANIZATION OF THIS DATA REPORT

1. This Data Report briefly discusses the background information on issues related to privately-owned wells, related field activities, and presents the data and observations. The topics discussed in each of the following chapters are as follows:
   - Chapter 2.0 "Field Activities" - describes the field data collection activities.
   - Chapter 3.0 "Results and Discussions" - presents the results of the characterization of the private-wells and discusses key observations.
   - Chapter 4.0 "References" - lists the references used in preparation of this Data Report.

2. The field activities laboratory reports, log sheets and photographs are provided in Appendices A, B, and C, respectively.

1.2 BACKGROUND

1. As part of an ongoing investigation of the sources and distribution of the ground water impacts observed in the Hawthorn Group, a survey was performed to identify privately-owned wells in the vicinity of the Site. The objectives of the survey were to determine if there are any potential ground water receptors, identify possible wells that may affect ground water flow patterns, and identify potential water level monitoring points in the vicinity of the Site. The results of the survey are reported in Field Investigation Activities Report (TRC, September 2002) and Addendum Hawthorn Group Field Investigation Report (TRC, August 2003) (the Field Investigation Reports). Briefly, 53 private wells were identified within 0.5 miles of the Site.

2. As described in the Third Workplan Addendum, of the 53 private wells identified, 21 wells were selected for further investigation. The selection of the wells was based on the well use (i.e., all wells reportedly used for drinking were selected), well location (i.e., wells adjacent to the Site), and the owner response to the survey (i.e., owner's indication of interest in the investigation). The locations of the selected wells is shown in Figure 1.

2.0 FIELD ACTIVITIES

1. Field activities consisted of the following:
   - Obtaining Access Agreements.
   - Reconnaissance of the well.
   - Sampling and logging activities.

   These activities are further discussed below.

2.1 PRIVATE WELL ACCESS AGREEMENTS

1. Because the wells are the private property of individual owners and investigation activities require access with the potential to damage the property, access agreements to investigate each well were necessary. This section describes the efforts to contact and obtain access agreements from the owners/operators of the selected private wells.

2. Beazer representatives attempted to contact all of the owners/operators of the selected private wells. Attempts at communication were made via:
   - Telephone calls (at different times of the day, and on different days).
   - Printed flyers.

- Door-to-Door visits (more than one time).

3. The contacts for all of the 21 selected well owners and final status of the access agreements are summarized in Table 1. As indicated in Table 1, of the locations that did not obtain an access agreement, most of the owners did not wish to have their well sampled and did not enter into an access agreement. Access agreements for two locations were not obtained because the well owner could not be contacted, or because of difficulties in coordinating a meeting to approve an agreement. In these latter cases, the owner indicated a willingness to participate in the investigation, but an agreement could not be obtained within the 6 weeks allowed for this activity.

4. As shown in Table 1, after six weeks of endeavor, 11 of 21 possible access agreements were obtained.

2.2 FIELD RECONNAISSANCE

1. The contracted well services company (Gainesville Pump of Gainesville Florida) accompanied the TRC field team leader to each of the properties to be sampled. Field reconnaissance was performed to determine if the well maintenance rig could access the well, identify special conditions, and schedule the sampling visit with the owner.

2. As shown in Table 2, for the 11 locations where an access agreement was obtained, eight were suitable to be sampled for water quality. The remaining three wells were not sampled for the following reasons: one was inaccessible due to additions to the home, one well could not be sampled due to the well pipe system prohibiting sampling with the owner's equipment, and one well was filled/silted up to within 12 feet of the surface.

3. Of the eight wells sampled, only three (including the Geiersbach well) could be accessed by the maintenance rig to remove the owner's equipment and allow gamma and video logging and sounding for water level and total depth. As noted in Table 2, physical accessibility to many of the wells was difficult. This prevented pulling the well equipment (pumps, etc.) for sounding, gamma logging, and video logging six of the eight wells sampled.

2.3 SAMPLING AND LOGGING ACTIVITIES

1. The field investigation activities were performed according to the methods and procedures approved by the Environmental Protection Agency for the ongoing investigation of the Hawthorn Group. The approved methods and procedures are presented in detail in the following management plans:

   - Quality Assurance Project Plan (QAPP).
   - Health and Safety Plan (HSP).
   - Sampling and Analysis Plan (SAP).

   These management plans are Appendices A, B, and C of the original approved Workplan (TRC, January 2002). Some amendments to the procedures specific to the private well sampling activities were necessary. These amendments were presented in the approved Third Workplan Addendum.

2. All reusable instrumentation and equipment inserted into the well boring (i.e., depth to water indicator, purge pump, gamma logging probe, etc.) were properly cleaned prior to use at each well. Decontamination procedures are presented in the QAPP.

3. The field investigation activities are described in detail below. The field activities consisted of well sounding and inspection, ground water sampling, gamma logging, and video logging.

4. Following the field investigation, well reassembly and demobilization was performed. The field team restored the property to original conditions as closely as possible. Care was taken by the field team to avoid damage to private property during the field investigation phase, including damage to landscaping, fencing and well equipment. There was minimal impact to landscaping and vegetation, and there was no damage to the well owner's equipment or well.

2.3.1 WELL INSPECTION/MOBILIZATION

1. The first activity during the sampling visit was mobilization and detailed well inspection. The field team removed equipment from the well and set up a small working area near the well head. A well maintenance rig was brought to the well head, if possible, to aid in removing well equipment and support the well sampling and logging activities.

2. At each well, the field team completed a Field Data Sheet (see Appendix B). Information collected from the Field Data Sheet are: well diameter, static water level, well use information (i.e., drinking water, irrigation, etc.), well depth, well construction materials, and description of equipment installed in the well. Photographs were also taken at each well to document conditions prior to the work being performed (see Appendix C).

3. In many cases, because of the difficulties with well access, not all information on the field Data Sheet could be obtained.

2.3.2 GROUND WATER SAMPLING

1. The ground water sampling procedures followed the sampling plans in the Third Addendum to the Workplan as closely as field conditions allowed (see comments in Table 2 for exceptions). The following paragraphs summarize the actual ground water sampling procedures performed for the private well investigation activity.

2. The sampling procedures in the Third Workplan Addendum includes purging of three well casing volumes prior to the sampling of ground water. However, in several cases, the well depth was not known and well casing volume could not be calculated. Thus, all the wells were purged prior to sampling, but for several wells it was uncertain whether the purged ground water volume was greater than three well casing volumes. Purged water was collected in a portable tank or 55-gallon drums. The purged water was taken to the Site for treatment through the onsite ground water treatment plant.

3. The well owner's equipment (i.e., pump, piping, plumbing, etc.) was used to collect the samples for five of the eight wells that were sampled[1]. The owner's pump was used in such cases since removal of the owner's well appurtenances was complicated and physical access to the site was limited and the bladder pump and teflon tubing could not be used.

2.3.3 GAMMA AND VIDEO LOGGING

1. Gamma logging of the well provides information concerning the characteristics of the strata penetrated to construct the well. Performing a gamma log consisted of lowering a

---

[1] The initial sampling of the Geiersbach well was performed with the owner's equipment. For the resampling, special measures were taken to achieve access with the development rig, and the bladder pump was used for sampling

gamma probe into the well that records the very low levels of natural gamma radiation that occurs in the ground surrounding the well casing. The variations in the natural radiation levels have been shown to be a useful tool in the Gainesville area to differentiate the various geologic formations in the Hawthorn Group.

2. The gamma logging was performed after the well equipment was removed and the total depth of the well determined. Gamma logging of the well took place after ground water sampling was completed.

3. The gamma logging probe was a 1-inch diameter 4-foot rod that was gently lowered to the bottom of the well boring and withdrawn from the well boring. Readings were recorded as the rod was lowered into the boring and again while it was withdrawn.

4. Video logging of the well can provide information on the construction details of the well and well casing condition. Performing a video log consisted of lowering a small camera with a light at the end of a video cable down the well. The video was recorded on a cassette tape, and observations and depths (i.e., screen intervals, changes in casing type, condition of the casing and screen, obstructions in the well, etc.) were recorded on a field data sheet.

5. Gamma and video logging were performed at the wells where the owners' equipment could be removed (i.e., the Geiersbach, Magee and Moratto wells). The reports of the video and gamma loggings are presented in Appendix D. The results are discussed in Section 3.0.

3.0 RESULTS AND DISCUSSIONS

3.1 CHEMICAL ANALYSES

1. Field measurements were taken prior to the sampling of ground water as required by the approved procedures. The field measurements included temperature, pH, electric conductance, oxidation reduction potential (ORP), dissolved oxygen, and turbidity. The field measurements are presented in Table 3.

2. Copies of the laboratory reports of analysis for ground water samples are provided in Appendix A, and the results of ground water sample analysis are summarized in Tables 4,

5, and 6. The water sample analysis results are classified into four different categories: VOCs, SVOCs, Total Metals, and Dissolved Metals.

3. The data quality is generally good based on review of the Quality Assurance/Quality Control (QA/QC) information provided by the laboratory and the results of quality control samples; however, two of the four trip blanks for VOC analyses indicated low levels of toluene (see Table 4). Toluene is a common laboratory and sampling artifact. The presence of toluene in the blanks suggests that levels similar in samples may not be representative of ground water conditions.

toluene in trip blanks

4. As indicated in Tables 4 and 5, the analyses were nondetect for all organic constituents except at the Geiersbach well (410 NW 26th Avenue). The detections at Geiersbach well are discussed further in Section 3.3.

5. The total and dissolved metals analyzed included arsenic, chromium, copper, and zinc. As shown in Table 6, arsenic was detected in the Crisman well at a total concentration of 13.2 µg/L. This is below the maximum contaminant level (MCL) of 50 µg/L, and similar or higher levels measured in local wells are believed to be naturally occurring in the Floridan Aquifer.

As @ 13.2 ug/L Crisman well

6. Zinc was detected at several of the wells as both total and dissolved forms, and some concentrations were fairly high compared to measurements from monitoring wells at the Site. It is likely that the elevated zinc concentrations are due to release of zinc from galvanized piping and other appurtenances associated with the well (since in most cases the well owner's equipment was used to collect the sample). Further, there is no primary MCL for zinc and secondary MCL (for taste, odor, or aesthetics) is 5, 000 mg/L. None of the sample results approached the secondary MCL for zinc.

3.2 GAMMA AND VIDEO LOGGING

1. Gamma and video logging was performed on the Geiersbach, Magee and Moratto wells. The results of gamma logging indicate conditions at the Magee well, located directly adjacent to the Site to the north (see Figure 1), are very similar to the conditions measured at monitoring wells on the Koppers property. In particular, gamma counts are low in the top approximately 20 feet, which geologic logging has indicated is coincident with the recent unconsolidated sands that overly the Hawthorn Group.

2. Gamma counts vary but remain high to the total depth of the well at 67 feet. The higher counts are indicative of the Hawthorn Group which contains phosphatic clays and sands. Because the gamma counts did not drop back to low levels, it is apparent that this well does not fully penetrate the Hawthorn Group (the underlying Ocala Limestone has relatively low gamma levels).

3. At the Moratto well, located approximately 1,000 feet northwest of the northwest corner of the Koppers Site, the gamma log is similar to those of the Magee well. However, the upper recent sand layer appears to be on the order of 10 to 15 feet thick, and the well fully penetrates the Hawthorn Group as indicated by the drop in gamma counts at approximately 150 feet.

4. At the Geiersbach well, the first 15 feet showed low gamma counts indicative of unconsolidated sands that overly the Hawthorn Group. Below 15 feet depth, the gamma log showed generally higher counts from approximately 15 to 65 feet depth with two notable peaks within this zone occurring at 27 and 61 feet depth. The initial peak zone has been typically observed at the top of the Hawthorn Group. A third gamma peak occurs from approximately 130 to 146 feet depth, indicative of the probable lenses of phosphatic clayey and sandy material within the Hawthorn Group. Below approximate depth of 146 feet, the gamma counts drop to low value, consistent with the upper surface of underlying Ocala Limestone.

5. Video logging in the Magee and Moratto wells indicates that the water in both wells was very turbid, preventing gathering of useful data below the water level in the well. In the shallower Magee well, the water level was at approximately 14.22 feet below ground surface (bgs). In the deeper Moratto well, the water level was at 123 feet bgs. The Magee well had a 2-inch diameter PVC casing in the top 15 feet, and it was in good condition. The Moratto well had 4-inch diameter steel casing and there was significant corrosion in the top 25 feet. However, the casing appeared to be intact.

6. Video logging at the Geiersbach well revealed that the well casing, constructed of approximately 4-inch-diameter steel, was intact with moderate corrosion throughout the length of the casing. The casing went down to approximately 145 feet bgs, which is the depth where the well transition from casing to an open borehole occurs. The water level was at approximately 140 feet. Overall, the video logging suggests well casing integrity to

be uncompromised and well construction information to be in accordance with previously known information.

3.3 FURTHER DISCUSSION ON THE GEIERSBACH WELL

1. As noted above, the only location with detections of organic constituents is the Geiersbach well. The Geiersbach well is located at 410 NW 26th Avenue. As shown in Figure 1, the well is located adjacent to the Site boundary (33.5 feet from West of Kopper's Site fence). Mr. Geiersbach has used the well in the past for irrigation of his yard, but at the time of sampling, the well pump was not operating and Mr. Geiersbach indicated he had not used the well during the past 6 months. The field team noted that the aboveground appurtenances associated with the well (i.e., the well box, the casing head, the pump, and piping) were in poor condition. However, Mr. Geiersbach and county records indicate the well was installed relatively recently in approximately 1999. The well is located in an overgrown section of the yard. It did not appear that there had been recent maintenance on the well.

2. Based on county record, the well is 228 feet deep, which is close to measured depth of 225 feet during the resampling of Geiersbach well. The casing at the surface is 4-inch-diameter steel (see Table 3).

3. The VOC and SVOC constituents detected at the Geiersbach well are listed in Table 7. Toluene is among the VOC compounds detected and toluene was present at similar levels in the trip blanks for quality control. This could indicate that the toluene is a laboratory or sampling artifact. However, benzene, ethyl benzene, and xylene were also detected at the Geiersbach well, and these constituents are typically detected together when there is a petroleum hydrocarbon source.

4. The only constituents detected in the Geiersbach well that exceeded an MCL or Florida target cleanup level was benzene. As shown in Table 7, the benzene concentration was 1.7 µg/L, and the benzene MCL is 1 µg/L. It is important to note that this well is not used for potable water.

5. Previous ground water sampling records of Geiersbach well were researched. In 1999, ground water sampling at Geiersbach well was performed by Alachua County Department of Environmental Protection (ACDEP). According to the ACEPD's ground water sampling report (see Appendix E) an odor was detected in cuttings during drilling at depths between 70 to 90 feet bgs at the Geiersbach well.

6. The ACEPD report does not indicate any detection of VOC or SVOC constituents. However, ground water samples were analyzed for a more comprehensive list of SVOC constituents than samples analyzed by ACEPD in 1999.

7. Based on the initial results, Beazer decided to resample the well. The resampling effort would also include a more invasive approach so that the well equipment could be removed, allowing sampling with a special sample and video and gamma logging of the well.

8. The resampling results displayed VOC and SVOC constituent detections consistent with the previous sampling results. Xylene and 3&4-Methylphenol, which were detected in the first sampling at Geiersbach well, were nondetect on resampling. All other detected constituents from resampling, including benzene, ethylbenzene, toluene, 2,4-dimethylphenol, 2-methylphenol, and napthalene, were detected but at somewhat lower concentrations than the results from the initial sampling. None of the detected VOC and SVOC constituents from resampling exceeded Florida MCLs; however, benzene was detected at its MCL concentration of 1.0 µg/L (see Table 7).

9. There was a significant difference in zinc concentrations between the two sampling events. The zinc concentration in the second event was on the order of 39 percent of the first. This is likely due to use of the specialized equipment for the resample, which does not have any galvanization or exposed metal parts.

10. The result of confirmatory resampling performed at Geiersbach well agrees with the previous sampling results. Both sampling results displayed organic constituent detections at below Florida MCL except for benzene, which was detected at concentrations equal to or higher than MCL. The relatively small differences in concentration between the two sampling events may be real, or they may be the result of differences in sampling method. The initial samples were collected with the owner's equipment, which is a relatively large pump. The resampling was performed with a low flow bladder pump using a technique that minimizes stressing the aquifer.

4.0 REFERENCES

TRC. *Report on Preliminary Results; Private Well Sampling.* Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. March 2004.

TRC. *Third Addendum to the Workplan for Additional Investigation of the Hawthorn Group Formation; Sampling of Private Wells.* Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. January 2004a.

TRC. *Field Investigation Activities Report.* Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. September 2002.

TRC. *Workplan for Additional Characterization of the Hawthorn Group Formation.* Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. January 2002.

