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FINAL SEMI-ANNUAL CORRECTIVE ACTION REPORT FOR SITE 11 APRIL - SEPTEMBER 2002 NSB KINGS BAY GA

10/30/2002

J A JONES MANAGEMENT SERVICES

NSB Kings Bay Administrative Record
Document Index Number

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SEMI-ANNUAL CORRECTIVE ACTION REPORT
APRIL 2002 – SEPTEMBER 2002

FINAL

SITE 11, OLD CAMDEN COUNTY LANDFILL
NAVAL SUBMARINE BASE KINGS BAY, GEORGIA

Contract No. N69272-00-D-3170

Prepared for:

NAVAL SUBMARINE BASE
KINGS BAY, GEORGIA
FACILITIES AND ENVIRONMENTAL DIRECTORATE

Prepared by:

J.A. JONES
MANAGEMENT SERVICES

P.O. Box 47248
930 USS Hunley Avenue
Kings Bay, Georgia 31547

OCTOBER 2002

5090
Ser PW4/

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Bruce Khaleghi
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King, Jr. Drive, SE
Floyd Towers East, Suite 1154
Atlanta, GA 30334-9000

Dear Mr. Khaleghi:

Please find for your review enclosure (1), the April - September 2002 Semi-Annual Corrective Action Assessment Report for Site 11, Old Camden County Landfill, Naval Submarine Base (SUBASE), Kings Bay as required by SUBASE Hazardous Waste Permit HW-014 (S&T)-3.

This report includes annual appendix IX sampling conducted in August. We will begin taking these samples in November to take advantage of cooler weather.

We would like to discontinue sampling of monitoring wells KBA-11-02, KBA-11-13B, KBA-11-15, and KBA-11-17B, each of which have met the groundwater protection standards for three years. We would also like to reduce the frequency of monitoring of the irrigation well at 102 Plantation Circle from monthly to annually, since this well has met the groundwater protection standards for one year. Our approved groundwater monitoring plan, section 3, allows this reduction in sampling frequency for compliance monitoring wells.

I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

5090
Ser FE4/

The SUBASE Kings Bay point of contact is Mr. Ken Yargus, (912) 673-2001, extension 1217. Please address all correspondence to "Commanding Officer, Naval Submarine Base, Kings Bay, 1063 USS TENNESSEE Avenue, Kings Bay, GA 31547-2606."

Sincerely,

JOHN R. GARNER
Leader, Environmental Division
Facilities & Environmental
By direction of the
Commanding Officer

Enclosure: 1. April - September 2002 Semi-Annual Corrective Action Assessment Report

Copy to: Mr. Bijan Rahbar

Copy to: (w/o encl)
SOUTHNAVENGCOM (Anthony Robinson)
COMNAVREG SE (Dominque Broadus)
J.A. Jones Environmental Services (Mike Halil)
J.A. Jones Environmental (SUBASE) (Sam Ross)

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OCTOBER 2002

The work described and professional opinions rendered in this document, *Semi-Annual Corrective Action Report, April 2002 – September 2002, Site 11, Old Camden County Landfill, Naval Submarine Base Kings Bay, Georgia* were conducted and developed using commonly accepted procedures consistent with applicable standards of practice. The scope of services and activities described in this document were developed under the supervision of a professional engineer registered in the State of Georgia.

Samuel M. Ross
10/10/02

Samuel M. Ross
Professional Engineer
State of Georgia License No. 024706
Expires December 31, 2002

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ACRONYMS

JAJMS	J.A. Jones Management Services
Bechtel	Bechtel Environmental, Inc.
1,1-DCA	1,1-dichloroethane
1,2-DCE	cis-1,2-dichloroethene
FID	flame ionization detector
GDNR	Georgia Department of Natural Resources
GEPD Rules	Rules of Georgia Department of Natural Resources Environmental Protection Division
GWMP	Groundwater Monitoring Plan
GWPS	Groundwater Protection Standard
NSB	Naval Submarine Base
MCL	Maximum Contaminant Level
PCE	Tetrachloroethene
PID	photoionization detector
TCE	Trichloroethene

UNITS OF MEASURE

ft	Foot
gal	Gallon
ID	inner diameter
in.	Inch
MSL	mean sea level
OD	outer diameter
ug/L	micrograms per liter
mg/L	milligrams per liter
Pg/L	picograms per liter
ppm	parts per million

1.0 INTRODUCTION

J.A. Jones Management Services (JAJMS) has been contracted by the Department of the Navy, Engineering Field Activity Southeast, Resident Officer in Charge of Construction, Kings Bay, Kings Bay, Georgia to provide operating support services as the Base Operating Support Contractor. Under the Prime Contract N69272-00-D-3170, JAJMS has been contracted to provide groundwater monitoring services at Site 11, Old Camden County Landfill at the Naval Submarine Base (NSB) Kings Bay in accordance with the approved Groundwater Monitoring Plan (GWMP; Bechtel, 1999). This Semi-Annual Corrective Action Report provides:

- A summary of the semiannual monitoring activities that were performed from April to September 2002;
- A presentation of the data from the activities performed;
- An assessment of the current and historical data;
- Recommendations for future activities based upon the data assessment; and
- A summary of the activities planned for the period of October 2002 to March 2003.

2.0 SUMMARY OF ACTIVITIES

Two quarterly groundwater sampling events were performed by JAJMS during the semiannual period, one from May 6 to 7, 2002 and the other from August 5 to 8, 2002. One annual sampling event was performed from August 5 to 8, 2002. Activities included well inspections, well measurements, and groundwater sampling and analysis. The activities that were performed during the May 2002 quarterly sampling event were presented in detail in the Quarterly Groundwater Monitoring Report, April 2002 – June 2002 (JAJMS, 2002), dated June 2002. For this reason, this section of the document only addresses the activities that were performed during the August 2002 sampling event.

Weather conditions during the groundwater sampling event were hot and dry with temperatures from the low 80's in the morning to the high 90's in the afternoon. There was no significant rainfall during the week preceding the groundwater sampling event. For the month of July 2002, a total of 5.66 inches of rainfall occurred. A site map is provided as Figure 1.

2.1 WELL INSPECTIONS

All wells were inspected for aboveground damage or well deterioration. Generally, all wells were structurally sound with no aboveground damage. It has been recommended by JAJMS that KBA-11-02 be redeveloped because the measured depth of the well has decreased since its construction; however, the depth has stabilized over the past year.

Per the direction of the Navy, with approval by the Georgia Department of Natural Resources (GDNR), recovery wells RW-6, RW-7, and RW-8 were abandoned on October 30, 2001. The work was performed under Delivery Order 640 of JAJMS Prime Contract N69272-00-D-3170, by a licensed driller in accordance with the Georgia Water Well Standards Act.

2.2 WELL MEASUREMENTS

Well measurements, including organic vapor headspace, depth to water, and the total depth, were recorded on August 5, 2002. Headspace readings were recorded from inside in the monitoring well

casing immediately after removing the cap using a Photovac model 2020 PID organic vapor meter. The highest PID response was recorded for each monitoring well. Water levels and well depth measurements were performed during the sampling event using an electronic water level indicator, accurate to 0.01 feet. All water level measurements were recorded with respect to a surveyed reference point located at the top of the well casing. Measurements were recorded two to three times over an eight-hour period and stabilization of static water level was assumed when two consecutive readings recorded at least one hour apart were within 0.01 feet. The total well depth was measured using the electronic water level indicator by lowering the probe until the bottom of the well was reached. Total depth measurements were made with respect to a surveyed reference point located at the top of the well casing. Barometric pressure, relative humidity and ambient air temperatures were measured using portable field instruments. All monitoring well measurements were obtained prior to sampling to avoid interference by purging activities.

2.3 GROUNDWATER SAMPLING AND ANALYSES

2.3.1 Monitoring Well Sampling

Currently a total of six monitoring wells are sampled on an annual basis and five monitoring wells are sampled on a quarterly basis at Site 11. Both the quarterly and annual sampling events were conducted at Site 11 during the period of August 6 to 8, 2002. Groundwater samples were generally collected from monitoring wells in order of least contaminated to most contaminated, based upon historical data. Prior to sampling, all monitoring wells were purged using the low-flow (minimal draw down) method. Prior to purging, the intake of a dedicated piece of Teflon™ tubing (3/16-in. OD by ¼-in. ID) was positioned near the center of the monitoring well screen. Groundwater was then purged through the tube using a peristaltic pump, Geotech Model Geopump 2. Water quality parameters, including temperature, pH, conductivity, oxygen-reduction potential, turbidity, and dissolved oxygen were measured every two gallons while purging. After parameters stabilized within 10 percent, a sample was collected and containerized for chemical analysis. Samples for volatile constituents were collected by stopping the pump, removing the tubing from the monitoring well, reversing the flow of the pump, and gently filling the container. Samples for non-volatile analyses were taken directly from the effluent of the peristaltic pump. All samples were submitted to Columbia Analytical Services for analyses using standard chain-of-custody procedures as specified in the GWMP. All purge water was containerized in drums and properly disposed.

2.3.2 Quarterly Monitoring Well Analyses

Groundwater samples collected from monitoring wells, PS-2, KBA-11-13A, KBA-11-16, KBA-11-34, KBA-11-37, were analyzed by Columbia Analytical Services for Groundwater Protection Standards (GWPS) compounds by EPA Method 8260B, naphthalene by EPA Method 8270C SIM, cobalt by EPA Method 200.8 and nickel by EPA Method 200.8. Naphthalene, cobalt and nickel analyses were not originally required at each monitoring well by the GWMP, but were included this quarter based upon detections of these constituents in samples collected for 40 CFR Part 264, Appendix IX compounds from KBA-11-13A during the August 2001 annual sampling event.

2.3.3 Annual Monitoring Well Analyses

Groundwater samples collected from monitoring wells KBA-11-02, KBA-11-10B, KBA-11-11A, KBA-11-13B, KBA-11-15 and KBA-11-17B, were analyzed by Columbia Analytical Services for GWPS compounds by EPA Method 8260B, naphthalene by EPA Method 8270C SIM, cobalt by EPA Method 200.8 and nickel by EPA Method 200.8. Naphthalene, cobalt and nickel analyses were not originally required at each monitoring well by the GWMP, but were included this year based upon detections of these constituents in samples collected for 40 CFR Part 264, Appendix IX compounds from KBA-11-13A during the August 2001 annual sampling event.

Groundwater samples collected from KBA-11-11A and KBA-11-13A were analyzed for 40 CFR Part 264, Appendix IX compounds by various EPA methods as noted in Appendix B. A total of one each EPA Method 8260 analysis for volatile organic constituents was performed for both the GWPS and Appendix IX compounds for monitoring wells KBA-11-11A and KBA-11-13A.

2.3.4 Irrigation Well Sampling and Analyses

Currently a total of three irrigation wells in the Crooked River Plantation subdivision, located across the highway from the Kings Bay Naval Submarine Base, are sampled on a monthly basis. These locations are not included in the GWMP and have been selected for sampling based upon the results from a comprehensive irrigation well survey that was performed in 1998. Irrigation wells located at 102 Plantation Court, 122 Plantation Court, and 108 Cottage Court were sampled on July 17, August 13 and September 25, 2002. Prior to sampling, all of the irrigation wells were purged by activating the irrigation pump and allowing the spicket to discharge for approximately 5 minutes. Sample containers were then filled directly from the spicket. All of the irrigation well samples were analyzed by Columbia Analytical Services for GWPS compounds by EPA Method 8260B.

3.0 DATA PRESENTATION

This section provides a summation and tabulation of all field measurements and analytical results associated with the groundwater monitoring program. The data from the May 2002 quarterly sampling event was discussed in detail in the Quarterly Groundwater Monitoring Report, April 2002 – June 2002 (JAJMS, 2002), dated June 2002. For this reason, this section only addresses the results from the activities performed during the August 2002 sampling event.

3.1 HEADSPACE READINGS

Headspace readings were measured at 19 monitoring wells as described in Section 2.2, using a Photovac model 2020 PID organic vapor meter which was calibrated in accordance with manufacturer's specifications prior to use. The results are summarized below:

- A total of 11 monitoring wells exhibited no response on the PID;
- The average PID response for all 19 monitoring wells analyzed was 154 parts per million (ppm);
- The range of PID responses was 0 to 2000 ppm (KBA-11-10B)

Headspace readings are provided in Table 1.

3.2 MONITORING WELL MEASUREMENTS

Depth to water and depth to monitoring well bottom were measured at 19 monitoring wells as described in Section 2.2, using an electronic water level indicator. Based upon the data, ground water flow in the intermediate zone appears to be generally west to northwest. A summary of the data recorded during the monitoring well measurement evolution is provided in Table 2. Isometric contours of the August 5, 2002 data set are provided on Figure 2.

3.3 MONITORING WELL PURGING PARAMETERS

Water quality parameters temperature, pH, conductivity, dissolved oxygen, turbidity and oxygen reduction potential were measured at each sampling location every two gallons during purging activities using a Horiba U-22 water quality meter, which was calibrated in accordance with manufacturer's

specifications prior to use. Parameters generally stabilized within ten percent after six to eight gallons of groundwater were purged from the monitoring well. Table 3 provides a summary of the stabilized parameters at the time of sample collection.

A summary of the monitoring well purging and sampling records for the August 2002 sampling event is included in Appendix A.

3.4 ANALYTICAL RESULTS

A total of eleven monitoring wells and three irrigation wells were sampled and analyzed during the quarter as described in Section 2.3. A summary of the analytical laboratory results is provided in Tables 4 through 6. Analytical laboratory reports are provided in Appendix B.

3.4.1 Groundwater Protection Standard Analytical Results

Of the eleven monitoring wells that were sampled for GWPS compounds, monitoring wells KBA-11-13A, KBA-11-16, KBA-11-34, KBA-11-37 and PS-2 exhibited concentrations that exceeded one or more of the GWPS constituent standards. The results are summarized below:

- Monitoring well KBA-11-13A, located approximately 150 feet downgradient from the source area, exhibited elevated concentrations of tetrachloroethene (PCE) at 14 micrograms per liter (ug/l), trichloroethene (TCE; 16 ug/l), and chlorobenzene (1.8 ug/l).
- Monitoring well KBA-11-16, located approximately 500 feet downgradient from the source area, exhibited elevated concentrations of 1,1-dichloroethane (1,1-DCA; 27 ug/l).
- Monitoring well KBA-11-34, located within the source area, exhibited elevated concentrations of PCE (100 ug/l) and TCE (15 ug/l).
- Monitoring well KBA-11-37, located approximately 600 feet downgradient from the source area, exhibited elevated concentrations of chlorobenzene (5.5 ug/l).
- Monitoring well PS-2, located approximately 400 feet crossgradient from the source area, exhibited elevated concentrations of cis-1,2-dichloroethene (1,2-DCE; 110 ug/l), 1,1-DCA (2.8 ug/l), vinyl chloride (2.3 ug/l), and chlorobenzene (2.2 ug/l).
- Monitoring wells KBA-11-02, KBA-11-10B, KBA-11-11A, KBA-11-13B, KBA-11-15 and KBA-11-17B were below the GWPS concentrations for all parameters.

The analytical results are presented in Table 4 and on Figures 3 through 6. Laboratory analytical reports are provided in Appendix B.

3.4.2 Appendix IX Analytical Results

Monitoring well KBA-11-13A and/or its duplicate sample exhibited concentrations of the following Appendix IX constituents at concentration that were greater than those found in background monitoring well KBA-11-11A: TCE (16 ug/L); chlorobenzene (1.8 ug/L); ethylbenzene (5.4 ug/L); trans-1,2-dichloroethene (2.5 ug/L); cis-1,2-DCE (25 ug/L); 1,4-dichlorobenzene (1.7 ug/L); PCE (14 ug/L) naphthalene (20 ug/L); barium (50.5 ug/L); beryllium (1.280 ug/L; possible blank contamination); cobalt (278 ug/L); silver (3.360 ug/L; possible blank contamination); nickel (521 ug/L); and vanadium (5.760 ug/L; possible blank contamination).

Background monitoring well KBA-11-11A exhibited detectable concentrations of the following Appendix IX constituents: di-n-butyl-phthalate (1.9; estimated value); 1,2,3,4,6,7,8-HpCDD (15.491 pg/L; estimated value); OCCD (158.321 pg/L; estimated value); 1,2,3,4,6,7,8-HpCDF (2.191 pg/L;

estimated value); OCDF (2.957 pg/L; estimated value); total hepta-dioxins (15.491 pg/L); total hepta-furans (5.416 pg/L); barium (11.1 ug/L); silver (1.910 ug/L; possible blank contamination).

The analytical results are presented in Table 5. Laboratory analytical reports are provided in Appendix B.

3.4.3 Cobalt, Nickel, and Naphthalene Analytical Results

Naphthalene, cobalt and nickel analyses were not originally required at each monitoring well by the GWMP, but were included this quarter based upon detections of these constituents in samples collected for 40 CFR Part 264, Appendix IX compounds from KBA-11-13A during the August 2001 annual sampling event. The additional analyses were performed under Delivery Order 32 of JAJMS Prime Contract N69272-00-D-3170. The results are summarized below:

- Detections of nickel were noted in all eleven of the monitoring wells, ranging from 0.00053 mg/l (PS-2) to 0.49 mg/l (KBA-11-13A). All of the monitoring wells except KBA-11-13A were below the maximum contaminant level (MCL) of 0.1 mg/l specified by the Rules of Georgia Department of Natural Resources Environmental Protection Division (GEPD Rules) Chapter 391-3-5-.18, 1(a).
- Detections of cobalt were noted in ten of the eleven of the monitoring wells, with KBA-11-37 exhibiting the only non-detectable concentration. The detected results ranged from 0.00003 ug/l (PS-2 and KBA-11-10B) to 0.36 ug/l (KBA-11-13A). An MCL for cobalt is currently not specified by the GEPD Rules.
- Detections of naphthalene were noted in three of the eleven of the monitoring wells, with KBA-11-16, KBA-11-13A, and KBA-11-37 exhibiting the only detectable concentrations. The detected results ranged from 0.88 ug/l (KBA-11-16) to 22 ug/l (KBA-11-13A). An MCL for naphthalene is currently not specified by the GEPD Rules.

The analytical results are presented in Table 4. Laboratory analytical reports are provided in Appendix B.

3.4.4 Subdivision Irrigation Wells Analytical Results

A total of three irrigation wells in the Crooked River Plantation subdivision, located across the highway from the Kings Bay Naval Submarine Base, were sampled on a monthly basis during the period. These locations are not included in the GWMP and were selected for sampling based upon the results from a comprehensive irrigation well survey that was performed in 1998. Irrigation wells located at 102 Plantation Court, 122 Plantation Court, and 108 Cottage Court were sampled on July 17, August 13 and September 24, 2002. The analytical results from the September 24, 2002 sampling event were not available when this document was issued and will be included in the next quarterly report. The results from the July and August sampling events are summarized below:

- The irrigation well located at 102 Plantation Court exhibited no detectable concentrations of GWPS constituents.
- The irrigation well located at 122 Plantation Court exhibited concentrations of vinyl chloride (4.1 ug/l) that were above the GWPS (2 ug/l). No other detections were noted at this location.
- The irrigation well located at 108 Cottage Court exhibited no concentrations above the GWPS, and detectable concentrations of cis-1,2-DCE (4.2 ug/l) that were below the GWPS (70 ug/l). No other detections were noted at this location.

The analytical results are presented in Table 6. Laboratory analytical reports are not included with this document but are on file at Kings Bay Naval Submarine Base and can be provided upon request.

3.5 QUANTITY OF HYDROCARBONS REMOVED

Per the direction of the Navy, with approval by the GDNR, the pump-and-treat remediation system at Site 11 was dismantled during November 2001 under Delivery Order 651 of JAJMS Prime Contract N69272-00-D-3170. For this reason, the quantity of hydrocarbons removed calculation no longer applies.

4.0 DATA ASSESSMENT

4.1 OBSERVATIONS

- With the exception of KBA-11-02, which may require redevelopment, all of the monitoring wells are in good condition and are functioning adequately for evaluating the hydrologic conditions and groundwater quality.
- No significant increases or decreases in contaminant concentrations were noted in any of the monitoring or irrigation wells compared to the data from last quarter.
- Source area monitoring well KBA-11-34 continues to show a slight overall upward trend in PCE concentrations.
- Downgradient monitoring well KBA-11-13A continues to show a slight downward trend in TCE concentrations. This trend is shown graphically on Figures 3 and 4.
- Downgradient monitoring well KBA-11-13A exhibited PCE concentrations above the GWPS for the first time since 1997.
- Source area monitoring well KBA-11-34 exhibited TCE concentrations above the GWPS for the first time since 1998.
- Monitoring wells KBA-11-02, KBA-11-11A, KBA-11-13B, KBA-11-15, and KBA-11-17B exhibited no detectable concentrations of GWPS constituents for the second consecutive annual sampling event. Monitoring well KBA-11-02 was inadvertently sampled on a quarterly basis during the previous year though the required sampling frequency had been reduced to annually.
- The irrigation well located at 102 Plantation Court exhibited non-detectable concentrations of all GWPS constituents for the seventh consecutive monthly sampling event, and exhibited no concentrations above GWPS concentrations for the twelfth consecutive monthly sampling event.
- The irrigation well located at 108 Cottage Court exhibited no concentrations above GWPS concentrations for the 25th consecutive monthly sampling event. Approval was recently received from GDNR to reduce the sampling frequency at this location to annually.

4.2 RECOMMENDATIONS

The following recommendations are provided for future groundwater monitoring at Site 11:

1. Discontinue sampling of monitoring wells KBA-11-02, KBA-11-11A, KBA-11-13B, KBA-11-15, and KBA-11-17B for GWPS constituents as they have met the criteria specified in the Exit Strategy of the GWMP by exhibiting no detectable concentrations of GWPS constituents for the second consecutive annual sampling event. Continue to sample KBA-11-11A for Appendix IX constituents as the background monitoring well.
2. Discontinue additional cobalt, nickel and naphthalene analyses except where results indicated significant concentrations. This would include monitoring well KBA-11-13A, which is already being sampled annually for these constituents as specified in the GWMP, and monitoring well KBA-11-34.

3. Reduce sampling frequency of irrigation well located at 102 Plantation Court from monthly to annually based upon historically non-detect concentrations.
4. Monitor PCE concentrations at KBA-11-13A to determine if an upward trend develops, and evaluate action as required.

5.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD

JAJMS will continue quarterly monitoring in accordance with the GWMP and all approved modifications. The next quarterly monitoring event is scheduled for November 2002.

6.0 REFERENCES

Bechtel Environmental, Inc., June 1999. *Groundwater Monitoring Plan for Site 11, Old Camden County Landfill, U.S. Naval Submarine Base, Kings Bay, Georgia.*

J.A. Jones Management Services (JAJMS), June 2002. *Quarterly Groundwater Monitoring Report, April 2002 – June 2002 for U.S. Naval Submarine Base, Kings Bay, Georgia.*

1 Site 11 Site Map – Groundwater Monitoring Program

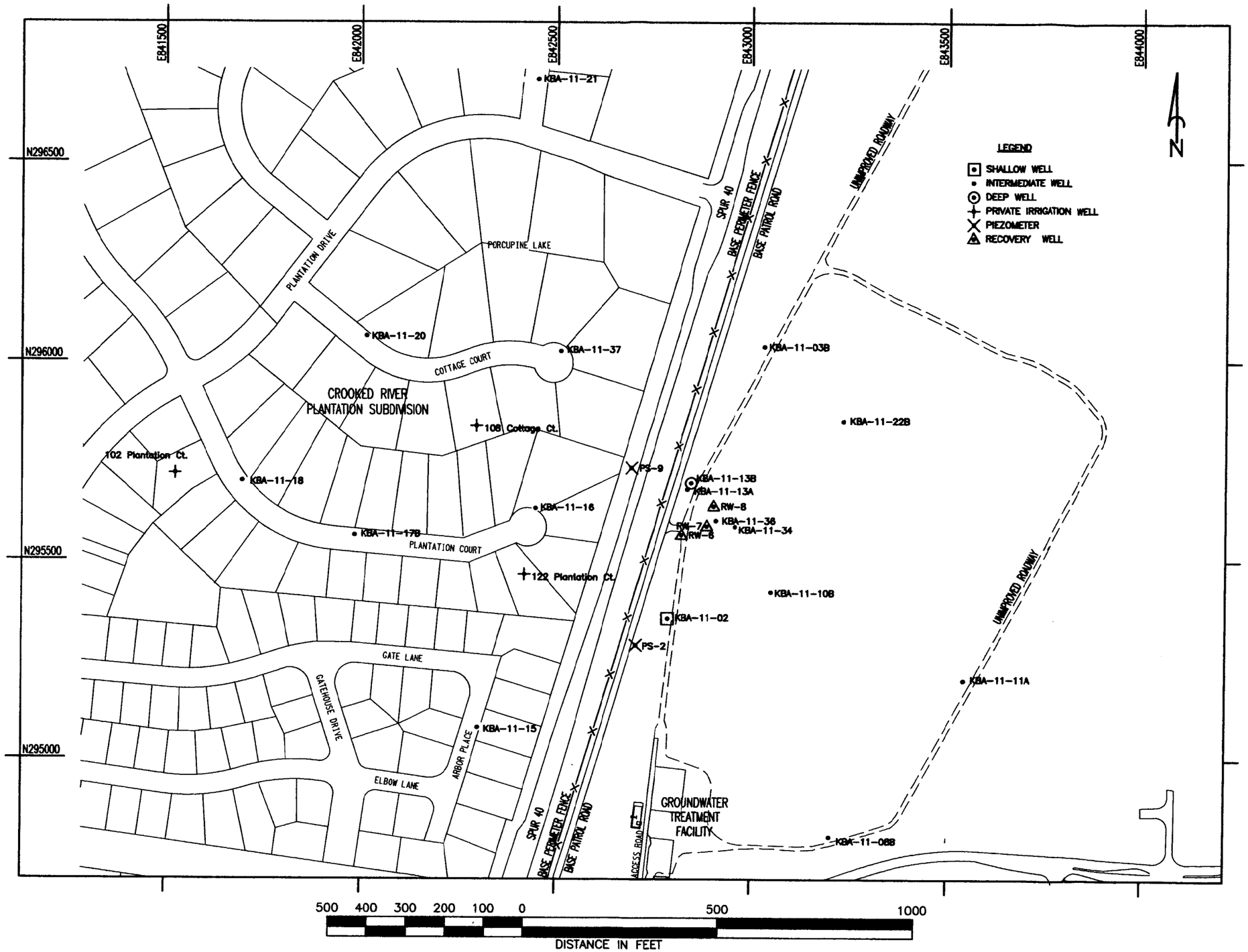
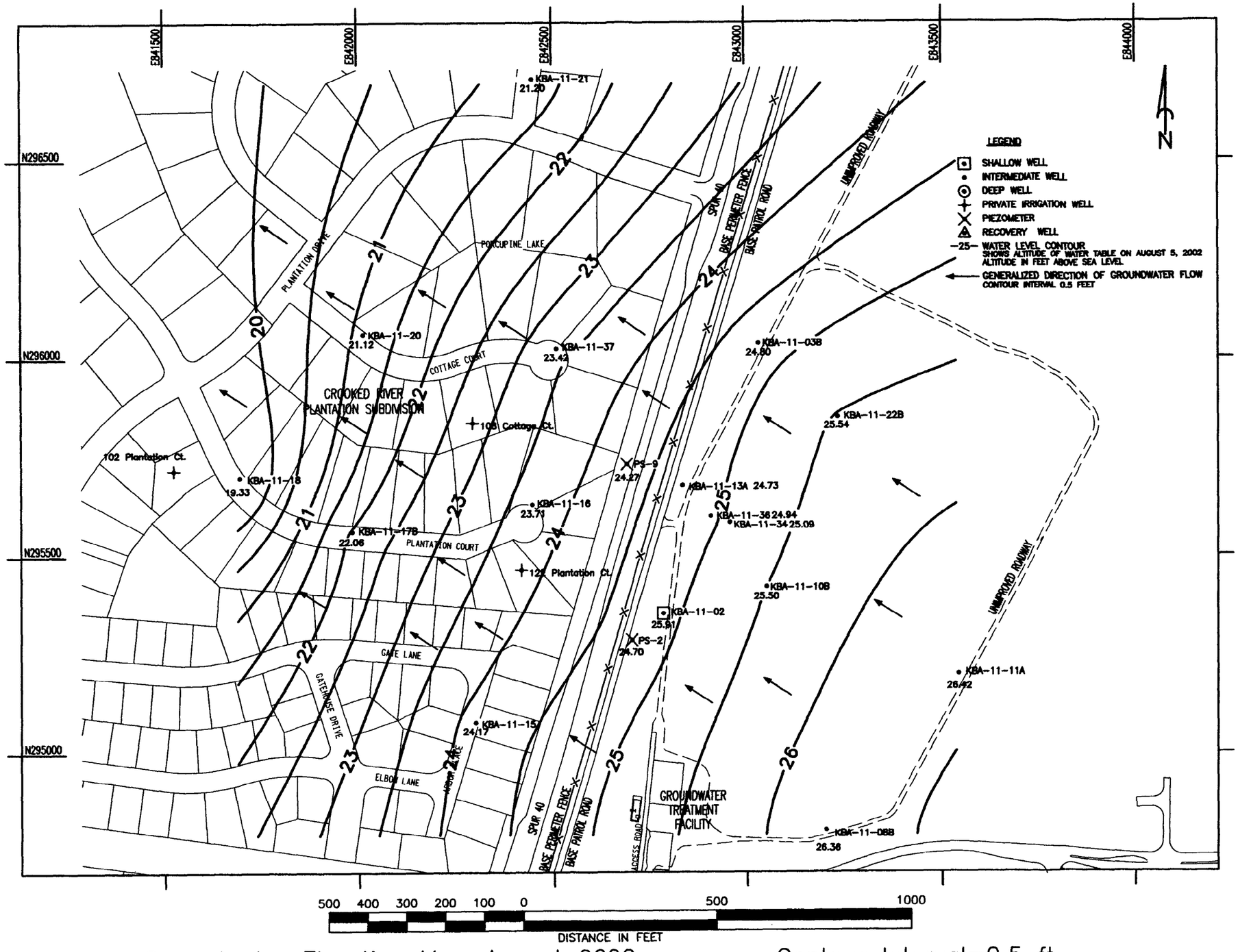