TABLE 1
SUMMARY OF PHONE CALLS/CONTACTS
PRIVATE WELLS SELECTED FOR FURTHER INVESTIGATION

WELL SITE ADDRESS	COUNTY ASSESSOR'S PARCEL NUMBER	PHONE NUMBER	OWNER	ACCESS AGREEMENT SIGNED	COMMENTS ON PROCESS OF OBTAINING ACCESS AGREEMENTS
201 NW 33rd Avenue	08387-000-000	352-376-6962	Magee	Yes	Signed
410 NW 26th Avenue	08481-009-000	352-336-6395	Geiersbach	Yes	Signed
426 NW 36th Avenue	08326-000-000	352-372-4476	Shields	No	Contacted; not interested in having well tested
437 NW 29th Avenue	08444-001-000	352-337-0274	O'Steen	Yes	Signed
437 NW 30th Avenue	08462-000-000	352-379-3304	Campbell	No	Contacted; talked several times; decided to not have well tested
725 NW 33rd Avenue	08520-000-000	352-371-6661	Mitchell	No	Contacted; not interested in having well tested
800 NW 36th Avenue	08554-001-000	352-336-0889	Pla-Silva	No	Contacted; not interested in having well tested
805 NW 32nd Place	08553-000-000	352-367-4529	Muir	Yes	Signed
906 NW 36th Road	08554-004-000	352-376-5633	Bigelow	Yes	Signed
911 NW 36th Road	08554-021-000	352-375-8484, x610 (work)	Ploch	Yes	Signed
912 NW 36th Road	08554-005-000	352-371-7130	Gilbert	No	Called twice; no answering machine; visited home once and talked to sister (Angela Geitner); no response
928 NW 36th Road	08554-006-000	352-372-9779	Curran	Yes	Signed
930 NW 36th Road	08554-007-000	352-373-1690	Motta	Yes	Signed
2523 NW 6th Street	08253-001-000	904-743-2076	Evans	No	Contacted; not interested in having well tested
3010 NW 9th Street	08769-000-000	352-373-1179	Crissman	Yes	Signed
3027 NW 4th Terrace	08415-000-000	352-338-0127	Hushelpeck	No	Contacted; visited house; could not locate abandoned well on property
3415 NW 5th Street	08336-000-000	352-337-9944	Cassiato	Yes	Signed
3425 NW 5th Street	08332-000-000	352-371-1254	Swicord	No	Contacted; not interested in having well tested
3425 NW 5th Street	08332-001-000	352-371-1254	Swicord	No	Contacted; not interested in having well tested
3505 NW 6th Street	08334-000-000	352-378-2105	Moratto	Yes	Signed
3627 N.W. 6th Street	08321-000-000	352-379-5621	Murphree-Leitner	No	Contacted; talked twice; left for vacation; did not return subsequent message left on answering machine

TABLE 2

ACCESSED AND SAMPLED PRIVATE WELLS

WELL SITE ADDRESS	OWNER	BASIS FOR SELECTION	ACCESS[1]	WATER QUALITY SAMPLE	VIDEO LOG	GAMMA LOG	COMMENTS
201 NW 33rd Ave	Magee	Adjacent to Site	Yes	Y	Y	Y	- Owner indicates well is used for irrigation - Well equipment removed for sampling and logging then replaced
410 NW 26th Ave	Geiersbach	Adjacent to Site	Yes	Y	Y[2]	Y[2]	- Owner indicates well is used for irrigation (however, owner indicated well was not used for past 6 months due to equipment maintenance issues) - Well is located on road side of property, fence would have to be removed for access to remove well equipment - Power lines overhead
426 NW 36th Ave	Shields	Water Supply	No	N	N	N	N/A
437 NW 29th Ave	O'Steen	Adjacent to Site	Yes	Y	N	N	- Owner indicates well is used for irrigation - Sampled using owner's equipment and debris would have to be moved and the roof of the pump house would have to come off for access to well
437 NW 30th Ave	Campbell	Adjacent to Site	No	N	N	N	N/A
725 NW 33rd Ave	Mitchell	Interest & Concern	No	N	N	N	N/A
800 NW 36th Ave	Pla-Silva	Water Supply	No	N	N	N	N/A
805 NW 32nd Place	Muir	Interest & Concern	Yes	N	N	N	- Owner does not use well, pump does not work, well and pump inside an addition to house (laundry room) - Shallow well
906 NW 36th Road	Bigelow	Water Supply	Yes	Y	N	N	- Owner indicates well is used for irrigation - Carport prevents access to remove equipment, but samples can be taken using owner's pump
911 NW 36th Road	Ploch	Water Supply	Yes	N	N	N	- Pump is a unique 2-pipe jet system that might be difficult to reassemble if removed, and has no sample port – power lines too low, too tight for access - Owner indicates well hasn't been used for 15 years - Well was not sampled because the pump could not be removed and had no sample port
912 NW 36th Road	Gilbert	Water Supply	No contact	N	N	N	N/A
928 NW 36th Road	Curran	Water Supply	Yes	Y	N	N	- Owner indicates well is used for irrigation - Access to remove well equipment would require clearing of landscaping and permission to go over neighbors yard
930 NW 36th Road	Motta	Water Supply	Yes	Y	N	N	- Owner indicates well is used for drinking water and irrigation - To gain access for pulling well equipment, bamboo would have to be cut down, trees pulled back and road partially blocked - Sampled using owner's equipment
2523 NW 6th Street	Evans	Interest & Concern	No	N	N	N	N/A
3010 NW 9th Street	Crisman	Interest & Concern	Yes	Y	N	N	- Owner indicates well is used for irrigation and heating - Removal of debris and bamboo required for access to remove well equipment - Sampled using owner's equipment

(1) See Table 1 and discussion in Section 2.1 regarding well access.
(2) Video and Gamma logging performed during the resampling of the well.

TABLE 2

ACCESSED AND SAMPLED PRIVATE WELLS
(Continued)

WELL SITE ADDRESS	OWNER	BASIS FOR SELECTION	ACCESS[1]	WATER QUALITY SAMPLE	VIDEO LOG	GAMMA LOG	COMMENTS
3027 NW 4th Terrace	Hushelpeck	Adjacent to Site	No	N	N	N	N/A
3415 NW 5th Street	Bishop	Interest & Concern	Yes	N	N	N	- Owner indicates well had been used for irrigation - Hand driven PVC well, Pump is broken - Well is silted up to within approximately 12 feet of surface; no screen or perforations above silt - Well covered with license plate, well seal installed, foot valve had red silty clay - No water in well to collect a sample
3425 NW 5th Street	Swicord	Interest & Concern	No	N	N	N	N/A
3425 NW 5th Street	Swicord	Interest & Concern	No	N	N	N	N/A
3505 NW 6th Street	Moratto	Water Supply	Yes	Y	Y	Y	- Owner indicates well is used for irrigation - Pump/well in gazebo. Roof removal required for well access - Well equipment removed for sampling and logging, then replaced
3627 NW 6th Street	Murphree-Leitner	Water Supply	No	N	N	N	N/A

(1) See Table 1 and discussion in Section 2.1 regarding well access.
(2) Video and Gamma logging performed during the resampling of the well.

TABLE 4
VOC CONSTITUENTS

Well Name / Date Sampled	Reporting Limit (ug/l)	Method Detection Limit (ug/l)	Bigelow 02/16/04	Crissman 02/17/04	Curran 02/10/2004	Geiersbach 02/18/04	Geiersbach (1) 04/08/04	Magee 02/10/2004	Morrato 02/11/2004	Motta 02/18/04	O'Steen 02/17/04	DUP A 02/10/2004	DUP B 02/17/04	EQUIP 02/19/04	FIELD A 02/17/04	FIELD 02/17/04	TRIP 02/16/04	TRIP 02/17/04	TRIP 02/19/04	TRIP 02/18/04
VOCs (ug/L)																				
Acetone	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	0.5	ND	ND	ND	**1.7**	**1.0**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (Not Spring 2003)	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCA	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (only Spring 2003)	1	0.5	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCA	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane (Not Spring 2003)	1	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DCE (Not Spring 2003)	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-DCE	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	1	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	0.5	ND	ND	ND	**0.91**	**0.55**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	5	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	5	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.2**	ND	ND	ND	ND	ND
Methylene chloride	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	5	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-TCA	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TCA	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1	0.5	ND	ND	ND	**2.4 B**	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.8**	**0.86**	ND	ND
Trichloroethylene	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	3	1	ND	ND	ND	**2.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

B = Constituent was detected in trip blank
(1) Resampling of Geiersbach well. See Section 3.3

TABLE 5
SVOC CONSTITUENTS

Well Name / Date Sampled	Reporting Limit (ug/l)	Method Detection Limit (ug/l)	Bigelow 02/16/04	Crissman 02/17/04	Curran 02/10/2004	Geiersbach 02/18/04	Geiersbach[1] 04/08/04	Magee 02/10/2004	Morrato 02/11/2004	Motta 02/18/04	O'Steen 02/17/04	DUP A 02/10/2004	DUP B 02/17/04	EQUIP 02/19/04	FIELD A 02/17/04
SVOCs (ug/L)															
Benzoic Acid	26	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methyl phenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	5.3	2.1	ND	ND	ND	**71.9**	**51.2**	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	26	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	11	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	5.3	2.1	ND	ND	ND	**33.2**	**23.1**	ND	ND	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	5.3	2.1	ND	ND	ND	**2.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	5.3	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	5.3	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	5.3	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	11	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	5.3	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl) phthalate	5.3	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5.3	1.1	ND	ND	ND	**15.3**	**6.0**	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	5.3	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.3	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

(1) Resampling of Geiersbach well. See Section 3.3

TABLE 3

FIELD MEASUREMENTS

WELL SITE ADDRESS	OWNER	DEPTH[3] (ft)	DIAMETER (in)	DEPTH TO WATER (ft)	TEMPERATURE (^{o}C)	pH	CONDUCTIVITY (mS/cm)	OXIDATION REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)
201 NW 33rd Avenue	Magee	69.7	2	14.22	20.32	7.04	2.62	-49	4.01	-
410 NW 26th Avenue	Geiersbach	228	4	140	22.33	7.54	0.32	-53	0.21	0.23
437 NW 29th Avenue	O'Steen	Unknown	2	Unknown	21.67	7.39	0.278	-20	3	0.13
805 NW 32nd Place	Muir[1]	Unknown	1+1/4	Unknown	-	-	-	-	-	-
906 NW 36th Road	Bigelow	85	2	Unknown	21.77	7.69	0.222	-60	1.7425	0.16
911 NW 36th Road	Ploch[2]	Unknown	4	Unknown	-	-	-	-	-	-
928 NW 36th Road	Curran	100	4	Unknown	22.05	7.25	0.234	+68	0.6264	1.09
930 NW 36th Road	Motta	Unknown	4	Unknown	22.33	7.20	0.22	148	1.0353	6.82
3010 NW 9th Street	Crisman	170	4	Unknown	23.26	7.32	0.44	+155	0.78	0.09
3415 NW 5th Street	Cassiato[2]	11.52	4	9.91	-	-	-	-	-	-
3505 NW 6th Street	Moratto	178	4	123	22.74	7.79	0.219	-1	2.8466	22.78

29016402/rpts/RePrRePrWeSa (6/4/04/nm)

(1) Well couldn't be sampled due to physical access-difficulties.
(2) Well had silted up or been backfilled to within 12 feet of the surface.
(3) Depth is reported depth.

TABLE 6
TOTAL AND DISSOLVED METAL CONSTITUENTS

Well Name / Date Sampled	RL (ug/l)	MDL (ug/l)	Bigelow 02/16/04	Crissman 02/17/04	Curran 02/10/2004	Geiersbach 02/18/04	Geiersbach[1] 04/08/04	Magee 02/10/2004	Morrato 02/11/2004	Motta 02/18/04	O'Steen 02/17/04	DUP A 02/10/2004	DUP B 02/17/04	EQUIP 02/19/04	FIELD A 02/17/04
Total Metals (unfiltered; ug/L)															
Arsenic	10	2.8	5.5 B	13.2	4.7 B	2.8 U	2.8 U	2.8 U	3.3 B	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Chromium	10	0.4	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Copper	25	0.44	0.64 B	7.3 B	1.4 B	0.44 U	0.44 U	3.9 B	18.5 B	3.5 B	1.7 B	2.8 B	0.44 U	0.57 B	0.55 B
Zinc	20	0.59	135	18.8 B	151	246	95.2	2210	49.3	26.9	1570	1410	1480	18.0 B	1.9 B
Dissolved Metals (field filtered, 0.45 um; ug/L)															
Arsenic	10	2.8	2.8 U	12.6	3.4 B	2.8 U	2.8 U	2.8 U	2.8 B	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Chromium	10	0.4	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Copper	25	0.44	0.44 U	6.0 B	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Zinc	20	0.59	15.1 B	132	383	270	6.4 B	2030	12.0 B	135	10.1 B	1990	7.4 B	0.59 U	0.59 U

U = below detection limit
B = between detection limit and reporting limit
(1) Resampling of Geiersbach well. See Section 3.3

TABLE 7

DETECTED VOC AND SVOC CONSTITUENT CONCENTRATIONS AT GEIERSBACH WELL

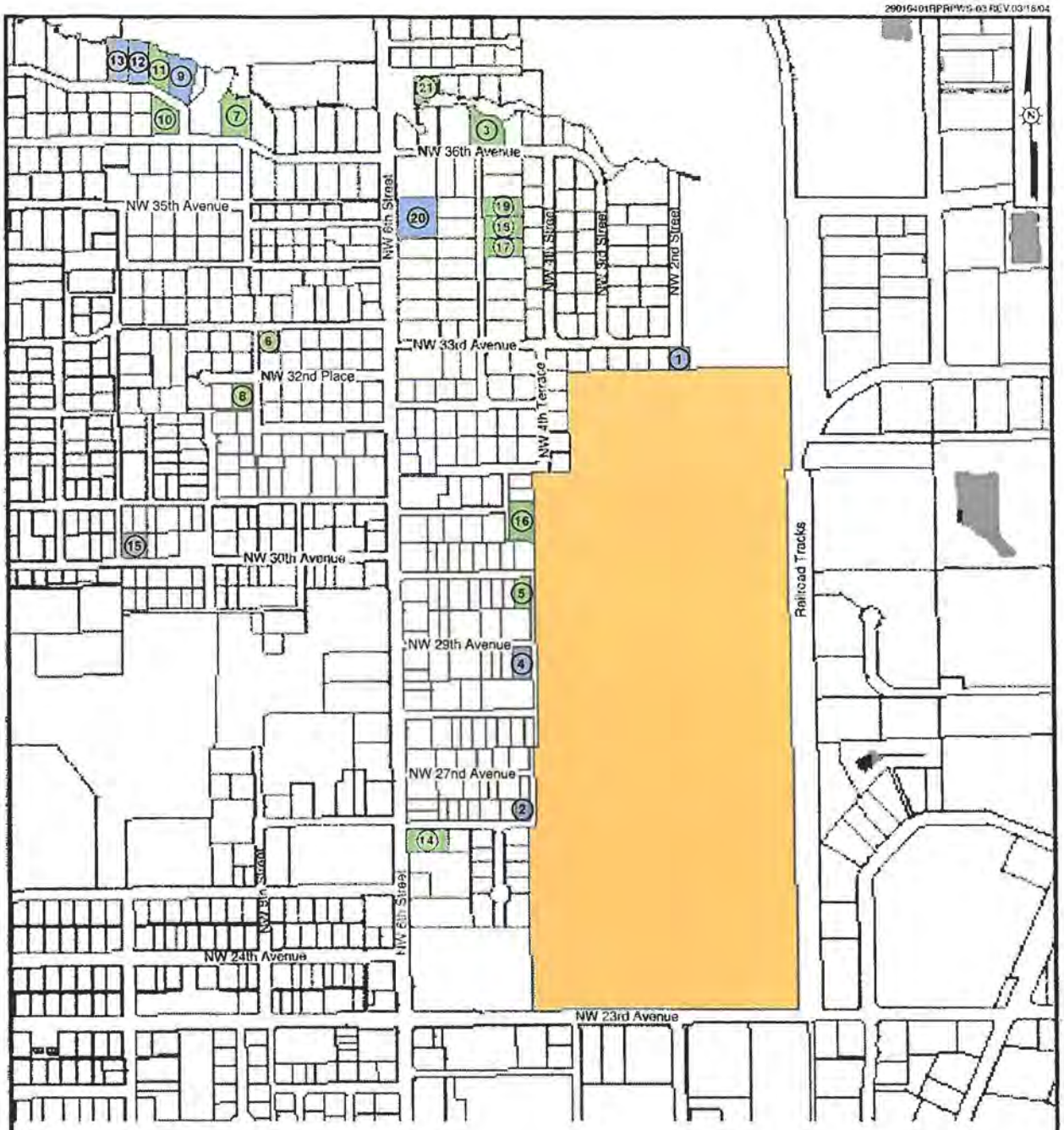
VOCs	Concentration (µg/L)		Water Quality Criteria (µg/L)
	02/18/2004	04/08/2004	
benzene	1.7	1.0	1.0[1]
ethylbenzene	0.91	0.55	700[1]
toluene	2.4	1.4	1,000[1]
xylene	2.4	ND < 1.0	10,000[1]
SVOCs			
2,4-Dimethylphenol	71.9	51.2	140[2]
2-Methylphenol	33.2	23.1	35[2]
3-, 4-Methylphenol	2.5	ND < 2.2	35, 4 [2] (35 for 3-Methylphenol, 4 for 4-Methylphenol)
Napthalene	15.3	6.0	20[2]

29016402/rpts/RePrRePrWeSa (6/4//04/rm)

(1) Florida Drinking Water Standards (MCLs)

(2) Florida Groundwater and Surface Water Cleanup Target Levels

TRC
Customer-Focused Solutions



NO.	WELL SITE ADDRESS	OWNER
1	201 NW 33rd Avenue	Clarence Magee
2	410 NW 26th Avenue	Roy Geiersbach
3	426 NW 36th Avenue	Dorothy Shields
4	437 NW 29th Avenue	James Frank O'Steen
5	437 NW 30th Avenue	Ashley Campbell
6	725 NW 33rd Avenue	Donna Mitchell
7	800 NW 36th Avenue	Richard Pla-Silva
8	805 NW 32nd Place	Jennifer Muir
9	906 NW 36th Road	Gordon Bigelow
10	911 NW 36th Road	Richard Ploch
11	912 NW 36th Road	Pamela Gilbert
12	928 NW 36th Road	Mrs. Bob Curran
13	930 NW 36th Road	Jack Motta
14	2523 NW 6th Street	Robin Evans
15	3010 NW 9th Street	John Coleman
16	3027 NW 4th Terrace	Eric Hushelpeck
17	3415 NW 5th Street	Charlie "August" Bishop
18	3425 NW 5th Street	George Swicord
19	3435 NW 5th Street	George Swicord
20	3505 NW 6th Street	Edward & Meva Moratto
21	3627 NW 6th Street	Alice Mapnee-Leitner

LEGEND

- KOPPERS SUPERFUND SITE
- SELECTED PRIVATE WELLS SAMPLED
- SELECTED PRIVATE WELLS NOT SAMPLED

0 500 1000 FEET

SCALE

LOCATIONS OF PRIVATE WELLS SAMPLED AND NOT SAMPLED

CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

TRC | FIGURE 1

APPENDIX A

LABORATORY ANALYTICAL REPORTS

Southeast
ACCUTEST.
Laboratories

03/02/04

Technical Report for

TRC

Koppers Superfund Site/Beazer-Gainesville

29016401-TA01

Accutest Job Number: F22212

Report to:

TRC
21 Technology Drive
Irvine, CA 92618

ATTN: Tom Patterson

Total number of pages in report: 23

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F22212-1: #12 CURRAN 4
2.2: F22212-1A: #12 CURRAN 10
2.3: F22212-2: BIGELOW #9 11
2.4: F22212-2A: BIGELOW #9 17
2.5: F22212-3: TRIP BLANK 18
Section 3: Misc. Forms 20
3.1: Chain of Custody 21

Sample Summary

TRC

Job No: F22212

Koppers Superfund Site/Beazer-Gainesville
Project No: 29016401-TA01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22212-1	02/16/04	11:30	LG	02/17/04	AQ	Ground Water	#12 CURRAN
F22212-1A	02/16/04	11:30	LG	02/17/04	AQ	Groundwater Filtered	#12 CURRAN
F22212-2	02/16/04	16:00	LG	02/17/04	AQ	Ground Water	BIGELOW #9
F22212-2A	02/16/04	16:00	LG	02/17/04	AQ	Groundwater Filtered	BIGELOW #9
F22212-3	02/16/04	00:00	LG	02/17/04	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0026773.D	1	02/24/04	JG	n/a	n/a	VG986
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W018955.D	1	02/25/04	ME	02/18/04	OP9788	SW990
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		49-119%
321-60-8	2-Fluorobiphenyl	78%		45-118%
1718-51-0	Terphenyl-d14	97%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	4.7 B	10	2.8	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	1.4 B	25	0.44	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	151	20	0.59	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3702
(2) Prep QC Batch: MP6392

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1A	Date Sampled:	02/16/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.4 B	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	383	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0026774.D	1	02/24/04	JG	n/a	n/a	VG986
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	100%		83-119%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W018958.D	1	02/25/04	ME	02/18/04	OP9788	SW990
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	27	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.1	ug/l	
95-48-7	2-Methylphenol	ND	5.4	2.2	ug/l	
	3&4-Methylphenol	ND	5.4	2.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	2.2	ug/l	
83-32-9	Acenaphthene	ND	5.4	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.4	1.1	ug/l	
120-12-7	Anthracene	ND	5.4	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	2.2	ug/l	
86-74-8	Carbazole	ND	5.4	1.1	ug/l	
218-01-9	Chrysene	ND	5.4	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
132-64-9	Dibenzofuran	ND	5.4	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	
206-44-0	Fluoranthene	ND	5.4	1.1	ug/l	
86-73-7	Fluorene	ND	5.4	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	2.2	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	2.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	1.1	ug/l	
129-00-0	Pyrene	ND	5.4	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	82%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		49-119%
321-60-8	2-Fluorobiphenyl	78%		45-118%
1718-51-0	Terphenyl-d14	95%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.5 B	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.64 B	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	135	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2A	Date Sampled:	02/16/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	15.1 B	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22212-3	Date Sampled:	02/16/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0026804.D	1	02/25/04	JG	n/a	n/a	VG988
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.80	1.0	0.50	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22212-3	Date Sampled:	02/16/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	98%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F22212

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 800-826-9787 949-727-7363

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville FL
PROJECT NO.: 290164.01 TA01
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION H2SO4	PRESERVATION NONE	8260b VOCs	8270 SVOC	Total Metals (As, Cr, Cu, Pb, Zn)	Dissolved Metals (As, Cr, Cu, Pb, Zn)	LAB USE ONLY
1	#12 Curran MSD	2-16-04	1130	LDL	GW	3	X			X	X				
1	" " " "	2-16-04	1138	LDL	GW	2				X		X			
1	" " " "	2-16-04	1145	LDL	GW	1			X				X		
1	" " " "	2-16-04	1200	LDL	GW	1			X					X	
2	Bigelow #9	2-16-04	1600	LDL	GW	3	X			X	X				
2	" "	2-16-04	1605	LDL	GW	2				X		X			
2	" "	2-16-04	1610	LDL	GW	1			X				X		
2	" "	2-16-04	1620	LDL	GW	1			X					X	
3	TRIP Blank	2-16-04		LDL	HQ	3	?				X				
	Line Blank														
	Line Blank														

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

VOC's Ice only N/O HCl
LDL

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Griffis LDL	12-17-04, 0825	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.0 °C

3.1 C

F22212: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22212
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1-800-828-9787/949-727-7363 FAX #:

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville FL
PROJECT NO.: 240164.01 TA01

ANALYSIS INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	8260B VOCs	8270 SVOCs	6010B Total Arsenic, Copper, Chromium	Dissolved Metals 6010B Arsenic, Copper, Chromium	LAB USE ONLY
1	#12 Curran	2-16-04	1130	LDC	GW	3	X			X	X				
2	" "	2-16-04	1134	LDC	GW	2				X		X			
3	" "	2-16-04	1145	LDC	GW	1			X				X		
4	" "	2-16-04	1200	LDC	GW	1			X					X	
5	#12 Curran MS	2-16-04	1130	LDC	GW	3				X					
6	" "	2-16-04	1134	LDC	GW	2				X					
7	" "	2-16-04	1145	LDC	GW	1			X						
8	" "	2-16-04	1200	LDC	GW	1			X						
9	" " LDC														
10	TRIP Blank	2-16-04		LDC	LIQ	3	?								
	Rec'd 02/16/04														

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☒ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

VOC's Ice only LDC

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	2-17-04 0830	[signature]	2. →	2/17/04 11:30	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 1.6 C
5.		5.				