FIGURE 1: Site 11, Site Map

0559BB12



Groundwater Elevation Map–August 2002 Contour Interval=0.5 ft

FIGURE 2: Site 11, Groundwater Elevation Map–August 2002

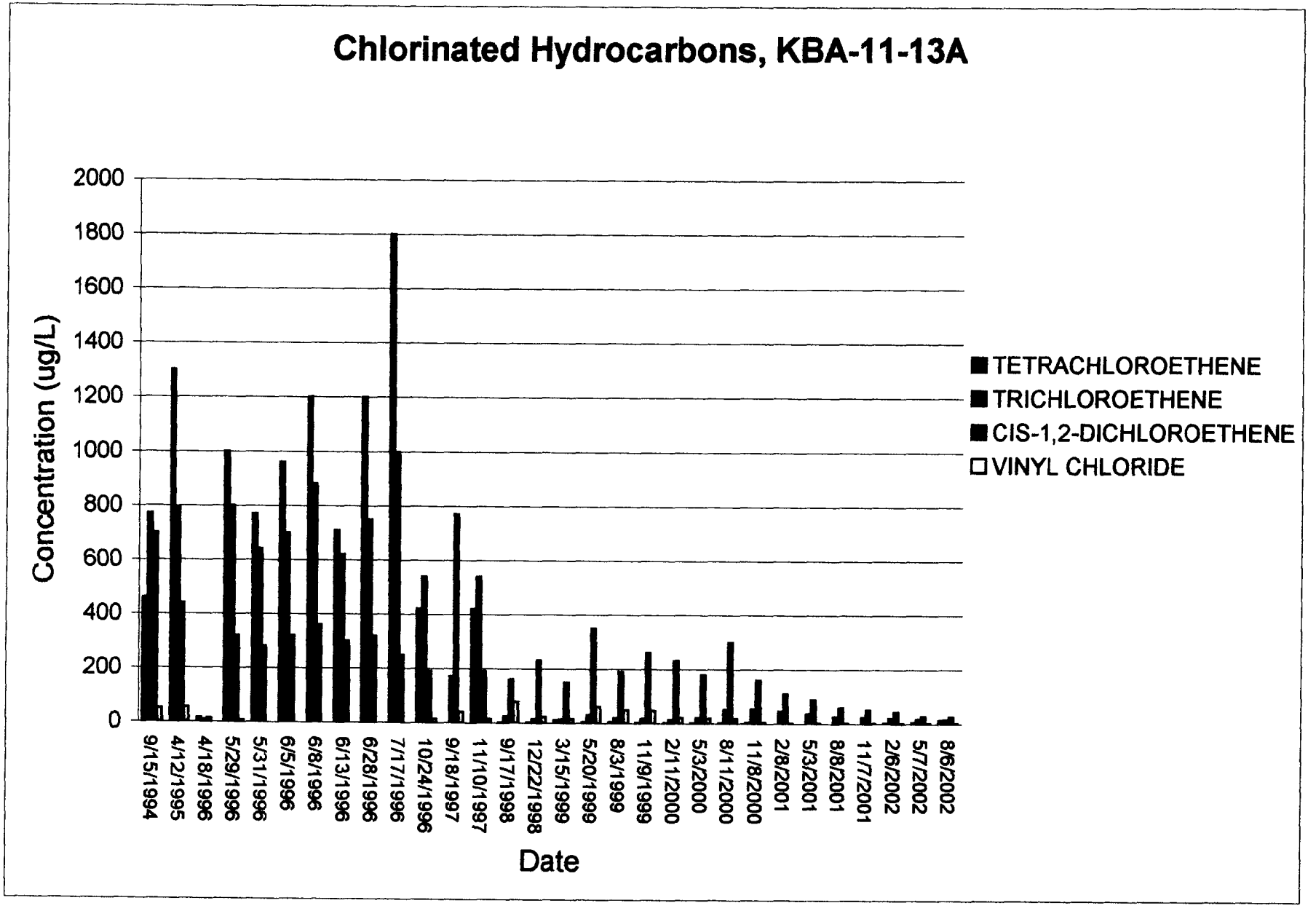
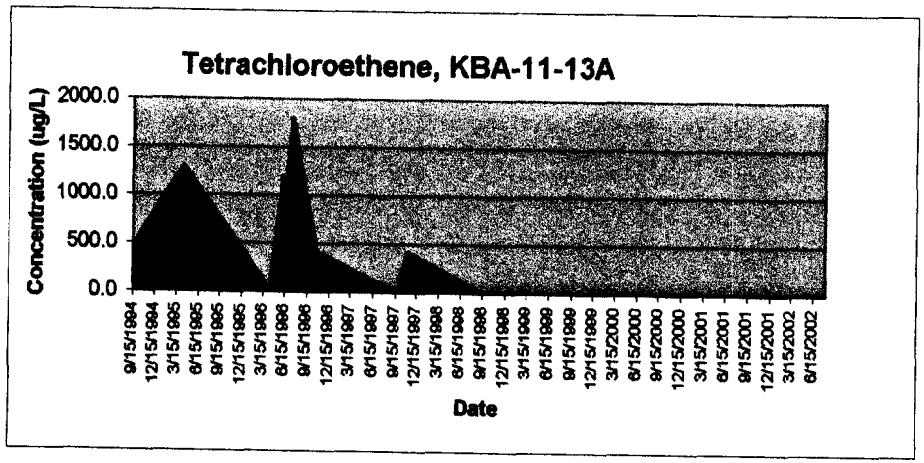
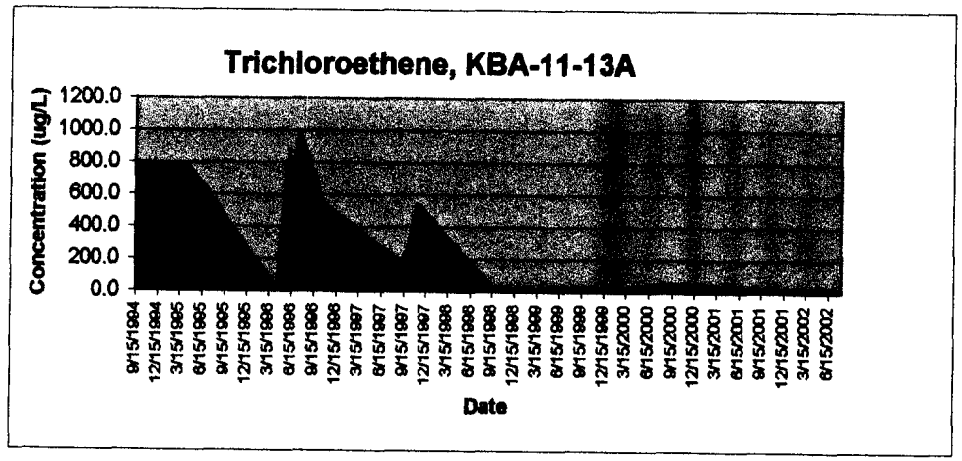
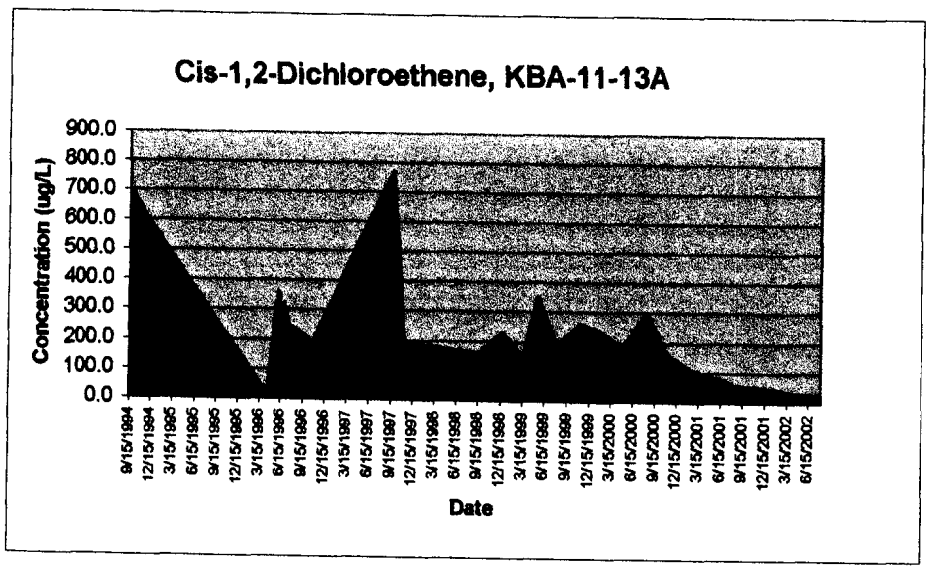


FIGURE 3 - CHLORINATED HYDROCARBONS, KBA-11-13A







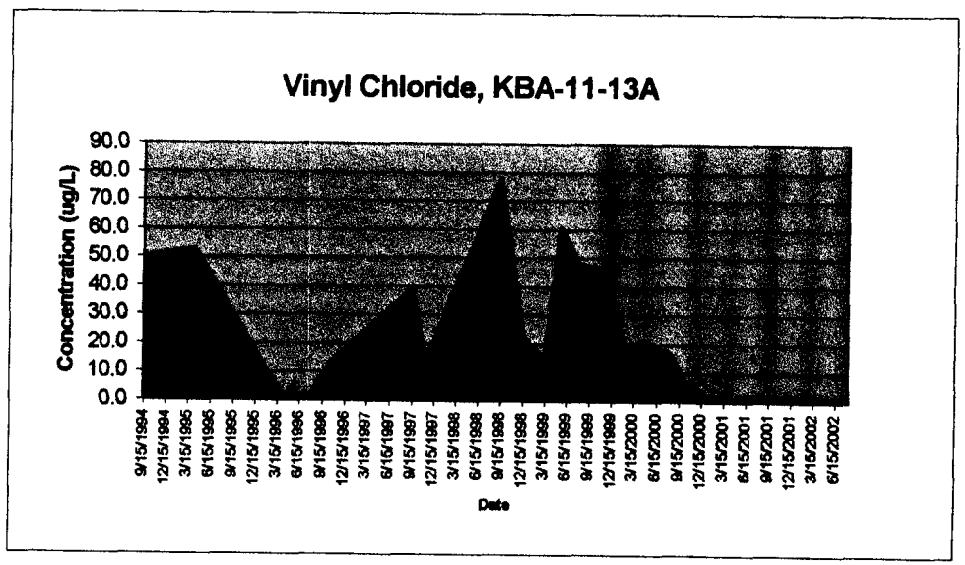


FIGURE 4 - CHLORINATED HYDROCARBON TRENDS, WELL KBA-11-13A

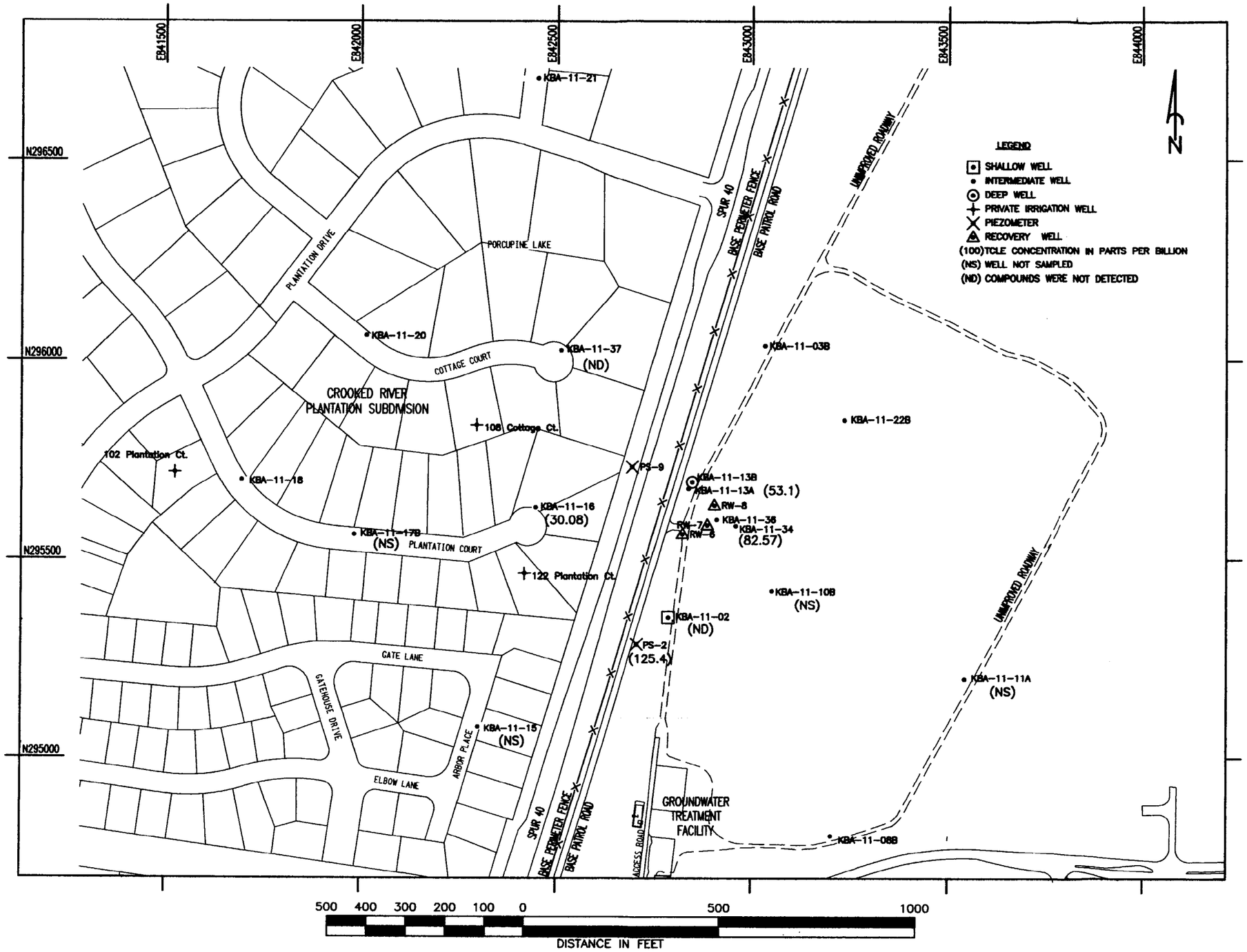


FIGURE 5: Site 11, Groundwater Monitoring Program,
Total Chlorinated Ethenes Concentrations (TCLE) May, 2002

0037BB22

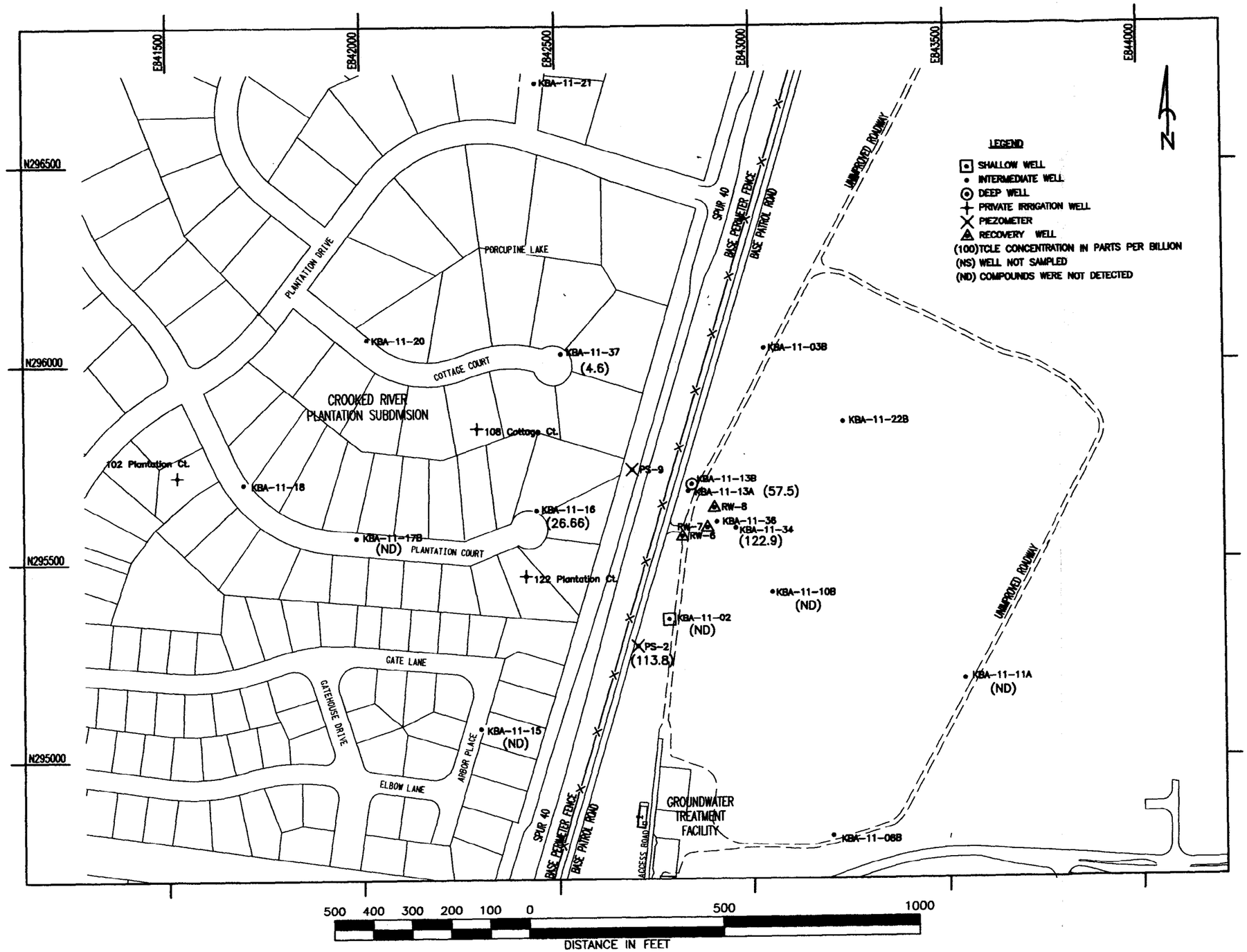


FIGURE 6: Site 11, Groundwater Monitoring Program,
Total Chlorinated Ethenes Concentrations (TCLE) August, 2002

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-02	11/8/1999	0.7	NM	NM
	2/1/2000	0.1	NM	NM
	5/2/2000	0	NM	NM
	8/8/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/6/2001	0	NM	NM
	5/1/2001	0	NM	NM
	8/7/2001	19.1	30.12	79.7
	11/6/2001	0	30.15	70.7
	2/5/2002	0	30.33	63.5
	5/6/2002	0	30.18	95
	8/5/2002	110	29.94	92.5
KBA-11-03B	8/3/1999	0.2	NM	NM
	11/8/1999	2	NM	NM
	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/5/2001	0	NM	NM
	8/7/2001	2.4	30.12	94.6
	11/6/2001	0	30.12	72.5
	2/5/2002	0	30.3	55.4
	5/6/2002	9.6	30.18	90
	8/5/2002	0	29.94	92.5
KBA-11-08B	8/3/1999	0	NM	NM
	11/8/1999	1.5	NM	NM
	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/5/2001	0	NM	NM
	8/7/2001	0	30.12	96.4
	11/6/2001	0	30.12	73.4
	2/5/2002	0.9	30.3	51.8
	5/6/2002	1.6	30.18	92.1
	8/5/2002	0	29.94	92.5
KBA-11-10B	8/2/1999	1.9	NM	NM
	11/8/1999	5	NM	NM
	8/8/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/5/2001	0	NM	NM
	8/7/2001	0	30.12	94.7
	11/6/2001	0	30.15	68
	2/5/2002	0	30.33	57.2
	5/6/2002	0	30.18	92.5
	8/5/2002	2000	29.97	89.1

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-11A	8/3/1999	0.3	NM	NM
	11/8/1999	4.5	NM	NM
	5/2/2000	0	NM	NM
	8/10/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/5/2001	0	NM	NM
	8/7/2001	0	30.12	92.4
	11/6/2001	0	30.12	74.3
	2/5/2002	0	30.3	56.3
	5/6/2002	0	30.18	92.3
	8/5/2002	0	29.94	92.5
KBA-11-13A	8/3/1999	13	NM	NM
	11/8/1999	2	NM	NM
	2/4/2000	0	NM	NM
	5/2/2000	0	NM	NM
	8/10/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/9/2001	3.5	NM	NM
	5/3/2001	0	NM	NM
	8/7/2001	2.8	30.12	88.7
	11/6/2001	0	30.15	70.7
	2/5/2002	0	30.33	55.4
	5/6/2002	0	30.18	94
	8/5/2002	0	29.97	90
KBA-11-13B	8/3/1999	0	NM	NM
	11/8/1999	2	NM	NM
	5/2/2000	0	NM	NM
	8/8/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/9/2001	0	NM	NM
	5/4/2001	0.1	NM	NM
	8/7/2001	0	30.12	92.6
	11/6/2001	0	30.12	70.2
	2/5/2002	0	30.33	55.4
	5/6/2002	0	30.18	94
	8/5/2002	0	29.94	90

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-15	8/17/1999	2,200	NM	NM
	11/9/1999	2.5	NM	NM
	2/7/2000	0	NM	NM
	5/2/2000	0	NM	NM
	8/9/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/13/2001	0	NM	NM
	5/4/2001	6.1	NM	NM
	8/7/2001	0	30.06	91.2
	11/6/2001	0	30.09	74.3
	2/5/2002	0	30.39	51.8
	5/6/2002	14.7	30.18	83.3
	8/5/2002	130	29.94	86
KBA-11-16	8/17/1999	3,500	NM	NM
	11/9/1999	1	NM	NM
	2/7/2000	0	NM	NM
	5/2/2000	0	NM	NM
	8/9/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/6/2001	4.2	NM	NM
	5/2/2001	10.5	NM	NM
	8/7/2001	0	30.06	94.2
	11/6/2001	3.2	30.12	77
	2/5/2002	0	30.39	53.6
	5/6/2002	43.7	30.18	87
	8/5/2002	0	29.94	89.6
KBA-11-17B	8/17/1999	2,700	NM	NM
	11/9/1999	5	NM	NM
	2/7/2000	0	NM	NM
	5/3/2000	0	NM	NM
	8/9/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/13/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.06	92.9
	11/6/2001	7.5	30.12	77.9
	2/5/2002	7,200	30.39	54.5
	5/6/2002	8.3	30.18	88.1
	8/5/2002	0	29.94	90.5

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-18	8/17/1999	3,600	NM	NM
	11/9/1999	11	NM	NM
	5/3/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/16/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.09	93.2
	11/6/2001	8.5	30.12	77.9
	2/5/2002	150	30.39	55.4
	5/6/2002	26.7	30.18	90.1
	8/5/2002	0	29.94	90.5
KBA-11-20	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/13/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.09	91.3
	11/6/2001	0.5	30.09	75.2
	2/5/2002	0	30.39	53.6
	5/6/2002	13.1	30.21	85.9
	8/5/2002	179	29.94	90
KBA-11-21	8/3/1999	3	NM	NM
	11/9/1999	7.5	NM	NM
	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/13/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.06	93.9
	11/6/2001	0	30.09	73.4
	2/5/2002	0	30.39	53.6
	5/6/2002	23.9	30.18	83.3
	8/5/2002	152	29.94	88.2
KBA-11-22	8/3/1999	7	NM	NM
	11/8/1999	0.6	NM	NM
	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/12/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	14.7	30.12	91
	11/6/2001	0	30.12	73.4
	2/5/2002	0	30.33	58.1
	5/6/2002	0	30.18	95
	8/5/2002	0	29.94	91.4

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-34	8/3/1999	1,400	NM	NM
	11/8/1999	2	NM	NM
	2/7/2000	0.4	NM	NM
	5/2/2000	0	NM	NM
	8/8/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/8/2001	25.6	NM	NM
	5/3/2001	28.6	NM	NM
	8/7/2001	0	30.12	92.7
	11/6/2001	0	30.15	70.7
	2/5/2002	0	30.33	55.4
	5/6/2002	0	30.18	95
	8/5/2002	0	29.94	90
KBA-11-36	8/3/1999	10	NM	NM
	11/8/1999	0.6	NM	NM
	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/12/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.12	92.8
	11/6/2001	0	30.15	70.7
	2/5/2002	0	30.33	57.2
	5/6/2002	0	30.18	95
	8/5/2002	0	29.94	90
KBA-11-37	8/16/1999	400	NM	NM
	11/9/1999	3	NM	NM
	2/8/2000	0	NM	NM
	5/4/2000	>2000	NM	NM
	8/9/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/7/2001	27	NM	NM
	5/2/2001	102.5	NM	NM
	8/7/2001	0	30.09	93.1
	11/6/2001	2.8	30.09	75.2
	2/5/2002	0	30.39	53.6
	5/6/2002	10.3	30.21	86.5
	8/5/2002	105	29.94	89.6

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
PS-2	11/8/1999	0.5	NM	NM
	2/7/2000	0	NM	NM
	5/3/2000	>2000	NM	NM
	8/8/2000	>2000	NM	NM
	11/8/2000	0	NM	NM
	2/7/2001	0	NM	NM
	5/2/2001	0.08	NM	NM
	8/7/2001	0	30.12	91.4
	11/6/2001	0	30.15	70.7
	2/5/2002	19.9	30.33	55.4
	5/6/2002	0	30.18	95
	8/5/2002	0	29.97	88
PS-9	5/2/2000	0	NM	NM
	11/8/2000	0	NM	NM
	2/13/2001	0	NM	NM
	5/4/2001	0	NM	NM
	8/7/2001	0	30.06	91.2
	11/6/2001	0.03	30.09	68.9
	2/5/2002	0	30.42	49.1
	5/6/2002	10.5	30.18	84.2
	8/5/2002	240	29.94	86

NM = not measured
PID = photoionization detector

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-02	8/2/1999	36.02	11.37	24.65	15.00	15.42
	11/8/1999		9.61	26.41		15.19
	2/4/2000		11.50	24.52		15.30
	5/2/2000		10.10	25.92		14.00
	8/8/2000		No water	No water		10.80
	11/8/2000		8.65	27.37		10.60
	2/6/2001		10.18	25.84		10.18
	5/1/2001		9.53	26.49		10.65
	8/7/2001		8.13	27.89		10.87
	11/6/2001		8.07	27.95		10.88
	2/5/2002		8.60	27.42		11.00
	5/6/2002		9.71	26.31		10.90
	8/5/2002		10.11	25.91		10.88
KBA-11-03B	8/2/1999	33.49	10.01	23.48	47.00	47.82
	11/8/1999		8.54	24.95		47.77
	2/24/2000		9.50	23.99		49.10
	5/2/2000		8.70	24.79		47.10
	8/15/2000		10.40	23.09		47.50
	11/6/2000		7.78	25.71		47.50
	2/5/2001		8.67	24.82		47.50
	5/1/2001		8.43	25.06		47.50
	8/7/2001		6.78	26.71		47.56
	11/6/2001		7.39	26.10		47.50
	2/5/2002		8.37	25.12		47.51
	5/6/2002		8.75	24.74		47.44
	8/5/2002		8.69	24.80		47.51
KBA-11-08B	8/2/1999	38.20	13.74	24.46	43.00	43.77
	11/8/1999		12.04	26.16		43.75
	2/24/2000		13.40	24.80		44.90
	5/2/2000		12.10	26.10		43.80
	8/15/2000		14.00	24.20		43.50
	11/20/2000		11.54	26.66		43.46
	2/5/2001		12.04	26.16		43.51
	5/1/2001		11.85	26.35		43.59
	8/7/2001		10.02	28.18		43.49
	11/6/2001		10.78	27.42		43.47
	2/5/2002		11.66	26.54		43.48
	5/6/2002		12.25	25.95		43.48
	8/5/2002		11.84	26.36		43.47