F22212: Chain of Custody
Page 2 of 3

:TEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

'ob Number: F22212

M PATTERSON (TRC) Project: Koppers

d: 2/17/04 Time Received: 18:30 PM

:eceived: 2 Cooler Temperatures: 1.6, 2.0°C

:hod: FedEx UPS (Accutest Courier) Greyhound Delivery Other

ber:

dy Seals Intact ?	(Yes)	No	
tody Provided ?	(Yes)	No	
Bottle Label ID's ?	(Yes)	No	
's Present on all bottles ?	(Yes)	No	
Marked On COC ?	(Yes)	No	
es Intact ?	(Yes)	No	
erved Correctly ?	(Yes)	No	
ber of Containers Used ?	(Yes)	No	
mple Volume ?	(Yes)	No	
ovided ?	(Yes)	No	
n COC ?	(Yes)	No	
tact ?	(Yes)	No	N/A
atrix ?	Soil	(Water)	N/A
cores ?	0		
Field Kits ?	0		

Comments: VOA vials not preserved

Date: 2/17/04

re:

F22212: Chain of Custody
Page 3 of 3

Southeast
ACCUTEST.
Laboratories

03/02/04

Technical Report for

TRC

Koppers Superfund Site/Beazer-Gainesville

29016401-TA01

Accutest Job Number: F22188

Report to:

TRC
21 Technology Drive
Irvine, CA 92618

ATTN: Tom Patterson

Total number of pages in report: **13**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Table of Contents

Sections: 1 2 3

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F22188-1: #20 MORATTO 4
2.2: F22188-1A: #20 MORATTO 10
Section 3: Misc. Forms 11
3.1: Chain of Custody 12

Sample Summary

TRC

Job No: F22188

Koppers Superfund Site/Beazer-Gainesville
Project No: 29016401-TA01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22188-1	02/11/04	11:50	LG	02/16/04	AQ	Ground Water	#20 MORATTO
F22188-1A	02/11/04	11:50	LG	02/16/04	AQ	Groundwater Filtered	#20 MORATTO

Accutest Laboratories

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0021284.D	1	02/20/04	KW	n/a	n/a	VC924
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		86-115%
17060-07-0	1,2-Dichloroethane-D4	98%		73-126%
2037-26-5	Toluene-D8	109%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W018954.D	1	02/25/04	ME	02/18/04	OP9788	SW990
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	7.9	ug/l	
95-48-7	2-Methylphenol	ND	5.3	2.1	ug/l	
	3&4-Methylphenol	ND	5.3	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	11	ug/l	
87-86-5	Pentachlorophenol	ND	26	11	ug/l	
108-95-2	Phenol	ND	5.3	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.3	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	1.1	ug/l	
120-12-7	Anthracene	ND	5.3	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.3	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	2.1	ug/l	
86-74-8	Carbazole	ND	5.3	1.1	ug/l	
218-01-9	Chrysene	ND	5.3	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.3	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.3	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.3	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.3	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.3	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.3	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.3	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.3	1.1	ug/l	
86-73-7	Fluorene	ND	5.3	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.3	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
78-59-1	Isophorone	ND	5.3	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	1.1	ug/l	
129-00-0	Pyrene	ND	5.3	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	85%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		49-119%
321-60-8	2-Fluorobiphenyl	80%		45-118%
1718-51-0	Terphenyl-d14	95%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1	Date Sampled:	02/11/04
Matrix:	AQ - Ground Water	Date Received:	02/16/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.3 B	10	2.8	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	18.5 B	25	0.44	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	49.3	20	0.59	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3702
(2) Prep QC Batch: MP6391

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#20 MORATTO		
Lab Sample ID:	F22188-1A	Date Sampled:	02/11/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/16/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	12.0 B	20	0.59	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3702
(2) Prep QC Batch: MP6391

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22188
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1-800-828-9797 / 949-727-7363

FACILITY INFORMATION

PROJECT NAME: Keppers
LOCATION: Gainesville
PROJECT NO.: 290164.01 TA01
FAX #:

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION MeOH	PRESERVATION HNO3	PRESERVATION NaOH	PRESERVATION NONE	8260b VOC's	8270 SVOCs	Total Metals Arsenic, Copper, Chromium + Zinc	Dissolved Metals Arsenic, Copper, Chromium Zinc	LAB USE ONLY
1	#20 Morgto 3506 NW 6TH ST	2-11-04	1150	LDC	GW	3						X				
			1154		GW	2							X			
			1202		GW	1								X		
			1210		GW	1									X	
	#4 O'Steen 437 NW 29TH Ave	2-[illegible]-04			GW	3						X				
					GW	2							X			
	NO SAMPLES				GW	1										
					GW	1										
	TRIP Blank	2-[illegible]-04			LIQ	3						X				
	TRIP Blank	2-11-04			LIQ	3						X				

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Patterson	2-16-04/1249	1. Courier COC	2. W Cooper	2/16/04-1530	
3.		3.	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ 2.6 °C TEMPERATURE

3

F22188: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F22188

Client: TRC Project: Koppers

Date Received: 02/16/04 Time Received: 1530

# of Coolers Received: 1 Cooler Temperatures: 2.6°

Delivery Method: FedEx UPS (Accutest Courier) Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?			
Number of Soil Field Kits ?			

Summary of Comments:

Signature: Date: 02/16/04

Review Signature:

ASBD 12/30/03

F22188: Chain of Custody
Page 2 of 2

Southeast
ACCUTEST.
Laboratories

02/24/04

Technical Report for

TRC

Koppers Superfund Site/Beazer-Gainesville

32811

Accutest Job Number: F22136

Report to:

TRC
21 Technology Drive
Irvine, CA 92618

ATTN: Tom Patterson

Total number of pages in report: 20

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F22136-1: MAGEE #1 4
2.2: F22136-1A: MAGEE #1 10
2.3: F22136-2: DUP A "BLIND" 11
2.4: F22136-2A: DUP A "BLIND" 17
Section 3: Misc. Forms 18
3.1: Chain of Custody 19

Sample Summary

TRC

Job No: F22136

Koppers Superfund Site/Beazer-Gainesville
Project No: 32811

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F22136-1	02/10/04	12:30	LDG	02/12/04	AQ	Ground Water	MAGEE #1
F22136-1A	02/10/04	12:30	LDG	02/12/04	AQ	Groundwater Filtered	MAGEE #1
F22136-2	02/10/04	00:00	LDG	02/12/04	AQ	Ground Water	DUP A "BLIND"
F22136-2A	02/10/04	00:00	LDG	02/12/04	AQ	Groundwater Filtered	DUP A "BLIND"

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B020063.D	1	02/19/04	KW	n/a	n/a	VB876
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020583.D	1	02/20/04	ME	02/17/04	OP9773	SL1109
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	27	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.1	ug/l	
95-48-7	2-Methylphenol	ND	5.4	2.2	ug/l	
	3&4-Methylphenol	ND	5.4	2.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	2.2	ug/l	
83-32-9	Acenaphthene	ND	5.4	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.4	1.1	ug/l	
120-12-7	Anthracene	ND	5.4	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	2.2	ug/l	
86-74-8	Carbazole	ND	5.4	1.1	ug/l	
218-01-9	Chrysene	ND	5.4	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
132-64-9	Dibenzofuran	ND	5.4	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	
206-44-0	Fluoranthene	ND	5.4	1.1	ug/l	
86-73-7	Fluorene	ND	5.4	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	2.2	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	2.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	1.1	ug/l	
129-00-0	Pyrene	ND	5.4	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		19-90%
4165-62-2	Phenol-d5	30%		10-68%
118-79-6	2,4,6-Tribromophenol	79%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	73%		45-118%
1718-51-0	Terphenyl-d14	89%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	3.9 B	25	0.44	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	2210	20	0.59	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3693
(2) Prep QC Batch: MP6375

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MAGEE #1		
Lab Sample ID:	F22136-1A	Date Sampled:	02/10/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/12/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	2030	20	0.59	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3693
(2) Prep QC Batch: MP6375

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B020064.D	1	02/19/04	KW	n/a	n/a	VB876
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020584.D	1	02/20/04	ME	02/17/04	OP9773	SL1109
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.5	ug/l	
95-48-7	2-Methylphenol	ND	5.0	2.0	ug/l	
	3&4-Methylphenol	ND	5.0	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.0	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	2.0	ug/l	
86-74-8	Carbazole	ND	5.0	1.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		19-90%
4165-62-2	Phenol-d5	29%		10-68%
118-79-6	2,4,6-Tribromophenol	78%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		49-119%
321-60-8	2-Fluorobiphenyl	74%		45-118%
1718-51-0	Terphenyl-d14	89%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2	Date Sampled:	02/10/04
Matrix:	AQ - Ground Water	Date Received:	02/12/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	2.8 B	25	0.44	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	1410	20	0.59	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3693
(2) Prep QC Batch: MP6375

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP A "BLIND"		
Lab Sample ID:	F22136-2A	Date Sampled:	02/10/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/12/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	1990	20	0.59	ug/l	1	02/20/04	02/23/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3693
(2) Prep QC Batch: MP6375

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F22136

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive (92618)
CITY: Irvine STATE: CA ZIP: ~~92604~~ 7703
SEND REPORT TO: 949 727
PHONE #: 800-828-9787
FAX #:

FACILITY INFORMATION

PROJECT NAME: Florida 29016401 Task 01
LOCATION: Magee #1
PROJECT NO.: 701 NW 33rd Ave
29016401

ANALYTICAL INFORMATION

8260 VOCs
8270 SVOCs
6010B Total
6010B Filtered
Metals: Arsenic, Copper, Chromium, Zinc

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION MeOH	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	8260 VOCs	8270 SVOCs	6010B Total	6010B Filtered	Metals: Arsenic, Copper, Chromium, Zinc	LAB USE ONLY
1	Magee #1	2-10-04	1230	LDL	GW	2					X		X				
		2-10-04	1240	LDL	GW	3	X					X					
		2-10-04	1255	LDL	GW	1			X					X			
		2-10-04	1300	LDL	GW	1			X						X		
2	Dup A "Blind"	2-10-04	Blind	LDL	GW	2					X		X				
		2-10-04	Blind	LDL	GW	3	X					X					
		2-10-04	Blind	LDL	GW	1			X					X			
		2-10-04	Blind	LDL	GW	1			X						X		

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY: Tom Patterson

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

call Tom Patterson 1-800-828-9787 with data. "Questions

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Patterson	12-10-04	1. K. Chlor	2.	2/12/04 17:00	2. Jeff Nichols
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.	1800 hrs	3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE
5.		6.				10° C

3.1 C

F22136: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F22136

Client: TRC Project: Florida 29016401 Task 01

Date Received: 2/12/04 Time Received: 17:00

# of Coolers Received: 1 Cooler Temperatures: 1.0°C

Delivery Method: FedEx UPS (Accutest Courier) Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	Yes	(No)	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	Yes	No	(N/A)
Trip Blank Matrix ?	Soil	Water	(N/A)
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments:

Signature: Jeff Tuthill Date: 2/13/04

Review Signature: Dan Watkins

ASBD 12/30/03

F22136: Chain of Custody
Page 2 of 2

Southeast
ACCUTEST.
Laboratories

03/02/04

Technical Report for

TRC

Koppers Superfund Site/Beazer-Gainesville

29016401-TA01

Accutest Job Number: F22212

Report to:

TRC
21 Technology Drive
Irvine, CA 92618

ATTN: Tom Patterson

Total number of pages in report: 23

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: F22212-1: #12 CURRAN 4
2.2: F22212-1A: #12 CURRAN 10
2.3: F22212-2: BIGELOW #9 11
2.4: F22212-2A: BIGELOW #9 17
2.5: F22212-3: TRIP BLANK 18
Section 3: Misc. Forms **20**
3.1: Chain of Custody 21

Sample Summary

TRC

Job No: F22212

Koppers Superfund Site/Beazer-Gainesville
Project No: 29016401-TA01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22212-1	02/16/04	11:30	LG	02/17/04	AQ	Ground Water	#12 CURRAN
F22212-1A	02/16/04	11:30	LG	02/17/04	AQ	Groundwater Filtered	#12 CURRAN
F22212-2	02/16/04	16:00	LG	02/17/04	AQ	Ground Water	BIGELOW #9
F22212-2A	02/16/04	16:00	LG	02/17/04	AQ	Groundwater Filtered	BIGELOW #9
F22212-3	02/16/04	00:00	LG	02/17/04	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0026773.D	1	02/24/04	JG	n/a	n/a	VG986
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W018955.D	1	02/25/04	ME	02/18/04	OP9788	SW990
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		49-119%
321-60-8	2-Fluorobiphenyl	78%		45-118%
1718-51-0	Terphenyl-d14	97%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	4.7 B	10	2.8	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	1.4 B	25	0.44	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	151	20	0.59	ug/l	1	02/26/04	02/27/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3702
(2) Prep QC Batch: MP6392

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#12 CURRAN		
Lab Sample ID:	F22212-1A	Date Sampled:	02/16/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.4 B	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	383	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0026774.D	1	02/24/04	JG	n/a	n/a	VG986
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	100%		83-119%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W018958.D	1	02/25/04	ME	02/18/04	OP9788	SW990
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	27	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.1	ug/l	
95-48-7	2-Methylphenol	ND	5.4	2.2	ug/l	
	3&4-Methylphenol	ND	5.4	2.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	2.2	ug/l	
83-32-9	Acenaphthene	ND	5.4	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.4	1.1	ug/l	
120-12-7	Anthracene	ND	5.4	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	2.2	ug/l	
86-74-8	Carbazole	ND	5.4	1.1	ug/l	
218-01-9	Chrysene	ND	5.4	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
132-64-9	Dibenzofuran	ND	5.4	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	
206-44-0	Fluoranthene	ND	5.4	1.1	ug/l	
86-73-7	Fluorene	ND	5.4	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	2.2	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	2.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	1.1	ug/l	
129-00-0	Pyrene	ND	5.4	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	82%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		49-119%
321-60-8	2-Fluorobiphenyl	78%		45-118%
1718-51-0	Terphenyl-d14	95%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2	Date Sampled:	02/16/04
Matrix:	AQ - Ground Water	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.5 B	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.64 B	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	135	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	BIGELOW #9		
Lab Sample ID:	F22212-2A	Date Sampled:	02/16/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/17/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	15.1 B	20	0.59	ug/l	1	02/27/04	03/01/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3704
(2) Prep QC Batch: MP6395

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22212-3	Date Sampled:	02/16/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0026804.D	1	02/25/04	JG	n/a	n/a	VG988
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.80	1.0	0.50	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22212-3	Date Sampled:	02/16/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/17/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	98%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22212
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 800-828-9787 949-727-7363

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville FL
PROJECT NO.: 290164.01 TA01
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	8260B VOCs	8270 SVOC	6010 Total Metals Arsenic, Copper, Chromium	6010 Dissolved Metals Arsenic, Copper, Chromium								LAB USE ONLY
1	#12 Curran MSD	2-16-04	1130	LDL	GW	3	X			X	X			X								
1	" " " "	2-16-04	1135	LDL	GW	2				X		X										
1	" " " "	2-16-04	1145	LDL	GW	1			X				X									
1	" " " "	2-16-04	1200	LDL	GW	1			X					X								
2	Bigelow #9	2-16-04	1600	LDL	GW	3	X			X	X											
2	" "	2-16-04	1605	LDL	GW	2				X		X										
2	" "	2-16-04	1610	LDL	GW	1			X				X									
2	" "	2-16-04	1620	LDL	GW	1			X					X								
3	TRIP Blank	2-16-04		LDL	HQ	3	?				X											
	Lime Blank																					
	Lime Blank																					

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [X] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

VOC's Ice only NO HCl
LDL

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Gaffis LDL	12-17-04 0800	1.	2.		2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 2.0 C
5.		5.				