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-10B	8/2/1999	38.03	13.90	24.13	51.50	51.67
	11/8/1999		12.31	25.72		51.62
	2/24/2000		13.50	24.53		53.00
	5/2/2000		12.80	25.23		53.40
	8/8/2000		14.90	23.13		52.20
	11/6/2000		14.03	24.00		54.34
	2/5/2001		12.48	25.55		51.35
	5/1/2001		12.06	25.97		51.35
	8/7/2001		10.48	27.55		51.38
	11/6/2001		10.96	27.07		51.37
	2/5/2002		12.11	25.92		51.37
	5/6/2002		12.40	25.63		51.36
	8/5/2002		12.53	25.50		51.36
KBA-11-11A	8/2/1999	35.85	11.40	24.45	37.00	37.12
	11/8/1999		9.61	26.24		37.12
	2/24/2000		11.10	24.75		37.20
	5/2/2000		9.40	26.45		37.00
	8/10/2000		11.70	24.15		37.40
	11/13/2000		8.85	27.00		36.86
	2/5/2001		9.60	26.25		36.84
	5/1/2001		9.31	26.54		36.83
	8/7/2001		7.64	28.21		36.86
	11/6/2001		8.16	27.69		36.83
	2/5/2002		8.23	27.62		36.85
	5/6/2002		9.69	26.16		36.81
	8/5/2002		9.43	26.42		36.82
KBA-11-13A	8/2/1999	34.20	10.77	23.43	42.50	42.52
	11/8/1999		9.25	24.95		42.75
	2/4/2000		10.20	24.00		42.40
	5/2/2000		9.30	24.90		42.00
	8/10/2000		11.20	23.00		42.90
	11/8/2000		6.52	27.68		42.30
	2/9/2001		9.53	24.67		42.26
	5/3/2001		9.21	24.99		42.25
	8/7/2001		7.51	26.69		42.31
	11/6/2001		8.17	26.03		42.27
	2/5/2002		9.13	25.07		42.26
	5/6/2002		9.46	24.74		42.29
	8/5/2002		9.47	24.73		42.25

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-13B	8/2/1999	34.86	14.27	20.59	90.70	90.77
	11/8/1999		12.88	21.98		90.72
	2/24/2000		13.60	21.26		91.40
	5/2/2000		12.80	22.06		91.00
	8/8/2000		14.60	20.26		91.80
	11/6/2000		12.50	22.36		91.60
	2/9/2001		13.05	21.81		90.53
	5/4/2001		13.09	21.77		90.49
	8/7/2001		11.37	23.49		91.98
	11/6/2001		12.33	22.53		90.50
	2/5/2002		12.80	22.06		90.60
	5/6/2002		13.38	21.48		90.52
	8/5/2002		13.07	21.79		90.46
KBA-11-15	8/2/1999	28.49	5.60	22.89	39.00	39.22
	11/9/1999		4.07	24.42		39.17
	2/7/2000		4.80	23.69		39.00
	5/2/2000		3.90	24.59		38.00
	8/9/2000		5.70	22.79		39.30
	11/7/2000		3.69	24.80		38.70
	2/13/2001		4.45	24.04		38.89
	5/4/2001		4.12	24.37		38.90
	8/7/2001		2.22	26.27		38.94
	11/6/2001		3.20	25.29		38.90
	2/5/2002		3.98	24.51		38.90
	5/6/2002		4.43	24.06		38.90
	8/5/2002		4.32	24.17		38.92
KBA-11-16	8/2/1999	28.66	6.17	22.49	44.90	44.77
	11/9/1999		4.73	23.93		44.72
	2/7/2000		5.30	23.36		45.30
	5/3/2000		3.90	24.76		44.00
	8/9/2000		6.40	22.26		45.10
	11/8/2000		4.39	24.27		44.45
	2/6/2001		4.98	23.68		44.47
	5/2/2001		4.48	24.18		44.46
	8/7/2001		2.59	26.07		43.48
	11/6/2001		3.99	24.67		44.46
	2/5/2002		4.70	23.96		44.47
	5/6/2002		5.09	23.57		44.45
	8/5/2002		4.95	23.71		44.47

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-17B	8/2/1999	25.41	4.61	20.80	44.80	44.72
	11/9/1999		3.03	22.38		44.67
	2/7/2000		3.60	21.81		44.40
	5/3/2000		2.70	22.71		42.30
	8/9/2000		4.60	20.81		45.00
	11/7/2000		3.07	22.34		45.30
	2/13/2001		3.65	21.76		44.41
	5/4/2001		3.33	22.08		44.41
	8/7/2001		1.29	24.12		44.48
	11/6/2001		2.81	22.60		44.41
	2/5/2002		3.27	22.14		44.44
	5/6/2002		3.74	21.67		44.44
	8/5/2002		3.35	22.06		44.43
KBA-11-18	8/2/1999	22.81	3.67	19.14	45.80	45.82
	11/9/1999		2.05	20.76		45.77
	2/25/2000		2.70	20.11		46.80
	5/3/2000		1.50	21.31		45.50
	8/15/2000		3.70	19.11		45.40
	11/8/2000		2.24	20.57		47.51
	2/16/2001		2.77	20.04		45.50
	5/4/2001		2.57	20.24		45.51
	8/7/2001		0.38	22.43		45.59
	11/6/2001		2.18	20.63		45.51
	2/5/2002		2.45	20.36		45.53
	5/6/2002		2.96	19.85		45.43
	8/5/2002		2.48	20.33		45.51
KBA-11-20	8/2/1999	23.07	3.22	19.85	40.00	40.12
	11/9/1999		1.94	21.13		40.12
	2/25/2000		2.60	20.47		40.90
	5/2/2000		1.60	21.47		40.90
	8/15/2000		3.60	19.47		40.20
	11/8/2000		2.18	20.89		39.84
	2/13/2001		2.39	20.68		39.86
	5/4/2001		2.48	20.59		39.86
	8/7/2001		0.58	22.49		39.87
	11/6/2001		2.04	21.03		39.84
	2/5/2002		2.18	20.89		39.86
	5/6/2002		2.73	20.34		39.84
	8/5/2002		1.95	21.12		39.85

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-21	8/2/1999	23.56	3.75	19.81	40.40	40.57
	11/9/1999		2.40	21.16		40.57
	2/25/2000		2.90	20.66		41.80
	5/2/2000		2.10	21.46		40.80
	8/15/2000		3.60	19.96		40.20
	11/6/2000		2.40	21.16		40.20
	2/13/2001		2.69	20.87		40.30
	5/4/2001		2.83	20.73		40.30
	8/7/2001		0.94	22.62		40.30
	11/6/2001		2.25	21.31		40.29
	2/5/2002		2.49	21.07		40.30
	5/6/2002		3.04	20.52		40.27
	8/5/2002		2.36	21.20		40.29
KBA-11-22B	8/2/1999	36.13	11.92	24.21	52.60	52.62
	11/8/1999		10.34	25.79		52.59
	2/25/2000		11.60	24.53		53.60
	5/2/2000		10.80	25.33		52.20
	8/15/2000		11.40	24.73		52.30
	11/8/2000		9.21	26.92		52.30
	2/5/2001		10.48	25.65		52.29
	5/4/2001		10.18	25.95		52.33
	8/7/2001		8.54	27.59		52.38
	11/6/2001		8.81	27.32		52.28
	2/5/2002		10.15	25.98		52.29
	5/6/2002		10.40	25.73		52.28
	8/5/2002		10.59	25.54		52.28
KBA-11-34	8/2/1999	37.51	13.75	23.76	40.00	41.07
	11/8/1999		12.18	25.33		41.07
	2/7/2000		13.20	24.31		41.04
	5/2/2000		12.30	25.21		41.40
	8/8/2000		14.30	23.21		41.60
	11/8/2000		11.31	26.20		40.76
	2/8/2001		12.40	25.11		40.76
	5/3/2001		12.01	25.50		40.45
	8/7/2001		10.35	27.16		40.78
	11/6/2001		10.96	26.55		40.78
	2/5/2002		11.95	25.56		40.76
	5/6/2002		12.26	25.25		40.77
	8/5/2002		12.42	25.09		40.76

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
KBA-11-36	8/2/1999	37.91	14.34	23.57	40.00	41.67
	11/8/1999		12.84	25.07		41.65
	2/24/2000		14.02	23.89		42.50
	5/4/2000		12.90	25.01		41.40
	8/15/2000		14.60	23.31		41.40
	11/8/2000		12.02	25.89		41.62
	2/12/2001		13.07	24.84		41.39
	5/4/2001		12.67	25.24		41.39
	8/7/2001		10.95	26.96		41.39
	11/6/2001		11.56	26.35		41.38
	2/5/2002		12.57	25.34		41.36
	5/6/2002		12.85	25.06		41.35
	8/5/2002		12.97	24.94		41.36
KBA-11-37	8/16/1999	26.26	4.15	22.11	38.50	38.57
	11/9/1999		2.86	23.40		38.46
	2/8/2000		3.20	23.06		38.40
	5/4/2000		2.40	23.86		38.20
	8/9/2000		4.10	22.16		38.60
	11/8/2000		2.76	23.50		30.20
	2/7/2001		2.96	23.30		38.18
	5/2/2001		3.00	23.26		38.20
	8/7/2001		1.37	24.89		38.21
	11/6/2001		2.43	23.83		38.19
	2/5/2002		2.82	23.44		38.18
	5/6/2002		3.28	22.98		38.19
	8/5/2002		2.84	23.42		38.19
PS-2	8/17/1999	32.71	9.60	23.11	40.67	39.60
	11/8/1999		7.80	24.91		37.47
	2/7/2000		8.80	23.91		36.80
	5/4/2000		7.20	25.51		36.80
	8/8/2000		9.90	22.81		37.50
	11/8/2000		8.85	23.86		36.86
	2/7/2001		8.06	24.65		37.24
	5/2/2001		7.72	24.99		37.19
	8/7/2001		5.97	26.74		37.24
	11/6/2001		6.68	26.03		37.24
	2/5/2002		7.61	25.10		37.22
	5/6/2002		8.00	24.71		37.20

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 2
Well Measurements

Well Identification	Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Elevation (ft msl)	Constructed Depth (ft btoc)	Measured Depth (ft btoc)
	8/5/2002		8.01	24.70		37.21

ft = feet
msl = above mean sea level
btoc = below top of casing

Table 3
Well Purge Parmeters

Well Identification	Date	Volume Purged (gal)	Temperature (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
KBA-11-02	11/9/1999	6	23.4	5.94	-160	0.527	3	0.51
	2/4/2000	3	22.7	5	-258	0.604	12	1.7
	5/3/2000	6	22.5	6.8	NM	0.44	10	2.3
	8/8/2000			no water – well was not purged				
	11/8/2000	6	23.7	6.62	-189	0.325	7	0.67
	2/6/2001	6	18.9	6.35	-255	0.343	11	0.07
	5/1/2001	6	22	6.1	-84	0.276	6	8.55
	8/8/2001	6	26.9	7.09	-242.2	0.248	10	9.65
	11/7/2001	8	22.7	6.69	-59	0.317	0.7	3.59
	2/6/2002	6	20.96	6.51	-85	0.206	0.4	0.97
	5/7/2002	8	22.1	6.42	-105	0.167	5.31	0
	8/6/2002	6	27.97	8.52	-39	0.35	5.1	3.88
KBA-11-10B	8/2/1999	6	25.6	5.14	-221	0.304	2	NM
	8/8/2000	6	25	6.3	-65	0.295	12	0.04
	8/9/2001	6	24.1	6.16	-222.6	0.317	5	9.99
	8/7/2002	8	25.82	8.37	-23	0.328	6.8	3.96
KBA-11-11A	8/10/2000	6	22.9	6	-18	0.071	4	0.01
	8/8/2001	8	22.8	5.64	-216.6	0.079	10	8.6
	8/6/2002	8	24.02	7.45	3	0.074	0.4	3.67
KBA-11-13A	8/3/1999	6	24.3	5.5	-210	0.463	17	NM
	11/9/1999	8	23	5.54	-142	0.467	2	0.78
	2/4/2000	8	22.3	6.68	-217	0.503	10	1.17
	5/3/2000	6	24.5	6.4	-113	0.561	10	1.1
	8/10/2000	6	23.7	6.2	-48	1.35	1	0.11
	11/8/2000	6	24.3	5.4	-81	1.3	4	0.4
	2/8/2001	6	23.8	4.8	-277	1.8	8	0.31
	5/3/2001	6	22.8	4.75	-76	2.16	1.9	8.5
	8/8/2001	8	25.2	4.98	-166.8	2.38	9	9.05
	11/7/2001	6	23.3	4.97	-10	1.75	0.6	3.53
	2/6/2002	8	24.1	4.85	-42	1.8	5.8	5.88
	5/8/2002	8	23.89	4.46	-16	1.66	8.3	0
	8/6/2002	8	26.67	6.7	69	1.82	32.7	2.51
KBA-11-13B	8/3/1999	8	24.9	7.15	-43	0.267	0	NM
	8/8/2000	6	24.3	7.5	-37	0.241	2	0.07
	8/8/2001	6	24.5	8.11	-243.3	0.29	0.85	10.21
	8/7/2002	8	26.3	8.76	-41	0.341	3.1	3.53
KBA-11-15	8/3/1999	6	25	4.9	-182	0.677	9	NM
	2/7/2000	7	20.8	5.04	-313	0.536	5	1.43
	8/9/2000	6	24.2	5.7	-91	0.694	3	0.13
	8/9/2001	6	22.7	5.9	-204.8	0.97	10	8.83
	8/7/2002	8	24.57	7.62	24	0.775	2.7	5.54

°C = degrees centigrade
NTU = nephelometric turbidity units
mV = millivolts

mg/L = milligrams per liter
mS/cm =microsiemens per centimeter
NM = not measured

Table 3
Well Purge Parmeters

Well Identification	Date	Volume Purged (gal)	Temperature (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
KBA-11-16	8/3/1999	7	26.8	4.76	-111	0.171	35	NM
	11/9/1999	8	24	4.89	-104	0.263	20	0.57
	2/7/2000	7	22.8	5.4	-275	0.364	8	1.09
	5/4/2000	6	23.6	6.1	NM	0.146	10	3.7
	8/9/2000	6	24.6	5.6	-67.7	0.331	1	0.06
	11/8/2000	6	25.02	5.02	-102	0.302	4	0.15
	2/6/2001	6	23.4	4.92	-111	0.345	2	0.03
	5/2/2001	6	23.1	4.17	-123	0.411	7	7.3
	8/9/2001	8	24.4	5.58	-248.1	0.394	4	8.68
	11/7/2001	8	23.6	4.79	-54	0.387	4.8	0.8
	2/6/2002	6	24.64	4.94	-140	0.28	0.7	2.3
	5/7/2002	6	24.41	4.81	-170	0.188	6.5	0
	8/7/2002	8	27.44	8.36	-45	0.449	1.1	10.45
KBA-11-17B	8/3/1999	8	24.7	4.48	-112	0.118	6	NM
	2/7/2000	7	21.9	5.4	-287	0.135	3	1.08
	8/9/2000	6	24.3	6.8	-101	0.073	2	0.01
	8/9/2001	6	23.6	5.46	-178.4	0.118	10	8.7
	8/7/2002	8	25.88	7.14	58	0.583	2	3.35
KBA-11-34	8/3/1999	6	30.5	3.2	-300	2.36	13	NM
	11/9/1999	8	27.2	3.58	-134	2.26	9	0.44
	2/7/2000	8	24.9	2.81	-184	2.19	9	2.43
	5/4/2000	6	25.8	3.9	-119	1.36	10	5.85
	8/8/2000	6	27.8	3.7	-315	1.78	38	0.02
	11/8/2000	6	26.03	3.51	-189	1.73	44	1.73
	2/8/2001	6	26.9	3.8	-249	1.69	4	0.06
	5/3/2001	8	25.2	3.88	-113	1.48	3	6.96
	8/9/2001	6	27.5	4.35	-152.5	1.07	12	8.77
	11/7/2001	6	25.3	3.7	-404	0.652	4.7	19.99
	2/6/2002	6	28.08	3.45	-322	1.28	0.5	8.45
	5/8/2002	8	27.12	3.65	-260	1.1	4.5	0
	8/8/2002	8	27.89	5.05	112	1.02	5.3	3.32
KBA-11-37	8/16/1999	9	25.5	5.52	-227	0.517	15	NM
	11/9/1999	8	24.2	5.37	-200	0.573	12	0.46
	2/8/2000	8	21.3	6.1	-323	0.562	6	1.45
	5/4/2000	6	24	6.3	NM	0.517	10	1.75
	8/9/2000	6	24.6	6.2	-119	0.551	3	0.03
	11/8/2000	6	26.2	5.67	-73	0.533	4.3	0.86
	2/7/2001	6	22.5	5.5	-73	0.559	9	0.1
	5/2/2001	8	24.2	5.41	-139	0.595	30	8.55
	8/9/2001	6	25.5	6.28	-248.8	0.587	10	9.61
	11/7/2001	8	23.7	5.57	-72	0.618	0.5	1.75
	2/5/2002	6	24.68	5.56	-147	0.395	0.7	1.27
	5/7/2002	6	24.15	5.47	-155	0.231	6.01	0

°C = degrees centigrade
NTU = nephelometric turbidity units
mV = millivolts

mg/L = milligrams per liter
mS/cm =microsiemens per centimeter
NM = not measured

Table 3
Well Purge Parmeters

Well Identification	Date	Volume Purged (gal)	Temperature (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
PS-2	8/18/1999	7	23.2	4.95	-213	0.381	10	NM
	11/9/1999	8	22	4.87	-144	0.363	2	0.35
	2/7/2000	8	19.5	4.93	-387	0.355	10	1.43
	5/3/2000	6	21.6	5.7	NM	0.317	10	1.3
	8/8/2000	6	23	5	-108	0.3	2	0.04
	11/8/2000	6	24.2	5.4	-92	0.298	4	0.48
	2/7/2001	6	17.7	5.24	-90	0.29	3	0.03
	5/2/2001	8	21.7	5.42	-123	0.327	1	7.8
	8/9/2001	6	23.1	5.8	-223.5	0.318	5	9.84
	11/7/2001	8	21.2	5.06	-33	0.334	0.2	1.64
	2/6/2002	6	22.85	5.24	-120	0.286	0.7	0.8
	5/6/2002	6	22.1	4.98	-105	0.163	9.9	0

°C = degrees centigrade
NTU = nephelometric turbidity units
mV = millivolts

mg/L = milligrams per liter
mS/cm =microsiemens per centimeter
NM = not measured

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-02																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/9/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/4/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/3/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/6/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/2/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.1	1.0U	1.0U	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/7/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	4.8JB	NA	NA
2/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	NA	NA
5/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00137	0.00137
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.0012	0.000036
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-10B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/2/1999	3.0U	1.0U	1.6I	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.6	10	1.0U	3.0U	**2.5**	1.5	NA	NA	NA
8/8/2000	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0	5.0	1.0U	3.0U	**1.0**	1.0	NA	NA	NA
8/9/2001	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.57J	2.5	1.0U	3.0U	**1.2**	0.76J	NA	NA	NA
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.1	1.0U	3.0U	1.0U	**75**	1.0U	0.00065B	0.00003
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-11A																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Cobalt (mg/L)	Nickel (mg/L)
8/2/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/10/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0	5.0	1.0U	1.0U	1.0	1.0	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00035B	0.001B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-13A																		
Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	3.0U	**19**	**190**	7.4	1.0U	1.0U	1.0U	**48**	1.0U	1.1I	66	2.7	14.4	**6.2**	4.0	NA	NA	NA
11/9/1999	30U	**15I**	**260**	1.0U	1.0U	1.0U	1.0U	**46**	1.0U	1.0U	65	1.0U	24I	1.0U	1.0U	NA	NA	NA
11/9/1999 (dup)	3.0U	**17**	**210**	6.6	1.0U	1.0U	1.0U	**42**	1.0U	1.3I	92	4.2	49	**8.2**	5.2	NA	NA	NA
2/4/2000	1.0U	**14**	**230**	6.0	1.0U	1.0U	1.0U	**20**	1.0U	2.0	64	2.0	23	**6.0**	4.0	NA	NA	NA
5/3/2000	1.0U	**20**	**180**	6.0	1.0U	1.0U	1.0U	**19**	1.0U	2.0	67	2.0	4.0	**5.0**	3.0	NA	NA	NA
8/10/2000	1.0U	**51**	**300E**	9.0	1.0U	1.0U	1.0U	**17**	1.0U	1.0	71	0.90	0.70	**5.0**	3.0	NA	NA	NA
8/10/2000 (dup)	1.0U	**40**	**190**	7.0	1.0U	1.0U	1.0U	**11**	1.0U	1.0	51	0.70	3.0	**4.0**	2.0	NA	NA	NA
11/8/2000	3.0U	**54**	**160**	7.0	1.0U	1.0U	1.0U	**4.0**	1.0U	1.0	57	1.0U	2.0U	**5.0**	3.0	NA	NA	NA
2/8/2001	0.8	**45**	**110**	8.0	1.0U	1.0U	1.0U	0.9	1.0U	1.0	34	1.0U	3.0U	**3.0**	1.0U	NA	NA	NA
5/3/2001	0.59J	**37**	**88**	6.6	1.0U	1.0U	1.0U	0.9	1.0U	0.33J	20	0.46J	0.33J	**2.4**	1.4	NA	NA	NA
8/8/2001	1.6	**32**	**71**	6.4	0.44J	1.0U	1.0U	1.0U	1.0U	0.43J	22	0.43J	0.56J	**3.1**	1.4	NA	NA	NA
8/8/2001 (dup)	0.77J	**26**	59	5.4	1.0U	1.0U	1.0U	1.0U	1.0U	0.31J	14	0.30J	0.37J	**2.1**	1.4	NA	NA	NA
11/7/2001	0.86J	**24**	52	4.7	1.0U	1.0U	1.0U	1.0U	1.0U	0.36J	16	0.28J	3.0U	**2.6**	2.1B	30	NA	NA
11/7/2001 (dup)	0.66J	**20**	44	4.0	1.0U	1.0U	1.0U	1.0U	1.0U	0.34J	14	0.24J	3.0U	**2.3**	1.7B	29B	NA	NA
2/6/2002	1.6	**21**	43	4.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	9.0	1.0U	3.0U	**3.1**	2.0B	38B	NA	NA
2/6/2002 (dup)	1.6	**20**	42	4.2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	8.5	1.0U	3.0U	**3.0**	1.9B	37B	NA	NA
5/8/2002	**5.0**	**17**	28	3.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	6.0	0.37J	3.0U	**2.2**	1.8	29	**0.58**	0.4
5/2/2002 (dup)	3.8	**16**	26	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.8	0.34J	3.0U	**1.9**	1.7	25	**0.55**	0.38
8/6/2002	**14**	**16**	25	2.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.4	1.0U	3.0U	**1.8**	1.7	NA	**0.49**	0.36
8/6/2002 (dup)	**13**	**15**	23	2.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.1	1.0U	3.0U	**1.6**	1.6	22	**0.45**	0.33
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
***BOLD** indicates result exceeds the groundwater protection standard.*
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-13B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Napthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/8/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00037B	0.016
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-15																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Napthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
2/7/2000	1.0	1.0	1.0U	0.9I	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
2/7/2000 (dup)	1.0	1.0	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/9/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/9/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.000092B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-16																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
11/9/1999	3.0U	1.0U	3.6	1.0U	1.0U	**1.6I**	1.0U	1.4I	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	1.0U	14	1.0U	1.0U	**5.0**	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000 (dup)	1.0U	1.0U	2.0	1.0U	1.0U	0.6U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	1.0U	1.0U	2.0	1.0U	1.0U	**2.0**	1.0U	1.0U	1.0U	1.0U	0.8J	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	2.0	1.0U	8.0	1.0U	1.0U	**2.0**	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/6/2001	1.0U	1.0U	34	1.0U	1.0U	**11**	1.0U	**4.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/2/2001	1.0U	0.31J	32	1.0U	1.3	**15**	1.0U	**3.4**	1.0U	0.96J	0.99J	5.4	0.86J	1.0U	1.0U	NA	NA	NA
8/9/2001	1.0U	0.42J	30	1.0U	1.8	**26**	1.0U	1.1	1.0U	1.2	1.8	15	1.7J	1.0U	1.0U	NA	NA	NA
11/7/2001	1.0U	0.72J	28	1.0U	1.7	**32**	1.0U	1.1	1.0U	1.2	2.4	26	3.1	1.0U	1.0U	1.0U	NA	NA
2/6/2002	1.0U	1.3	46	1.0U	1.0U	**31**	1.0U	1.0U	1.0U	1.1	3.2	28	5.3	1.0U	1.0U	1.0U	NA	NA
5/7/2002	0.38J	1.4	32	1.0U	2.3	**37**	1.0U	1.0U	1.0U	0.92J	4.2	25	6.4	1.0U	1.0U	1.0U	0.0014J	0.001U
8/7/2002	1.0U	1.0U	24	1.1	1.6	**27**	1.0U	1.0U	1.0U	1.0	2.9	15	5.2	1.0U	1.0U	0.9	0.0027	0.000034B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-17B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/3/1999	17	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U	0.000034	0.00086B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-34																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	**17**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/9/1999	**22**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	**83**	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000	**89**	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	**63**	0.6J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	**79**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/8/2001	**73**	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/3/2001	**62**	2.6	0.27J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.13J	0.24J	0.17J	1.0U	0.41J	NA	NA	NA
8/9/2001	**35**	3.0	2.8	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.56J	NA	NA	NA
11/7/2001	**97**	1.7	1.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.47JB	4.0 JB	NA	NA
2/6/2002	**61**	0.63J	0.54J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.34JB	1.0U	NA	NA
5/8/2002	**75**	2.2	5.0	0.37J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.39J	0.094J	**0.15**	0.28
8/8/2002	**100**	**15**	7.9	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.073	0.077
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-37																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/16/1999	3.0U	1.0U	24	1.0U	1.0U	1.0U	1.0U	**2.5I**	1.0U	2.1	15	1.0U	3.0U	**2.9**	3.6	NA	NA	NA
11/9/1999	3.0U	1.0U	17	1.0U	1.0U	1.0U	1.0U	1.4I	1.0U	2.0	14	1.0U	3.0U	**3.1**	4.7	NA	NA	NA
2/8/2000	1.0U	1.0U	16	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	9.0	1.0	3.0U	**2.0**	3.0	NA	NA	NA
5/4/2000	1.0U	1.0U	17	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	1.0U	1.0U	12	**3.0**	3.0	NA	NA	NA
8/9/2000	1.0U	1.0U	14	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	7.0	1.0U	3.0	**2.0**	3.0	NA	NA	NA
11/8/2000	1.0U	1.0U	11	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	10	1.0U	2.0U	**3.0**	4.0	NA	NA	NA
11/8/2000 (dup)	1.0U	1.0U	11	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	11	1.0U	2.0U	**3.0**	3.0	NA	NA	NA
2/7/2001	1.0U	1.0U	13	1.0U	1.0U	1.0U	1.0U	0.6J	1.0U	2.0	13	1.0U	3.0U	**2.0**	1.0U	NA	NA	NA
5/2/2001	1.0U	1.0U	13	1.0U	1.0U	1.0U	1.0U	0.6J	1.0U	1.3	10	0.41J	0.18J	**2.1**	2.6	NA	NA	NA
8/8/2001	1.0U	1.0U	12	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.3	13	0.22J	3.0U	**2.8**	3.1	NA	NA	NA
11/7/2001	1.0U	1.0U	6.9	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.1	8.2	1.0U	3.0U	**3.8**	2.4B	25	NA	NA
2/6/2002	1.0U	1.0U	6.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.85J	6.4	1.0U	3.0U	**4.6**	2.4B	17B	NA	NA
5/7/2002	1.0U	1.0U	5.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.79J	5.4	1.0U	3.0U	**5.6**	2.4	12	0.0014	0.001U
8/8/2002	1.0U	1.0U	4.6	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	4.2	1.0U	3.0U	**5.5**	2.4	13	0.0021	0.00003U
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

PS-2																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/18/1999	3.0U	1.3I	41	1.0U	1.0U	**5.6**	1.0U	**3.2I**	1.0U	**9.1**	10	43	29	1.0U	1.0U	NA	NA	NA
11/9/1999	3.0U	1.4I	40	1.0U	1.0U	**5.1**	1.0U	**2.9**	1.0U	**9.4**	16	57	47	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	2.0	52	1.0U	1.0U	**5.0**	1.0U	**2.0**	1.0U	**8.0**	14	37	40	1.0U	1.0U	NA	NA	NA
5/3/2000	1.0U	2.0	57	0.5	1.0U	**5.0**	1.0U	1.0U	1.0U	**8.0**	16	19	41	0.7	1.0U	NA	NA	NA
8/8/2000	1.0U	2.0	58	1.0U	1.0U	**4.0**	1.0U	**2.0**	1.0U	**6.0**	14	8.0	19	0.5	1.0U	NA	NA	NA
11/8/2000	3.0U	2.0	61	1.0U	1.0U	**4.0**	1.0U	**3.0**	1.0U	**5.0**	18	5.0	7.0	**1.0**	1.0U	NA	NA	NA
2/7/2001	1.0U	2.0	**71**	0.6J	1.0U	**4.0**	1.0U	**3.0**	1.0U	4.0	18	3.0	4.0	0.5J	1.0U	NA	NA	NA
5/2/2001	0.14J	1.9	**79**	0.60J	1.0U	**4.1**	1.0U	**2.4**	1.0U	3.7	22	2.9	3.6	0.59J	1.0U	NA	NA	NA
8/9/2001	1.0U	2.0	**99**	0.80J	1.0U	**4.2**	1.0U	**2.4**	1.0U	3.4	22	2.7	3.5	0.92J	1.0U	NA	NA	NA
11/7/2001	1.0U	2.0	**110**	0.84J	1.0U	**4.1**	1.0U	**3.0**	1.0U	2.7	20	1.9	2.4J	**1.2**	1.0	3.7JB	NA	NA
2/6/2002	1.0U	1.7	**110**	0.73J	1.0U	**3.4**	1.0U	**2.7**	1.0U	2.1	14	1.5	1.9J	**1.6**	1.0U	1.0U	NA	NA
5/6/2002	1.0U	1.6	**120**	0.80J	1.0U	**3.6**	0.85J	**3.0**	**2.3**	2.0	13	1.7	1.4J	**1.8**	1.0U	0.061J	0.00043	0.001U
8/6/2002	1.0U	1.5	**110**	1.0U	1.0U	**2.8**	1.0U	**2.3**	1.0U	1.7	12	1.3	3.0U	**2.2**	1.0U	1.0U	0.00053B	0.00003
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 5
Analytical Summary: Appendix IX Compounds

Appendix IX Constituents (only detectable compounds shown)	KBA-11-11A Background Well				KBA-11-13A Downgradient Well					
Date Collected	8-19-99	8-10-00	8-08-01	8-06-02	8-03-99	8-10-00	8-08-01	9-20-01 (resample)	8-06-02	8-06-02 (duplicate)
Volatile Organic (ug/L)										
Vinyl Chloride	ND	ND	ND	ND	49.6	17	ND	ND	ND	ND
Trichlororethene	ND	ND	ND	ND	22.7	51	35	7	16	15
Toluene	ND	ND	ND	ND	3.5	0.95	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	5.8	5.0	3.4	3	1.8	1.6
Ethylbenzene	ND	ND	ND	ND	79.6	71	21	24	5.4	5.1
Xylenes (total)	ND	ND	ND	ND	19.5	0.71	ND	ND	ND	ND
Trans-1,2 dichloroethene	ND	ND	ND	ND	4.7	9.0	6.4	1	2.5	2.5
Cis -1,2-dichloroethene	ND	ND	ND	ND	234E	300E	71	14	25	23
1,4 - dichlorobenzene	ND	1.0	ND	ND	4.0	3.0	1.4	ND	1.7	1.6
1,1-dichloroethene	ND	ND	ND	ND	ND	ND	0.44J	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	4.6J	ND	8.2	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	2.2	ND	14	13
Semivolatile Organic (ug/L)										
Naphthalene	ND	ND	ND	ND	18.3	20	15	19	20	NA
Di-n-butyl Phthalate	ND	ND	ND	1.9J	ND	ND	ND	ND	ND	NA
Diethyl Phthalate	ND	5.2	ND	ND	ND	7.2	ND	ND	ND	NA
Dioxins/furans (pg/L)										
1,2,3,4,6,7,8-HpCDD	ND	ND	ND	15.491J	ND	ND	ND	ND	ND	NA
OCDD	ND	ND	ND	158.321J	ND	ND	ND	ND	6.194J	NA
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	2.191JK	ND	ND	ND	ND	ND	NA
OCDF	ND	ND	ND	2.957J	ND	ND	ND	ND	ND	NA
Total Hepta-Dioxins	ND	ND	ND	15.491	ND	ND	ND	ND	ND	NA
Total Hepta-Furans	ND	ND	ND	5.416	ND	ND	ND	ND	ND	NA
Pesticides/PCBs/Herbicides Organics (ug/L)										
Aldrin	ND	ND	0.0072J	ND	ND	ND	ND	ND	ND	NA
Heptachlor	ND	ND	ND	ND	ND	ND	0.031	ND	ND	NA
Inorganics (ug/L)										
Antimony	2.9	0.15	ND	ND	2.9	0.289	ND	NA	ND	NA
Arsenic	2.7	0.318	0.159B	ND	2.7	1.41	4.06	NA	ND	NA
Barium	8.2	10.4	10	11.1	15.8	74.8	74.9	NA	50.5	NA
Beryllium	0.32	0.024	ND	ND	0.09	0.022	0.923B	NA	1.280B	NA
Cadmium	0.36	0.02	ND	ND	0.36	0.02	0.200U	NA	ND	NA
Chromium	1.3	0.604	0.779B	ND	2.5	1.94	5.400B	NA	ND	NA
Cobalt	0.84	0.015	0.028B	ND	0.84	0.148	177	220	278	NA
Copper	1.7	1.55	ND	ND	6.2	0.493	4.920B	NA	ND	NA
Lead	1.9	0.058	0.080B	ND	2.8	0.044	ND	NA	ND	NA
Mercury	0.04	0.03	ND	ND	0.04	0.03	ND	NA	ND	NA
Nickel	1.0	0.363	ND	ND	12.7	3.48	229	NA	521	NA
Selenium	2.9	0.677	1.800B	ND	2.9	2.11	5.710B	NA	ND	NA
Silver	0.9	0.005	ND	1.910B	3.1	0.036	0.050U	NA	3.360B	NA
Thallium	4.4	0.01	ND	ND	3.9	0.01	0.050U	NA	ND	NA
Tin	2.0	0.17	ND	ND	2	0.224	3.00U	NA	ND	NA
Vanadium	1.1	0.715	0.497B	ND	5.5	5.07	4.420B	NA	5.760B	NA
Zinc	4.9	1.16	ND	ND	18.3	1.99	219	20U	768	NA
General Chemistry (mg/L)										
Cyanides	0.000000	ND	ND	ND	0	0.0008	ND	NA	ND	NA
Sulfides	0.45	ND	ND	ND	1.1	ND	ND	NA	1.9	NA

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
B = possible blank contamination
E = estimated value
K = estimated maximum possible concentration
ND = not detected
NA = Not analyzed

Table 6
Analytical Summary, Subdivision Irrigation Wells

108 Cottage Court																
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
March-00	1.0U	1.0U	7.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-00	1.0U	1.0U	5.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
May-00	1.0U	1.0U	5.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
June-00	1.0U	1.0U	4.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
July-00	1.0U	1.0U	4.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
August-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
September-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
October-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
November-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
December-00	1.0U	1.0U	0.7J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-01	1.0U	1.0U	3.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	7.0U	1.0U	1.0U	NA
May-01	1.0U	1.0U	6.8	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
June-01	1.0U	1.0U	3.8	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
July-01	1.0U	1.0U	10	1.0U	1.0U	1.0U	0.32J	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
September-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
October-01	1.0U	1.0U	2.2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
November-01	1.0U	1.0U	1.3	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
December-01	1.0U	1.0U	0.37	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.34	3.1
January-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10U
February-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10U
April-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
May-02	1.0U	1.0U	3.2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
June-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10U
July-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10U

Table 6
Analytical Summary, Subdivision Irrigation Wells

108 Cottage Court																
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
August-02	1.0U	1.0U	4.2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10U
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	20

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 6
Analytical Summary, Subdivision Irrigation Wells

122 Plantation Court																
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
January-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
February-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**8.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
March-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**8.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**6.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
May-00	1.0U	1.0U	3.0	1.0U	1.0U	1.0U	1.0U	**8.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
June-00	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**7.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
July-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
August-00	1.0U	2.0	2.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
September-00	1.0U	1.0U	3.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
October-00	1.0U	0.9J	2.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
November-00	1.0U	0.93	2.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
December-00	1.0U	2.0	1.0	1.0	1.0U	1.0U	1.0U	**4.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
January-01	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**7.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
February-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**4.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
February-01 (dup)	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	**6.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
March-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**4.0E**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
March-01 (dup)	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**4.0E**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-01 (dup)	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**5.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
May-01	1.0U	1.0U	0.1	1.0U	1.0U	1.0U	1.0U	**4.5**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
May-01 (dup)	1.0U	1.0U	0.94J	1.0U	1.0U	1.0U	1.0U	**3.4**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
June-01	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	1.0U	**4.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.23J	NA
June-01 (dup)	1.0U	1.0U	0.95	1.0U	1.0U	1.0U	1.0U	**4.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.21J	NA
July-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**4.6**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.26J	NA
July-01 (dup)	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**4.6**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.27J	NA

Table 6
Analytical Summary, Subdivision Irrigation Wells

122 Plantation Court																
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
August-01	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**4.7**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.2	NA
August-01 (dup)	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	1.0U	**4.7**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.2	NA
September-01	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	0.32J	**5.1**	1.0U	1.0U	1.0U	1.0U	0.24J	1.0U	0.31J	NA
September-01 (dup)	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	1.0U	**5.1**	1.0U	1.0U	1.0U	1.0U	0.21J	1.0U	0.30J	NA
October-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**5.6**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.26J	NA
October-01 (dup)	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**5.9**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.27J	NA
November-01	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**6.4**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.29J	1.0U
November-01 (dup)	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**6.4**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.26J	1.0U
December-01	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	1.0U	**5.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0
December-01 (dup)	1.0U	1.0U	1.2	1.0U	1.0U	1.0U	1.0U	**5.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.38J	10.0
January-02	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**7.4**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.6	10U
January-02 (dup)	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**7.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.5	10U
February-02	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**6.9**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.34J	10U
February-02 (dup)	1.0U	1.0U	1.1	1.0U	1.0U	1.0U	1.0U	**6.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.34JB	10U
March-02	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	**6.3**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.40J	10U
March-02 (dup)	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	0.66J	**5.8**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.42J	10U
April-02	1.0U	1.0U	0.95J	1.0U	1.0U	1.0U	1.0U	**5.4**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.50J	3.1JB
April-02 (dup)	1.0U	1.0U	0.79J	1.0U	1.0U	1.0U	1.0U	**4.7**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.48J	10U
June-02	1.0U	1.0U	0.60J	1.0U	1.0U	1.0U	0.38J	**4.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
June-02 (dup)	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.6	**3.9**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
July-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**4.1**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.U
July-02 (dup)	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**4.6**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
August-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**4.1**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
August-02 (dup)	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**4.3**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U

Table 6
Analytical Summary, Subdivision Irrigation Wells

122 Plantation Court																
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	20

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 6
Analytical Summary, Subdivision Irrigation Wells

102 Plantation Court

Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
January-00	1.0U	**28**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
February-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
March-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
April-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
May-00	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
June-00	1.0U	1.OU	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
July-00	1.0U	**8.0**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
August-00	1.0U	**37**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	NA
September-00	1.0U	**150**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	3.0U	NA
October-00	1.0U	**4**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	3.0U	NA
November-00	1.0U	**8**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	3.3J
December-00	1.0U	**17**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	3.0U	10
January-01	1.0U	**86**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
February-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
March-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
April-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.10J	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
May-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.10J	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
June-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
July-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
August-01	1.0U	**9.9**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
August-01(dup)	1.6	**32**	**71**	6.4	0.44J	1.0U	1.0U	1.0U	0.43J	**22**	0.43J	0.56J	3.1	**1.4**	NA	NA
September-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
October-01	1.0U	0.027J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA
November-01	1.0U	0.53J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	3.3J
December-01	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10

Table 6
Analytical Summary, Subdivision Irrigation Wells

102 Plantation Court

Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene
March-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
April-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
May-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
June-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U
July-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
August-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	20

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

APPENDIX A
WELL PURGING AND SAMPLING RECORDS

SAMPLING STATION

Well #	Station Type
KBA-11-02	MONITORING WELL

IPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-02-AUG-6-02	WATER	GRAB		8-6-02	1350	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	D1046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen	↓	↓	↓	↓	
Turbidity	↓	↓	↓	↓	
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-6-02	1355	28.58c	8.95	0.320	S/cm	4.9	NTU	4.17	G/L	-51m ✓
4 G.	8-6-02	1405	27.97c	8.65	0.338	S/cm	4.4	NTU	3.91	G/L	-45m ✓
6 G.	8-6-02	1416	27.97c	8.52	0.350	S/cm	5.1	NTU	3.88	G/L	-39m ✓

Well purged to dryness: [ ] Yes [✓] No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-6-02		

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-02	8-5-02	~~1109~~ ~~1049~~	10.11'	10.81'	110 PPM
	8-5-02	1119 1355	10.11'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-02	8-5-02	1119 ~~1049~~	92.5°F	55%	29.94	SUNNY
	8-5-02	1355	92.5°F	55%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-3B	Station Type MONITORING WELL

IPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant}

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-3B	8-5-02	1108	8.69'	47.51'	0.0 ppm
	8-5-02	1350	8.69'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-3B	8-5-02	1108	91.5°F	50%	29.94	PARTLY CLOUDY
	8-5-02	1350	92.5°F	62%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-8B	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$$\frac{r(in.)}{12(in.)} = R\ (ft);\ [7.48\ gal/ft\ 3\ constant]$$

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-8B	8-5-02	1045	11.85'	43.47'	0.0 PPM
	8-5-02	1340	11.84'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-8B	8-5-02	1045	91.4°F	65%	29.94	PARTLY CLOUDY
	8-5-02	1340	92.5°F	36%	29.94	Sunny

SAMPLING STATION

Well #	Station Type
KBA-11-10 B	MONINTORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-10B-AUG-7-02	WATER	GRAB		8-7-02	1400	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP2 S/N: PURGE METHOD: Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-7-02	1400	26.33c	8.30	0.240	S/cm	9.5	NTU	3.82	G/L	+34m ✓
4 G	8-7-02	1409	25.84c	8.41	0.277	S/cm	5.8	NTU	3.48	G/L	-5m ✓
6 G	8-7-02	1418	25.85c	8.35	0.320	S/cm	3.8	NTU	4.00	G/L	-22m ✓
8 G	8-7-02	1427	25.84c	8.37	0.328	S/cm	6.8	NTU	3.96	G/L	-23m ✓

Well purged to dryness: [ ] Yes [~~4~~ No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-7-02		

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-10B	8-5-02	1245	12.53'	51.36'	2000 ppm
	8-5-02	1416	12.53'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-10B	8-5-02	1245	92°F	27%	29.97	PARTLY CLOUDY
	8-5-02	1416	89.1°F	66%	29.97	CLOUDY

SAMPLING STATION

Well #	Station Type
KBA-11-11A	MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KB11-11A-AUG-6-02	WATER	GRAB		8-6-02	8:30	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CAL. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:				S/N:		PURGE METHOD:				Pump Type:	
Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-6-02	0825	24.02c	6.92	0.124	S/cm	0.2	NTU	3.04	G/L	56 mv
4 G	8-6-02	0840	24.0c	7.30	0.078	S/cm	-0.2	NTU	3.26	G/L	42 mv
6 G	8-6-02	0856	24.05c	7.35	0.075	S/cm	-0.4	NTU	3.58	G/L	37 mv
8 G.	8-6-02	0904	24.02c	7.45	0.074	S/cm	-0.4	NTU	3.67	G/L	30 mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-6-02		

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-11A	8-5-02	1057	9.43'	36.82'	0.0 PPM
	8-5-02	1346	9.43'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-11A	8-5-02	1057	91.9°F	60%	29.94	PARTLY CLOUDY
	8-5-02	~~1346~~ 1346	92.5°F	50%	29.94	SUNNY

SAMPLING STATION

Well #	Station Type
KBA-11-13A	MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-13A-AUG-6-02	WATER			8-6-02	1012	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP 2 S/N: PURGE METHOD: Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-6-02	1012	25.94c	7.42	1.42	S/cm	2.9	NTU	2.01	G/L	46 mv
4 G.	8-6-02	1025	26.21c	7.01	1.72	S/cm	35.5	NTU	2.65	G/L	49 mv
6 G.	8-6-02	1037	26.15c	6.75	1.76	S/cm	40.7	NTU	2.43	G/L	65 mv
8 G.	8-6-02	1050	26.67c	6.70	1.82	S/cm	32.7	NTU	2.51	G/L	69 mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-6-02		

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-13A	8-5-02	1330	9.47'	42.25'	0.0 ppm
	8-5-02	1435	9.47'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-13A	8-5-02	1330	92°F	50%	29.97	sunny
	8-5-02	1435	90°F	67%	29.94	sunny

SAMPLING STATION

Well #	Station Type
KBA-11-13B	MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KB11-13B-AUG-7-02	WATER	GRAB		8-7-02	1300	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP2 S/N: PURGE METHOD: Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G	8-7-02	1302	26.75c	7.79	0.343	S/cm	6.8	NTU	4.42	G/L	+17mv
4 G	8-7-02	1312	26.66c	8.12	0.336	S/cm	3.7	NTU	4.24	G/L	-5mv
6 G	8-7-02	1322	26.47c	8.29	0.336	S/cm	3.3	NTU	4.71	G/L	-15mv
8 G	8-7-02	1333	26.30c	8.76	0.341	S/cm	3.1	NTU	3.53	G/L	-41mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-7-02		

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-13B	8-5-02	1317	13.07'	90.46'	0.0 ppm
	8-5-02	1430	13.07'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-13B	8-5-02	1317	92°F	20%	29.94	sunny
	8-5-02	1430	90°F	60%	29.94	sunny

SAMPLING STATION

Well # KBA-11-15 | Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-15-AUG-7-02	WATER	GRAB		8-7-02	0910	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP 2 | S/N: | PURGE METHOD: | Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-7-02	0915	24.75c	9.25	0.768	S/cm	4.9	NTU	5.35	G/L	-42 mv
4 G.	8-7-02	0922	24.56c	8.35	0.790	S/cm	2.9	NTU	4.79	G/L	+ 6 mv
6 G.	8-7-02	0928	24.48c	7.71	0.773	S/cm	2.8	NTU	4.73	G/L	+ 21 mv
8.G.	8-7-02	0934	24.57c	7.62	0.775	S/cm	2.7	NTU	5.54	G/L	+ 24 mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by: Tommy Bryant | Date: 8-7-02 | Reviewed by: | Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-15	8-5-02	0815	4.32'	38.92'	130.0 PPM
			4.32'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-15	8-5-02	0815	75.2°F	87%	29.94	CLOUDY
KBA-11-15	8-5-02	1000	86.°F	69%	29.94	PARTLY CLOUDY

SAMPLING STATION

Well # KBA-11-16	Station Type MONITORING WELL

1PLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-16-AUG-7-02	WATER	GRAB		8-7-02	1045	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP 2	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-7-02	1050	27.63c	7.48	0.307	S/cm	2.4	NTU	3.53	G/L	+37mv
4 G.	8-7-02	1059	27.31c	7.75	0.332	S/cm	2.0	NTU	2.48	G/L	-4mv
6 G.	8-7-02	1109	27.30c	8.20	0.438	S/cm	2.1	NTU	2.76	G/L	-33mv
8 G.	8-7-02	1119	27.44c	8.36	0.449	S/cm	1.1	NTU	10.45	G/L	-45mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by: Tommy Bryant	Date: 8-7-02	Reviewed by:	Date:

PHOTO VAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-16	8-5-02	0945	4.95'	44.47'	0.0 ppm
	8-5-02	1028	4.95'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-16	8-5-02	0945	85.1°F	71%	29.94	PARTLY CLOUDY
	8-5-02	1028	89.6°F	65%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-17B	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-17B-AUG-7-02	WATER	GRAB		8-7-02	1000	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GED Pump 2	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-7-02	1002	26.06	8.39	0.099	S/cm	2.5	NTU	3.49	G/L	-26mv
4 G.	8-7-02	1011	25.72	8.25	0.094	S/cm	2.7	NTU	4.56	G/L	-20mv
6 G.	8-7-02	1020	25.66	7.79	0.312	S/cm	2.0	NTU	3.12	G/L	+23mv
8 G.	8-7-02	1030	25.88	7.14	0.583	S/cm	2.0	NTU	3.35	G/L	+58mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by: Tommy Bryant	Date: 8-7-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-17B	8-5-02	0930	3.35'	44.43'	0.0 PPM
	8-5-02	1025	3.35'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-17B	8-5-02	0930	86.5 °F	67%	29.94	SUNNY
	8-5-02	1025	90.5 °F	64%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-18	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-18	8-5-02	0920	2.47'	45.51'	0.0 ppm
	8-5-02	1021	2.48'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-18	8-5-02	0920	86°F	71. %	29.94	SUNNY
	8-5-02	1021	90.5°F	64 %	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-20	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTO VAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-20	8-5-02	0900	1.95'	39.85'	179.0 PPM
		1015	1.96'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-20	8-5-02	0900	86°F	61%	29.94	SUNNY
	8-5-02	1015	90°F	64%	29.94	PARTLY CLOUDY

SAMPLING STATION

Well # KBA-11-21	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-21	8-5-02	0845	2.36'	40.29'	152.0 PPM
	8-5-02	1010	2.36'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-21	8-5-02	0845	85.1°F	71%	29.94	SUNNY
KBA-11-21	8-5-02	1010	88.2°F	66%	29.94	PARTLY CLOUDY

SAMPLING STATION

Well # KBA-11-22	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant)

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-22	8-5-02	1128	10.59'	52.28'	0.0 ppm
	8-5-02	~~13~~ 1402	10.59		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-22	8-5-02	1128	92.5°F	51%	29.94	SUNNY
	8-5-02	1402	91.4°F	50%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-34	Station Type MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-34-AUG-8-02	WATER		GRAB	8-8-02	0914	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen	↓	↓	↓	↓	
Turbidity	↓	↓	↓	↓	
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GED PUMP 2	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL.	8-8-02	0914	27.22c	4.98	0.837	S/cm	-5.8	NTU	3.65	G/L	+161 mv
4 GAL.	8-8-02	0923	27.64c	4.85	0.847	S/cm	-5.7	NTU	3.26	G/L	+126 mv
6 GAL.	8-8-02	0933	27.90c	4.97	0.960	S/cm	-5.9	NTU	3.41	G/L	+113 mv
8 GAL.	8-8-02	0944	27.89c	5.05	1.02	S/cm	-5.3	NTU	3.32	G/L	+112 mv

Well purged to dryness: [ ] Yes [X] No

Recorded by: Tommy Bryant	Date: 8-8-02	Reviewed by:	Date:

COLLECTED SAMPLES AT: 0950

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-34	8-5-02	1255	12.42'	40.76	0.0 ppm
	8-5-02	1420	12.42'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-34	8-5-02	1255	92°F	28%	29.97	Sunny/cloudy
	8-5-02	1420	90°F	55%	29.94	Sunny/cloudy

SAMPLING STATION

Well # KBA-11-36	Station Type MONITORING WELL

'PLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-36	8-5-02	1305	12.97'	41.36	0.0 ppm
	8-5-02	1425	12.97'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-36	8-5-02	1305	92°F	24%	29.97	SUNNY
	8-5-02	1425	90°F	69%	29.94	PARTLY CLOUDS

SAMPLING STATION

Well # KBA11-37	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-37-AUG-8-02	WATER		GRAB	8-8-02	0800	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	01046	8-1-02	CALIB. DAILY	
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEO PUMP II S/N: PURGE METHOD: Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G.	8-8-02	807	24.95c	7.26	0.410	S/cm	-3.8	NTU	2.78	G/L	-27 mv
4 G.	8-8-02	0817	25.39c	7.94	0.459	S/cm	-7.7	NTU	2.91	G/L	-38 mv
6 G	8-8-02	0827	25.40c	8:02	0.479	S/cm	-6.2	NTU	2.57	G/L	-38 mv
8 G	8-8-02	0836	25.44c	8.17	0.492	S/cm	-2.9	NTU	2.59	G/L	-46 mv

Well purged to dryness: [ ] Yes [X] No

Recorded by: Tommy Bryant	Date: 8-8-02	Reviewed by:	Date:

COLLECTED SAMPLES AT: 0840

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB.DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-37	8-5-02	0915	2.84'	38.19'	105.0 PPM
		1018	2.84'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-37	8-5-02	0915	86 °F	67 %	29.94	SUNNY
	8-5-02	1018	89.6 °F	65 %	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type
KBA-11-PS2	MONITORIN WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-PS2-AUG-6-02	WATER	GRAB		8-6-02	1300	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	D1046	8-1-02	CALIB. DAILY	
Conductivity/Temp	↓	↓	↓	↓	
Dissolved Oxygen					
Turbidity					
Redox	↓	↓	↓	↓	

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT: GEOPUMP 2 S/N: PURGE METHOD: Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 G	8-6-02	1306	25.12c	7.80	0.406	S/cm	5.2	NTU	3.80	G/L	-22mv
4 G	8-6-02	1317	24.82c	7.97	0.407	S/cm	5.6	NTU	3.78	G/L	-24mv
6 G	8-6-02	1326	24.73c	8.02	0.410	S/cm	5.9	NTU	4.05	G/L	-24mv

Well purged to dryness: [ ] Yes [✓] No

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	8-6-02		

WELL MEASUREMENTS

PHOTOVAC 2020
CALIB. DATE: 8-1-02

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-PS2	8-5-02	1235	8.00'	37.21'	0.0 ppm
	8-5-02	1410	8.01'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-PS2	8-5-02	1235	92°F	28%	29.94	PARTLY CLOUDY
	8-5-02	1410	88°F	75%	29.97	CLOUDY

SAMPLING STATION

Well # KBA-11-PS9	Station Type MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh					
Conductivity/Temp					
Dissolved Oxygen					
Turbidity					
Redox					

GROUND LEVEL DATA (before purging)

Well Variables

Depth of water = (TD - H) = h (ft) [H = depth to top of water]

Inside diam. Of casing = d(in.); 1/2(d) = r(in.)