F22212: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22212
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1-800-828-9787/949-727-7363

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville FL
PROJECT NO.: 290164.01 TA01

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION H2SO4	PRESERVATION NONE	8260B VOCs	8270 SVOCs	6010B Total Arsenic, Copper, Chromium	Dissolved Metals (6010B Arsenic, Copper, Chromium)	LAB USE ONLY
1	#12 Curran	2-16-04	1130	LDC	GW	3	X			X	X				
1	" "	2-16-04	1138	LDC	GW	2				X		X			
1	" "	2-16-04	1145	LDC	GW	1			X				X		
1	" "	2-16-04	1200	LDC	GW	1			X					X	
1	#12 Curran MS	2-16-04	1130	LDC	GW	3				X					
1	" "	2-16-04	1138	LDC	GW	2				X					
1	" "	2-16-04	1145	LDC	GW	1			X						
1	" "	2-16-04	1200	LDC	GW	1			X						
	~~"~~ LDC														
3	TRIP Blank	2-16-04		LDC	LIQ	3	?								
	RSP 02/16/04														

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☒ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

VOC's Ice only LDC

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY-SAMPLER:	DATE-TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Patterson	2-17-04 0830	1. Carla	2. →	2/17/04 16:30	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE
5.		5.				1.6 °C

F22212: Chain of Custody
Page 2 of 3

TEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Job Number: F22212

M PATTERSON (TRC) Project: Koppers

d: 2/17/04 Time Received: 18:30 PM

Received: 2 Cooler Temperatures: 1.6, 2.0°C

thod: FedEx UPS (Accutest Courier) Greyhound Delivery Other

ber:

dy Seals Intact ?	(Yes)	No	
tody Provided ?	(Yes)	No	
Bottle Label ID's ?	(Yes)	No	
's Present on all bottles ?	(Yes)	No	
Marked On COC ?	(Yes)	No	
es Intact ?	(Yes)	No	
erved Correctly ?	(Yes)	No	
ber of Containers Used ?	(Yes)	No	
mple Volume ?	(Yes)	No	
ovided ?	(Yes)	No	
n COC ?	(Yes)	No	
tact ?	(Yes)	No	N/A
atrix ?	Soil	(Water)	N/A
scores ?	Ø		
Field Kits ?	Ø		

Comments: VOA vials not preserved

Date: 2/17/04

ure:

F22212: Chain of Custody
Page 3 of 3

Southeast
ACCUTEST.
Laboratories

03/08/04

Technical Report for

TRC

Koppers Superfund Site/Beazer-Gainesville

29016401 TA01

Accutest Job Number: F22298

Report to:

TRC
21 Technology Drive
Irvine, CA 92618

ATTN: Tom Patterson

Total number of pages in report: **84**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3

Table of Contents

Section 1: Sample Summary 3
Section 2: Sample Results 5
2.1: F22298-1: #15 CRISSMAN 5
2.2: F22298-1A: #15 CRISSMAN 11
2.3: F22298-2: #4 O'STEEN 12
2.4: F22298-2A: #4 O'STEEN 18
2.5: F22298-3: TRIP BLANK 19
2.6: F22298-4: DUP B 21
2.7: F22298-4A: DUP B 27
2.8: F22298-5: FIELD BLANK A 28
2.9: F22298-5A: FIELD BLANK A 34
2.10: F22298-6: FIELD BLANK 35
2.11: F22298-7: EQUIPMENT BLANK 37
2.12: F22298-7A: EQUIPMENT BLANK 43
2.13: F22298-8: TRIP BLANK 44
2.14: F22298-9: #13 MOTTA 46
2.15: F22298-9A: #13 MOTTA 52
2.16: F22298-10: GEIERS BACH #2 53
2.17: F22298-10A: GEIERS BACH #2 59
2.18: F22298-11: TRIP BLANK 60
2.19: F22298-12: ITW-10 62
2.20: F22298-12A: ITW-10 68
2.21: F22298-13: ITW-21 69
2.22: F22298-13A: ITW-21 75
2.23: F22298-14: TRIP BLANK 76
Section 3: Misc. Forms 78
3.1: Chain of Custody 79

Sample Summary

TRC

Job No: F22298

Koppers Superfund Site/Beazer-Gainesville
Project No: 29016401 TA01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22298-1	02/17/04	14:00	LG	02/20/04	AQ	Ground Water	#15 CRISSMAN
F22298-1A	02/17/04	14:00	LG	02/20/04	AQ	Groundwater Filtered	#15 CRISSMAN
F22298-2	02/17/04	09:45	LG	02/20/04	AQ	Ground Water	#4 O'STEEN
F22298-2A	02/17/04	09:45	LG	02/20/04	AQ	Groundwater Filtered	#4 O'STEEN
F22298-3	02/17/04	00:00	LG	02/20/04	AQ	Trip Blank Water	TRIP BLANK
F22298-4	02/17/04	00:00	LG	02/20/04	AQ	Ground Water	DUP B
F22298-4A	02/17/04	00:00	LG	02/20/04	AQ	Groundwater Filtered	DUP B
F22298-5	02/17/04	10:10	LG	02/20/04	AQ	Field Blank Water	FIELD BLANK A
F22298-5A	02/17/04	10:10	LG	02/20/04	AQ	Groundwater Filtered	FIELD BLANK A
F22298-6	02/17/04	00:00	LG	02/20/04	AQ	Field Blank Water	FIELD BLANK
F22298-7	02/19/04	08:30	LG	02/20/04	AQ	Equipment Blank	EQUIPMENT BLANK
F22298-7A	02/19/04	08:30	LG	02/20/04	AQ	Groundwater Filtered	EQUIPMENT BLANK
F22298-8	02/19/04	00:00	LG	02/20/04	AQ	Trip Blank Water	TRIP BLANK

Sample Summary
(continued)

TRC

Job No: F22298

Koppers Superfund Site/Beazer-Gainesville
Project No: 29016401 TA01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22298-9	02/18/04	15:20	LG	02/20/04	AQ	Ground Water	#13 MOTTA
F22298-9A	02/18/04	15:20	LG	02/20/04	AQ	Groundwater Filtered	#13 MOTTA
F22298-10	02/18/04	10:06	LG	02/20/04	AQ	Ground Water	GEIERS BACH #2
F22298-10A	02/18/04	10:06	LG	02/20/04	AQ	Groundwater Filtered	GEIERS BACH #2
F22298-11	02/18/04	00:00	LG	02/20/04	AQ	Trip Blank Water	TRIP BLANK
F22298-12	02/19/04	11:48	LG	02/20/04	AQ	Ground Water	ITW-10
F22298-12A	02/19/04	11:48	LG	02/20/04	AQ	Groundwater Filtered	ITW-10
F22298-13	02/19/04	15:55	LG	02/20/04	AQ	Ground Water	ITW-21
F22298-13A	02/19/04	15:55	LG	02/20/04	AQ	Groundwater Filtered	ITW-21
F22298-14	02/19/04	00:00	LG	02/20/04	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020155.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	107%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	107%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020735.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	86%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	81%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	13.2	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	7.3 B	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	18.8 B	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#15 CRISSMAN		
Lab Sample ID:	F22298-1A	Date Sampled:	02/17/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	12.6	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	6.0 B	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	132	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020156.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	110%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	104%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020736.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	7.9	ug/l	
95-48-7	2-Methylphenol	ND	5.3	2.1	ug/l	
	3&4-Methylphenol	ND	5.3	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	11	ug/l	
87-86-5	Pentachlorophenol	ND	26	11	ug/l	
108-95-2	Phenol	ND	5.3	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.3	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	1.1	ug/l	
120-12-7	Anthracene	ND	5.3	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.3	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	2.1	ug/l	
86-74-8	Carbazole	ND	5.3	1.1	ug/l	
218-01-9	Chrysene	ND	5.3	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.3	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.3	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.3	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.3	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.3	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	5.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.3	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.3	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.3	1.1	ug/l	
86-73-7	Fluorene	ND	5.3	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.3	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
78-59-1	Isophorone	ND	5.3	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	1.1	ug/l	
129-00-0	Pyrene	ND	5.3	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	87%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		49-119%
321-60-8	2-Fluorobiphenyl	81%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	1.7 B	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	1570	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#4 O'STEEN		
Lab Sample ID:	F22298-2A	Date Sampled:	02/17/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	10.1 B	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-3	Date Sampled:	02/17/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B020157.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.86	1.0	0.50	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-3	Date Sampled:	02/17/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	108%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	105%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020158.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	112%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	105%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020737.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.8	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate [a]	ND	10	10	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	87%		45-118%
1718-51-0	Terphenyl-d14	96%		46-135%

(a) Elevated reporting limits due to matrix interference.

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4	Date Sampled:	02/17/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	1480	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP B		
Lab Sample ID:	F22298-4A	Date Sampled:	02/17/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	7.4 B	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B020159.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	3.2	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	111%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	107%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020738.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.5	ug/l	
95-48-7	2-Methylphenol	ND	5.0	2.0	ug/l	
	3&4-Methylphenol	ND	5.0	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.0	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	2.0	ug/l	
86-74-8	Carbazole	ND	5.0	1.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		19-90%
4165-62-2	Phenol-d5	30%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		49-119%
321-60-8	2-Fluorobiphenyl	82%		45-118%
1718-51-0	Terphenyl-d14	91%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.55 B	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	1.9 B	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK A		
Lab Sample ID:	F22298-5A	Date Sampled:	02/17/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	0.59 U	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F22298-6	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B020160.D	1	02/24/04	KW	n/a	n/a	VB879
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F22298-6	Date Sampled:	02/17/04
Matrix:	AQ - Field Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	110%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020207.D	1	02/26/04	KW	n/a	n/a	VB881
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	118%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	104%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020724.D	1	02/28/04	ME	02/26/04	OP9839	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.7	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		19-90%
4165-62-2	Phenol-d5	25%		10-68%
118-79-6	2,4,6-Tribromophenol	77%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		49-119%
321-60-8	2-Fluorobiphenyl	64%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7	Date Sampled:	02/19/04
Matrix:	AQ - Equipment Blank	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.57 B	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	18.0 B	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	F22298-7A	Date Sampled:	02/19/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	0.59 U	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-8	Date Sampled:	02/19/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0021499.D	1	03/02/04	KW	n/a	n/a	VC932
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-8	Date Sampled:	02/19/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	101%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020175.D	1	02/25/04	KW	n/a	n/a	VB880
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	115%		73-126%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020739.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		19-90%
4165-62-2	Phenol-d5	29%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		49-119%
321-60-8	2-Fluorobiphenyl	80%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	3.5 B	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	26.9	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	#13 MOTTA		
Lab Sample ID:	F22298-9A	Date Sampled:	02/18/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	135	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

ACCUTEST Laboratories

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	B020176.D	1	02/25/04	KW	n/a	n/a	VB880
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	1.7	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.91	1.0	0.50	ug/l	J
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.4	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	2.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	115%		73-126%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L020740.D	1	02/28/04	ME	02/24/04	OP9820	SL1115
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	71.9	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.5	ug/l	
95-48-7	2-Methylphenol	33.2	5.0	2.0	ug/l	
	3&4-Methylphenol	2.5	5.0	2.0	ug/l	J
88-75-5	2-Nitrophenol	ND	5.0	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.0	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	2.0	ug/l	
86-74-8	Carbazole	ND	5.0	1.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	15.3	5.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		19-90%
4165-62-2	Phenol-d5	29%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		49-119%
321-60-8	2-Fluorobiphenyl	80%		45-118%
1718-51-0	Terphenyl-d14	89%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10	Date Sampled:	02/18/04
Matrix:	AQ - Ground Water	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	246	20	0.59	ug/l	1	03/02/04	03/03/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3707
(2) Prep QC Batch: MP6411

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	GEIERS BACH #2		
Lab Sample ID:	F22298-10A	Date Sampled:	02/18/04
Matrix:	AQ - Groundwater Filtered	Date Received:	02/20/04
		Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	0.40 U	10	0.40	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Copper	0.44 U	25	0.44	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]
Zinc	270	20	0.59	ug/l	1	03/03/04	03/04/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3708
(2) Prep QC Batch: MP6413

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-11	Date Sampled:	02/18/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0021500.D	1	03/02/04	KW	n/a	n/a	VC932
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	1.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22298-11	Date Sampled:	02/18/04
Matrix:	AQ - Trip Blank Water	Date Received:	02/20/04
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Koppers Superfund Site/Beazer-Gainesville		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	101%		83-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22298
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1800-824-9787
949-727-7363

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville, FL
PROJECT NO.: 29016401 TA01
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCL	PRESERVATION NONE	PRESERVATION H2SO4	PRESERVATION HNO3	8260 VOCs	8270 SVOCs	6010 Total metals Arsenic, Copper, Chromium, Zinc	6010 Dissolved metals Arsenic, Copper, Chromium, Zinc
	#15 CRISSMAN	2-17-04	1400	LDL	GW	3				X	X			
	" "	2-17-04	1402	LDL	GW	2				X		X		
1	" "	2-17-04	1403	LDL	GW	1			X				X	
	" "	21704	1405	LDL	GW	1			X					X
	#4 O'STEEN	2-17-04	0945	LDL	GW	3				X	X			
	" "	2-17-04	0951	LDL	GW	2				X		X		
2	~~Line Blank~~	2-17-04	~~0955~~	~~LDL~~										
	" "	2-17-04	1005	LDL	GW	1			X					X
3	TRIP Blank	2-17-04	~~0955~~	LDL	LIQ	2	3				X			
2	#4 O'STEEN	2-17-04	0955	LDL	GW	1							X	
	Line Blank													

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

DATA TURNAROUND INFORMATION

☐ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER _____
APPROVED BY: _____ _____

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS

TRIP Blank has no Time assinged LDL
Sulfid odor LDL

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	2-18-04 1080	1.	2. Accutest Courier	2/20/04 1235	2. [signature]
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE / TEMPERATURE
5.		5.		☐ 1.2 2.2 2.2 1.8 2	_____ C

3.1 3

F22298: Chain of Custody
Page 1 of 6

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F822298
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1-800-828-7787 / 949-727-7343

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville, FL
PROJECT NO.: 890164.01 TA01
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION MeOH	PRESERVATION HNO3	PRESERVATION NONE	8260 VOCs	8270 SVOC	Total Metals 6010 Arsenic, Copper, Chromium Zinc	Dissolve Metals 6010 Arsenic, Copper, Chromium Zinc
4	Dup B	2-17-04	—	LDC	GW	3	X	X		X	X			
	" "	2-17-04	—	LDC	GW	2				X		X		
	" "	2-17-04	—	LDC	GW	1			X				X	
	" "	2-17-04	—	LDC	GW	1			X					X
5	Field Blank A	2-17-04	1010	LDC	DIW	3	X				X			
		2-17-04	1015	LDC	DIW	2				X		X		
		2-17-04	1015	LDC	DIW	1			X				X	
		2-17-04	1015	LDC	DIW	1			X					X
6	Field Blank	2-17-04	—	LDC	AQ	2	?				X			

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☒ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

VOC Samples are NOT preserved with HCL For DUP B set

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	2-18-04/0800	1.	2. Accutest Courier	2-20-04 12:30	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C
5.		5.				

F22298: Chain of Custody
Page 2 of 6

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22298
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: Tom Patterson
ADDRESS: TRC
CITY: 21 Technology Drive STATE: Irvine ZIP: CA 92618
SEND REPORT TO: 949-727-7363
PHONE #: 800-478-9787
FAX #:

FACILITY INFORMATION
PROJECT NAME: Keepers
LOCATION: Gainesville FL
PROJECT NO.: 29016401 TA01

ANALYTICAL INFORMATION
8260 VOCs
8270 SVOCs
6010 Total Metals - Arsenic, Copper, Zinc
6010 Dissolved Metals - Arsenic, Copper, Chromium

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION	8260 VOCs	8270 SVOCs	6010 Total Metals - Arsenic, Copper, Zinc	6010 Dissolved Metals - Arsenic, Copper, Chromium	LAB USE ONLY
	Equipment Blank	2-14-04	0830	LDL	DI	3	HCl	X				
7	" "	2-14-04	0850	LDL	DI	2	HCl	X	X			
	" "	2-14-04		LDL	DI	1	HNO3			X		
	" "	2-19-04		LDL	DI	1	HNO3				X	
8	Trip Blank	2-19-04		LIQ	?	2		X				

DATA TURNAROUND INFORMATION
- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [X] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS
DI Water from Accutest

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tod Griffin 2-19-04 2100		1.	2. Accutest Courier	2/20/04 1230	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C
5.		5.				

3.1 3

F22298: Chain of Custody
Page 3 of 6

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22298
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 1-800-828-9787 / 949-727-7367
FAX #:

FACILITY INFORMATION

PROJECT NAME: Kappers
LOCATION:
PROJECT NO.: 29016401 TA01

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	8260 VOCs	8270 SVOCs	6010 Total Metals Copper, Chromium, Arsenic, Zinc	6010 Dissolve Metals copper, chromium, Arsenic, Zinc	LAB USE ONLY
9	#13 MOTTA	2-18-04	1520	LDL	GW	3				X	X				
	" "	2-18-04	1525	LDL	GW	2				X		X			
	" "	2-18-04	1526	LDL	GW	1		X					X		
	" "	2-18-04	1530	LDL	GW	1		X						X	
10	GeiersBach #2	2-18-04	1006	LDL	GW	3				X	X				
	" "	2-18-04	1016	LDL	GW	2				X		X			
	" "	2-18-04	1016	LDL	GW	1		X					X		
	" "	2-18-04	1022	LDL	GW	1		X						X	
11	TRIP BLANK	2-18-04	—	LDL	LIQ	2					X				

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

☐ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER _____
APPROVED BY: _____
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Bak	2-19-04 2120	1.	2. Accutest Courier	2/20/04 AM	2
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C
5.		5.				

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F22298
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tom Patterson
COMPANY: TRC
ADDRESS: 21 Technology Drive
CITY: Irvine STATE: CA ZIP: 92618
SEND REPORT TO:
PHONE #: 800-828-9787 949-727-7363 FAX #:

FACILITY INFORMATION

PROJECT NAME: Koppers
LOCATION: Gainesville FL
PROJECT NO.: 290164.01 TA01

ANALYTICAL INFORMATION

8260 VOCs; 8270 SVOCs; 6010 Total Metals; Arsenic, Chromium, Lead, Zinc; 6010 Dissolve metals; Chromium, Arsenic, Copper, Zinc

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: HCl	HNO3	H2SO4	NONE	8260 VOCs	8270 SVOCs	6010 Total Metals	Arsenic, Chromium, Lead, Zinc	6010 Dissolve metals	Chromium, Arsenic, Copper, Zinc	LAB USE ONLY
	ITW-10	2-19-04	1148	LDL	GW	3				X	X						
			1201		GW	2				X		X					
12			1216		GW	1			X				X				
			1224		GW	1			X						X		
	ITW-21	2-19-04	1555		GW	3				X	X						
			1556		GW	2				X	X	X					
13			1602		GW	1			X				X				
			1610		GW	1			X						X		
14	TRIP Blank	2-19-04			~~GW~~	~~2~~	LDL				X						
						2	?										

DATA TURNAROUND INFORMATION

- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [X] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Tom Patterson	2-19-04 0100 pm	1.	2. Accutest (courier)	2/20/04 1205	2. Ann Watkins
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C
5.		5.				

3.1 3

F22298: Chain of Custody
Page 5 of 6

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F22298

Client: TRC Project: Koppers

Date Received: 2/20/04 Time Received: 1235

# of Coolers Received: 5 Cooler Temperatures: 1.2, 2.2, 2.2, 1.8, 2.2

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	Yes	No	
Chain of Custody Provided ?	Yes	No	
COC Match Bottle Label ID's ?	Yes	No	
Sample Labels Present on all bottles ?	Yes	No	
All Analyses Marked On COC ?	Yes	No	
Are All Bottles Intact ?	Yes	No	
Samples Preserved Correctly ?	Yes	No	
Correct Number of Containers Used ?	Yes	No	
Sufficient Sample Volume ?	Yes	No	
Trip Blank Provided ?	Yes	No	
Trip Blank on COC ?	Yes	No	
Trip Blank Intact ?	Yes	No	N/A
Trip Blank Matrix ?	Soil	Water	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments: NOTE ONE TB per cooler
Vials for Sample #4 (DUPB) unpreserved.
Only two vials for sample #6 (Field Blank) and there is a ? as to preservation.