$\frac{r(in.)}{12(in.)}$ = R (ft); [7.48 gal/ft 3 constant]

WELL PURGE INFORMATION

PURGE EQUIPMENT:	S/N:	PURGE METHOD:	Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox

Well purged to dryness: [ ] Yes [ ] No

Recorded by: Tommy Bryant	Date: 8-5-02	Reviewed by:	Date:

PHOTO VAC 2020
CALIB. DATE: 8-1-02

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VA
KBA-11-PS9	8-5-02	0830	4.45'	34.12'	240.0 PPM
		1005	4.45'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-PS9	8-5-02	0830	79.7°F	70%	29.94	PARTLY CLOUD
	8-5-02	1005	86°F	72%	29.94	PARTLY CLOUD

PHOTOVAC PID

Pine Environmental Services, Inc.
4037Darling Court, Suite D
Lilburn, Ga. 30047
1-800-842-1088
770-925-2855
Fax: 770-925-2811

Check Model Number That Applies

[ ] SERVICE [X] RENTAL [ ] HL200 [X] 2020 IS-3000

Work Order #	96349	ID Number	804	Date Rec	August 1, 2002
Recorded By	KH	Checked In By		Date Ready	

Shipping Address

Company Name J.A. Jones
Street Address Naval Sub Base Building 2022
City, State, Zip Kings Bay, GA 31547

Contact Susan Lane
Phone 912/673-203
Fax

Calibration Information

LOT# 70100

CALIBRATION GAS	Isobutylene	CONCENTRATION	100 PPM
SPAN SETTING	1.0	RESPONSE	100 PPM

ntity	PARTS LIST	ADDITIONAL INFOMATION	DATE CHECKED IN	DATE CHECKED OUT	QUANTITY CHECKED IN
1	BASE UNIT		August 1, 2002		
1	BATTERY PACK				
1	CARRING CASE				
1	CHARGER				
1	LAMP				
1	MANUAL				
1	PROBE EXTENSION				
X	TEDLAR BAG				
X	CAL GAS				
X	REGULATOR & TUBING				

Equipment Problems

Work Performed

Comments

Customer must notify PES of any defect within 24 hours of receipt of equipment
Please call 1-800-842-1088 for Technical Assistance

Horiba U-10/22

Pine Environmental Services, Inc.
4037Darling Court, Suite D
Lilburn, Ga. 30047

1-800-842-10
770-925-28
Fax: 770-925-2811

[ ] SERVICE [X] RENTAL

Work Order #	96349	I.D. # OR Serial #	1046	Date Rec	August 1, 2002
Recorded By	KH	Checked in by:		Date Ready	

Shipping Address

Company Name: J.A. Jones
Street Address: Naval Sub Base Building 2022
City, State, Zip: Kings Bay, GA 31547

Contact: Susan Lane
Phone: 912/673-2036
Fax:

Calibration Information

Auto Cal Solution	P.H.	Conductivity	Turb.	D.O.
Levels	4.0	4.49	0.0	Fresh Air
Response	3.99	4.49	0.0	9.25

QUANTITY	ACCESSORIES SHIPPED	ADDITIONAL INFROMATION	DATE READY	DATE RECIEVED	QUANTITY RECEIVED
1	BASE UNIT		August 1, 2002		
1	SPARE BATTERIES (4)	(3) AAA / (1) 9V			
1	AUTO CAL	500Ml			
1	CASE				
1	CAL. CUP				
x	FLOW CELL				

Equipment Problems

Work Performed

Comments

Customer must notify PES of any defect within 24 hours of receipt of equipment
Please call 1-800-842-1088 for Technical Assistance

APPENDIX B
ANALYTICAL REPORTS

Appendix IX Analyses
(except VOCs)

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Sample Data

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-11A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.4	4.2	1	08/13/02	09/18/02	JWG0200535	
Bis(2-chloroethyl) Ether	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
Phenol	ND	U	5.4	0.54	1	08/13/02	09/18/02	JWG0200535	
2-Chlorophenol	ND	U	5.4	0.91	1	08/13/02	09/18/02	JWG0200535	
1,3-Dichlorobenzene	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
1,4-Dichlorobenzene	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
1,2-Dichlorobenzene	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
Bis(2-chloroisopropyl) Ether	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
Benzyl alcohol	ND	U	5.4	0.88	1	08/13/02	09/18/02	JWG0200535	*
2-Methylphenol	ND	U	5.4	0.77	1	08/13/02	09/18/02	JWG0200535	
Acetophenone	ND	U	11	6.0	1	08/13/02	09/18/02	JWG0200535	*
Hexachloroethane	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
N-Nitrosodi-n-propylamine	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
4-Methylphenol†	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
Nitrobenzene	ND	U	5.4	0.97	1	08/13/02	09/18/02	JWG0200535	
Isophorone	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
2-Nitrophenol	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
2,4-Dimethylphenol	ND	U	5.4	0.99	1	08/13/02	09/18/02	JWG0200535	
bis(2-Chloroethoxy)methane	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
2,4-Dichlorophenol	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
1,2,4-Trichlorobenzene	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
Naphthalene	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
4-Chloroaniline	ND	U	5.4	0.62	1	08/13/02	09/18/02	JWG0200535	
Hexachlorobutadiene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
4-Chloro-3-methylphenol	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
2-Methylnaphthalene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
1-Methylnaphthalene	ND	U	11	5.9	1	08/13/02	09/18/02	JWG0200535	
Hexachlorocyclopentadiene	ND	U	5.4	1.9	1	08/13/02	09/18/02	JWG0200535	
2,4,6-Trichlorophenol	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
2,4,5-Trichlorophenol	ND	U	5.4	1.5	1	08/13/02	09/18/02	JWG0200535	
2-Chloronaphthalene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
2-Nitroaniline	ND	U	5.4	1.2	1	08/13/02	09/18/02	JWG0200535	
Acenaphthylene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	

Comments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-11A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	5.4	1.5	1	08/13/02	09/18/02	JWG0200535	
2,6-Dinitrotoluene	ND	U	5.4	1.5	1	08/13/02	09/18/02	JWG0200535	
Acenaphthene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
3-Nitroaniline	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
2,4-Dinitrophenol	ND	U	22	7.9	1	08/13/02	09/18/02	JWG0200535	*
Dibenzofuran	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
4-Nitrophenol	ND	U	22	3.2	1	08/13/02	09/18/02	JWG0200535	
2,4-Dinitrotoluene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Fluorene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
4-Chlorophenyl Phenyl Ether	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Diethyl Phthalate	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
4-Nitroaniline	ND	U	5.4	1.1	1	08/13/02	09/18/02	JWG0200535	
thyl-4,6-dinitrophenol	ND	U	22	6.1	1	08/13/02	09/18/02	JWG0200535	
4-Bromophenyl Phenyl Ether	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Hexachlorobenzene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Pentachlorophenol	ND	U	22	6.4	1	08/13/02	09/18/02	JWG0200535	
Phenanthrene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
Anthracene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Carbazole	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Di-n-butyl Phthalate	**1.9**	**J**	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Fluoranthene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Pyrene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Butyl Benzyl Phthalate	ND	U	11	1.3	1	08/13/02	09/18/02	JWG0200535	
3,3'-Dichlorobenzidine	ND	U	22	4.1	1	08/13/02	09/18/02	JWG0200535	
Benz(a)anthracene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Chrysene	ND	U	5.4	1.4	1	08/13/02	09/18/02	JWG0200535	
Bis(2-ethylhexyl) Phthalate	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	
Di-n-octyl Phthalate	ND	U	5.4	1.5	1	08/13/02	09/18/02	JWG0200535	
Benzo(b)fluoranthene	ND	U	5.4	2.1	1	08/13/02	09/18/02	JWG0200535	*
Benzo(k)fluoranthene	ND	U	5.4	1.5	1	08/13/02	09/18/02	JWG0200535	*
Benzo(a)pyrene	ND	U	5.4	1.9	1	08/13/02	09/18/02	JWG0200535	
Indeno(1,2,3-cd)pyrene	ND	U	5.4	1.3	1	08/13/02	09/18/02	JWG0200535	*
Dibenz(a,h)anthracene	ND	U	5.4	1.9	1	08/13/02	09/18/02	JWG0200535	*

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-11A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	5.4	1.9	1	08/13/02	09/18/02	JWG0200535	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	38	21-79	09/18/02	Acceptable
Phenol-d6	23	13-51	09/18/02	Acceptable
Nitrobenzene-d5	60	46-132	09/18/02	Acceptable
2-Fluorobiphenyl	60	43-124	09/18/02	Acceptable
2,4,6-Tribromophenol	75	28-142	09/18/02	Acceptable
Terphenyl-d14	81	43-134	09/18/02	Acceptable

† Analyte Comments

N-Nitrosodiphenylamine	This analyte can not be separated from Diphenylamine.
4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/ Site 11	**Date Collected:**	8/6/2002
Sample Matrix:	Water	**Date Received:**	8/7/2002

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name:	KBA11-11A-Aug6-02	Units:	ug/L (ppb)
Lab Code:	J2202542-001	Basis:	NA
Test Notes:	*		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2-Acetylaminofluorene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
4-Aminobiphenyl	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Aniline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Aramite, Total	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
Chlorobenzilate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Diallate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
3,3'-Dimethylbenzidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,6-Dichlorophenol	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Dimethoate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
a,a-Dimethylphenethylamine	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
7,12-Dimethylbenz(a)anthracen	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,4-Dimethylphenol	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1,3-Dinitrobenzene	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Dinoseb	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Diphenylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	**
Disulfoton	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Ethyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Famphur	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Hexachlorophene	EPA 3510C	8270C	100	1	8/13/2002	9/18/2002	U	
Hexachloropropene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
›drin	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
›safrole	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Kepone	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
3-Methylcholanthrene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Methyl Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Methapyrilene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Methyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-nitrosodi-n-butylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosodiethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosodimethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosomethylethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosomorpholine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosopiperidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosopyrrolidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1,4-Naphthoquinone	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
4-Nitroquinoline N-Oxide	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2-Methyl-5-nitroaniline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
o-Toluidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
p-Dimethylaminoazobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,4-Phenylenediamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Pentachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

** Since Diphenylamine cannot be chromatographically separated from n-Nitrosodiphenylamine, it is reported as n-Nitrosodiphenylamine.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: JA Jones Management Services
Project: NSB Kings Bay/ Site 11
Sample Matrix: Water

Service Request: J2202542
Date Collected: 8/6/2002
Date Received: 8/7/2002

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name: KBA11-11A-Aug6-02
Lab Code: J2202542-001
Test Notes: *

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Pentachloroethane	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Pentachloronitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Phenacetin	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Phorate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
2-Picoline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Pronamide	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Pyridine	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Safrole	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Sulfotep	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,2,4,5-Tetrachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,3,4,6-Tetrachlorophenol	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Thionazin	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
OOOTETPTHIOATE	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,3,5-Trinitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-13A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.3	4.1	1	08/13/02	09/20/02	JWG0200535	
Bis(2-chloroethyl) Ether	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
Phenol	ND	U	5.3	0.53	1	08/13/02	09/20/02	JWG0200535	
2-Chlorophenol	ND	U	5.3	0.89	1	08/13/02	09/20/02	JWG0200535	
1,3-Dichlorobenzene	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
1,4-Dichlorobenzene	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
1,2-Dichlorobenzene	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
Bis(2-chloroisopropyl) Ether	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
Benzyl alcohol	ND	U	5.3	0.86	1	08/13/02	09/20/02	JWG0200535	
2-Methylphenol	ND	U	5.3	0.75	1	08/13/02	09/20/02	JWG0200535	
Acetophenone	ND	U	11	5.9	1	08/13/02	09/20/02	JWG0200535	
Hexachloroethane	ND	U	5.3	1.0	1	08/13/02	09/20/02	JWG0200535	
itrosodi-n-propylamine	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
4-Methylphenol†	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
Nitrobenzene	ND	U	5.3	0.95	1	08/13/02	09/20/02	JWG0200535	
Isophorone	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
2-Nitrophenol	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
2,4-Dimethylphenol	ND	U	5.3	0.97	1	08/13/02	09/20/02	JWG0200535	
bis(2-Chloroethoxy)methane	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
2,4-Dichlorophenol	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
1,2,4-Trichlorobenzene	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
Naphthalene	**20**		5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
4-Chloroaniline	ND	U	5.3	0.61	1	08/13/02	09/20/02	JWG0200535	
Hexachlorobutadiene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
4-Chloro-3-methylphenol	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
2-Methylnaphthalene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
1-Methylnaphthalene	ND	U	11	5.8	1	08/13/02	09/20/02	JWG0200535	
Hexachlorocyclopentadiene	ND	U	5.3	1.8	1	08/13/02	09/20/02	JWG0200535	
2,4,6-Trichlorophenol	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
2,4,5-Trichlorophenol	ND	U	5.3	1.5	1	08/13/02	09/20/02	JWG0200535	
2-Chloronaphthalene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
2-Nitroaniline	ND	U	5.3	1.2	1	08/13/02	09/20/02	JWG0200535	
Acenaphthylene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	

Comments:

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202542
Date Collected: 08/06/2002
Date Received: 08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name: KBA11-13A-Aug6-02
Lab Code: J2202542-002

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	5.3	1.5	1	08/13/02	09/20/02	JWG0200535	
2,6-Dinitrotoluene	ND	U	5.3	1.5	1	08/13/02	09/20/02	JWG0200535	
Acenaphthene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
3-Nitroaniline	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
2,4-Dinitrophenol	ND	U	21	7.8	1	08/13/02	09/20/02	JWG0200535	*
Dibenzofuran	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
4-Nitrophenol	ND	U	21	3.2	1	08/13/02	09/20/02	JWG0200535	
2,4-Dinitrotoluene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Fluorene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
4-Chlorophenyl Phenyl Ether	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Diethyl Phthalate	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
4-Nitroaniline	ND	U	5.3	1.1	1	08/13/02	09/20/02	JWG0200535	
2-Methyl-4,6-dinitrophenol	ND	U	21	6.0	1	08/13/02	09/20/02	JWG0200535	
4-Bromophenyl Phenyl Ether	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Hexachlorobenzene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Pentachlorophenol	ND	U	21	6.3	1	08/13/02	09/20/02	JWG0200535	
Phenanthrene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
Anthracene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Carbazole	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Di-n-butyl Phthalate	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Fluoranthene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Pyrene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Butyl Benzyl Phthalate	ND	U	11	1.3	1	08/13/02	09/20/02	JWG0200535	
3,3'-Dichlorobenzidine	ND	U	21	4.0	1	08/13/02	09/20/02	JWG0200535	
Benz(a)anthracene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Chrysene	ND	U	5.3	1.4	1	08/13/02	09/20/02	JWG0200535	
Bis(2-ethylhexyl) Phthalate	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	
Di-n-octyl Phthalate	ND	U	11	1.5	1	08/13/02	09/20/02	JWG0200535	
Benzo(b)fluoranthene	ND	U	5.3	2.0	1	08/13/02	09/20/02	JWG0200535	*
Benzo(k)fluoranthene	ND	U	5.3	1.5	1	08/13/02	09/20/02	JWG0200535	*
Benzo(a)pyrene	ND	U	5.3	1.8	1	08/13/02	09/20/02	JWG0200535	
Indeno(1,2,3-cd)pyrene	ND	U	5.3	1.3	1	08/13/02	09/20/02	JWG0200535	*
Dibenz(a,h)anthracene	ND	U	5.3	1.8	1	08/13/02	09/20/02	JWG0200535	*

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-13A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	5.3	1.8	1	08/13/02	09/20/02	JWG0200535	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	32	21-79	09/20/02	Acceptable
Phenol-d6	29	13-51	09/20/02	Acceptable
Nitrobenzene-d5	23	46-132	09/20/02	Outside Control Limits
2-Fluorobiphenyl	47	43-124	09/20/02	Acceptable
2,4,6-Tribromophenol	54	28-142	09/20/02	Acceptable
Terphenyl-d14	57	43-134	09/20/02	Acceptable

† **Analyte Comments**

N-Nitrosodiphenylamine	This analyte can not be separated from Diphenylamine.
4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/ Site 11	**Date Collected:**	8/6/2002
ımple Matrix:	Water	**Date Received:**	8/7/2002

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name:	KBA11-13A-Aug6-02	Units:	ug/L (ppb)
Lab Code:	J2202542-002	Basis:	NA
Test Notes:	*		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2-Acetylaminofluorene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
4-Aminobiphenyl	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Aniline	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Aramite, Total	EPA 3510C	8270C	50	1	8/13/2002	9/20/2002	U	
Chlorobenzilate	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Diallate	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
3,3'-Dimethylbenzidine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
2,6-Dichlorophenol	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Dimethoate	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
a,a-Dimethylphenethylamine	EPA 3510C	8270C	50	1	8/13/2002	9/20/2002	U	
7,12-Dimethylbenz(a)anthracer	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
2,4-Dimethylphenol	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
1,3-Dinitrobenzene	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Dinoseb	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Diphenylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	**
Disulfoton	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Ethyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Famphur	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Hexachlorophene	EPA 3510C	8270C	100	1	8/13/2002	9/20/2002	U	
Hexachloropropene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
·sodrin	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
osafrole	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Kepone	EPA 3510C	8270C	50	1	8/13/2002	9/20/2002	U	
3-Methylcholanthrene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Methyl Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Methapyrilene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Methyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-nitrosodi-n-butylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosodiethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosodimethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosomethylethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosomorpholine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosopiperidine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
N-Nitrosopyrrolidine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
1-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
2-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
1,4-Naphthoquinone	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
4-Nitroquinoline N-Oxide	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
2-Methyl-5-nitroaniline	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
o-Toluidine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
p-Dimethylaminoazobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
1,4-Phenylenediamine	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Pentachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

** Since Diphenylamine cannot be chromatographically separated from n-Nitrosodiphenylamine, it is reported as n-Nitrosodiphenylamine.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/ Site 11	**Date Collected:**	8/6/2002
ımple Matrix:	Water	**Date Received:**	8/7/2002

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name:	KBA11-13A-Aug6-02	Units:	ug/L (ppb)
Lab Code:	J2202542-002	Basis:	NA
Test Notes:	*		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Pentachloroethane	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Pentachloronitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Phenacetin	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Phorate	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
2-Picoline	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Pronamide	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Pyridine	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Safrole	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
Sulfotep	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
1,2,4,5-Tetrachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	
2,3,4,6-Tetrachlorophenol	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
Thionazin	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
OOOTETPTHIOATE	EPA 3510C	8270C	20	1	8/13/2002	9/20/2002	U	
1,3,5-Trinitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/20/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200535-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.0	3.9	1	08/13/02	09/18/02	JWG0200535	
Bis(2-chloroethyl) Ether	ND	U	5.0	1.0	1	08/13/02	09/18/02	JWG0200535	
Phenol	ND	U	5.0	0.50	1	08/13/02	09/18/02	JWG0200535	
2-Chlorophenol	ND	U	5.0	0.85	1	08/13/02	09/18/02	JWG0200535	
1,3-Dichlorobenzene	ND	U	5.0	0.98	1	08/13/02	09/18/02	JWG0200535	
1,4-Dichlorobenzene	ND	U	5.0	0.98	1	08/13/02	09/18/02	JWG0200535	
1,2-Dichlorobenzene	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
Bis(2-chloroisopropyl) Ether	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
Benzyl alcohol	ND	U	5.0	0.82	1	08/13/02	09/18/02	JWG0200535	*
2-Methylphenol	ND	U	5.0	0.72	1	08/13/02	09/18/02	JWG0200535	
Acetophenone	ND	U	10	5.6	1	08/13/02	09/18/02	JWG0200535	*
Hexachloroethane	ND	U	5.0	0.96	1	08/13/02	09/18/02	JWG0200535	
trosodi-n-propylamine	ND	U	5.0	1.0	1	08/13/02	09/18/02	JWG0200535	
4-Methylphenol†	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
Nitrobenzene	ND	U	5.0	0.91	1	08/13/02	09/18/02	JWG0200535	
Isophorone	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
2-Nitrophenol	ND	U	5.0	1.0	1	08/13/02	09/18/02	JWG0200535	
2,4-Dimethylphenol	ND	U	5.0	0.93	1	08/13/02	09/18/02	JWG0200535	
bis(2-Chloroethoxy)methane	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
2,4-Dichlorophenol	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
1,2,4-Trichlorobenzene	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
Naphthalene	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
4-Chloroaniline	ND	U	5.0	0.58	1	08/13/02	09/18/02	JWG0200535	
Hexachlorobutadiene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
4-Chloro-3-methylphenol	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
2-Methylnaphthalene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
1-Methylnaphthalene	ND	U	10	5.5	1	08/13/02	09/18/02	JWG0200535	
Hexachlorocyclopentadiene	ND	U	5.0	1.7	1	08/13/02	09/18/02	JWG0200535	
2,4,6-Trichlorophenol	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
2,4,5-Trichlorophenol	ND	U	5.0	1.4	1	08/13/02	09/18/02	JWG0200535	
2-Chloronaphthalene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
2-Nitroaniline	ND	U	5.0	1.1	1	08/13/02	09/18/02	JWG0200535	
Acenaphthylene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	

Comments:

Analytical Results

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: water

Service Request: J2202542
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0200535-4

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	5.0	1.4	1	08/13/02	09/18/02	JWG0200535	
2,6-Dinitrotoluene	ND	U	5.0	1.4	1	08/13/02	09/18/02	JWG0200535	
Acenaphthene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
3-Nitroaniline	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
2,4-Dinitrophenol	ND	U	20	7.4	1	08/13/02	09/18/02	JWG0200535	*
Dibenzofuran	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
4-Nitrophenol	ND	U	20	3.0	1	08/13/02	09/18/02	JWG0200535	
2,4-Dinitrotoluene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Fluorene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
4-Chlorophenyl Phenyl Ether	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Diethyl Phthalate	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
4-Nitroaniline	ND	U	5.0	1.0	1	08/13/02	09/18/02	JWG0200535	
hyl-4,6-dinitrophenol	ND	U	20	5.7	1	08/13/02	09/18/02	JWG0200535	
4-Bromophenyl Phenyl Ether	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Hexachlorobenzene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Pentachlorophenol	ND	U	20	6.0	1	08/13/02	09/18/02	JWG0200535	
Phenanthrene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
Anthracene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Carbazole	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Di-n-butyl Phthalate	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Fluoranthene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Pyrene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Butyl Benzyl Phthalate	ND	U	10	1.2	1	08/13/02	09/18/02	JWG0200535	
3,3'-Dichlorobenzidine	ND	U	20	3.8	1	08/13/02	09/18/02	JWG0200535	
Benz(a)anthracene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Chrysene	ND	U	5.0	1.3	1	08/13/02	09/18/02	JWG0200535	
Bis(2-ethylhexyl) Phthalate	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	
Di-n-octyl Phthalate	ND	U	5.0	1.4	1	08/13/02	09/18/02	JWG0200535	
Benzo(b)fluoranthene	ND	U	5.0	1.9	1	08/13/02	09/18/02	JWG0200535	*
Benzo(k)fluoranthene	ND	U	5.0	1.4	1	08/13/02	09/18/02	JWG0200535	*
Benzo(a)pyrene	ND	U	5.0	1.7	1	08/13/02	09/18/02	JWG0200535	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	1.2	1	08/13/02	09/18/02	JWG0200535	*
Dibenz(a,h)anthracene	ND	U	5.0	1.7	1	08/13/02	09/18/02	JWG0200535	*

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200535-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	5.0	1.7	1	08/13/02	09/18/02	JWG0200535	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	46	21-79	09/18/02	Acceptable
Phenol-d6	30	13-51	09/18/02	Acceptable
Nitrobenzene-d5	69	46-132	09/18/02	Acceptable
2-Fluorobiphenyl	66	43-124	09/18/02	Acceptable
2,4,6-Tribromophenol	83	28-142	09/18/02	Acceptable
Terphenyl-d14	89	43-134	09/18/02	Acceptable

† Analyte Comments

N-Nitrosodiphenylamine	This analyte can not be separated from Diphenylamine.
4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/ Site 11	**Date Collected:**	NA
ample Matrix:	Water	**Date Received:**	NA

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	ug/L (ppb)
Lab Code:	JWG0200535-4	Basis:	NA
Test Notes:	*		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
2-Acetylaminofluorene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
4-Aminobiphenyl	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Aniline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Aramite, Total	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
Chlorobenzilate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Diallate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
3,3'-Dimethylbenzidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,6-Dichlorophenol	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Dimethoate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
a,a-Dimethylphenethylamine	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
7,12-Dimethylbenz(a)anthracei	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,4-Dimethylphenol	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1,3-Dinitrobenzene	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Dinoseb	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Diphenylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	**
Disulfoton	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Ethyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Famphur	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Hexachlorophene	EPA 3510C	8270C	100	1	8/13/2002	9/18/2002	U	
Hexachloropropene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
odrin	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
osafrole	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Kepone	EPA 3510C	8270C	50	1	8/13/2002	9/18/2002	U	
3-Methylcholanthrene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Methyl Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Methapyrilene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Methyl Methanesulfonate	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-nitrosodi-n-butylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosodiethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosodimethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosomethylethylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosomorpholine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosopiperidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
N-Nitrosopyrrolidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2-Naphthylamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
1,4-Naphthoquinone	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
4-Nitroquinoline N-Oxide	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2-Methyl-5-nitroaniline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
o-Toluidine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
p-Dimethylaminoazobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Parathion	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,4-Phenylenediamine	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Pentachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

** Since Diphenylamine cannot be chromatographically separated from n-Nitrosodiphenylamine, it is reported as n-Nitrosodiphenylamine.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/ Site 11	**Date Collected:**	NA
ample Matrix:	Water	**Date Received:**	NA

Appendix IX
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	ug/L (ppb)
Lab Code:	JWG0200535-4	Basis:	NA
Test Notes:	*		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Pentachloroethane	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Pentachloronitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Phenacetin	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Phorate	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
2-Picoline	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Pronamide	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Pyridine	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Safrole	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
Sulfotep	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,2,4,5-Tetrachlorobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	
2,3,4,6-Tetrachlorophenol	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
Thionazin	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
OOOTETPTHIOATE	EPA 3510C	8270C	20	1	8/13/2002	9/18/2002	U	
1,3,5-Trinitrobenzene	EPA 3510C	8270C	5	1	8/13/2002	9/18/2002	U	

* All Appendix IX analytes were searched for as a tentatively identified compounds.

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Sample Data

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Organochlorine Pesticides by GC-ECD

Sample Name:	KBA11-11A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
gamma-BHC (Lindane)	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
beta-BHC	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
delta-BHC	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Heptachlor	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Aldrin	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Heptachlor Epoxide	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
gamma-Chlordane	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
alpha-Chlordane	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDE	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Endosulfan I	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Dieldrin	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
[illegible]n	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
4,[illegible]-DDD	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Endosulfan II	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDT	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Endrin Aldehyde	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Methoxychlor	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	*
Endosulfan Sulfate	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Endrin Ketone	ND	U	0.021	1	08/13/02	08/20/02	JWG0200551	
Toxaphene	ND	U	0.53	1	08/13/02	08/20/02	JWG0200551	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	90	35-93	08/20/02	Acceptable
Decachlorobiphenyl	48	28-95	08/20/02	Acceptable

[illegible]nents:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Organochlorine Pesticides by GC-ECD

Sample Name:	KBA11-13A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
gamma-BHC (Lindane)	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
beta-BHC	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
delta-BHC	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Heptachlor	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Aldrin	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Heptachlor Epoxide	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
gamma-Chlordane	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
alpha-Chlordane	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDE	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Endosulfan I	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Dieldrin	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
n	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDD	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Endosulfan II	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDT	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Endrin Aldehyde	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Methoxychlor	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	*
Endosulfan Sulfate	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Endrin Ketone	ND	U	0.022	1	08/13/02	08/20/02	JWG0200551	
Toxaphene	ND	U	0.53	1	08/13/02	08/20/02	JWG0200551	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	39	35-93	08/20/02	Acceptable
Decachlorobiphenyl	40	28-95	08/20/02	Acceptable

Comments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides by GC-ECD

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200551-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
gamma-BHC (Lindane)	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
beta-BHC	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
delta-BHC	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Heptachlor	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Aldrin	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Heptachlor Epoxide	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
gamma-Chlordane	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
alpha-Chlordane	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDE	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Endosulfan I	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Dieldrin	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
[illegible]in	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
4,[illegible]DDD	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Endosulfan II	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDT	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Endrin Aldehyde	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Methoxychlor	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	*
Endosulfan Sulfate	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Endrin Ketone	ND	U	0.020	1	08/13/02	08/20/02	JWG0200551	
Toxaphene	ND	U	0.50	1	08/13/02	08/20/02	JWG0200551	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	74	35-93	08/20/02	Acceptable
Decachlorobiphenyl	80	28-95	08/20/02	Acceptable

[illegible]nents:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides by GC-ECD

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	JWG0200551-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.321**		0.020	1	08/13/02	08/20/02	JWG0200551	*
gamma-BHC (Lindane)	**0.320**		0.020	1	08/13/02	08/20/02	JWG0200551	*
beta-BHC	**0.303**		0.020	1	08/13/02	08/20/02	JWG0200551	
delta-BHC	**0.306**		0.020	1	08/13/02	08/20/02	JWG0200551	*
Heptachlor	**0.340**		0.020	1	08/13/02	08/20/02	JWG0200551	*
Aldrin	**0.306**		0.020	1	08/13/02	08/20/02	JWG0200551	
Heptachlor Epoxide	**0.311**		0.020	1	08/13/02	08/20/02	JWG0200551	
gamma-Chlordane	**0.307**		0.020	1	08/13/02	08/20/02	JWG0200551	
alpha-Chlordane	**0.302**		0.020	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDE	**0.320**		0.020	1	08/13/02	08/20/02	JWG0200551	*
Endosulfan I	**0.302**		0.020	1	08/13/02	08/20/02	JWG0200551	
Dieldrin	**0.322**		0.020	1	08/13/02	08/20/02	JWG0200551	*
in	**0.318**		0.020	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDD	**0.331**		0.020	1	08/13/02	08/20/02	JWG0200551	*
Endosulfan II	**0.307**		0.020	1	08/13/02	08/20/02	JWG0200551	
4,4'-DDT	**0.331**		0.020	1	08/13/02	08/20/02	JWG0200551	*
Endrin Aldehyde	**0.289**		0.020	1	08/13/02	08/20/02	JWG0200551	
Methoxychlor	**0.331**		0.020	1	08/13/02	08/20/02	JWG0200551	
Endosulfan Sulfate	**0.310**		0.020	1	08/13/02	08/20/02	JWG0200551	
Endrin Ketone	**0.289**		0.020	1	08/13/02	08/20/02	JWG0200551	
Toxaphene	ND	U	0.50	1	08/13/02	08/20/02	JWG0200551	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	72	35-93	08/20/02	Acceptable
Decachlorobiphenyl	76	28-95	08/20/02	Acceptable

Comments:

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Sample Data

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	KBA11-11A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	48	28-95	08/20/02	Acceptable

.nents:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/07/2002

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	KBA11-13A-Aug6-02	**Units:**	ug/L
Lab Code:	J2202542-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	ND	U	0.53	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	38	28-95	08/20/02	Acceptable

ments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200553-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	79	28-95	08/20/02	Acceptable

ments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	J2202569-009	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	ND	U	0.52	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	59	28-95	08/20/02	Acceptable

.ments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	JWG0200553-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**8.61**		1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	1.2	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	**9.02**		1.2	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
.chlorobiphenyl	85	28-95	08/20/02	Acceptable

.nents:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	JWG0200553-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**6.41**		0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.93	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	**6.90**		0.93	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	76	28-95	08/20/02	Acceptable

nents:

Client:	JA Jones Management Services	**Service Request:**	J2202542
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	water	**Date Received:**	NA

Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	JWG0200553-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**2.77**		0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1221	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1232	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1242	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1248	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1254	ND	U	0.50	1	08/13/02	08/20/02	JWG0200553	
Aroclor 1260	**3.18**		0.50	1	08/13/02	08/20/02	JWG0200553	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
chlorobiphenyl	77	28-95	08/20/02	Acceptable

ments:

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
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Fax 904-739-2011

Sample Data

Columbia Analytical Services
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Jacksonville, FL 32256

Phone: (904) 739-2277
FAX: (904) 739-2011

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
KBA11-11A-Aug6-02

Contract: JA Jones Management Services

Lab Code: JAX Case No.: Site 11 SAS No.: SDG NO.: J2202542

Matrix (soil/water): WATER Lab Sample ID: J2202542-001

Level (low/med): LOW Date Received: 8/7/02

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.460	U		MS
7440-38-2	Arsenic	1.30	U		MS
7440-39-3	Barium	11.1			P
7440-41-7	Beryllium	0.110	U		MS
7440-43-9	Cadmium	0.200	U		MS
7440-47-3	Chromium	4.80	U		P
7440-48-4	Cobalt	5.20	U		P
7440-50-8	Copper	3.00	U		P
7439-92-1	Lead	0.325	U		MS
7439-97-6	Mercury	0.140	U		CV
7440-02-0	Nickel	12.0	U		P
7782-49-2	Selenium	2.30	U		MS
7440-22-4	Silver	1.910	B		MS
7440-28-0	Thallium	0.145	U		MS
7440-31-5	Tin	25.0	U		P
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	8.50	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
KBA11-13A-Aug6-02

Contract: JA Jones Management Services

Lab Code: JAX Case No.: Site 11 SAS No.: SDG NO.: J2202542

Matrix (soil/water): WATER Lab Sample ID: J2202542-002

Level (low/med): LOW Date Received: 8/7/02

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.460	U		MS
7440-38-2	Arsenic	1.30	U		MS
7440-39-3	Barium	50.5			P
7440-41-7	Beryllium	1.280	B		MS
7440-43-9	Cadmium	0.200	U		MS
7440-47-3	Chromium	4.80	U		P
7440-48-4	Cobalt	278			P
7440-50-8	Copper	15.0	U		P
7439-92-1	Lead	0.325	U		MS
7439-97-6	Mercury	0.140	U		CV
7440-02-0	Nickel	521			P
7782-49-2	Selenium	2.30	U		MS
7440-22-4	Silver	3.360	B		MS
7440-28-0	Thallium	0.145	U		MS
7440-31-5	Tin	125	U		P
7440-62-2	Vanadium	5.760	B		P
7440-66-6	Zinc	768			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

Columbia Analytical Services INC.

An Employee - Owned Company

Analytical Report

10655 Richmond Avenue, Suite 130-A, Houston, TX 77042
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

205 G17

DIOXIN GC/MS RUN LOG

C10499CAL

CAS HOUSTON 10655 Richmond Avenue, Suite 130-A Houston, TX 77042

Columbia Analytical Services inc.
An Employee Owned Company

Acq Method: _____ Result File: C10499RES Archive Tape: _____
GC Method: _____ EDD File: _____ Instrument ID: VG 70C

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
19Aug02	08:18	C10498	HRMSCHK			cee		
	08:21	C10499 #1	windowDefine	D4-90-2				
	09:10	C10499 #2	CCALHRCC3	D4-49-3				
	10:00	C10499 #3	EB12031-MB	Method Blank	EB12031			
	10:49	C10499 #4	E2200310-001	023290-02				1613
	11:38	C10499 #5	E2200310-003	023290-04				
	12:28	C10499 #6	E2200310-004	023291-12A				
	13:17	C10499 #7	E2200310-005	023291-13A				
	14:06	C10499 #8	E2200310-002	023290-03	EB12032			
	14:56	C10499 #9	E2200314-001	023296-01	EB12031			
	15:45	C10499 #10	E2200314-002	023296-02				
	16:34	C10499 #11	E2200315-001	KBA11-11A-AU66-02				8280
	17:24	C10499 #12	E2200316-001	Bleach Plant Filt			re-injection needs	1613
	18:13	C10499 #13	E2200319-002	23351.01	EB12032		re-injection	8290
	19:02	C10499 #14	CCALHRCC3	D5-49-3	—		Use Average	
	19:54	C10500 #1	HRMSCHECK			AV		

Reviewed by: cee

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
METHOD BLANK

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: EB12031-MB

Client Name: Sample Wt/Vol: 1000 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: Instrument ID: 70S

Ext. Date: 08/13/02 GC Column:db5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: C10499#3

Analysis Date: 19-AUG-02 Time: 10:00:16 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10499#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
2,3,7,8-TCDD	*	1.205	U	*	*	0.85
1,2,3,7,8-PeCDD	*	1.502	U	*	*	0.96
1,2,3,4,7,8-HxCDD	*	1.526	U	*	*	0.91
1,2,3,6,7,8-HxCDD	*	1.149	U	*	*	1.21
1,2,3,7,8,9-HxCDD	*	1.355	U	*	*	1.02
1,2,3,4,6,7,8-HpCDD	*	2.723	U	*	*	0.92
OCDD	*	4.862	U	*	*	1.03
2,3,7,8-TCDF	*	1.348	U	*	*	1.03
1,2,3,7,8-PeCDF	*	0.952	U	*	*	0.95
2,3,4,7,8-PeCDF	*	0.985	U	*	*	0.92
1,2,3,4,7,8-HxCDF	*	1.035	U	*	*	1.13
1,2,3,6,7,8-HxCDF	*	0.931	U	*	*	1.26
1,2,3,7,8,9-HxCDF	*	1.503	U	*	*	0.78
2,3,4,6,7,8-HxCDF	*	1.153	U	*	*	1.02
1,2,3,4,6,7,8-HpCDF	*	1.566	U	*	*	1.43
1,2,3,4,7,8,9-HpCDF	*	2.958	U	*	*	0.76
OCDF	*	5.590	U	*	*	1.17
Total Tetra-Dioxins	*	1.205	U			
Total Penta-Dioxins	*	1.502	U			
Total Hexa-Dioxins	*	1.149	U			
Total Hepta-Dioxins	*	2.723	U			
Total Tetra-Furans	*	1.348	U			
Total Penta-Furans	*	0.985	U			
Total Hexa-Furans	*	0.931	U			
Total Hepta-Furans	*	1.566	U			

(1) Qualifiers: See flag definitions.

(2) RRTs and ion ratios are specified in Tables 11 and 8, Method 8290. 8290F1

FORM 2

PCDD/PCDF LABELED COMPOUND AND CLEANUP STANDARD RECOVERIES

CLIENT ID.

METHOD BLANK

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: EB12031-MB

Client Name: Sample Wt/Vol: 1000 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: Instrument ID: 70S

Ext. Date: 08/13/02 GC Column: db5

Ext. Vol(ul): 20.0 Inj. Vol(ul): 1.0 Sample Data Filename: C10499#3

Analysis Date: 19-AUG-02 Time: 10:00:16 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10499#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

	SPIKE CONC. (pg)	CONCENT. FOUND (pg)	RECOV. %	Q	ION ABUND. RATIO(2)	RRT (2)	MEAN RRF
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1000	657.57	65.76		0.78	1.008	1.12
13C-1,2,3,7,8-PeCDD	1000	799.65	79.97		1.59	1.185	0.73
13C-1,2,3,6,7,8-HxCDD	2500	2029.77	81.19		1.22	0.991	1.00
13C-1,2,3,4,6,7,8-HpCDD	2500	2403.96	96.16		0.97	1.078	0.55
13C-OCDD	5000	4911.29	98.23		0.93	1.169	0.28
13C-2,3,7,8-TCDF	1000	629.34	62.93		0.78	0.977	1.32
13C-1,2,3,7,8-PeCDF	1000	781.13	78.11		1.52	1.143	1.17
13C-1,2,3,4,7,8-HxCDF	2500	1890.41	75.62		0.50	0.969	1.49
13C-1,2,3,4,6,7,8-HpCDF	2500	2142.28	85.69		0.44	1.050	0.76
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	800	626.67	78.33			1.009	

(1) Contract-required limits for percent recovery are 40%-135% (section 8.4, Method 8290).

(2) Contract-required Reference Attributions for RRTs and ion abundance ratios are specified in Tables 11 and 8, respectively, Method 8290.

NOTE: There is no ion abundance ratio for 37Cl4-2378-TCDD (cleanup standard).

8290F2

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
METHOD BLANK

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: EB12032-MB

Client Name: Sample Wt/Vol: 10.000 g or mL: g

Matrix (aqueous/solid/leachate): solid Initial Calibration Date: 03/06/02

Sample Receipt Date: Instrument ID: 70S

Ext. Date: 08/14/02 GC Column:DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: C10505#3

Analysis Date: 21-AUG-02 Time: 11:40:47 Blank Data Filename: C10505#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10505#2

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Moisture/Lipid:

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
,3,7,8-TCDD	*	0.061	U	*	*	0.80
1,2,3,7,8-PeCDD	*	0.071	U	*	*	0.99
1,2,3,4,7,8-HxCDD	*	0.103	U	*	*	1.02
1,2,3,6,7,8-HxCDD	*	0.087	U	*	*	1.20
1,2,3,7,8,9-HxCDD	*	0.095	U	*	*	1.10
1,2,3,4,6,7,8-HpCDD	*	0.148	U	*	*	0.99
OCDD	1.722	0.127	J	0.79	1.169	1.10
2,3,7,8-TCDF	*	0.072	U	*	*	1.05
1,2,3,7,8-PeCDF	*	0.055	U	*	*	0.95
2,3,4,7,8-PeCDF	*	0.054	U	*	*	0.98
1,2,3,4,7,8-HxCDF	*	0.075	U	*	*	1.25
1,2,3,6,7,8-HxCDF	*	0.071	U	*	*	1.31
1,2,3,7,8,9-HxCDF	*	0.091	U	*	*	1.03
2,3,4,6,7,8-HxCDF	*	0.079	U	*	*	1.18
1,2,3,4,6,7,8-HpCDF	*	0.119	U	*	*	1.42
1,2,3,4,7,8,9-HpCDF	*	0.167	U	*	*	1.01
OCDF	*	0.149	U	*	*	1.28
Total Tetra-Dioxins	*	0.061	U			
Total Penta-Dioxins	*	0.071	U			
Total Hexa-Dioxins	*	0.087	U			
Total Hepta-Dioxins	*	0.148	U			
Total Tetra-Furans	*	0.072	U			
Total Penta-Furans	*	0.054	U			
Total Hexa-Furans	*	0.071	U			
otal Hepta-Furans	*	0.119	U			

(1) Qualifiers: See flag definitions.

(2) RRTs and ion ratios are specified in Tables 11 and 8, Method 8290. 8290F1

FORM 2

PCDD/PCDF LABELED COMPOUND AND
CLEANUP STANDARD RECOVERIES

CLIENT ID.

METHOD BLANK

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: EB12032-MB

Client Name: Sample Wt/Vol: 10.000 g or mL: g

Matrix (aqueous/solid/leachate): solid Initial Calibration Date: 03/06/02

Sample Receipt Date: Instrument ID: 70S

Ext. Date: 08/14/02 GC Column: DB-5

Ext. Vol(ul): 20.0 Inj. Vol(ul): 1.0 Sample Data Filename: C10505#3

Analysis Date: 21-AUG-02 Time: 11:40:47 Blank Data Filename: C10505#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10505#2

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Moisture/Lipid:

	SPIKE CONC.(pg)	CONCENT. FOUND(pg)	RECOV. %	Q	ION ABUND. RATIO(2)	RRT (2)	MEAN RRF
ABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1000	827.69	82.77		0.78	1.008	1.06
13C-1,2,3,7,8-PeCDD	1000	669.53	66.95		1.58	1.185	0.99
13C-1,2,3,6,7,8-HxCDD	2500	2075.75	83.03		1.23	0.991	0.97
13C-1,2,3,4,6,7,8-HpCDD	2500	1820.70	72.83		0.98	1.078	0.87
13C-OCDD	5000	4503.73	90.07		0.87	1.169	0.59
13C-2,3,7,8-TCDF	1000	850.67	85.07		0.78	0.977	1.26
13C-1,2,3,7,8-PeCDF	1000	656.32	65.63		1.55	1.142	1.54
13C-1,2,3,4,7,8-HxCDF	2500	2091.92	83.68		0.49	0.969	1.31
13C-1,2,3,4,6,7,8-HpCDF	2500	1834.50	73.38		0.43	1.051	1.05
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	800	805.89	100.74			1.008	

(1) Contract-required limits for percent recovery are 40%-135% (section 8.4, Method 8290).

(2) Contract-required Reference Attributions for RRTs and ion abundance ratios are specified in Tables 11 and 8, respectively, Method 8290.

NOTE: There is no ion abundance ratio for 37Cl4-2378-TCDD (cleanup standard).

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
KBA11-11A-AUG6-02

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: E2200315-001

Client Name: JA JONES MGMT Sample Wt/Vol: 940 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: 08/13/02 Instrument ID: 70S

Ext. Date: 08/13/02 GC Column:DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: C10502#7

Analysis Date: 20-AUG-02 Time: 14:39:10 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
2,3,7,8-TCDD	*	1.090	U	*	*	0.80
1,2,3,7,8-PeCDD	*	1.196	U	*	*	0.99
1,2,3,4,7,8-HxCDD	*	1.239	U	*	*	1.02
1,2,3,6,7,8-HxCDD	*	1.053	U	*	*	1.20
1,2,3,7,8,9-HxCDD	*	1.150	U	*	*	1.10
1,2,3,4,6,7,8-HpCDD	15.491	2.328	J	1.10	1.078	0.99
OCDD	158.321	1.665	J	0.87	1.169	1.10
2,3,7,8-TCDF	*	0.843	U	*	*	1.05
1,2,3,7,8-PeCDF	*	0.814	U	*	*	0.95
2,3,4,7,8-PeCDF	*	0.791	U	*	*	0.98
1,2,3,4,7,8-HxCDF	*	0.783	U	*	*	1.25
1,2,3,6,7,8-HxCDF	*	0.747	U	*	*	1.31
1,2,3,7,8,9-HxCDF	*	0.950	U	*	*	1.03
2,3,4,6,7,8-HxCDF	*	0.830	U	*	*	1.18
1,2,3,4,6,7,8-HpCDF	2.191	1.689	JK	0.66	1.000	1.42
1,2,3,4,7,8,9-HpCDF	*	2.381	U	*	*	1.01
OCDF	2.957	2.100	J	1.00	1.004	1.28
Total Tetra-Dioxins	*	1.090	U			
Total Penta-Dioxins	*	1.196	U			
Total Hexa-Dioxins	*	1.053	U			
Total Hepta-Dioxins	15.491	2.328				
Total Tetra-Furans	*	0.843	U			
Total Penta-Furans	*	0.791	U			
Total Hexa-Furans	*	0.747	U			
Total Hepta-Furans	5.416	1.689				

(1) Qualifiers: See flag definitions.

(2) RRTs and ion ratios are specified in Tables 11 and 8, Method 8290. 8290F1

FORM 2

PCDD/PCDF LABELED COMPOUND AND
CLEANUP STANDARD RECOVERIES

CLIENT ID.
KBA11-11A-AUG6-02

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: E2200315-001

Client Name: JA JONES MGMT Sample Wt/Vol: 940 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: 08J/13/02 Instrument ID: 70S

Ext. Date: 08/13/02 GC Column: DB-5

Ext. Vol(ul): 20.0 Inj. Vol(ul): 1.0 Sample Data Filename: C10502#7

Analysis Date: 20-AUG-02 Time: 14:39:10 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

	SPIKE CONC.(pg)	CONCENT. FOUND(pg)	RECOV. %	Q	ION ABUND. RATIO(2)	RRT (2)	MEAN RRF
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1000	719.56	71.96		0.77	1.008	1.06
13C-1,2,3,7,8-PeCDD	1000	645.32	64.53		1.61	1.185	0.99
13C-1,2,3,6,7,8-HxCDD	2500	2073.53	82.94		1.23	0.991	0.97
13C-1,2,3,4,6,7,8-HpCDD	2500	1896.72	75.87		0.99	1.078	0.87
13C-OCDD	5000	3935.49	78.71		0.87	1.169	0.59
13C-2,3,7,8-TCDF	1000	761.86	76.19		0.78	0.977	1.26
13C-1,2,3,7,8-PeCDF	1000	628.34	62.83		1.53	1.143	1.54
13C-1,2,3,4,7,8-HxCDF	2500	2083.02	83.32		0.50	0.969	1.31
13C-1,2,3,4,6,7,8-HpCDF	2500	1570.49	62.82		0.43	1.050	1.05
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	800	748.09	93.51		-	1.009	

(1) Contract-required limits for percent recovery are 40%-135% (section 8.4, Method 8290).

(2) Contract-required Reference Attributions for RRTs and ion abundance ratios are specified in Tables 11 and 8, respectively, Method 8290.

NOTE: There is no ion abundance ratio for 37C14-2378-TCDD (cleanup standard).

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.
KBA11-11A-AUG6-02

Lab Name: Columbia Analytical Services
Episode No.:

Lab Code: CAS Method: 8290
Lab Sample ID: E2200315-001

Client Name: JA JONES MGMT
Sample Wt/Vol: 940 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous
Initial Calibration Date: 03/06/02

Sample Receipt Date: 08J/13/02
Instrument ID: 70S

Ext. Date: 08/13/02
GC Column ID: DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0
Sample Data Filename: C10502#7

Analysis Date: 20-AUG-02 Time: 14:39:10
Blank Data Filename: C10499#3

Dilution Factor: 1
Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture:

	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	*	X 1.0	*
1,2,3,7,8-PeCDD	*	X 0.5	*
1,2,3,4,7,8-HxCDD	*	X 0.1	*
1,2,3,6,7,8-HxCDD	*	X 0.1	*
1,2,3,7,8,9-HxCDD	*	X 0.1	*
1,2,3,4,6,7,8-HpCDD	15.49	X 0.01	1.55e-01
OCDD	158.32	X 0.001	1.58e-01
2,3,7,8-TCDF	*	X 0.1	*
1,2,3,7,8-PeCDF	*	X 0.05	*
2,3,4,7,8-PeCDF	*	X 0.5	*
1,2,3,4,7,8-HxCDF	*	X 0.1	*
1,2,3,6,7,8-HxCDF	*	X 0.1	*
1,2,3,7,8,9-HxCDF	*	X 0.1	*
2,3,4,6,7,8-HxCDF	*	X 0.1	*
1,2,3,4,6,7,8-HpCDF	2.19	X 0.01	2.19e-02
1,2,3,4,7,8,9-HpCDF	*	X 0.01	*
OCDF	2.96	X 0.001	2.96e-03

Total: 3.381e-01

(1) Taken from 'Interim Procudures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxin and -Dibenzofurans (CDDs and CDFs) and 1989 Udate(EPA/625/3-89/016, March 1989.)

Form 1

PCDD/PCDF ANALYSIS DATA SHEET
Use for Sample and Blank Results

CLIENT ID.
KBA11-13A-AUG6-02

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: E2200315-002

Client Name: JA JONES MGMT Sample Wt/Vol: 970 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: 08/13/02 Instrument ID: 70S

Ext. Date: 08/13/02 GC Column:DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: C10502#8

Analysis Date: 20-AUG-02 Time: 15:28:27 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

ANALYTE	CONCENTRATION FOUND	DETECTION LIMIT	Qual. (1)	ION ABUND. RATIO (2)	RRT (2)	MEAN RRF
2,3,7,8-TCDD	*	1.502	U	*	*	0.80
1,2,3,7,8-PeCDD	*	2.064	U	*	*	0.99
1,2,3,4,7,8-HxCDD	*	1.408	U	*	*	1.02
1,2,3,6,7,8-HxCDD	*	1.196	U	*	*	1.20
1,2,3,7,8,9-HxCDD	*	1.306	U	*	*	1.10
1,2,3,4,6,7,8-HpCDD	*	2.234	U	*	*	0.99
OCDD	6.194	2.607	J	0.86	1.170	1.10
2,3,7,8-TCDF	*	0.962	U	*	*	1.05
1,2,3,7,8-PeCDF	*	1.042	U	*	*	0.95
2,3,4,7,8-PeCDF	*	1.013	U	*	*	0.98
1,2,3,4,7,8-HxCDF	*	0.913	U	*	*	1.25
1,2,3,6,7,8-HxCDF	*	0.872	U	*	*	1.31
1,2,3,7,8,9-HxCDF	*	1.109	U	*	*	1.03
2,3,4,6,7,8-HxCDF	*	0.969	U	*	*	1.18
1,2,3,4,6,7,8-HpCDF	*	1.852	U	*	*	1.42
1,2,3,4,7,8,9-HpCDF	*	2.611	U	*	*	1.01
OCDF	*	3.329	U	*	*	1.28
Total Tetra-Dioxins	*	1.502	U			
Total Penta-Dioxins	*	2.064	U			
Total Hexa-Dioxins	*	1.196	U			
Total Hepta-Dioxins	*	2.234	U			
Total Tetra-Furans	*	0.962	U			
Total Penta-Furans	*	1.013	U			
Total Hexa-Furans	*	0.872	U			
Total Hepta-Furans	*	1.852	U			

(1) Qualifiers: See flag definitions.

(2) RRTs and ion ratios are specified in Tables 11 and 8, Method 8290. 8290F1

FORM 2

PCDD/PCDF LABELED COMPOUND AND
CLEANUP STANDARD RECOVERIES

CLIENT ID.

KBA11-13A-AUG6-02

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS SDG No.: Method: 8290 Lab Sample ID: E2200315-002

Client Name: JA JONES MGMT Sample Wt/Vol: 970 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: 08/13/02 Instrument ID: 70S

Ext. Date: 08/13/02 GC Column: DB-5

Ext. Vol(ul): 20.0 Inj. Vol(ul): 1.0 Sample Data Filename: C10502#8

Analysis Date: 20-AUG-02 Time: 15:28:27 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture/Lipid:

LABELED COMPOUNDS	SPIKE CONC.(pg)	CONCENT. FOUND(pg)	RECOV. %	Q	ION ABUND. RATIO(2)	RRT (2)	MEAN RRF
13C-2,3,7,8-TCDD	1000	761.67	76.17		0.77	1.008	1.06
13C-1,2,3,7,8-PeCDD	1000	732.44	73.24		1.59	1.185	0.99
13C-1,2,3,6,7,8-HxCDD	2500	2291.09	91.64		1.23	0.991	0.97
13C-1,2,3,4,6,7,8-HpCDD	2500	2013.64	80.55		0.97	1.078	0.87
13C-OCDD	5000	3652.98	73.06		0.89	1.169	0.59
13C-2,3,7,8-TCDF	1000	811.62	81.16		0.77	0.977	1.26
13C-1,2,3,7,8-PeCDF	1000	688.76	68.88		1.52	1.142	1.54
13C-1,2,3,4,7,8-HxCDF	2500	2280.98	91.24		0.50	0.969	1.31
13C-1,2,3,4,6,7,8-HpCDF	2500	2046.21	81.85		0.44	1.051	1.05
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	800	795.23	99.40		-	1.009	

(1) Contract-required limits for percent recovery are 40%-135% (section 8.4, Method 8290).

(2) Contract-required Reference Attributions for RRTs and ion abundance ratios are specified in Tables 11 and 8, respectively, Method 8290.

NOTE: There is no ion abundance ratio for 37C14-2378-TCDD (cleanup standard).

Form 3

CLIENT ID.

KBA11-13A-AUG6-02

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS Method: 8290 Lab Sample ID: E2200315-002

Client Name: JA JONES MGMT Sample Wt/Vol: 970 g or mL: mL

Matrix (aqueous/solid/leachate): aqueous Initial Calibration Date: 03/06/02

Sample Receipt Date: 08/13/02 Instrument ID: 70S

Ext. Date: 08/13/02 GC Column ID: DB-5

Ext. Vol(ul):20.0 Inj. Vol(ul):1.0 Sample Data Filename: C10502#8

Analysis Date: 20-AUG-02 Time: 15:28:27 Blank Data Filename: C10499#3

Dilution Factor: 1 Cal. Ver. Data Filename: C10502#2

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture:

	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	*	X 1.0	*
1,2,3,7,8-PeCDD	*	X 0.5	*
1,2,3,4,7,8-HxCDD	*	X 0.1	*
1,2,3,6,7,8-HxCDD	*	X 0.1	*
1,2,3,7,8,9-HxCDD	*	X 0.1	*
1,2,3,4,6,7,8-HpCDD	*	X 0.01	*
OCDD	6.19	X 0.001	6.19e-03
2,3,7,8-TCDF	*	X 0.1	*
1,2,3,7,8-PeCDF	*	X 0.05	*
2,3,4,7,8-PeCDF	*	X 0.5	*
1,2,3,4,7,8-HxCDF	*	X 0.1	*
1,2,3,6,7,8-HxCDF	*	X 0.1	*
1,2,3,7,8,9-HxCDF	*	X 0.1	*
2,3,4,6,7,8-HxCDF	*	X 0.1	*
1,2,3,4,6,7,8-HpCDF	*	X 0.01	*
1,2,3,4,7,8,9-HpCDF	*	X 0.01	*
OCDF	*	X 0.001	*

Total: 6.194e-03

(1) Taken from 'Interim Procudures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxin and -Dibenzofurans (CDDs and CDFs) and 1989 Udate(EPA/625/3-89/016, March 1989.)

ANALYTICAL RESULTS REPORT

ELAB, Inc.

Date: *27-Aug-02*

CLIENT:	Columbia Analytical Services	**Client Sample ID:**	J2202542-001
Lab Order:	F02080328	**Collection Date:**	8/6/02 9:20:00 AM
Project:	J2202542	**Sample Description:**	
Lab ID:	F02080328-001	**Matrix:**	Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
CYANIDE, TOTAL	**E335.3**			PrepDate:	**8/16/02 12:45:00 PM**	Analyst: **RFI**
Cyanide	ND	0.010		mg/L	1	8/19/02
SULFIDE	**E376.1**			PrepDate:		Analyst: **SFI**
Sulfide	ND	0.40		mg/L	4	8/12/02
8151: HERBICIDES, CHLORINATED BY GC	**SW8151**			PrepDate:	**8/13/02 11:26:43 AM**	Analyst: **KHA**
Bentazon	ND	0.10		µg/L	1	8/15/02 6:18:35 PM
2,4-D	ND	0.10		µg/L	1	8/15/02 6:18:35 PM
2,4-DB	ND	2.1		µg/L	1	8/15/02 6:18:35 PM
Dalapon	ND	1.0		µg/L	1	8/15/02 6:18:35 PM
Dicamba	ND	0.10		µg/L	1	8/15/02 6:18:35 PM
Dichlorprop	ND	0.73		µg/L	1	8/15/02 6:18:35 PM
Dinoseb	ND	0.21		µg/L	1	8/15/02 6:18:35 PM
MCPA	ND	21		µg/L	1	8/15/02 6:18:35 PM
MCPP	ND	21		µg/L	1	8/15/02 6:18:35 PM
4-Nitrophenol	ND	0.21		µg/L	1	8/15/02 6:18:35 PM
Pentachlorophenol	ND	0.042		µg/L	1	8/15/02 6:18:35 PM
Picloram	ND	0.10		µg/L	1	8/15/02 6:18:35 PM
2,4,5-T	ND	0.21		µg/L	1	8/15/02 6:18:35 PM
2,4,5-TP (Silvex)	ND	0.21		µg/L	1	8/15/02 6:18:35 PM
Surr: DCAA	105			%REC	1	8/15/02 6:18:35 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

ELAB, Inc.