Signature: [signature] Date: 2/20/04

Review Signature: [signature]

ASBD 12/30/03

F22298: Chain of Custody
Page 6 of 6

APPENDIX B

FIELD SAMPLING LOGS

APPENDIX B

Well/Location 406 NW 36TH Road

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location: Bigelow #9
Project No.: 29016401 TA01	Personnel: Lon Griffith, Dave Vitro
#03019 Instruments Mp-20	Other:
Temperature: Fac OK	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity: cal check 2ppt	
pH: cal check .1 units High	2" well .163 gallons per foot
ORP: — OK	4" well .65 gallons per foot
~85'	6" well 1.5 gallons per foot
Purge volume Calculation and well diameter	8" well 2.6 gallons per foot
42 Tank + 41 gal = 3 gallons	12" well 5.81 gallons per foot

GENERAL						
Well ID Bigelow #9						
Water Source GW	Well Use Irrigation					
Date 2-16-04						
Time 1500	15:23	15:30	15:35	15:40	15:45	1550
SAMPLING CONDITIONS						
Sampling Method	(Pump) or Bailer after three well casing volumes					
Depth Sample Taken	? ft					
Well Depth bgs (TD)	~85' ft					
Water Level bpvc (WL)	? ft	- ft stickup =		ft bgs		
Recharge/Discharge	?					
Appearance	clear	clear	clear	clear	clear	
FIELD MEASUREMENTS AND ANALYSIES						
Temperature (°C)	20.33	21.46	21.36	21.37	21.68/21.51	21.77
Elec Cond ~~(µS/cm)~~ ms/cm	0.234	0.235	0.230	0.229	0.224	0.222
PH	7.50	7.68	7.70	7.68	7.64	7.64
ORP (mV)	-4	-45	-58	-59	-59	-60
Volume Removed (gal)	~15 g	~25	40	20	20	20
Cum. Volume (gal)	~15 g	40	80	100	120	140
SAMPLES COLLECTED AND TREATMENT						

8260b Volatile Organic Compounds	1600	COMMENTS: 42 gal Pump Tank Samples:
8270 Semi-Volatile Organic Compounds	1605	Installed well equipment Starlight Jet Pump Well installed in 1956
6010b – Arsenic & Zinc Total and Dissolved	1610 1620	

~~All ok~~

~~1-14 Papers~~ NO LOG ENTRY

Lon Griffith 2-16-04

Sampler's Signature Date

DO 5.84 28.23 21.4 20.5 20.8 19.8

Turbity 3.16 0.270.75 0.67 0.28 .16

John CRISSman

APPENDIX B

Well/Location ~~3~~ 3010 NW 4TH Terrace

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location:
Project No.: 29016401 TA01	Personnel: LDG DV
MICRO Basics Instruments MP20 Flowcell	Other:
Temperature: F0309	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity:	
pH:	
ORP:	2" well .163 gallons per foot
Purge volume Calculation and well diameter	4" well .65 gallons per foot 6" well 1.5 gallons per foot 8" well 2.6 gallons per foot 12" well 5.81 gallons per foot

#15 CRISSman	GENERAL				
Well ID CRISSman					
Water Source	Well Use				
Date 2-17-04					
Time 1245-	12:40	12:45	12:47	12:50	12:53
	SAMPLING CONDITIONS				
Sampling Method	(Pump) or Bailer after three well casing volumes				
Depth Sample Taken	? ft				
Well Depth bgs (TD)	170 ft	County Records			
Water Level bpvc (WL)	? ft	- ft stickup = ft bgs			
Recharge/Discharge	?				
Appearance	clear	clear	clear	clear	clear
	FIELD MEASUREMENTS AND ANALYSIES				
Temperature (°C)	23.26	23.29	23.28	23.27	23.26
Elec Cond (µS/cm)	0.440	0.440	0.441	0.440	0.440
PH	7.34	7.33	7.33	7.33	7.32
ORP (mV)	158		156	156	155
Volume Removed (gal)	~~1.5~~ 1	2	3	1	2
Cum. Volume (gal)	1gal	3gal	6	7	9
	SAMPLES COLLECTED AND TREATMENT				
8260b Volatile Organic Compounds	1400	COMMENTS: pump on flow cell only Samples: Installed well equipment NO purg / maxes out Pump Goulds 3/4 Horse Submersible 4 inch Well, Hose From Heater Running well pump Never Stopp during Sampling			
8270 Semi-Volatile Organic Compounds	1402				
6010b – Arsenic & Zinc Total and Dissolved	1403 1405				

Don Gibbs 2-17-04

Sampler's Signature Date

metals

PH OK 1-14 paper

DO	9.18	DO 9.1	0.78	0.78
Turbidity	0.23	0.10	0.10	0.09

APPENDIX B

Well/Location # Curran

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: #12 Curran	Site Location: 928 NW 36 Road Gainesville FL
Project No.: 29016401 TA01	Personnel: Lon Griffith + Dave Vitro
# 03109 Instruments MP 20	Other:
Temperature: Fac SET	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity: Cal 1413 MS	
pH: 7.00 10 Reads 9.85 4 Reads 3.99	2" well .163 gallons per foot
ORP: 250	4" well .65 gallons per foot
DO Fact set,	6" well 1.5 gallons per foot
Purge volume Calculation and well diameter	8" well 2.6 gallons per foot
~80 x .65 x 3 = ~150 + Sat. 3 gal	12" well 5.81 gallons per foot

GENERAL					
Well ID #12 Curran					
Water Source Hose Bib	Well Use	Irrigation, Hse			
Date 2-16-04					
Time 0930	1050	11:00	11:05	11:10	11:15
SAMPLING CONDITIONS					
Sampling Method	Pump or Bailer after three well casing volumes				
Depth Sample Taken	? ft				
Well Depth bgs (TD)	? ft				
Water Level bpvc (WL)	? ft	- ft stickup = ? ft bgs			
Recharge/Discharge	?				
Appearance	clear	clear	clear	clear	clear
FIELD MEASUREMENTS AND ANALYSIES					
Temperature (°C)	18.90	21.83	21.49	21.97	22.05
Elec Cond ~~(µS/cm)~~ MS	0.222	0.234	0.232	0.232	0.234
PH	6.71	7.28	7.25	7.25	7.25
ORP (mV)	+193	+82	+78	+73	+68
Volume Removed (gal)		~50	~50	~~~150~~ 50	50 Lab
Cum. Volume (gal)	~4	540	~100	~150	~200

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	1130	COMMENTS: NOT. MOT WITH Big Cloo 10-10 20 Lbs Samples: SET, MS, MSD
8270 Semi-Volatile Organic Compounds	1138	Installed well equipment
6010b – Arsenic & Zinc Total and Dissolved	1145 1200	4" Submersible, Owners pump Cannot measure D.T.W. or TD

~~PH~~ OK
~~1 of 4 Papers~~ Entry
NO Log Entry
LOC

Lon Griffith 2-16-04
Sampler's Signature Date

DO 1634 21% 17.9% 13.2% 7.2%

APPENDIX B

Well/Location #2 Ceires Beach

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location:
Project No.: 29016401 TA01 MICRO	Personnel: Dave Vitro, Lon Griffith
MP20 Instruments Basics	Other:
Temperature: # 03109 Eacr	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity: OK	
pH: OK	
ORP: OK	2" well .163 gallons per foot
Purge volume Calculation and well diameter	(4") well .65 gallons per foot 6" well 1.5 gallons per foot 8" well 2.6 gallons per foot 12" well 5.81 gallons per foot

GENERAL						
Well ID Ceiresbeach	# 2					
Water Source	Well Use Irrigation, Has been Down					
Date 2-18-09	for ~ 6 month, per Renter					
Time 0830 Pump on	09:30	09:47	09:52	09:55	10:00	1005
SAMPLING CONDITIONS						
Sampling Method	(Pump) or Bailer after three well casing volumes owners					
Depth Sample Taken	? ft					
Well Depth bgs (TD)	? ft					
Water Level bpvc (WL)	? ft	- ft stickup =	ft bgs			
Recharge/Discharge	?					
Appearance	Cloudy clear	Clear	Clear	Clear	Clear	Clear
FIELD MEASUREMENTS AND ANALYSIES						
Temperature (°C)	22.36	22.09	22.18	22.29	22.32	22.33
Elec Cond (µS/cm)	0.322	0.320	0.321	0.321	0.321	0.320
PH	7.54	7.56	7.56	7.66	7.57	7.54
ORP (mV)	-5	-26	-34	-47	-51	-53
Volume Removed (gal)	40	80	30	25	35	40
Cum. Volume (gal)	40	120	150	175	210	250

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	1006	COMMENTS: well secured a) Samples: Well set Installed well equipment 4 INCH Submersible, well IS NOT Sampled Through a Tank
8270 Semi-Volatile Organic Compounds	1016	
6010b – Arsenic & Zinc Total and Dissolved	1018 1022	

PH

Lonnell D Griffith 2-18-09
Sampler's Signature Date

DOG 3.3 2.8 2.2 2.1 0.17 0.21 2.2
Turbidity 1.27 0.66 0.36 0.21 0.23 2.2

APPENDIX B

Well/Location Magee #1
201 NW 33rd Ave

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location: Magee
Project No.: 29016401 TA01	Personnel: LonG, PGH, DM, DV
Micro pro Instruments Basic	Other:
Temperature: #0316	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity: cal check	
pH: cal check	
ORP: cal check	2" well .163 gallons per foot
Purge volume Calculation and well diameter	4" well .65 gallons per foot 6" well 1.5 gallons per foot 8" well 2.6 gallons per foot 12" well 5.81 gallons per foot

50' Assumed TD
2" well 35 FT Assumed water column

GENERAL					
Well ID Magee 1					
Water Source	Well Use Irragation				
Date ~~10-4-04~~ 2-10-04					
Time 1040	? :	? :	? :	? :	? :
SAMPLING CONDITIONS					
Sampling Method	Pump or Bailer after three well casing volumes			well pump	used
Depth Sample Taken	? ft	~ 36 FT BGS			
Well Depth bgs (TD)	? 69.7 ft				
Water Level bpvc (WL)	? 14.2 ft	- ft stickup = .75 ft bgs		13.47	
Recharge/Discharge	?				
Appearance	Turbid	Tur	clear	clear	clear
FIELD MEASUREMENTS AND ANALYSIES					
Temperature (°C)	13.9	14.77	14.11	19.74	19.45
Elec Cond ~~(µS/cm)~~ mS/cm	0.267	0.267	0.00	0.172	.259
PH	6.16	6.68	6.99	7.02	7.04
ORP (mV)	151	103	-6	-32	-33
Volume Removed (gal)	1 gal	8 gal	8	8	8
Cum. Volume (gal)	1 gal	9 gal	16	~25	~32

clear
20.32
.262
7.04
-44
~40 gal

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	~~1250~~	COMMENTS: Samples: Set + Dup A
8270 Semi-Volatile Organic Compounds	~~1230~~	Installed well equipment Temp increased Sampled @ 1230
6010b – Arsenic & Zinc Total and Dissolved	~~1230~~	

1240
1230
Total 1255 + Dissolved 300

DO mg/L 4.01 4 gal bgs
DO PTO Low

~~Phone interview~~ No Log Entry Loc

Jon Griffin 2-10-04 @ 1315
Sampler's Signature Date

PTO

Flow Rate ~ 1 gpm

VOA Flow Rate ~ 150 ml/pm

APPENDIX B

Well/Location ~~#~~ 20 Maratto

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location: 3505 NW 6TH Street
Project No.: 29016401 TA01 ~~Task~~	Personnel: DM, LDG, DV, EM owner
MP20 Instruments MacroRo Bast	Other:
Temperature: #0301G	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity:	
pH:	
ORP:	2" well .163 gallons per foot
Purge volume Calculation and well diameter	(4") well .65 gallons per foot ~180' Assume 160 6" well 1.5 gallons per foot 8" well 2.6 gallons per foot 12" well 5.81 gallons per foot

GENERAL					
Well ID #20 Maratto	#20 Edward + Mevin Maratto				
Water Source	Well Use				
Date 2-11-04					on phone
Time 0930 –	10:50	10:55	11:00	11:05	11:10
SAMPLING CONDITIONS					
Sampling Method	(Pump) or Bailer after three well casing volumes				Owners 4 inc
Depth Sample Taken	ft				
Well Depth bgs (TD)	ft				
Water Level bpvc (WL)	ft	- ft stickup =	ft bgs		
Recharge/Discharge					
Appearance	clear 10:50	clear ~			
FIELD MEASUREMENTS AND ANALYSIES					
Temperature (°C)	19.80	21.23	21.66	21.94	22.14 ~
Elec Cond (~~µS/cm~~) As/cm	0.210	0.209	0.209	0.210	0.210 0.211
PH	7.19	7.78	7.79	7.90	7.80 7.80
ORP (mV)	165	155	145	134	125
Volume Removed (gal)	~~100~~ 10	~~100~~ 100	100 100	~~100~~ gal	
Cum. Volume (gal)	~~100~~ 10	200 100	300 100	150 ~ 175	125 Total circ ckt
SAMPLES COLLECTED AND TREATMENT					
8260b Volatile Organic Compounds		COMMENTS: gal 10 20 ~~100~~ 70 43 Samples: 10 30 100 Installed well equipment			
8270 Semi-Volatile Organic Compounds					
6010b – Arsenic & Zinc Total and Dissolved					

Tonnell O Griffis 2-11-04
Sampler's Signature Date

00 60.. 2 445 ~ 45.8

~~#~~ 06

APPENDIX B

Morra To continued

Well/Location _____

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project:	Site Location:
Project No.: 29016401 TA01	Personnel:
Instruments	Other:
Temperature:	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity:	
pH:	
ORP:	2" well .163 gallons per foot 4" well .65 gallons per foot 6" well 1.5 gallons per foot 8" well 2.6 gallons per foot 12" well 5.81 gallons per foot
Purge volume Calculation and well diameter	

GENERAL						
Well ID						
Water Source	Well Use					
Date 2-11-04						
Time	11 :15	11 :20	11 :25	11 :30	11 :35	1140 11
SAMPLING CONDITIONS						
Sampling Method	Pump or Bailer after three well casing volumes					
Depth Sample Taken	? ft					
Well Depth bgs (TD)	? ft					
Water Level bpvc (WL)	? ft	- ft stickup =		ft bgs		
Recharge/Discharge	?					
Appearance DO?	38.9	71.4	58.0 60	57.6 61.12	43.1	
FIELD MEASUREMENTS AND ANALYSIES						
Temperature (°C)	22.24	22.48	22.56	22.65	22.74	22.74
Elec Cond (µS/cm)	0.211	0.214	0.213	0.215	0.216	0.216 0.215
PH	7.80	7.82	7.82	7.81	7.79	7.75
ORP (mV)	121	105	94	75	34	~~25~~ 14
Volume Removed (gal)	Low	20	20			25
Cum. Volume (gal)	~~60~~ 150	180	200	~	230	250

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	1150	COMMENTS: Total purge 300 gallons Samples: Installed well equipment 137' pipe pulled
8270 Semi-Volatile Organic Compounds	1154	
6010b – Arsenic & Zinc Total and Dissolved	1202 / 1210	Flow Cell is oxygenated, DO unstable until sink was turned on.

Low flow

DO Log entry

Sampler's Signature

2-11-03

Date

260 gal
T 22.76
Spc 0.219
DO 33.1
pH 7.79
ORP 9

1148
~~25~~ 275
22.78
0.220
30.4
7.78
-1

Turbidity @ 230 gallons 0.30
" @ 250 " 0.30 14
" 275 0.25

APPENDIX B

Well/Location MOTTa #13

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers	Site Location: 930 NW 36TH RD Gainesville
Project No.: 29016401 TA01	Personnel: Dave Vito, Ron Griffin Tal
MP 20 Instruments Basics	Other:
Temperature: #03109	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity:	
pH:	
ORP:	2" well .163 gallons per foot
	4" well .65 gallons per foot
Purge volume Calculation and well diameter	6" well 1.5 gallons per foot
7 Stabilization 15 gal	8" well 2.6 gallons per foot
	12" well 5.81 gallons per foot

GENERAL						
Well ID	MOTTa #13					
Water Source	Well Use Drinking water + Irrigation					
Date 2-16-07						
Time 1330	14:23	14:32	14:45	14:53	15:00	15:12
SAMPLING CONDITIONS						
Sampling Method	Pump or Bailer after three well casing volumes owners					
Depth Sample Taken	7 ft					
Well Depth bgs (TD)	7 ft					
Water Level bpvc (WL)	2 ft - ft stickup = ft bgs					
Recharge/Discharge	2					
Appearance						
FIELD MEASUREMENTS AND ANALYSIES						
Temperature (°C)	22.01	21.76	22.23	22.21	22.24	22.33
Elec Cond (µS/cm)	0.221	0.220	0.220	0.220	0.221	0.220
PH	7.65	7.13	7.19	7.19	7.19	7.20
ORP (mV)	154	152	150	150	149	146
Volume Removed (gal)	~~10~~ 25	50	50	50	50	50
Cum. Volume (gal)	~~10~~ 25	75	125	175	225	275

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	1520	COMMENTS: Samples:
8270 Semi-Volatile Organic Compounds	1525	Installed well equipment 82 Gal tank 1/2 Horse Power Submersible Galvanized Pipe out of well
6010b – Arsenic & Zinc Total and Dissolved	1526 / 1530	

PH OK 1-14 paper low

Sampler's Signature Date

DO2 6857 6209 51.9 20.4 · 20.4 11.9

Turbidity ~~0.66~~ 16.7 17.0 10.06 6.82

APPENDIX B

Well/Location O'Steen #4

FIELD WATER QUALITY SAMPLING AND ANALYSES

Project: Koppers O'Steen	Site Location: 437 NW 29TH Ave
Project No.: 29016401 TA01	Personnel: LDC DV
MP 20 Instruments flow cell	Other:
Temperature: Micro Basics 0309	3 Purge Volumes = (0.**)(TD bgs – depth to water bgs) /3.75 = Gallons
Conductivity: " " #0301 9	
pH: " "	(2") well .163 gallons per foot
ORP: " "	4" well .65 gallons per foot
Purge volume Calculation and well diameter	6" well 1.5 gallons per foot
	8" well 2.6 gallons per foot
	12" well 5.81 gallons per foot

GENERAL					
Well ID #4 O'Steen					
Water Source GW	Well Use				
Date 2-17-04					
Time 0915	09:20	09:24	09:30	:	:
SAMPLING CONDITIONS					
Sampling Method	(Pump) or Bailer after three well casing volumes OWNERS Pump				
Depth Sample Taken	9 ft				
Well Depth bgs (TD)	9 ft				
Water Level bpvc (WL)	ft	- ft stickup =		ft bgs	
Recharge/Discharge					
Appearance					
FIELD MEASUREMENTS AND ANALYSIES					
Temperature (°C)	21.40	21.66	21.70	21.67	
Elec Cond ~~(µS/cm)~~ MS/cm	0.281	0.280	0.279	0.274	
PH	7.27	7.36	7.39	7.39	
ORP (mV)	4.4	0	-12	-20	
Volume Removed (gal)	25	25	25	75*	
Cum. Volume (gal)	25	50	75	150	

SAMPLES COLLECTED AND TREATMENT		
8260b Volatile Organic Compounds	0945	COMMENTS: 42 gal CCP T.ve Air Tank
8270 Semi-Volatile Organic Compounds	0958	Samples: Installed well equipment
6010b – Arsenic & Zinc Total and Dissolved	0959	Samples Set A Vertical Deep well JET
		Feild Blank A 100 gall 3 Jet + Tank

Metals OK 1-14 paper LDC

Lou Cobb 2-17-04 IF 120' Deep.
Sampler's Signature Date

DO 29.0 33.1 3 42 X Pump Kicked on

Turbidity 0.27 0.22 0.13 0.10

APPENDIX C

PHOTOGRAPHS OF SAMPLED PRIVATE WELLS

Bigelow: well and starlight jet pump (Feb 16, 2004).

Bigelow: sampling for general field parameters (Feb 16, 2004)

Crissman: well and pump located in the back yard

Crissman: sampling at the well (Feb 17, 2004)

Curran: well in the yard.

Geiersbach: wooden box cover over the well (Feb 18, 2004)

Magee: well located in the back yard (201 NW 33rd Ave.)

Magee: field techs removing well equipment for sampling and logging (Feb 10, 2004)

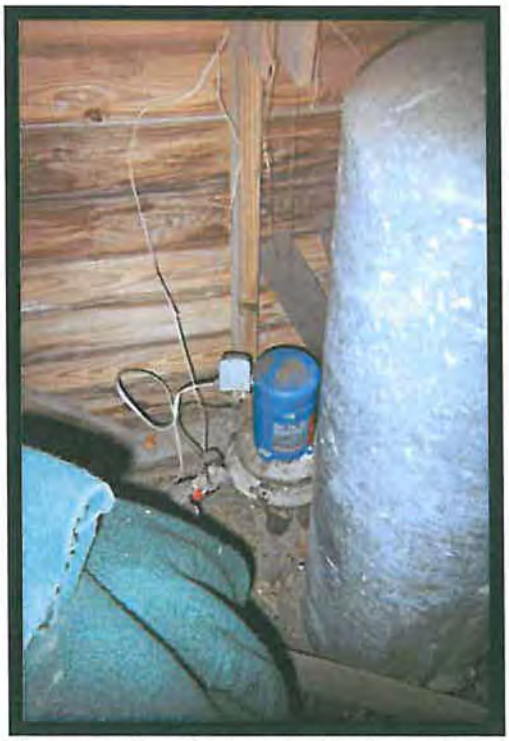
Moratto: well house roof (3508 NW 6th St.)

Moratto: field techs removing well equipment for sampling and logging (Feb 11, 2004)

Motta: well sampled using owner's equipment (Feb 18, 2004)

O'Steen: field techs truck entering the driveway (437 NW 29th Ave.)

O'Steen: pump house



O'Steen: well and pump inside the well house

O'Steen: sampling well using owner's equipment (i.e. pump, hose, etc… Feb 17, 2004)

APPENDIX D

VIDEO AND GAMMA RAY LOGGINGS

GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604
Professional Geological, Geophysical and Geotechnical Services

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE GEIERSBACH RESIDENCE, 410 NW 26TH AVENUE, GAINESVILLE, FLORIDA

Report #2004135

PREPARED FOR: TRC
21 Technology Drive
Irvine, California 92618

April 2004

Telephone: (352) 371-7243 (800) 770-9990 Fax: (352) 371-4410
Web Page: http://www.sinkholes.com E-mail: geohazards@bellsouth.net

GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604

Professional Geological, Geophysical and Geotechnical Engineering Services

Anthony F. Randazzo, Ph. D.
Geologist
Florida PG# 0003
Georgia PG#1136

David Bloomquist, Ph. D.
Geotechnical Engineer
Florida PE# 37235

Douglas L. Smith, Ph.D.
Geophysicist
Florida PG# 0018
Georgia PG# 1140

April 20, 2004

Geohazards Project No. 2004135

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE GEIERSBACH RESIDENCE, 410 NW 26TH AVENUE, GAINESVILLE, FLORIDA

INTRODUCTION

This investigation was conducted to provide a characterization of the geological subsurface, and to provide well integrity and construction information for the private well at the above referenced residential site. Gamma logging efforts were designed to determine the vertical distribution of natural gamma radiation within the borehole. Video logging was performed to determine the integrity of the well casing and to verify well construction data.

The field investigation was conducted on April 9th, 2004.

Telephone: (352) 371-7243 (800) 770-9990
Web page: www.sinkholes.com
Fax: (352) 371-4410
Email: geohazards@bellsouth.net

REGIONAL GEOLOGY

Based on map consultations and published information, the surficial geologic material at the study site consists of the Hawthorn Group of formations covered by a thin layer of Pleistocene or Recent unconsolidated sands. The Hawthorn consists of fine to medium grained, unconsolidated quartz sand, silt, clay, and limestone in varying proportions and thickness. Much of the clayey material with the Hawthorn Group is phosphatic clay and sand with associated uranium and corresponding gamma ray sources. The upper surface of the Hawthorn Group of formations is often a weathered surface with a concentration of phosphatic pebbles and sand, yielding a high gamma "kick." The Ocala Limestone underlies the Hawthorn.

METHODS EMPLOYED

GAMMA LOGGING

Natural gamma radiation was recorded using a Delta Epsilon GE9409 probe and EPCI-9511 Digital Acquisition System linked to a laptop computer running Delta Epsilon's proprietary DELogger software. A thallium-activated, sodium iodide crystal detector within a 46 mm diameter sonde detected gamma radiation.

The field procedure involved erection of a small tripod assembly with a 300m electric winch and an automatic depth-encoder pulley system. The gamma sonde was aligned to ground level and slowly lowered to the bottom of the well, recording at a 0.1 ft data interval. The sonde was decontaminated prior to entering the well. The cable was decontaminated as the sonde was lowered, and was again decontaminated as it was raised.

Data stored in the field was downloaded to a computer system at the Geohazards, Inc., offices and printed. The printed profile includes both a "filtered" (green curve) and an "unfiltered" (blue curve) log of the gamma measurements.

VIDEO LOGGING

Video logging was performed using a GeoVision, Jr. video logging system manufactured by Marks Products, Inc. The system consists of a black and white camera with infrared illumination connected to a video monitor and VHS recorder. The camera was slowly lowered down while recording onto VHS. Depth markers were simultaneously dictated into a microphone. After reaching the bottom of the well, video was again collected as the camera was raised. The camera and cable were decontaminated before entering the well, and were again decontaminated as they exited the well.

RESULTS AND INTERPRETATION

GAMMA LOGGING

The data, as calculated and plotted on the attached graphs, reveal the following points:

1. The well was geophysically logged from the ground surface over the borehole. The well was continuously logged starting from the ground surface until reaching the final depth at approximately 225 feet depth.

2. The log suggests a positive gamma peak from approximately 15 to 65 feet depth. Graphical peaks within this zone occur at 27 and 61 feet depth. A second gamma peak is recorded from approximately 130 to 146 feet depth, with peak intensity occurring at 145 feet depth. The second gamma peak is notably weaker in terms of its vertical extent and intensity (relative to the first gamma surge) when compared to nearby on site and off site wells that have been Gamma logged by Geohazards as part of the ongoing operations. This may indicate that phosphatic materials of higher sand content exist in this zone relative to these other wells.

3. The initial gamma peak may be interpreted as the top of the Hawthorn sequence of sediments. Subsequent peaks of gamma radiation at greater depths are interpreted as indicative of probable lenses of phosphatic clayey and sandy material within the Hawthorn Group of formations. Below approximately 146 feet depth, the gamma record drops to a low value, consistent with the upper surface of underlying Ocala Limestone.

VIDEO LOGGING

Analysis of the video log revealed the following points:

1. The well casing is constructed of approximately 4 in. diameter steel.

2. Casing integrity appeared to be intact, and moderate corrosion of the casing was visible throughout the length of the casing.

3. Depth to water was approximately 140 feet.

4. The well transitions from casing to an open borehole (within limestone) at approximately 145 feet depth.

CONCLUSIONS

An initial gamma peak from approximately 15 to 65 feet depth is interpreted as the upper surface of the Hawthorn Group of formations. The second gamma peak from 130 to 146 was notably weaker than what in observed in nearby wells. Subsequent peaks in the natural gamma radiation may be interpreted as lenses of phosphatic clayey and sandy materials within the Hawthorn Group of formations. The lower portion of the log is interpreted as consistent with the upper portion of the Ocala Limestone. The video log revealed the well casing integrity to be uncompromised and well construction information to be in accordance with previously known information.

LIMITATIONS

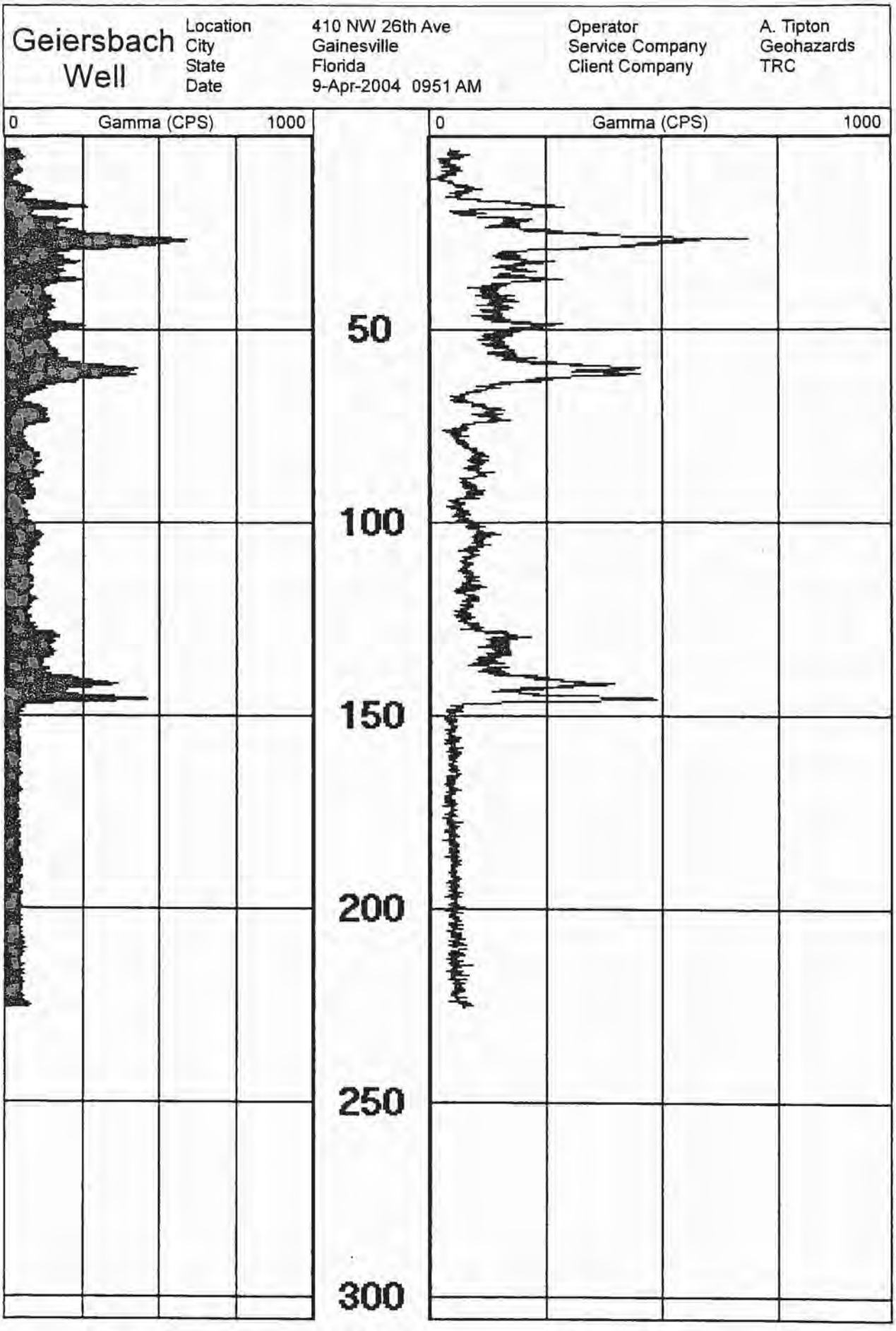
While due care has been exercised in the performance of these measurements and their interpretation, Geohazards, Inc. can make no representations, warranties, or guarantees with respect to latent or concealed conditions which may exist that may be beyond the limits of detection with the methodologies used.

Douglas L. Smith, Ph.D., P.G.S.
Geophysicist

DOUGLAS L. SMITH
4/21/04
No. 18
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

Anthony F. Randazzo, Ph.D., P.G.
Geologist

ANTHONY F. RANDAZZO
No. 3
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST


Geiersbach Well
Location
City
State
Date
410 NW 26th Ave
Gainesville
Florida
9-Apr-2004 0951 AM
Operator
Service Company
Client Company
A. Tipton
Geohazards
TRC
0
Gamma (CPS)
1000
0
Gamma (CPS)
1000
50
100
150
200
250
300

GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604
Professional Geological, Geophysical and Geotechnical Services

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE MAGEE RESIDENCE, 201 NW 33RD AVENUE, GAINESVILLE, FLORIDA

Report #2004059

PREPARED FOR: TRC
21 Technology Drive
Irvine, California 92618

April 2004

Telephone: (352) 371-7243 (800) 770-9990 Fax: (352) 371-4410
Web Page: http://www.sinkholes.com E-mail: geohazards@bellsouth.net

GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604

Professional Geological, Geophysical and Geotechnical Engineering Services

Anthony F. Randazzo, Ph. D.
Geologist
Florida PG# 0003
Georgia PG#1136

David Bloomquist, Ph. D.
Geotechnical Engineer
Florida PE# 37235

Douglas L. Smith, Ph.D.
Geophysicist
Florida PG# 0018
Georgia PG# 1140

April 1, 2004

Geohazards Project No. 2004059

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE MAGEE RESIDENCE, 201 NW 33RD AVENUE, GAINESVILLE, FLORIDA

INTRODUCTION

This investigation was conducted to provide a characterization of the geological subsurface, and to provide well integrity and construction information for the private well at the above referenced residential site. Gamma logging efforts were designed to determine the vertical distribution of natural gamma radiation within the borehole. Video logging was performed to determine the integrity of the well casing and to verify well construction data.

The field investigation was conducted on February 10TH, 2004.

Telephone: (352) 371-7243 (800) 770-9990
Web page: www.sinkholes.com
Fax: (352) 371-4410
Email: geohazards@bellsouth.net

REGIONAL GEOLOGY

Based on map consultations and published information, the surficial geologic material at the study site consists of the Hawthorn Group of formations covered by a thin layer of Pleistocene or Recent unconsolidated sands. The Hawthorn consists of fine to medium grained, unconsolidated quartz sand, silt, clay, and limestone in varying proportions and thickness. Much of the clayey material with the Hawthorn Group is phosphatic clay and sand with associated uranium and corresponding gamma ray sources. The upper surface of the Hawthorn Group of formations is often a weathered surface with a concentration of phosphatic pebbles and sand, yielding a high gamma "kick." The Ocala Limestone underlies the Hawthorn.

METHODS EMPLOYED

GAMMA LOGGING

Natural gamma radiation was recorded using a Delta Epsilon GE9409 probe and EPCI-9511 Digital Acquisition System linked to a laptop computer running Delta Epsilon's proprietary DELogger software. A thallium-activated, sodium iodide crystal detector within a 46 mm diameter sonde detected gamma radiation.

The field procedure involved erection of a small tripod assembly with a 300m electric winch and an automatic depth-encoder pulley system. The gamma sonde was aligned to ground level and slowly lowered to the bottom of the well, recording at a 0.2 ft data interval. The sonde was decontaminated prior to entering the well. The cable was decontaminated as the sonde was lowered, and was again decontaminated as it was raised.

Data stored in the field was downloaded to a computer system at the Geohazards, Inc., offices and printed.

VIDEO LOGGING

Video logging was performed using a GeoVision, Jr. video logging system manufactured by Marks Products, Inc. The system consists of a black and white camera with infrared illumination connected to a video monitor and VHS recorder. The camera was slowly lowered down while recording onto VHS. Depth markers were simultaneously dictated into a microphone. After reaching the bottom of the

well, video was again collected as the camera was raised. The camera and cable were decontaminated before entering the well, and were again decontaminated as they exited the well.

RESULTS AND INTERPRETATION

GAMMA LOGGING

The data, as calculated and plotted on the attached graphs, reveal the following points:

1. Well was geophysically logged from the ground surface over the borehole. The well was continuously logged starting from the ground surface until reaching the final depth at approximately 67 feet depth.

2. The log reveals a positive gamma surge from approximately 20 to 35 feet depth. Subsequent gamma surges, of lesser intensity than the first, are recorded with peaks at 41, 55, and 63 feet depth. The initial gamma surge may be interpreted as the top of the Hawthorn sequence of sediments. Subsequent surges of gamma radiation at greater depths are interpreted as indicative of probable lenses of phosphatic clayey and sandy material within the Hawthorn Group of formations.

VIDEO LOGGING

Analysis of the video log revealed the following points:

1. The well was video logged from the top of the well casing until reaching the bottom at approximately 67 feet below surface.

2. The well casing is constructed of 2 in. diameter PVC casing.

3. Depth to water was approximately 16 feet.

4. High turbidity limited visibility once the camera was submerged, therefore no well construction data could be ascertained in the zone extending from 16 to 67 feet below surface.

5. Casing integrity appeared to be intact within the upper 16 feet of video logging.

CONCLUSIONS

An initial gamma surge from approximately 25 to 60 feet depth is interpreted as the upper surface of the Hawthorn Group of formations. Subsequent surges in the natural gamma radiation may be interpreted as lenses of phosphatic clayey and sandy materials within the Hawthorn Group of formations. Turbidity of the water limited analysis of the well to the upper 16 feet. The casing integrity appeared to be intact within the upper 16 feet.

LIMITATIONS

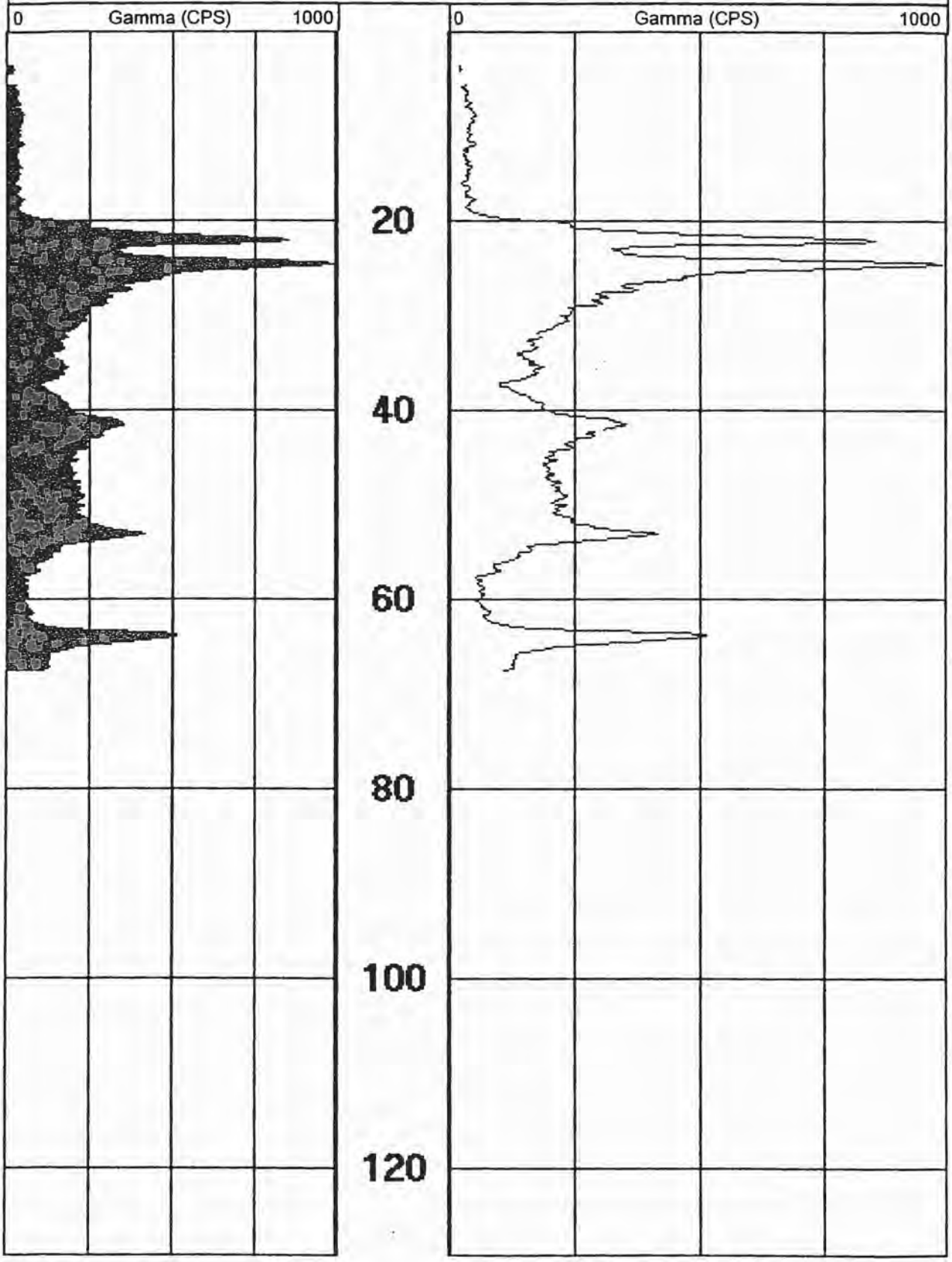
While due care has been exercised in the performance of these measurements and their interpretation, Geohazards, Inc. can make no representations, warranties, or guarantees with respect to latent or concealed conditions which may exist that may be beyond the limits of detection with the methodologies used.