Date: *27-Aug-02*

CLIENT:	Columbia Analytical Services	**Client Sample ID:**	J2202542-002
Lab Order:	F02080328	**Collection Date:**	8/6/02 11:15:00 AM
Project:	J2202542	**Sample Description:**	
Lab ID:	F02080328-002	**Matrix:**	Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
CYANIDE, TOTAL	**E335.3**			PrepDate:	**8/16/02 12:45:00 PM**	Analyst: **RFI**
Cyanide	ND	0.010		mg/L	1	8/19/02
SULFIDE	**E376.1**			PrepDate:		Analyst: **SFI**
Sulfide	1.9	0.20		mg/L	2	8/12/02
8151: HERBICIDES, CHLORINATED BY GC	**SW8151**			PrepDate:	**8/13/02 11:26:43 AM**	Analyst: **KHA**
Bentazon	ND	0.11		µg/L	1	8/15/02 6:18:35 PM
2,4-D	ND	0.11		µg/L	1	8/15/02 6:18:35 PM
2,4-DB	ND	2.2		µg/L	1	8/15/02 6:18:35 PM
Dalapon	ND	1.1		µg/L	1	8/15/02 6:18:35 PM
Dicamba	ND	0.11		µg/L	1	8/15/02 6:18:35 PM
Dichlorprop	ND	0.76		µg/L	1	8/15/02 6:18:35 PM
Dinoseb	ND	0.22		µg/L	1	8/15/02 6:18:35 PM
MCPA	ND	22		µg/L	1	8/15/02 6:18:35 PM
MCPP	ND	22		µg/L	1	8/15/02 6:18:35 PM
4-Nitrophenol	ND	0.22		µg/L	1	8/15/02 6:18:35 PM
Pentachlorophenol	ND	0.043		µg/L	1	8/15/02 6:18:35 PM
Picloram	ND	0.11		µg/L	1	8/15/02 6:18:35 PM
2,4,5-T	ND	0.22		µg/L	1	8/15/02 6:18:35 PM
2,4,5-TP (Silvex)	ND	0.22		µg/L	1	8/15/02 6:18:35 PM
Surr: DCAA	102			%REC	1	8/15/02 6:18:35 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

GWPS and Appendix IX
VOC Analyses

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577
Date Collected: 08/06/2002
Date Received: 08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA11-02-8/6/02
Lab Code: J2202577-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/200'

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-02-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	109	61-133	08/16/02	Acceptable
Dibromofluoromethane	98	65-136	08/16/02	Acceptable
Toluene-d8	104	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-10B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
[illegible],2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-10B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**1.1**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	109	61-133	08/16/02	Acceptable
Dibromofluoromethane	100	65-136	08/16/02	Acceptable
Toluene-d8	108	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577
Date Collected: 08/06/2002
Date Received: 08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name: KBA11-11A-8/6/02
Lab Code: J2202577-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acrolein†	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Acetonitrile	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
[illegible] Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Chloroprene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Propionitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Isobutyl Alcohol	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dioxane	ND	U	100	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-11A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-11A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	104	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	103	80-120	08/16/02	Acceptable

† Analyte Comments

Acrolein	This compound is quantified using a single point calibration and reported as screening level data.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acrolein†	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Allyl Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	**2.5**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Chloroprene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Propionitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Isobutyl Alcohol	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	**16**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dioxane	ND	U	100	1	08/16/02	08/16/02	JWG0200606	

Comments:

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577
Date Collected: 08/06/2002
Date Received: 08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name: KBA11-13A-8/6/02
Lab Code: J2202577-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Tetrachloroethene (PCE)	**14**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	**1.8**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**5.4**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	**1.7**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	106	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	106	80-120	08/16/02	Acceptable

† **Analyte Comments**

Acrolein	This compound is quantified using a single point calibration and reported as screening level data.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577
Date Collected: 08/06/2002
Date Received: 08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name: KBA11-13A-8/6/02 DUP
Lab Code: J2202577-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acrolein†	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Methyl Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	**2.5**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Chloroprene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Propionitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Isobutyl Alcohol	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	**15**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dioxane	ND	U	100	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/200

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02 DUP	**Units:**	ug/L
Lab Code:	J2202577-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Tetrachloroethene (PCE)	**13**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	**1.6**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**5.1**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	**1.6**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02 DUP	**Units:**	ug/L
Lab Code:	J2202577-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	84	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	100	61-133	08/16/02	Acceptable
Dibromofluoromethane	92	65-136	08/16/02	Acceptable
Toluene-d8	99	80-120	08/16/02	Acceptable

† Analyte Comments

Acrolein	This compound is quantified using a single point calibration and reported as screening level data.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-13B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-13B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	107	61-133	08/16/02	Acceptable
Dibromofluoromethane	100	65-136	08/16/02	Acceptable
Toluene-d8	106	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-15-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
le Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-15-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	109	61-133	08/16/02	Acceptable
Dibromofluoromethane	101	65-136	08/16/02	Acceptable
Toluene-d8	107	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-16-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	**1.6**		1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	**98**		50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	**27**		1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	**24**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	**83**		10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	**180**		25	1	08/16/02	08/16/02	JWG0200606	
Toluene	**15**		1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-16-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**2.9**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	**3.1**		2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	**2.1**		1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	107	61-133	08/16/02	Acceptable
Dibromofluoromethane	101	65-136	08/16/02	Acceptable
Toluene-d8	108	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-17B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-17B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	108	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	106	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-34-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-012	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	**7.9**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	**15**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-34-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-012	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	**100**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
',2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	110	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	107	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-37-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	**4.6**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-37-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	**5.5**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**4.2**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
[illegible] 2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
[illegible] Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	**2.4**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	107	61-133	08/16/02	Acceptable
Dibromofluoromethane	98	65-136	08/16/02	Acceptable
Toluene-d8	107	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-PS2-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	**2.3**		1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	**2.8**		1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	**110**		1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	**1.7**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	**1.5**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	**1.3**		1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-PS2-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	**2.2**		1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	**12**		1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	103	61-133	08/16/02	Acceptable
Dibromofluoromethane	96	65-136	08/16/02	Acceptable
Toluene-d8	101	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-Field Blank	**Units:**	ug/L
Lab Code:	J2202577-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-Field Blank	**Units:**	ug/L
Lab Code:	J2202577-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	109	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	104	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-Rinsate Blank	**Units:**	ug/L
Lab Code:	J2202577-014	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA11-Rinsate Blank	**Units:**	ug/L
Lab Code:	J2202577-014	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	109	61-133	08/16/02	Acceptable
Dibromofluoromethane	99	65-136	08/16/02	Acceptable
Toluene-d8	105	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	Trip Blank (7/24/02)	**Units:**	ug/L
Lab Code:	J2202577-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methyl tert-Butyl Ether	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
cis-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Bromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
ıle Matrix:	Water	**Date Received:**	08/09/2002

Volatile Organic Compounds by GC/MS

Sample Name:	Trip Blank (7/24/02)	**Units:**	ug/L
Lab Code:	J2202577-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
ˋ ˋ,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
ı ·Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	111	61-133	08/16/02	Acceptable
Dibromofluoromethane	101	65-136	08/16/02	Acceptable
Toluene-d8	106	80-120	08/16/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200606-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Chloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Chloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Chloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Trichlorofluoromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acrolein†	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Acetone	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Disulfide	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Acetonitrile	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Allyl Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Methylene Chloride	ND	U	5.0	1	08/16/02	08/16/02	JWG0200606	
Acrylonitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
trans-1,2-Dichloroethene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1-Dichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Vinyl Acetate	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Chloroprene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Butanone (MEK)	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Propionitrile	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
Methacrylonitrile	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
Chloroform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Carbon Tetrachloride	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Benzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Isobutyl Alcohol	ND	U	50	1	08/16/02	08/16/02	JWG0200606	
Trichloroethene (TCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Dibromomethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Methyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dioxane	ND	U	100	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
'e Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200606-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bromodichloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
cis-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Toluene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,3-Dichloropropene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethyl Methacrylate	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2-Trichloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Tetrachloroethene (PCE)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
2-Hexanone	ND	U	25	1	08/16/02	08/16/02	JWG0200606	
Dibromochloromethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
-obenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
ı, ,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Ethylbenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
m,p-Xylenes	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	
o-Xylene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Styrene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
Bromoform	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2,3-Trichloropropane	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
trans-1,4-Dichloro-2-butene	ND	U	10	1	08/16/02	08/16/02	JWG0200606	
1,3-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,4-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dichlorobenzene	ND	U	1.0	1	08/16/02	08/16/02	JWG0200606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	08/16/02	08/16/02	JWG0200606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200606-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	08/16/02	Acceptable
4-Bromofluorobenzene	107	61-133	08/16/02	Acceptable
Dibromofluoromethane	100	65-136	08/16/02	Acceptable
Toluene-d8	105	80-120	08/16/02	Acceptable

† Analyte Comments

Acrolein	This compound is quantified using a single point calibration and reported as screening level data.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577

Surrogate Recovery Summary
Volatile Organic Compounds by GC/MS (Appendix IX)

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
KBA11-11A-8/6/02	J2202577-001	90	104	99	103
KBA11-13A-8/6/02	J2202577-002	91	106	99	106
KBA11-13A-8/6/02 DUP	J2202577-003	84	100	92	99
KBA11-PS2-8/6/02	J2202577-004	86	103	96	101
KBA11-02-8/6/02	J2202577-005	90	109	98	104
KBA11-15-8/7/02	J2202577-006	92	109	101	107
KBA11-17B-8/7/02	J2202577-007	91	108	99	106
KBA11-16-8/7/02	J2202577-008	93	107	101	108
KBA11-13B-8/7/02	J2202577-009	92	107	100	106
KBA11-10B-8/7/02	J2202577-010	92	109	100	108
KBA11-37-8/8/02	J2202577-011	91	107	98	107
KBA11-34-8/8/02	J2202577-012	92	110	99	107
KBA11-Field Blank	J2202577-013	91	109	99	104
KBA11-Rinsate Blank	J2202577-014	90	109	99	105
[illegible] Blank (7/24/02)	J2202577-015	91	111	101	106
[illegible] 1 Purge Water	J2202577-016	90	109	97	105
Method Blank	JWG0200606-4	90	107	100	105
KBA11-13A-8/6/02MS	JWG0200606-1	93	105	103	107
KBA11-13A-8/6/02DMS	JWG0200606-2	93	108	103	108
Lab Control Sample	JWG0200606-3	91	104	101	105

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	56-147
Sur2 =	4-Bromofluorobenzene	61-133
Sur3 =	Dibromofluoromethane	65-136
Sur4 =	Toluene-d8	80-120

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	08/16/2002
Sample Matrix:	Water	**Date Analyzed:**	08/16/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200606

Analyte Name	Sample Result	KBA11-13A-8/6/02MS JWG0200606-1 Matrix Spike			KBA11-13A-8/6/02DMS JWG0200606-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Dichlorodifluoromethane	ND	19.0	20.0	95	16.8	20.0	84	80-135	12	30
Chloromethane	ND	21.1	20.0	105	18.0	20.0	90	70-139	16	30
Vinyl Chloride	ND	20.6	20.0	103	18.7	20.0	93	80-133	10	30
Bromomethane	ND	21.5	20.0	107	18.3	20.0	92	78-138	16	30
Chloroethane	ND	21.7	20.0	109	18.6	20.0	93	66-148	15	30
Trichlorofluoromethane	ND	18.2	20.0	91	15.3	20.0	77	67-153	17	30
1,1-Dichloroethene	ND	24.0	20.0	120	20.1	20.0	101	77-122	18	30
Acetone	ND	90.2	100	90	76.1	100	76	58-149	17	30
Iodomethane (Methyl Iodide)	ND	120	100	120	103	100	103	78-137	16	[illegible]
Carbon Disulfide	ND	136	100	136	119	100	119	76-144	14	30
Acetonitrile	ND	86.1	100	86	73.3	100	73 *	80-120	16	30
Allyl Chloride	ND	21.4	20.0	107	18.1	20.0	91	80-120	17	30
Methylene Chloride	ND	22.2	20.0	111	18.7	20.0	93	36-159	17	30
Acrylonitrile	ND	108	100	108	92.6	100	93	80-123	16	30
trans-1,2-Dichloroethene	2.5	27.4	20.0	125 *	23.9	20.0	107	80-120	14	30
1,1-Dichloroethane	ND	24.4	20.0	122 *	20.8	20.0	104	80-120	16	30
Vinyl Acetate	ND	101	100	101	85.5	100	86	77-141	17	30
Chloroprene	ND	28.0	20.0	140 *	23.8	20.0	119	80-121	16	30
2-Butanone (MEK)	ND	112	100	112	94.9	100	95	63-142	17	30
Propionitrile	ND	114	100	114	98.7	100	99	77-130	14	30
Methacrylonitrile	ND	27.1	20.0	135 *	23.2	20.0	116	80-132	16	30
Chloroform	ND	25.6	20.0	128 *	21.7	20.0	108	80-120	16	30
1,1,1-Trichloroethane (TCA)	ND	24.8	20.0	124 *	21.3	20.0	106	80-121	15	30
Carbon Tetrachloride	ND	26.7	20.0	133 *	22.5	20.0	112	75-126	17	30
Benzene	ND	24.5	20.0	122 *	21.0	20.0	105	80-120	15	30
1,2-Dichloroethane (EDC)	ND	22.6	20.0	113	19.1	20.0	96	80-120	17	30
Isobutyl Alcohol	ND	452	400	113	399	400	100	61-141	12	30
Trichloroethene (TCE)	16	42.4	20.0	130 *	38.1	20.0	109	80-120	11	30
1,2-Dichloropropane	ND	22.7	20.0	114	19.7	20.0	99	80-120	14	30
Dibromomethane	ND	24.1	20.0	121 *	21.3	20.0	106	80-120	13	30
Methyl Methacrylate	ND	27.9	20.0	140 *	24.3	20.0	121	78-125	14	30
1,4-Dioxane	ND	481	400	120	363	400	91	58-142	28	30
Bromodichloromethane	ND	23.6	20.0	118	20.2	20.0	101	80-124	16	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	08/16/2002
ıle Matrix:	Water	**Date Analyzed:**	08/16/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS (Appendix IX)

Sample Name:	KBA11-13A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200606

Analyte Name	Sample Result	KBA11-13A-8/6/02MS JWG0200606-1 Matrix Spike			KBA11-13A-8/6/02DMS JWG0200606-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
cis-1,3-Dichloropropene	ND	26.1	20.0	131 *	22.9	20.0	115	78-120	13	30
4-Methyl-2-pentanone (MIBK)	ND	126	100	126 *	108	100	108	80-124	16	30
Toluene	ND	25.1	20.0	126 *	22.0	20.0	110	80-120	13	30
trans-1,3-Dichloropropene	ND	25.3	20.0	126 *	22.0	20.0	110	77-120	14	30
Ethyl Methacrylate	ND	31.1	20.0	156 *	27.1	20.0	136 *	80-125	14	30
1,1,2-Trichloroethane	ND	23.4	20.0	117	20.6	20.0	103	80-120	12	30
Tetrachloroethene (PCE)	14	41.0	20.0	135 *	37.8	20.0	119	78-120	8	30
2-Hexanone	ND	126	100	126 *	106	100	106	75-125	17	30
mochloromethane	ND	24.9	20.0	124 *	21.7	20.0	109	78-120	14	30
N ıibromoethane (EDB)	ND	24.3	20.0	121 *	21.0	20.0	105	80-120	15	30
Chlorobenzene	1.8	26.1	20.0	121 *	22.7	20.0	104	80-120	14	30
1,1,1,2-Tetrachloroethane	ND	24.9	20.0	124 *	21.7	20.0	108	80-120	14	30
Ethylbenzene	5.4	29.9	20.0	123 *	27.1	20.0	108	80-120	10	30
m,p-Xylenes	ND	51.7	40.0	129 *	44.7	40.0	112	80-121	15	30
o-Xylene	ND	24.2	20.0	121 *	21.1	20.0	106	80-120	14	30
Styrene	ND	24.1	20.0	121 *	20.8	20.0	104	80-120	15	30
Bromoform	ND	23.7	20.0	119	21.0	20.0	105	64-120	12	30
1,1,2,2-Tetrachloroethane	ND	21.2	20.0	106	18.4	20.0	92	77-125	14	30
1,2,3-Trichloropropane	ND	23.3	20.0	116	20.2	20.0	101	77-120	14	30
trans-1,4-Dichloro-2-butene	ND	18.3	20.0	91	15.5	20.0	77	46-135	17	30
1,3-Dichlorobenzene	ND	24.1	20.0	121 *	20.6	20.0	103	80-120	16	30
1,4-Dichlorobenzene	1.7	25.4	20.0	119	22.1	20.0	102	80-120	14	30
1,2-Dichlorobenzene	ND	23.9	20.0	119	20.9	20.0	105	80-120	13	30
1,2-Dibromo-3-chloropropane (DBCP	ND	24.2	20.0	121	20.8	20.0	104	48-135	15	30

flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	08/16/2002
Sample Matrix:	Water	**Date Analyzed:**	08/16/200

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS (Appendix IX)

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	JWG0200606

	Lab Control Sample JWG0200606-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	14.9	20.0	75 *	80-135
Chloromethane	16.5	20.0	83	70-139
Vinyl Chloride	17.1	20.0	86	80-133
Bromomethane	17.6	20.0	88	78-138
Chloroethane	17.3	20.0	86	66-148
Trichlorofluoromethane	15.1	20.0	75	67-153
Acrolein	122	100	122	10-370
1,1-Dichloroethene	19.0	20.0	95	77-122
Acetone	77.4	100	77	58-149
Iodomethane (Methyl Iodide)	100	100	100	78-137
Carbon Disulfide	103	100	103	76-144
Acetonitrile	76.5	100	77 *	80-120
Allyl Chloride	17.6	20.0	88	80-120
Methylene Chloride	18.3	20.0	92	36-159
Acrylonitrile	97.0	100	97	80-123
trans-1,2-Dichloroethene	20.5	20.0	103	80-120
1,1-Dichloroethane	20.0	20.0	100	80-120
Vinyl Acetate	85.9	100	86	77-141
Chloroprene	22.9	20.0	114	80-120
2-Butanone (MEK)	98.8	100	99	63-142
Propionitrile	101	100	101	77-130
Methacrylonitrile	24.1	20.0	120	80-132
Chloroform	21.3	20.0	106	80-120
1,1,1-Trichloroethane (TCA)	20.6	20.0	103	80-120
Carbon Tetrachloride	21.7	20.0	108	75-126
Benzene	20.5	20.0	102	80-120
1,2-Dichloroethane (EDC)	19.7	20.0	98	80-120
Isobutyl Alcohol	436	400	109	61-141
Trichloroethene (TCE)	21.0	20.0	105	80-120
1,2-Dichloropropane	19.3	20.0	96	80-120
Dibromomethane	21.1	20.0	106	80-120
Methyl Methacrylate	24.4	20.0	122	78-125
1,4-Dioxane	454	400	114	58-142
Bromodichloromethane	19.8	20.0	99	80-124
cis-1,3-Dichloropropene	22.3	20.0	112	78-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2202577
Date Extracted: 08/16/2002
Date Analyzed: 08/16/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS (Appendix IX)

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0200606

Analyte Name	Lab Control Sample JWG0200606-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	105	100	105	80-120
Toluene	21.0	20.0	105	80-120
trans-1,3-Dichloropropene	21.6	20.0	108	77-120
Ethyl Methacrylate	26.4	20.0	132 *	80-125
1,1,2-Trichloroethane	20.8	20.0	104	80-120
Tetrachloroethene (PCE)	21.7	20.0	108	78-120
2-Hexanone	106	100	106	75-125
Dibromochloromethane	21.8	20.0	109	78-120
1,2-Dibromoethane (EDB)	21.3	20.0	106	80-120
Chlorobenzene	20.7	20.0	103	80-120
1,1,2,2-Tetrachloroethane	21.5	20.0	108	80-120
Ethylbenzene	21.0	20.0	105	80-120
m,p-Xylenes	42.6	40.0	106	80-121
o-Xylene	20.4	20.0	102	80-120
Styrene	20.6	20.0	103	80-120
Bromoform	21.1	20.0	105	64-120
1,1,2,2-Tetrachloroethane	18.5	20.0	93	77-125
1,2,3-Trichloropropane	20.6	20.0	103	77-120
trans-1,4-Dichloro-2-butene	16.4	20.0	82	46-135
1,3-Dichlorobenzene	20.6	20.0	103	80-120
1,4-Dichlorobenzene	20.7	20.0	104	80-120
1,2-Dichlorobenzene	20.8	20.0	104	80-120
1,2-Dibromo-3-chloropropane (DBCP	20.3	20.0	101	48-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Additional Semi-Volatiles Analyses

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-02-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-005	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	73	20-99	08/22/02	Acceptable
p-Terphenyl-d14	70	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/200

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-10B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-010	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.0**		0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	70	20-99	08/22/02	Acceptable
p-Terphenyl-d14	75	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
ıle Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-11A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-001	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
'sene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
ı ɔ(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	74	20-99	08/22/02	Acceptable
p-Terphenyl-d14	74	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-13A-8/6/02 DUP	**Units:**	ug/L
Lab Code:	J2202577-003	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**22**		0.14	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.14	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	69	20-99	08/22/02	Acceptable
p-Terphenyl-d14	79	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-13B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-009	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible]ysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible]o(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	68	20-99	08/22/02	Acceptable
p-Terphenyl-d14	67	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-15-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-006	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	67	20-99	08/22/02	Acceptable
p-Terphenyl-d14	70	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-16-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-008	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.88**		0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	**0.20**		0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	**0.15**		0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible]ysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible](b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	60	20-99	08/22/02	Acceptable
p-Terphenyl-d14	65	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/07/2002
Sample Matrix:	Water	**Date Received:**	08/09/200

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-17B-8/7/02	**Units:**	ug/L
Lab Code:	J2202577-007	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	68	20-99	08/22/02	Acceptable
p-Terphenyl-d14	68	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
ple Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-34-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-012	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible]sene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
[illegible]o(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	54	20-99	08/22/02	Acceptable
p-Terphenyl-d14	59	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-37-8/8/02	**Units:**	ug/L
Lab Code:	J2202577-011	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**13**		0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	**0.18**		0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	**0.21**		0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	59	20-99	08/22/02	Acceptable
p-Terphenyl-d14	59	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/06/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-PS2-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-004	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	69	20-99	08/22/02	Acceptable
p-Terphenyl-d14	62	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/200

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-Field Blank	**Units:**	ug/L
Lab Code:	J2202577-013	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	71	20-99	08/22/02	Acceptable
p-Terphenyl-d14	70	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	08/08/2002
Sample Matrix:	Water	**Date Received:**	08/09/2002

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-Rinsate Blank	**Units:**	ug/L
Lab Code:	J2202577-014	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.11	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	71	20-99	08/22/02	Acceptable
p-Terphenyl-d14	57	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200546-4	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
2-Methylnaphthalene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
1-Methylnaphthalene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Acenaphthylene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Acenaphthene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Fluorene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Phenanthrene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Anthracene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Fluoranthene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Pyrene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Benz(a)anthracene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Chrysene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Benzo(b)fluoranthene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Benzo(k)fluoranthene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Benzo(a)pyrene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Dibenz(a,h)anthracene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	
Benzo(g,h,i)perylene	ND	U	0.10	1	08/13/02	08/22/02	JWG0200546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	72	20-99	08/22/02	Acceptable
p-Terphenyl-d14	83	30-150	08/22/02	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: JA Jones Management Services
Project: NSB Kings Bay/Site 11
ple Matrix: Water

Service Request: J2202577

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Extraction Method: EPA 3510
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
KBA11-11A-8/6/02	J2202577-001	74	74
KBA11-13A-8/6/02 DUP	J2202577-003	69	79
KBA11-PS2-8/6/02	J2202577-004	69	62
KBA11-02-8/6/02	J2202577-005	73	70
KBA11-15-8/7/02	J2202577-006	67	70
KBA11-17B-8/7/02	J2202577-007	68	68
KBA11-16-8/7/02	J2202577-008	60	65
KBA11-13B-8/7/02	J2202577-009	68	67
KBA11-10B-8/7/02	J2202577-010	70	75
KBA11-37-8/8/02	J2202577-011	59	59
KBA11-34-8/8/02	J2202577-012	54	59
KBA11-Field Blank	J2202577-013	71	70
KBA11-Rinsate Blank	J2202577-014	71	57
Method Blank	JWG0200546-4	72	83
11-11A-8/6/02MS	JWG0200546-1	43	43
11-11A-8/6/02DMS	JWG0200546-2	44	43
Lab Control Sample	JWG0200546-3	44	45

Surrogate Recovery Control Limits (%)

Sur1 =	2-Fluorobiphenyl	20-99
Sur2 =	p-Terphenyl-d14	30-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	08/13/2002
Sample Matrix:	Water	**Date Analyzed:**	08/22/2002

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Sample Name:	KBA11-11A-8/6/02	**Units:**	ug/L
Lab Code:	J2202577-001	**Basis:**	NA
Extraction Method:	EPA 3510	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	JWG0200546

Analyte Name	Sample Result	KBA11-11A-8/6/02MS JWG0200546-1 Matrix Spike			KBA11-11A-8/6/02DMS JWG0200546-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	ND	8.79	11.1	79	9.48	10.4	91	34-136	8	30
2-Methylnaphthalene	ND	9.10	11.1	82	9.60	10.4	92	38-130	5	30
1-Methylnaphthalene	ND	8.67	11.1	78	9.51	10.4	91	38-131	9	30
Acenaphthylene	ND	9.21	11.1	83	9.68	10.4	93	41-133	5	30
Acenaphthene	ND	8.70	11.1	78	9.16	10.4	88	44-124	5	30
Fluorene	ND	9.17	11.1	83	9.49	10.4	91	40-132	3	30
Phenanthrene	ND	8.42	11.1	76	8.79	10.4	84	46-120	4	30
Anthracene	ND	8.94	11.1	80	9.03	10.4	87	49-126	1	30
F[illegible]anthene	ND	8.62	11.1	78	8.90	10.4	85	43-134	3	
P[illegible]ne	ND	9.11	11.1	82	9.67	10.4	93	53-115	6	30
Benz(a)anthracene	ND	8.02	11.1	72	8.45	10.4	81	47-123	5	30
Chrysene	ND	8.14	11.1	73	8.52	10.4	82	46-120	5	30
Benzo(b)fluoranthene	ND	8.96	11.1	81	9.28	10.4	89	38-125	4	30
Benzo(k)fluoranthene	ND	8.71	11.1	78	8.93	10.4	86	27-121	3	30
Benzo(a)pyrene	ND	8.57	11.1	77	8.89	10.4	85	30-127	4	30
Indeno(1,2,3-cd)pyrene	ND	6.90	11.1	62	6.71	10.4	64	10-144	3	30
Dibenz(a,h)anthracene	ND	4.17	11.1	38	4.04	10.4	39	10-121	3	30
Benzo(g,h,i)perylene	ND	5.03	11.1	45	4.91	10.4	47	10-117	2	30

[illegible] flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	08/13/2002
Sample Matrix:	Water	**Date Analyzed:**	08/22/2002

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons (PAHs) by GC/MS SIM

Extraction Method:	EPA 3510	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	JWG0200546

	Lab Control Sample JWG0200546-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	4.09	5.00	82	34-136
2-Methylnaphthalene	4.15	5.00	83	38-130
1-Methylnaphthalene	4.09	5.00	82	38-131
Acenaphthylene	4.24	5.00	85	41-133
Acenaphthene	4.01	5.00	80	44-124
Fluorene	4.16	5.00	83	40-132
Phenanthrene	3.90	5.00	78	46-120
Anthracene	4.09	5.00	82	49-126
Fluoranthene	3.98	5.00	80	43-134
Pyrene	4.22	5.00	84	53-115
Benzo(a)anthracene	3.74	5.00	75	47-123
Chrysene	3.81	5.00	76	46-120
Benzo(b)fluoranthene	4.22	5.00	84	38-125
Benzo(k)fluoranthene	4.19	5.00	84	27-121
Benzo(a)pyrene	4.05	5.00	81	30-127
Indeno(1,2,3-cd)pyrene	3.51	5.00	70	10-144
Dibenz(a,h)anthracene	3.33	5.00	67	10-121
Benzo(g,h,i)perylene	3.27	5.00	65	10-117

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Additional Cobalt and Nickel Analyses

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

'ient:	JA Jones Management Services	**Service Request:**	J2202577
. roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-02-8/6/02	Units:	mg/L (ppm)
Lab Code:	J2202577-005	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	0.000036	B
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.0012	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/7/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-10B-8/7/02	Units:	mg/L (ppm)
Lab Code:	J2202577-010	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.00065	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

'ient:	JA Jones Management Services	**Service Request:**	J2202577
_ roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-11A-8/6/02	Units:	mg/L (ppm)
Lab Code:	J2202577-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/15/02	0.00035	B
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/15/02	0.001	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-13A-8/6/02	Units:	mg/L (ppm)
Lab Code:	J2202577-002	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/15/02	0.36	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/15/02	0.49	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