Douglas L. Smith, Ph.D., P.G.
Geophysicist 4/1/

Anthony F. Randazzo, Ph.D., P.G.
Geologist 4/1/

Magee Well

Location	201 NW 33rd Avenue	Operator	A. Tipton
City	Gainesville	Service Company	Geohazards
State	Florida	Client Company	TRC
Date	10-Feb-2004 0307 PM		



GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604
Professional Geological, Geophysical and Geotechnical Services

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE MORATTO RESIDENCE, 3505 NW 6TH STREET, GAINESVILLE, FLORIDA

Report #2004059

PREPARED FOR: TRC
21 Technology Drive
Irvine, California 92618

April 2004

Telephone: (352) 371-7243 (800) 770-9990 Fax: (352) 371-4410
Web Page: http://www.sinkholes.com E-mail: geohazards@bellsouth.net

GEOHAZARDS, INC.

SINKHOLES • EXPANSIVE CLAYS • LAND SUBSIDENCE

P.O. Box 14956
Gainesville, Florida 32604

Professional Geological, Geophysical and Geotechnical Engineering Services

Anthony F. Randazzo, Ph. D.
Geologist
Florida PG# 0003
Georgia PG#1136

David Bloomquist, Ph. D.
Geotechnical Engineer
Florida PE# 37235

Douglas L. Smith, Ph.D.
Geophysicist
Florida PG# 0018
Georgia PG# 1140

April 1, 2004

Geohazards Project No. 2004059

VIDEO AND GAMMA RAY LOGGING OF THE WELL AT THE MORATTO RESIDENCE, 3505 NW 6TH STREET, GAINESVILLE, FLORIDA

INTRODUCTION

This investigation was conducted to provide a characterization of the geological subsurface, and to provide well integrity and construction information for the private well at the above referenced residential site. Gamma logging efforts were designed to determine the vertical distribution of natural gamma radiation within the borehole. Video logging was performed to determine the integrity of the well casing and to verify well construction data.

The field investigation was conducted on February 11TH, 2004.

Telephone: (352) 371-7243 (800) 770-9990
Web page: www.sinkholes.com
Fax: (352) 371-4410
Email: geohazards@bellsouth.net

REGIONAL GEOLOGY

Based on map consultations and published information, the surficial geologic material at the study site consists of the Hawthorn Group of formations covered by a thin layer of Pleistocene or Recent unconsolidated sands. The Hawthorn consists of fine to medium grained, unconsolidated quartz sand, silt, clay, and limestone in varying proportions and thickness. Much of the clayey material with the Hawthorn Group is phosphatic clay and sand with associated uranium and corresponding gamma ray sources. The upper surface of the Hawthorn Group of formations is often a weathered surface with a concentration of phosphatic pebbles and sand, yielding a high gamma "kick." The Ocala Limestone underlies the Hawthorn.

METHODS EMPLOYED

GAMMA LOGGING

Natural gamma radiation was recorded using a Delta Epsilon GE9409 probe and EPCI-9511 Digital Acquisition System linked to a laptop computer running Delta Epsilon's proprietary DELogger software. A thallium-activated, sodium iodide crystal detector within a 46 mm diameter sonde detected gamma radiation.

The field procedure involved erection of a small tripod assembly with a 300m electric winch and an automatic depth-encoder pulley system. The gamma sonde was aligned to ground level and slowly lowered to the bottom of the well, recording at a 0.2 ft data interval. The sonde was decontaminated prior to entering the well. The cable was decontaminated as the sonde was lowered, and was again decontaminated as it was raised.

Data stored in the field was downloaded to a computer system at the Geohazards, Inc., offices and printed.

VIDEO LOGGING

Video logging was performed using a GeoVision, Jr. video logging system manufactured by Marks Products, Inc. The system consists of a black and white camera with infrared illumination connected to a video monitor and VHS recorder. The camera was slowly lowered down while recording onto VHS. Depth markers were simultaneously dictated into a microphone. After reaching the bottom of the

well, video was again collected as the camera was raised. The camera and cable were decontaminated before entering the well, and were again decontaminated as they exited the well.

RESULTS AND INTERPRETATION

GAMMA LOGGING

The data, as calculated and plotted on the attached graphs, reveal the following points:

1. The well was geophysically logged from the ground surface over the borehole. The well was continuously logged starting from the ground surface until reaching the final depth at approximately 180 feet depth.

2. The log suggests a positive gamma surge from approximately 15 to 60 feet depth. Graphical peaks within this zone occur at 20, 40 and 50 feet depth. A second gamma surge, of greater intensity than the first, is recorded from approximately 125 to 150 feet depth, with peak intensity occurring at 145 feet depth. The initial gamma surge may be interpreted as the top of the Hawthorn sequence of sediments. Subsequent surges of gamma radiation at greater depths are interpreted as indicative of probable lenses of phosphatic clayey and sandy material within the Hawthorn Group of formations. Below approximately 155 feet depth, the gamma record drops to a low value, consistent with the upper surface of underlying Ocala Limestone.

VIDEO LOGGING

Analysis of the video log revealed the following points:

1. The well casing is constructed of approximately 4 in. diameter steel casing joined in 22.5 ft. sections.

2. Turbidity limited visibility once the camera was submerged and visibility was negligible until reaching the bottom of the casing, therefore no well

construction data could be ascertained in the zone extending from 123 to 131 feet below surface.

3. Casing integrity appeared to be intact, though significant corrosion of the casing was observed on the upper 25 feet of casing. Though visibility was poor once the camera was submerged, it should be assumed corrosion of the casing was present from 123 to 131 feet, as well.

4. Depth to water was approximately 123 feet.

5. Though visibility was poor, it appears that well transitions from casing to an open borehole (within limestone) at approximately 131 feet depth.

CONCLUSIONS

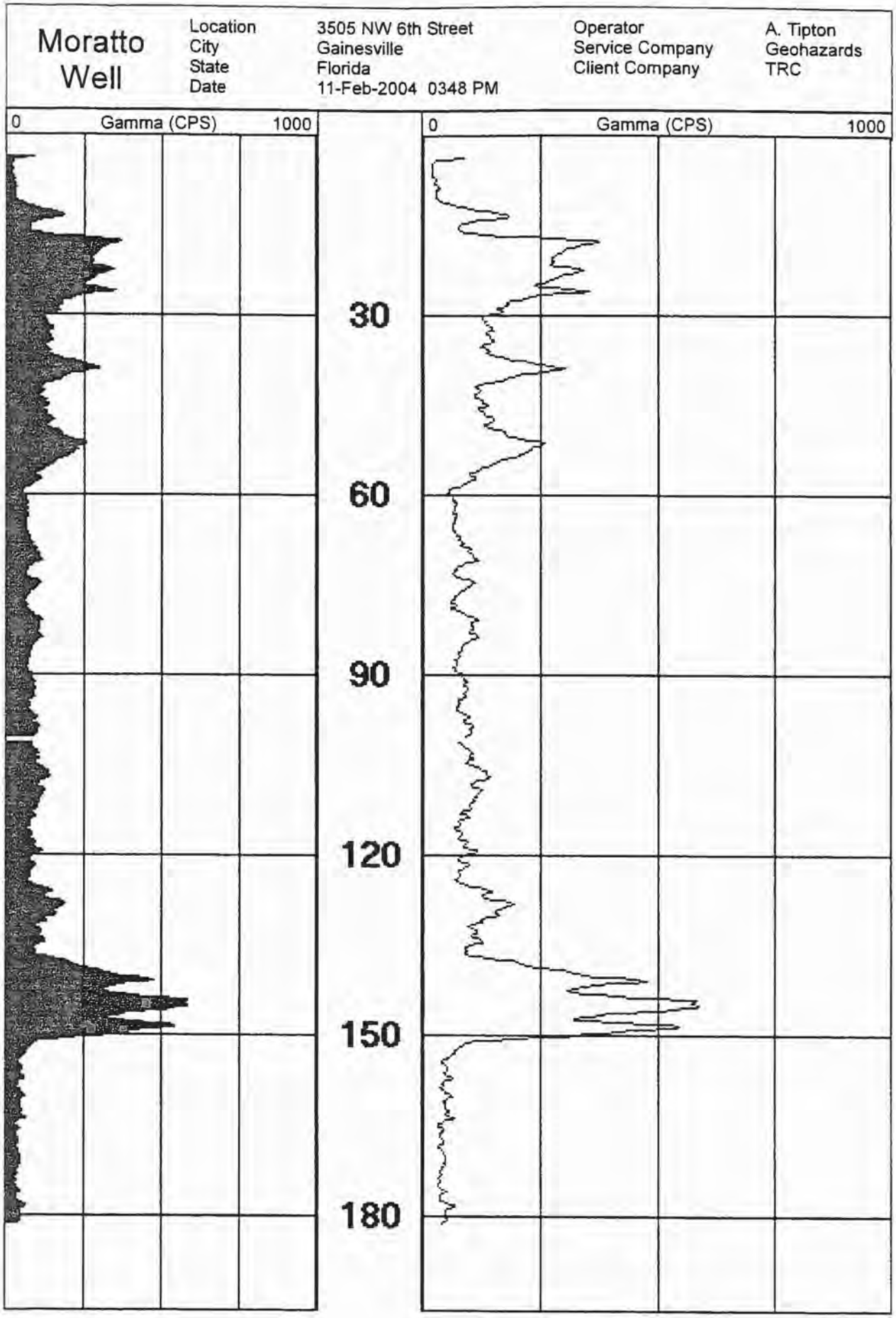
An initial gamma surge from approximately 15 to 60 feet depth is interpreted as the upper surface of the Hawthorn Group of formations. Subsequent surges in the natural gamma radiation may be interpreted as lenses of phosphatic clayey and sandy materials within the Hawthorn Group of formations. The lower portion of the log is interpreted as consistent with the upper portion of the Ocala Limestone. The video log revealed the well casing integrity to be uncompromised and well construction information to be in accordance with previously known information.

LIMITATIONS

While due care has been exercised in the performance of these measurements and their interpretation, Geohazards, Inc. can make no representations, warranties, or guarantees with respect to latent or concealed conditions which may exist that may be beyond the limits of detection with the methodologies used.

Douglas L. Smith, Ph.D., P.G.
Geophysicist

Anthony F. Randazzo, Ph.D., P.G.
Geologist


Moratto Well
Location
City
State
Date
3505 NW 6th Street
Gainesville
Florida
11-Feb-2004 0348 PM
Operator
Service Company
Client Company
A. Tipton
Geohazards
TRC
0
Gamma (CPS)
1000
0
Gamma (CPS)
1000
30
60
90
120
150
180

APPENDIX E

ACEPD GEIERSBACH WELL SAMPLING RECORD

File #1658
Cabot/Koppers

~~Complaint #3233~~

ALACHUA COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
226 South Main Street • Gainesville, Florida 32601-6538
Tel: (352) 955-2442 • Fax (352) 955-2440
Suncom: 625-2442
Home Page: www.co.alachua.fl.us

Board of County Commissioners

Chris Bird
Environmental Protection Director

Barbara J. Pierce
Administrative Assistant

Richard J. Burges
Natural Resources Supervisor

John J. Mousa
Pollution Prevention Manager

August 2, 1999

Mr. Roy Geiersbach
410 NW 26th Avenue
Gainesville, Florida 32609

RE: Results of Analysis of Groundwater and Cuttings Samples, Complaint/Inquiry # 3233

Dear Mr. Geiersbach:

As you will recall, the Alachua County Environmental Protection Department (ACEPD) collected water samples from your newly installed Floridan aquifer system irrigation well and sampled the cuttings from construction of the well on May 21, 1999. The cuttings sampled were those soil, sediment, and rock materials brought to the surface during the well drilling process. Data collected included field measurements of the groundwater (pH, conductance, dissolved oxygen (DO), temperature, and turbidity) and samples of the groundwater and cuttings for laboratory analyses of volatile organic compounds (VOCs) and semi-volatile organic compounds (base/neutral and acid extractable compounds). Copies of the field data sheets and laboratory analysis results are attached for you information.

Based on our review of the data, your well water appears to be of good quality. None of the organic compounds (volatile or semi-volatile) tested for were detected in the water samples collected from your well. The field measurements of pH, specific conductance, and turbidity were in the range expected for this type of groundwater.

The samples of the cuttings reportedly did not contain any of the semi-volatile compounds analyzed, but were reported to have very low concentrations of VOCs. Cuttings sample #1, taken from the north side of the well, reportedly contained 13 μg/kg tetrachloroethene. Cuttings sample #2, taken from the southwest side of the well, reportedly contained 6 μg/kg toluene and 5 μg/kg 1,2,4-trimethylbenzene. The compounds detected are common constituents of solvents, lubricants, or fuel. The low levels of VOCs in the cuttings may be an artifact of well construction activities, and do not necessarily reflect contamination from the adjacent Koppers facility.

The odors you noticed during construction of the well, at a depth interval of 70-90 feet below land surface, may indicate groundwater contamination in the shallower sediments of the intermediate aquifer system. We are working with the Florida Department of Environmental Protection (FDEP) and the US Environmental Protection Agency (USEPA) to further investigate the potential for contamination of the intermediate aquifer in this area.

If you have any questions regarding these data, please do not hesitate to contact me.

Sincerely,

Robin R. Hallbourg
Hydrogeologist

Enc.

cc: Chris Bird, ACEPD, w/o Enc.
John Blanchard, USEPA, w/Enc.
Peg Bonyata, FDEP, w/Enc.
Richard Burges, ACEPD w/o Enc.
Jim Frazee, SJRWMD, w/Enc.
Paul Myers, ACHD, Environmental Health, w/Enc.
Bob Ott, County Attorney's Office, w/Enc.
Terry Zinn, FDOT, w/ Enc.
Kim Zoltek, GRU, w/ Enc.

FLORIDA AMBIENT MONITORING NETWORK
GROUND WATER SAMPLING FIELD LOG SHEET

SAMPLING AGENCY: Alachua Co. EPD
STATION ID:
OWNER: Roy Geiersbach
CASING DIAMETER:
LAND SURFACE ELEV. (LSE)
MEASURING POINT ELEV. (MPE

COUNTY: Alachua
STATION:
PROJECT: Complaint #~~3933~~ 3233
CASING MATERIAL:
TOTAL DEPTH: 225'
WATERBODY:

DATE/TIME ON SITE: 5/21/09 1015
DATE/TIME OFF SITE: 5/21/09

SAMPLER: Robin Hallbourg
LAB(s): PCB

SAMPLER: Joy McBane
FIELD ID: Geiersbach irrigation well
410 NW 26th Ave
Gainesville, FL 352/336-6395

	HELD AT		WETTED AT		DEPTH TO WATER (DTW)	
1.	130.00	-	0.15	=	137.22	(feet from MPE)
2.	141.31	-	2.70	=	137.26	(feet from MPE)

(SU=MPE-LSE): 1.31 ft (stickup) DTWLSE (DTW-SU) = _____ ft (depth to water from lse) WLE (MPE-DTW) _____ ft (water level elevation)

MIN. PURGE VOLUME: $\underset{(DW}{225} - (\underset{DTW}{137.26} - \underset{SU}{1.31}) \times \underset{D}{4} \times \underset{D}{4} \times 0.1224 = 175$ gal

PURGE RATE: 17.6 gal/min
PURGE PUMP ID: in place submersible pump

MIN. PURGE TIME: (MIN. PURGE VOLUME/PURGE RATE) 10 min.

DATE/TIME PURGE BEGIN: 1052
DATE/TIME PURGE STOP: 1152

TOTAL PURGE TIME: _____ min

TOTAL PURGE VOLUME: (PURGE RATE x TOTAL PURGE TIME) _____ gal

FUEL-POWERED UNITS USED ON SITE: _____

SULFUR ODOR: None
COLOR: clear

DATE/TIME SAMPLING BEGIN: 1150 ~~1151~~ (DUPE)
DATE/TIME SAMPLING STOP: 1152

SAMPLING DEVICE ID: _____

SAMPLING FLOW-RATE (IF IN-PLACE PLUMBING): _____

QA SAMPLES TAKEN ON SITE: Equipment blank collected at 1143 w/ PCaB analyte-free water.

WEATHER CONDITIONS: Warm, humid (3/8" rain 5/30; 1½" rain 5/1.

PERSONNEL/VISITORS ON SITE: Mr Geierschacht

WELL CONDITION: good

WELL TAG:

ADDITIONAL COMMENTS: Well is 33.50 ft. west of Koppers fence, and 48.5 ft. North of "100" in Koppers fence. Soil sample cuttings #1 (8260 + 8270) on north side of well (volatiles + semivolatiles). Soil sample cuttings #2 from SW side of well (volatiles + semivolatiles - EPA 8260, 8270). Well water and cuttings sampled for VOCs and semivolatiles.

CHEMICAL STABILITY MONITORING

#	TIME	pH	TEMP	SP.COND.	EH	DO	COMMENT
1	1113	7.12	23.93	323	7.0	4.60	
2	1117	7.39	23.26	318	-72.5	3.21	
3	1121	7.39	23.42	318	-82.2	2.67	
4	1125	7.39	23.47	318	-81.4	2.29	turbidity = 1.00 n.t.u.
5							
6							
7							
8							
9							

* instrument calibrations will be recorded in the instrument calibration logs
* Eh values above MUST be converted relative to the std hydrogen electrode

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : Alachua County EPD
226 South Main Street
Gainesville, FL 32601-6538

Contact : Robin Hallbourg
Phone : (352) 955-2442

Laboratory Reference Number : 99050239

Project Name : Geiersbach Irrigation Well
Project Number : COMPLAINT #3933

Chain of Custody : 16695

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled
99050239-1	Soil	CUTTING #1 (N SIDE	RUN	05/21/1999
99050239-2	Soil	CUTTING #2 (SW SIDE)	RUN	05/21/1999
99050239-3	Water	EQUIPMENT BLANK	RUN	05/21/1999 11:43
99050239-4	Water	GEIERSBACH WELL	RUN	05/21/1999 11:50
99050239-5	Water	GEIERSBACH WELL DUPE	RUN	05/21/1999 11:51

Number	Parameter	Description
3	EPA 525.2	Organics by GCMS
2	EPA 8270	Semivolatile Organics by GCMS
3	EPA 524.2	Volatile Organics
2	EPA 8260	Volatile Organics by GCMS

PC&B Environmental Laboratories, Inc
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 524.2

Lab Reference Number	99050239-3	99050239-4	99050239-5
Client Sample ID	EQUIPMENT BLANK	GEIERSBACH WELL	GEIERSBACH WELL DUPE
Date Sampled	05/21/1999	05/21/1999	05/21/1999
Date Extracted	05/26/1999	05/26/1999	05/26/1999
Date Analyzed	05/26/1999	05/26/1999	05/26/1999
Sample Matrix (as Received)	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS
Dilution Factor	1	1	1
Result Units	ug/l	ug/l	ug/l
Benzene	0.5 U	0.5 U	0.5 U
Bromobenzene	0.5 U	0.5 U	0.5 U
Bromochloromethane	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U
n-Butylbenzene	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U
2-Chlorotoluene	0.5 U	0.5 U	0.5 U
4-Chlorotoluene	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U
1,2-dibromoethane	0.5 U	0.5 U	0.5 U
Dibromomethane	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U
Isopropylbenzene	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U
Naphthalene	0.5 U	0.5 U	0.5 U
n-Propylbenzene	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 524.2

Lab Reference Number	99050239-3	99050239-4	99050239-5
Client Sample ID	EQUIPMENT BLANK	GEIERSBACH WELL	GEIERSBACH WELL DUPE
Date Sampled	05/21/1999	05/21/1999	05/21/1999
Date Extracted	05/26/1999	05/26/1999	05/26/1999
Date Analyzed	05/26/1999	05/26/1999	05/26/1999
Sample Matrix (as Received)	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS
Dilution Factor	1	1	1
Result Units	ug/l	ug/l	ug/l
Vinyl chloride	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U
m-Xylene	0.5 U	0.5 U	0.5 U
p-Xylene	0.5 U	0.5 U	0.5 U
(Surr) 1,2-Dichloroethane-d4 (%)	77	85	93
(Surr) Toluene-d8 (%)	126	119	127
(Surr) 4-Bromofluorobenzene (%)	119	112	100

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

Reviewed by :

Quality Control Report for Spike Analysis

Volatile Organics

Matrix: Water
Lab Sample ID: 99050252-1
QC Batch ID: 9905MS3057
Spike Units: ug/l

Analysis Date: 05/26/1999
Preparation Date: 05/26/1999
Method: EPA 524.2
Analyst: AV

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	10.0	0.0	8.2	82	70	130
Carbon tetrachloride	10.0	0.0	8.6	86	70	130
Chlorobenzene	10.0	0.0	10.2	102	70	130
1,4-Dichlorobenzene	10.0	0.0	7.6	76	70	130
1,1-Dichloroethene	10.0	0.0	8.7	87	70	130
Ethylbenzene	10.0	0.0	9.4	94	70	130
Toluene	10.0	0.0	10.4	104	70	130
Trichloroethene	10.0	0.0	9.4	94	70	130
m-Xylene	10.0	0.0	10.4	104	70	130

PC&B Environmental Laboratories, Inc
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics by GCMS

CLIENT NAME: Alachua County EPD
PROJECT NAME: Gelersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 8260

Lab Reference Number	99050239-1		99050239-2	
Client Sample ID	CUTTING #1 (N SIDE		CUTTING #2 (SW SIDE)	
Date Sampled	05/21/1999		05/21/1999	
Date Extracted	05/26/1999		05/26/1999	
Date Analyzed	05/26/1999		05/26/1999	
Sample Matrix (as Received)	Soil		Soil	
Analysis Confirmed	GCMS		GCMS	
Dilution Factor	1		1	
Result Units	ug/kg		ug/kg	
Benzene	5	U	5	U
Bromobenzene	5	U	5	U
Bromochloromethane	5	U	5	U
Bromodichloromethane	5	U	5	U
Bromoform	5	U	5	U
Bromomethane	5	U	5	U
n-Butylbenzene	5	U	5	U
sec-Butylbenzene	5	U	5	U
tert-Butylbenzene	5	U	5	U
Carbon tetrachloride	5	U	5	U
Chlorobenzene	5	U	5	U
Chloroethane	5	U	5	U
Chloroform	5	U	5	U
Chloromethane	5	U	5	U
2-Chlorotoluene	5	U	5	U
4-Chlorotoluene	5	U	5	U
Dibromochloromethane	5	U	5	U
1,2-Dibromo-3-chloropropane	5	U	5	U
1,2-Dibromoethane	5	U	5	U
Dibromomethane	5	U	5	U
1,2-Dichlorobenzene	5	U	5	U
1,3-Dichlorobenzene	5	U	5	U
1,4-Dichlorobenzene	5	U	5	U
Dichlorodifluoromethane	5	U	5	U
1,1-Dichloroethane	5	U	5	U
1,2-Dichloroethane	5	U	5	U
1,1-Dichloroethene	5	U	5	U
cis-1,2-Dichloroethene	5	U	5	U
trans-1,2-Dichloroethene	5	U	5	U
1,2-Dichloropropane	5	U	5	U
1,3-Dichloropropane	5	U	5	U
2,2-Dichloropropane	5	U	5	U
1,1-Dichloropropene	5	U	5	U
Ethylbenzene	5	U	5	U
Hexachlorobutadiene	5	U	5	U
Isopropylbenzene	5	U	5	U
p-Isopropyltoluene	5	U	5	U
Methylene chloride	5	U	5	U
Naphthalene	5	U	5	U
n-Propylbenzene	5	U	5	U
Styrene	5	U	5	U
1,1,1,2-Tetrachloroethane	5	U	5	U
1,1,2,2-Tetrachloroethane	5	U	5	U
Tetrachloroethene	13		5	U
Toluene	5	U	6	
1,2,3-Trichlorobenzene	5	U	5	U
1,2,4-Trichlorobenzene	5	U	5	U
1,1,1-Trichloroethane	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U
Trichloroethene	5	U	5	U
Trichlorofluoromethane	5	U	5	U
1,2,3-Trichloropropane	5	U	5	U
1,2,4-Trimethylbenzene	5	U	5	
1,3,5-Trimethylbenzene	5	U	5	U

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics by GCMS

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 8260

Lab Reference Number	99050239-1	99050239-2
Client Sample ID	CUTTING #1 (N SIDE	CUTTING #2 (SW SIDE)
Date Sampled	05/21/1999	05/21/1999
Date Extracted	05/26/1999	05/26/1999
Date Analyzed	05/26/1999	05/26/1999
Sample Matrix (as Received)	Soil	Soil
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/kg	ug/kg
Vinyl chloride	5 U.	5 U
m&p-Xylenes	5 U	5
o-Xylene	5 U	5 U
cis-1,2-Dichloropropene	5 U	5 U
trans-1,2-Dichloropropene	5 U	5 U
(Surr) 1,2-Dichloroelhane-d4 (%)	107	106
(Surr) Toluene-d8 (%)	84	74
(Surr) 4-Bromofluorobenzene (%)	139	139

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/53353

Reviewed by :

Quality Control Report for Spike Analysis

Volatile Organics by GCMS

Matrix: Soil
Lab Sample ID: 99050237-1
QC Batch ID: 9905MS1055
Spike Units: ug/kg

Analysis Date: 05/26/1999
Preparation Date: 05/26/1999
Method: EPA 8260
Analyst: LN

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	50	0	58	116	65	136
Carbon tetrachloride	50	0	67	134	62	147
Chlorobenzene	50	0	53	106	74	125
1,4-Dichlorobenzene	50	0	54	108	72	129
1,1-Dichloroethene	50	0	46	92	72	150
Ethylbenzene	50	0	52	104	64	134
Toluene	50	0	61	122	66	130
Trichloroethene	50	0	47	94	71	155
o-Xylene	50	0	57	114	75	122

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX 359-7197

Semivolatile Organics by GCMS

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 8270

Lab Reference Number	99050239-1	99050239-2
Client Sample ID	CUTTING #1 (N SIDE	CUTTING #2 (SW SIDE)
Date Sampled	05/21/1999	05/21/1999
Date Extracted	05/26/1999	05/26/1999
Date Analyzed	05/26/1999	05/26/1999
Sample Matrix (as Received)	Soil	Soil
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/kg	ug/kg
Acenaphthene	160 U	160 U
Acenaphthylene	160 U	160 U
Anthracene	160 U	160 U
Benzidine	160 U	160 U
Benzoic Acid	1600 U	1600 U
Benzo(a)anthracene	160 U	160 U
Benzo(b)fluoranthene	160 U	160 U
Benzo(k)fluoranthene	160 U	160 U
Benzo(ghi)perylene	160 U	160 U
Benzo(a)pyrene	160 U	160 U
Benzyl alcohol	600 U	600 U
Bis(2-chloroethyl)ether	160 U	160 U
Bis(2-chloroethoxy)methane	160 U	160 U
Bis(2-chloroisopropyl)ether	160 U	160 U
Bis(2-ethylhexyl)phthalate	170 U	170 U
4-Bromophenyl phenyl ether	160 U	160 U
Butyl benzyl phthalate	160 U	160 U
4-Chloroaniline	600 U	600 U
1-Chloronaphthalene	160 U	160 U
2-Chloronaphthalene	160 U	160 U
4-Chloro-3-methylphenol	160 U	160 U
2-Chlorophenol	160 U	160 U
4-Chlorophenyl phenyl ether	160 U	160 U
Chrysene	160 U	160 U
Dibenz(a,h)anthracene	160 U	160 U
Dibenzofuran	160 U	160 U
Di-n-butyl phthalate	160 U	160 U
1,3-Dichlorobenzene	160 U	160 U
1,4-Dichlorobenzene	160 U	160 U
1,2-Dichlorobenzene	160 U	160 U
3,3'-Dichlorobenzidine	600 U	600 U
2,4-Dichlorophenol	160 U	160 U
2,6-Dichlorophenol	160 U	160 U
Diethylphthalate	160 U	160 U
2,4-Dimethylphenol	160 U	160 U
Dimethylphthalate	160 U	160 U
4,6-Dinitro-2-methylphenol	160 U	160 U
2,4-Dinitrophenol	1600 U	1600 U
2,4-Dinitrotoluene	160 U	160 U
2,6-Dinitrotoluene	160 U	160 U
Diphenylamine	160 U	160 U
1,2-Diphenylhydrazine	160 U	160 U
Di-n-Octylphthalate	160 U	160 U
Fluoranthene	160 U	160 U
Fluorene	160 U	160 U
Hexachlorobenzene	160 U	160 U
Hexachlorobutadiene	160 U	160 U
Hexachlorocyclopentadiene	160 U	160 U
Hexachloroethane	160 U	160 U
Indeno(123-cd)pyrene	160 U	160 U
Isophorone	160 U	160 U
1-Methylnaphthalene	160 U	160 U
2-Methylnaphthalene	160 U	160 U
2-Methylphenol	160 U	160 U

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Semivolatile Organics by GCMS

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 8270

Lab Reference Number	99050239-1	99050239-2
Client Sample ID	CUTTING #1 (N SIDE	CUTTING #2 (SW SIDE)
Date Sampled	05/21/1999	05/21/1999
Date Extracted	05/26/1999	05/26/1999
Date Analyzed	05/26/1999	05/26/1999
Sample Matrix (as Received)	Soil	Soil
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/kg	ug/kg
4-Methylphenol	160 U	160 U
Naphthalene	160 U	160 U
2-Nitroaniline	1600 U	1600 U
3-Nitroaniline	1600 U	1600 U
4-Nitroaniline	1600 U	1600 U
Nitrobenzene	160 U	160 U
2-Nitrophenol	160 U	160 U
4-Nitrophenol	160 U	160 U
N-Nitrosodiphenylamine	160 U	160 U
N-Nitroso-di-n-propylamine	160 U	160 U
Pentachlorophenol	1600 U	1600 U
Phenanthrene	160 U	160 U
Phenol	160 U	160 U
Pyrene	160 U	160 U
1,2,4-Trichlorobenzene	160 U	160 U
2,4,5-Trichlorophenol	160 U	160 U
2,4,6-Trichlorophenol	160 U	160 U
Pyridine	250 U	250 U
Aniline	250 U	250 U
(Surr) 2-Fluorophenol (%)	39	46
(Surr) Phenol-d5 (%)	34	57
(Surr) Nitrobenzene-d5 (%)	48	59
(Surr) 2-Fluorobiphenyl (%)	44	36
(Surr) 2,4,6-Tribromophenol (%)	52	35
(Surr) Terphenyl-d14 (%)	50	50

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

Reviewed by :

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Organics by GCMS

CLIENT NAME: Alachua County EPD
PROJECT NAME: Geiersbach Irrigation Well
PROJECT NUMBER: COMPLAINT #3933
DATE RECEIVED: 05/24/1999
ANALYTICAL PROTOCOL: EPA 525.2

Lab Reference Number	99050239-3	99050239-4	99050239-5
Client Sample ID	EQUIPMENT BLANK	GEIERSBACH WELL	GEIERSBACH WELL DUPE
Date Sampled	05/21/1999	05/21/1999	05/21/1999
Date Extracted	05/27/1999	05/27/1999	05/27/1999
Date Analyzed	05/27/1999	05/27/1999	05/27/1999
Sample Matrix (as Received)	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS
Dilution Factor	1	1	1
Result Units	ug/l	ug/l	ug/l
Acenaphthene	1.0 U	1.0 U	1.0 U
Aldrin	1.0 U	1.0 U	1.0 U
Anthracene	1.0 U	1.0 U	1.0 U
Atrazine	1.0 U	1.0 U	1.0 U
Benz(a)anthracene	1.0 U	1.0 U	1.0 U
Benzo(b)fluoranthene	1.0 U	1.0 U	1.0 U
Benzo(k)fluoranthene	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	0.2 U	0.2 U	0.2 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U
Butyl benzyl phthalate	1.0 U	1.0 U	1.0 U
alpha-Chlordane	1.0 U	1.0 U	1.0 U
gamma-Chlordane	1.0 U	1.0 U	1.0 U
trans-Nonachlor	1.0 U	1.0 U	1.0 U
Chrysene	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U
di-n-Butyl phthalate	1.0 U	1.0 U	1.0 U
Diethylphthalate	1.0 U	1.0 U	1.0 U
bis(2-ethylhexyl)phthalate	1.0 U	1.0 U	1.0 U
bis(2-ethylhexyl)adipate	1.0 U	1.0 U	1.0 U
Dimethylphthalate	1.0 U	1.0 U	1.0 U
Endrin	1.0 U	1.0 U	1.0 U
Fluorene	1.0 U	1.0 U	1.0 U
Heptachlor	0.2 U	0.2 U	0.2 U
Heptachlor epoxide	0.2 U	0.2 U	0.2 U
Hexachlorobenzene	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U
Lindane	0.2 U	0.2 U	0.2 U
Methoxychlor	1.0 U	1.0 U	1.0 U
Pentachlorophenol	1.0 U	1.0 U	1.0 U
Phenanthrene	1.0 U	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U	1.0 U
Simazine	1.0 U	1.0 U	1.0 U
Toxaphene	1.0 U	1.0 U	1.0 U
Alachlor	1.0 U	1.0 U	1.0 U
2-Chlorobiphenyl	1.0 U	1.0 U	1.0 U
2,3-Dichlorobiphenyl	1.0 U	1.0 U	1.0 U
2,4,5-trichlorobiphenyl	1.0 U	1.0 U	1.0 U
Tetrachlorobiphenyl	1.0 U	1.0 U	1.0 U
Pentachlorobiphenyl	1.0 U	1.0 U	1.0 U
Hexachlorobiphenyl	1.0 U	1.0 U	1.0 U
Heptachlorobiphenyl	1.0 U	1.0 U	1.0 U
Octachlorobiphenyl	1.0 U	1.0 U	1.0 U
2,3,7,8-Dioxin	1.0 U	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

Reviewed by: _____

Quality Control Report for LCS Analysis

Semivolatile Organics by GCMS

Matrix: Soil
Lab Sample ID: LCS
QC Batch ID: 9905BNA136
LCS Units: ug/kg

Analysis Date: 05/26/1999
Preparation Date: 05/26/1999
Method: EPA 8270
Analyst: ELA

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
(Surr) 2-Fluorophenol	100	52	52	24	120
(Surr) Phenol-d5	100	85	85	25	121
(Surr) Nitrobenzene-d5	100	62	62	23	120
(Surr) 2-Fluorobiphenyl	100	40	40	30	120
(Surr) 2,4,6-Tribromophenol	100	38	38	19	122
(Surr) Terphenyl-d14	100	43	43	18	137
Acenaphthene	100	75	75	42	96
4-Chloro-3-methylphenol	200	110	55	49	101
2-Chlorophenol	200	118	59	51	101
1,3-Dichlorobenzene	100	60	60	57	104
2,4-Dinitrotoluene	100	45	45	45	95
4-Nitrophenol	200	110	55	41	115
N-Nitroso-di-n-propylamine	100	90	90	47	98
Pentachlorophenol	200	110	55	54	120
Phenol	200	117	59	50	107
Pyrene	100	50	50	48	113
1,2,4-Trichlorobenzene	100	50	50	47	94

PSAB Environmental

210 Park Road, Oviedo, FL 32765
407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: P.O. 9902

Date: 5/20/99 Page 1 of 1

COMPANY: Alachua Co. EPD
ADDRESS: 224 S Main St.
Gainesville FL 32601
SAMPLED BY: Robin Hallbourg SIGN:
PHONE: 352/955-2442 FAX: 352/955-2440

#	SAMPLE ID	DATE/TIME	MATRIX: AIR	WATER	SOLIDS	TOXICITY	OTHER	Volatile Organics by GC/MS EPA 8260	Semivolatile Organics by GC/MS EPA 8270	Organics by GC/MS EPA 8260	Volatile Organics EPA 624		PRESERVATION											Number of Containers
								—	—	—	sodium thiosulfate													
1	Culling #1 (North side of well)	5/21/99				X		1	1															2
2	Culling #2 (SW side of well)	5/21/99				X		1	1															2
3	Equipment Blank	5/21/99 1113		X						1	3													4
4	Geiersbach Well	5/21/99 1150		X						1	3													4
5	Geiersbach Well - DUPE	5/21/99 1151		X						1	3													4
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1. [signature]	5/18/99 9:00	1. Robin R Hallbourg	5/19/99 17:30
2. Robin R Hallbourg	5/21/99 1333	2. [signature]	5/24/99 16:17
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Geiersbach irrigation well
PROJECT #: Complaint # 3953
SITE ADDRESS: 410 NW 26th Ave Gainesville
PROJECT MANAGER: Robin Hallbourg

SAMPLE RECEIPT
Total # of Containers
Chain of Custody Seals
Recv'd in Good Condition
PO #:

SPECIAL INSTRUCTIONS/COMMENTS:
Please fax results as soon as possible.
352/955-2440

INVOICE TO:
(if same as from above)

QUOTE/CONTRACT #:

WHITE, Project File YELLOW, Laboratory PINK, Sampler