'ient:	JA Jones Management Services	**Service Request:**	J2202577
.oject:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-13A-8/6/02 DUP	Units:	mg/L (ppm)
Lab Code:	J2202577-003	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/15/02	0.33	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/15/02	0.45	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/7/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-13B-8/7/02	Units:	mg/L (ppm)
Lab Code:	J2202577-009	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	0.00037	B
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.016	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
rroject:	NSB Kings Bay/Site 11	**Date Collected:**	8/7/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-15-8/7/02	Units:	mg/L (ppm)
Lab Code:	J2202577-006	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	0.000092	B
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.0019	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/7/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-16-8/7/02	Units:	mg/L (ppm)
Lab Code:	J2202577-008	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	0.000034	B
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.0027	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/7/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-17B-8/7/02	Units:	mg/L (ppm)
Lab Code:	J2202577-007	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.00086	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/8/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-34-8/8/02	Units:	mg/L (ppm)
Lab Code:	J2202577-012	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	0.077	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.073	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/8/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-37-8/8/02	Units:	mg/L (ppm)
Lab Code:	J2202577-011	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.0021	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-PS2-8/6/02	Units:	mg/L (ppm)
Lab Code:	J2202577-004	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/15/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/15/02	0.00053	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

ient:	JA Jones Management Services	**Service Request:**	J2202577
. roject:	NSB Kings Bay/Site 11	**Date Collected:**	8/8/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-Field Blank	Units:	mg/L (ppm)
Lab Code:	J2202577-013	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.00069	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/8/02
Sample Matrix:	Water	**Date Received:**	8/9/02

Total Metals

Sample Name:	KBA11-Rinsate Blank	Units:	mg/L (ppm)
Lab Code:	J2202577-014	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/19/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/19/02	0.00091	B

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Total Metals

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	J220813-MB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.00003	1	8/13/02	8/15/02	U	
Nickel	EPA 3020A	200.8	0.002	0.00015	1	8/13/02	8/15/02	0.0002	B

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	8/6/02
Sample Matrix:	Water	**Date Received:**	8/9/02
		Date Extracted:	8/13/02
		Date Analyzed:	8/15/02

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	KBA11-13A-8/6/02		Units:	mg/L (ppm)
Lab Code:	J2202577-002MS	J2202577-002DMS	Basis:	NA
Test Notes:				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Cobalt	EPA 3020A	200.8	0.001	0.0500	0.0500	0.36	0.416	0.425	112	130	70-130	2	
Nickel	EPA 3020A	200.8	0.002	0.0500	0.0500	0.49	0.537	0.536	94	92	70-130	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2202577
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	8/13/02
		Date Analyzed:	8/15/02

Laboratory Control Sample Summary
Total Metals

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	J220813-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cobalt	EPA 3020A	200.8	0.0500	0.0498	100	85-115	
Nickel	EPA 3020A	200.8	0.0500	0.0497	99	85-115	

Chain of Custody

Columbia Analytical Services INC.
An Employee-Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 2

CAS Contact J220, 577

Project Name: King Bay, GA	Project Number: Site 11
Project Manager: Coby	Report CC: Coby
Company/Address: J.A Jones Mgt Service, P.O Box 47248, King Bay, GA 31547	
Phone #: 912-673-2001 ext. 8536	FAX#: 912-673-4037
Sampler's Signature: Tommy Bryant	Sampler's Printed Name: Tommy BRYANT

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	TCP-MS	Cobalt/Nickel	[illegible]	Naphthalene 8270 SIMS	GPS	8260B	Aroclor IV	Volatiles	85	REMARKS/ ALTERNATE DESCRIPTION
KBA11-11A-AUG-6-02		8-6-02	0910	WATER	4	✓		✓			✓	✓			
KBA11-13A-AUG-6-02		8-6-02	1055	WATER	4	✓		✓			✓	✓			
KBA11-13A-AUG-6-02	DUP	8-6-02	1130	WATER	4	✓		✓			✓	✓			
KBA11-13A-AUG-6-02	MS/MSD	8-6-02	1145	WATER	4	✓		✓			✓	✓			
KBA11-PS2-AUG-6-02		8-6-02	1330	WATER	4	✓		✓			✓	✓			
KBA11-02-AUG-6-02		8-6-02	1430	WATER	4	✓		✓			✓	✓			
KBA11-15-AUG-7-02		8-7-02	0935	WATER	4	✓		✓			✓	✓			
KBA11-17B-AUG-7-02		8-7-02	1030	WATER	4	✓		✓			✓	✓			
KBA11-16-AUG-7-02		8-7-02	1125	WATER	4	✓		✓			✓	✓			
KBA11-13B-AUG-7-02		8-7-02	1340	WATER	4	✓		✓			✓	✓			

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS

Naphthalene Not Required by 8260B

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE _____
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO# 1965292/1965294
BILL TO: J.A Jones, mgt
P.O Box 47248
King Bay, GA
31547

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Tommy Bryant	Signature: [illegible]	Signature	Signature: K Mathurlale	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: Eric Reams	Printed Name	Printed Name: Kelly Hinkle	Printed Name	Printed Name
Firm: JA JONES	Firm: J.A. Jones	Firm	Firm: CAS	Firm	Firm
Date/Time: 8-9-02/0731	Date/Time: 8/9/02 7:40	Date/Time	Date/Time: 8/9/02 12:18	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1000-07

Columbia Analytical Services, Inc. General Terms and Conditions

Laboratory Services • 1-800-695-7222 x07

1. These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory ("LAB") and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent or conflicting terms, whether printed or otherwise set forth in purchase order or other communication from the Client to LAB. The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state from which services are procured.

2. **Warranty.** Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

At LAB sole discretion, preliminary results may be given in advance of the laboratory report. Such preliminary results are tentative, subject to confirmation and final review by LAB. Client's use of preliminary results in any manner shall be at Client's sole risk.

3. **Scope and Compensation.** LAB agrees to perform the services described in the proposal or agreement to which these Terms and Conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1 1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sales, use or other taxes. Such taxes will be added to invoice prices when required. LAB reserves the right to require payment prior to release of data. Until such time as Client invoices are paid in full, LAB has no obligation, and will not defend, reproduce, return, or supplement data results.

4. Compensation for services performed will be based on the current Lab Analytical Fee Schedule, or on verbal quotations agreed to in writing by the parties. Unless specifically indicated on the written confirmation of quotation, analytical turnaround times are not guaranteed. The minimum charge will be $100.00 unless otherwise noted.

5. **Methods.** Where applicable, LAB will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), State Agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemists (AOAC), Standard Methods for the Examination of Water and Wastewater, or other recognized methodologies. LAB reserves the right to deviate from these methodologies, if necessary or appropriate, due to the nature or composition of the sample or otherwise, based on the reasonable judgment of LAB. Deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or LAB's standard operating procedures.

6. **Limitations of Liability.** In the event of any error, omission or other professional negligence, the sole and exclusive responsibility of LAB shall be to reperform the deficient work at its own expense, and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation or responsibility of any kind for losses, costs, expenses or other damages (including but not limited to any special, indirect, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients, and LAB is in no way responsible for the use of such results by clients or third parties. All results should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of the results.

7. **Hazard Disclosure.** Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of hazardous substances known or suspected by Client. Client further warrants that sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

8. **Sample Handling.** Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss of or damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from LAB's premises.

LAB will use its best efforts to arrange for the shipment of specially prepared sample bottles, sampling instructions per Client instruction by the readily available, least cost method. Any other shipment arrangements will be at Client's expense.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis, unless modified by applicable state or federal laws. Client will be required to give to LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample which, in the sole judgment of LAB, (a) is of unsuitable volume, (b) may be or become unsuitable for, or may pose a risk in handling, transport or processing for any health, safety environmental or other reason, whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) has been delivered to the LAB more than 72 hours after sampling or if one half or more of the recommended holding time for the analysis has lapsed.

9. **Legal Responsibility.** LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort, including negligence.

10. **Data Deliverables.** Where specifically requested by Client, LAB agrees to produce electronic data representing services performed hereunder, subject to the following specific understanding between the parties: LAB agrees to supply Client with electronic data as mutually defined, using an agreed medium. Client recognizes that LAB is not a software consultant, manufacturer or reseller; any transfer of electronic data pursuant to services provided by LAB is an accommodation to and strictly for the convenience of the client who is solely liable for the choice and maintenance of the medium utilized. Electronic data provided under this agreement is not deemed to be the project deliverable for the purpose of fulfilling obligations under the Agreement. The provision of electronic data does not in any way modify the intention of the parties that the Client rely on the written or hard copy form of the deliverable.

Except with regard to any limited warranty as specifically set forth below, LAB disclaims and excludes all warranties express or implied with regard to the creation, transmittal or use of electronic data hereunder. The limited warranty in this Agreement replaces all other warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose. Professional warranties extend to written or hard copy deliverables only and do <u>not</u> extend to electronic data supplied to Client. Professional warranties in the Agreement which extend to written or hard copy deliverables shall be undisturbed by this Amendment. LAB's liability for medium failure shall be limited to replacement of the electronic data with a hard copy for a period of thirty days from the date of delivery. LAB's electronic data transfer is derived in part from or is created using third party software, and no such third party warrants or assumes any liability regarding use of or undertakes to provide support information relating to LAB's electronic data. LAB will utilize anti-virus programs on a best efforts basis in preparation of the electronic data transfer, but LAB makes no warranty as to the effectiveness of such screening. LAB will also use its best efforts to ensure that its electronic data will meet all criteria as specified by Client, including criteria regarding date/time data, if, and when, included; but LAB makes no warranty as to the appropriateness of the client specified criteria by accepting the same.

In addition to indemnities contained in the underlying agreement between LAB and Client, Client shall hold LAB harmless from any claims, suits or liability arising from or related to electronic data supplied pursuant to this Agreement. Any reuse of original or altered files by Client shall be at Client's risk and without liability or responsibility to LAB, but shall entitle LAB to additional compensation for such unauthorized reuse. In no event will LAB's liability for electronic data include any special, incidental or consequential damages, whether or not LAB has knowledge of the potential for loss or damage.

11. **Force Majeure.** LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Columbia Analytical Services, Inc.
An Employee-Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 2 OF 2

SR # J22 - 577
CAS Contact

Project Name: Kings Bay, GA
Project Number: Site 11
Project Manager: Caly
Report CC: Caly
Company/Address: T.A. Jones Mgt Serv, P.O. Box 47248, Kings Bay GA 31547
Phone #: 912-673-2081 ext. 8536
FAX#: 912-673-4037
Sampler's Signature: Tommy Bryant
Sampler's Printed Name: TOMMY BRYANT

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	TCP-MS	Cobalt/Nickel	Naphthalene 8270 SIMS	GRO 8260B	Aroclor IV Chlorides	86
KBA11-10B-AUG-7-02		8-7-02	1430	WATER	4	✓	✓	✓	✓	✓	
KBA11-37-AUG-8-02		8-8-02	0840	WATER	4	✓	✓	✓	✓	✓	
KBA11-34-AUG-8-02		8-8-02	0950	WATER	4	✓	✓	✓	✓	✓	
KBA11-FIELD BLANK		8-8-02	1020	WATER	4	✓	✓	✓	✓	✓	
KBA11-RINSATE BLANK		8-8-02	1120	WATER	4	✓	✓	✓	✓	✓	
TRIP BLANK		7-24-02		WATER	3			✓			
SITE 11 PURGE WATER		8-8-02	1130	WATER	3			✓			

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
✓ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
1965293/65294
PO#: TA Jones Mgt Serv
BILL TO: PO Box 47248 Kings Bay GA 31547

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Tommy Bryant	Signature: [illegible]	Signature	Signature: [illegible]	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: Eric Reams	Printed Name	Printed Name: Kelly Hinkle	Printed Name	Printed Name
Firm: TA JONES	Firm: T.A. Jones	Firm	Firm: CAS	Firm	Firm
Date/Time: 8-9-02 / 0731	Date/Time: 8/9/02 7:35	Date/Time	Date/Time: 8/9/02 12:18	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1000-07

Columbia Analytical Services, Inc. General Terms and Conditions

Laboratory Services • 1-800-695-7222 x07

1. These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory ("LAB") and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent or conflicting terms, whether printed or otherwise set forth in purchase order or other communication from the Client to LAB. The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state from which services are procured.

2. **Warranty.** Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings and prepare reports in accordance with generally *accepted analytical laboratory principles and practices at the time of performance of* services. LAB makes no other warranty, express or implied.

At LAB sole discretion, preliminary results may be given in advance of the laboratory report. Such preliminary results are tentative, subject to confirmation and final review by LAB. Client's use of preliminary results in any manner shall be at Client's sole risk.

3. **Scope and Compensation.** LAB agrees to perform the services described in the proposal or agreement to which these Terms and Conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1 1/2%) per month or portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sales, use or other taxes. Such taxes will be added to invoice prices when required. LAB reserves the right to require payment prior to release of data. Until such time as Client invoices are paid in full, LAB has no obligation, and will not defend, reproduce, return, or supplement data results.

Fees. Compensation for services performed will be based on the current Lab Analytical Fee Schedule, or on verbal quotations agreed to in writing by the parties. Unless specifically indicated on the written confirmation of quotation, analytical turnaround times are not guaranteed. The minimum charge will be $100.00 unless otherwise noted.

5. **Methods.** Where applicable, LAB will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), State Agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemists (AOAC), Standard Methods for the Examination of Water and Wastewater, or other recognized methodologies. LAB reserves the right to deviate from these methodologies, if necessary or appropriate, due to the nature or composition of the sample or otherwise, based on the reasonable judgment of LAB. Deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or LAB's standard operating procedures.

6. **Limitations of Liability.** In the event of any error, omission or other professional negligence, the sole and exclusive responsibility of LAB shall be to reperform the deficient work at its own expense, and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation or responsibility of any kind for losses, costs, expenses or other damages (including but not limited to any special, indirect, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients, and LAB is in no way responsible for the use of such results by clients or third parties. All results should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of the results.

7. **Hazard Disclosure.** Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

8. **Sample Handling.** Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss of or damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from LAB's premises.

LAB will use its best efforts to arrange for the shipment of specially prepared sample bottles, sampling instructions per Client instruction by the readily available, least cost method. Any other shipment arrangements will be at Client's expense.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis, unless modified by applicable state or federal laws. Client will be required to give to LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample which, in the sole judgment of LAB, (a) is of unsuitable volume, (b) may be or become unsuitable for, or may pose a risk in handling, transport or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of *any hazardous substance, and whether or not such presence has been disclosed to* LAB by Client or (c) has been delivered to the LAB more than 72 hours after sampling or if one half or more of the recommended holding time for the analysis has lapsed.

9. **Legal Responsibility.** LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort, including negligence.

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****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	0090
CONNECTION TEL	764046519425
SUBADDRESS	
CONNECTION ID	
ST. TIME	10/18 13:59
USAGE T	03'26
PGS. SENT	12
RESULT	OK

FAX 12 pages including cover
404-651-9425

18 OCT 02

To: Larry Papetti
From: Ken Yargus

Larry: Attached are summary tables that include our August 6, 2002 results for the old Camden County Landfill

Thank you,

Ken Yargus

3.4 ANALYTICAL RESULTS

A total of eleven monitoring wells and three irrigation wells were sampled and analyzed during the quarter as described in Section 2.3. A summary of the analytical laboratory results is provided in Tables 4 through 6. Analytical laboratory reports are provided in Appendix B.

3.4.1 Groundwater Protection Standard Analytical Results

Of the eleven monitoring wells that were sampled for GWPS compounds, monitoring wells KBA-11-13A, KBA-11-16, KBA-11-34, KBA-11-37 and PS-2 exhibited concentrations that exceeded one or more of the GWPS constituent standards. The results are summarized below:

- Monitoring well KBA-11-13A, located approximately 150 feet downgradient from the source area, exhibited elevated concentrations of tetrachloroethene (PCE) at 14 micrograms per liter (ug/l), trichloroethene (TCE; 16 ug/l), and chlorobenzene (1.8 ug/l).
- Monitoring well KBA-11-16, located approximately 500 feet downgradient from the source area, exhibited elevated concentrations of 1,1-dichloroethane (1,1-DCA; 27 ug/l).
- Monitoring well KBA-11-34, located within the source area, exhibited elevated concentrations of PCE (100 ug/l) and TCE (15 ug/l).
- Monitoring well KBA-11-37, located approximately 600 feet downgradient from the source area, exhibited elevated concentrations of chlorobenzene (5.5 ug/l).
- Monitoring well PS-2, located approximately 400 feet crossgradient from the source area,

FAX 12 pages including cover
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To: Larry Papetti
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- Monitoring well KBA-11-34, located within the source area, exhibited elevated concentrations of PCE (100 ug/l) and TCE (15 ug/l).
- Monitoring well KBA-11-37, located approximately 600 feet downgradient from the source area, exhibited elevated concentrations of chlorobenzene (5.5 ug/l).
- Monitoring well PS-2, located approximately 400 feet crossgradient from the source area, exhibited elevated concentrations of cis-1,2-dichloroethene (1,2-DCE; 110 ug/l), 1,1-DCA (2.8 ug/l), vinyl chloride (2.3 ug/l), and chlorobenzene (2.2 ug/l).
- Monitoring wells KBA-11-02, KBA-11-10B, KBA-11-11A, KBA-11-13B, KBA-11-15 and KBA-11-17B were below the GWPS concentrations for all parameters.

The analytical results are presented in Table 4 and on Figures 3 through 6. Laboratory analytical reports are provided in Appendix B.

3.4.2 Appendix IX Analytical Results

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-02																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/9/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/4/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/3/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/6/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/2/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.1	1.0U	1.0U	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/7/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	4.8JB	NA	NA
2/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	NA	NA
5/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00137	0.00137
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.0012	0.000036
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA -- Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-10B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/2/1999	3.0U	1.0U	1.6I	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.6	10	1.0U	3.0U	**2.5**	1.5	NA	NA	NA
8/8/2000	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0	5.0	1.0U	3.0U	**1.0**	1.0	NA	NA	NA
8/9/2001	1.0U	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.57J	2.5	1.0U	3.0U	**1.2**	0.76J	NA	NA	NA
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.1	1.0U	3.0U	1.0U	**75**	1.0U	0.00065B	0.00003
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	—	0.1	—

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-11A																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Cobalt (mg/L)	Nickel (mg/L)
8/2/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/10/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0	5.0	1.0U	1.0U	1.0	1.0	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/6/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00035B	0.001B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-13A																		
Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	3.0U	19	190	7.4	1.0U	1.0U	1.0U	48	1.0U	1.1I	66	2.7	14.4	6.2	4.0	NA	NA	NA
11/9/1999	30U	15I	260	1.0U	1.0U	1.0U	1.0U	46	1.0U	1.0U	65	1.0U	24I	1.0U	1.0U	NA	NA	NA
11/9/1999 (dup)	3.0U	17	210	6.6	1.0U	1.0U	1.0U	42	1.0U	1.3I	92	4.2	49	8.2	5.2	NA	NA	NA
2/4/2000	1.0U	14	230	6.0	1.0U	1.0U	1.0U	20	1.0U	2.0	64	2.0	23	6.0	4.0	NA	NA	NA
5/3/2000	1.0U	20	180	6.0	1.0U	1.0U	1.0U	19	1.0U	2.0	67	2.0	4.0	5.0	3.0	NA	NA	NA
8/10/2000	1.0U	51	300E	9.0	1.0U	1.0U	1.0U	17	1.0U	1.0	71	0.90	0.70	5.0	3.0	NA	NA	NA
8/10/2000 (dup)	1.0U	40	190	7.0	1.0U	1.0U	1.0U	11	1.0U	1.0	51	0.70	3.0	4.0	2.0	NA	NA	NA
11/8/2000	3.0U	54	160	7.0	1.0U	1.0U	1.0U	4.0	1.0U	1.0	57	1.0U	2.0U	5.0	3.0	NA	NA	NA
2/8/2001	0.8	45	110	8.0	1.0U	1.0U	1.0U	0.9	1.0U	1.0	34	1.0U	3.0U	3.0	1.0U	NA	NA	NA
5/3/2001	0.59J	37	88	6.6	1.0U	1.0U	1.0U	0.9	1.0U	0.33J	20	0.46J	0.33J	2.4	1.4	NA	NA	NA
8/8/2001	1.6	32	71	6.4	0.44J	1.0U	1.0U	1.0U	1.0U	0.43J	22	0.43J	0.56J	3.1	1.4	NA	NA	NA
8/8/2001 (dup)	0.77J	26	59	5.4	1.0U	1.0U	1.0U	1.0U	1.0U	0.31J	14	0.30J	0.37J	2.1	1.4	NA	NA	NA
11/7/2001	0.86J	24	52	4.7	1.0U	1.0U	1.0U	1.0U	1.0U	0.36J	16	0.28J	3.0U	2.6	2.1B	30	NA	NA
11/7/2001 (dup)	0.66J	20	44	4.0	1.0U	1.0U	1.0U	1.0U	1.0U	0.34J	14	0.24J	3.0U	2.3	1.7B	29B	NA	NA
2/6/2002	1.6	21	43	4.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	9.0	1.0U	3.0U	3.1	2.0B	38B	NA	NA
2/6/2002 (dup)	1.6	20	42	4.2	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	8.5	1.0U	3.0U	3.0	1.9B	37B	NA	NA
5/8/2002	5.0	17	28	3.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	6.0	0.37J	3.0U	2.2	1.8	29	0.58	0.4
5/2/2002 (dup)	3.8	16	26	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.8	0.34J	3.0U	1.9	1.7	25	0.55	0.38
8/6/2002	14	16	25	2.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.4	1.0U	3.0U	1.8	1.7	NA	0.49	0.36
8/6/2002 (dup)	13	15	23	2.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.1	1.0U	3.0U	1.6	1.6	22	0.45	0.33
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	—	0.1	—

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-13B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Napthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/8/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/8/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.00037B	0.016
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-15																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Napthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
2/7/2000	1.0	1.0	1.0U	0.9I	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
2/7/2000 (dup)	1.0	1.0	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/9/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/9/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-16																		
Date.	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
11/9/1999	3.0U	1.0U	3.6	1.0U	1.0U	**1.6I**	1.0U	1.4I	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	1.0U	14	1.0U	1.0U	**5.0**	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000	1.0U	1.0U	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000 (dup)	1.0U	1.0U	2.0	1.0U	1.0U	0.6U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	1.0U	1.0U	2.0	1.0U	1.0U	**2.0**	1.0U	1.0U	1.0U	1.0U	0.8J	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	2.0	1.0U	8.0	1.0U	1.0U	**2.0**	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/6/2001	1.0U	1.0U	34	1.0U	1.0U	**11**	1.0U	**4.0**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/2/2001	1.0U	0.31J	32	1.0U	1.3	**15**	1.0U	**3.4**	1.0U	0.96J	0.99J	5.4	0.86J	1.0U	1.0U	NA	NA	NA
8/9/2001	1.0U	0.42J	30	1.0U	1.8	**26**	1.0U	1.1	1.0U	1.2	1.8	15	1.7J	1.0U	1.0U	NA	NA	NA
11/7/2001	1.0U	0.72J	28	1.0U	1.7	**32**	1.0U	1.1	1.0U	1.2	2.4	26	3.1	1.0U	1.0U	1.0U	NA	NA
2/6/2002	1.0U	1.3	46	1.0U	1.0U	**31**	1.0U	1.0U	1.0U	1.1	3.2	28	5.3	1.0U	1.0U	1.0U	NA	NA
5/7/2002	0.38J	1.4	32	1.0U	2.3	**37**	1.0U	1.0U	1.0U	0.92J	4.2	25	6.4	1.0U	1.0U	1.0U	0.0014J	0.001U
8/7/2002	1.0U	1.0U	24	1.1	1.6	**27**	1.0U	1.0U	1.0U	1.0	2.9	15	5.2	1.0U	1.0U	0.9	0.0027	0.000034B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-17B																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Cobalt (mg/L)	Nickel (mg/L)
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/3/1999	3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/3/1999	17	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2001	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/7/2002	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U	0.000034	0.00086B
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-34																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/3/1999	**17**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/9/1999	**22**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/7/2000	**83**	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/4/2000	**89**	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
8/9/2000	**63**	0.6J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
11/8/2000	**79**	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
2/8/2001	**73**	2.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	NA	NA	NA
5/3/2001	**62**	2.6	0.27J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.13J	0.24J	0.17J	1.0U	0.41J	NA	NA	NA
8/9/2001	**35**	3.0	2.8	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.56J	NA	NA	NA
11/7/2001	**97**	1.7	1.5	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.47JB	4.0 JB	NA	NA
2/6/2002	**61**	0.63J	0.54J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.34JB	1.0U	NA	NA
5/8/2002	**75**	2.2	5.0	0.37J	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	0.39J	0.094J	**0.15**	0.28
8/8/2002	**100**	**15**	7.9	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	1.0U	0.073	0.077
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

KBA-11-37																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/16/1999	3.0U	1.0U	24	1.0U	1.0U	1.0U	1.0U	**2.5I**	1.0U	2.1	15	1.0U	3.0U	**2.9**	3.6	NA	NA	NA
11/9/1999	3.0U	1.0U	17	1.0U	1.0U	1.0U	1.0U	1.4I	1.0U	2.0	14	1.0U	3.0U	**3.1**	4.7	NA	NA	NA
2/8/2000	1.0U	1.0U	16	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	9.0	1.0	3.0U	**2.0**	3.0	NA	NA	NA
5/4/2000	1.0U	1.0U	17	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	1.0U	1.0U	12	**3.0**	3.0	NA	NA	NA
8/9/2000	1.0U	1.0U	14	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	7.0	1.0U	3.0	**2.0**	3.0	NA	NA	NA
11/8/2000	1.0U	1.0U	11	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	10	1.0U	2.0U	**3.0**	4.0	NA	NA	NA
11/8/2000 (dup)	1.0U	1.0U	11	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	2.0	11	1.0U	2.0U	**3.0**	3.0	NA	NA	NA
2/7/2001	1.0U	1.0U	13	1.0U	1.0U	1.0U	1.0U	0.6J	1.0U	2.0	13	1.0U	3.0U	**2.0**	1.0U	NA	NA	NA
5/2/2001	1.0U	1.0U	13	1.0U	1.0U	1.0U	1.0U	0.6J	1.0U	1.3	10	0.41J	0.18J	**2.1**	2.6	NA	NA	NA
8/8/2001	1.0U	1.0U	12	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.3	13	0.22J	3.0U	**2.8**	3.1	NA	NA	NA
11/7/2001	1.0U	1.0U	6.9	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.1	8.2	1.0U	3.0U	**3.8**	2.4B	25	NA	NA
2/6/2002	1.0U	1.0U	6.0	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.85J	6.4	1.0U	3.0U	**4.6**	2.4B	17B	NA	NA
5/7/2002	1.0U	1.0U	5.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	0.79J	5.4	1.0U	3.0U	**5.6**	2.4	12	0.0014	0.001U
8/8/2002	1.0U	1.0U	4.6	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	4.2	1.0U	3.0U	**5.5**	2.4	13	0.0021	0.00003U
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
J = estimated value; analyte detected; value is between the method detection level (MDL) and the practical quantitation level (PQL).
U = compound was analyzed for but not detected to the level shown.
BOLD indicates result exceeds the groundwater protection standard.
B = possible blank contamination
E = estimated value
NA – Not analyzed

Table 4
Analytical Summary, Groundwater Protection Standard Compounds

PS-2																		
Date	Tetrachloroethene	Trichloroethene	Cis -1,2-dichloroethene	Trans-1,2 dichloroethene	1,1-dichloroethene	1,1-dichloroethane	1,2-dichloroethane	Vinyl Chloride	Chloroethane	Benzene	Ethylbenzene	Toluene	Total xylenes	Chlorobenzene	1,4-dichlorobenzene	Naphthalene	Nickel (mg/L)	Cobalt (mg/L)
8/18/1999	3.0U	1.3I	41	1.0U	1.0U	**5.6**	1.0U	**3.2I**	1.0U	**9.1**	10	43	29	1.0U	1.0U	NA	NA	NA
11/9/1999	3.0U	1.4I	40	1.0U	1.0U	**5.1**	1.0U	**2.9**	1.0U	**9.4**	16	57	47	1.0U	1.0U	NA	NA	NA
2/7/2000	1.0U	2.0	52	1.0U	1.0U	**5.0**	1.0U	**2.0**	1.0U	**8.0**	14	37	40	1.0U	1.0U	NA	NA	NA
5/3/2000	1.0U	2.0	57	0.5	1.0U	**5.0**	1.0U	1.0U	1.0U	**8.0**	16	19	41	0.7	1.0U	NA	NA	NA
8/8/2000	1.0U	2.0	58	1.0U	1.0U	**4.0**	1.0U	**2.0**	1.0U	**6.0**	14	8.0	19	0.5	1.0U	NA	NA	NA
11/8/2000	3.0U	2.0	61	1.0U	1.0U	**4.0**	1.0U	**3.0**	1.0U	**5.0**	18	5.0	7.0	**1.0**	1.0U	NA	NA	NA
2/7/2001	1.0U	2.0	**71**	0.6J	1.0U	**4.0**	1.0U	**3.0**	1.0U	4.0	18	3.0	4.0	0.5J	1.0U	NA	NA	NA
5/2/2001	0.14J	1.9	**79**	0.60J	1.0U	**4.1**	1.0U	**2.4**	1.0U	3.7	22	2.9	3.6	0.59J	1.0U	NA	NA	NA
8/9/2001	1.0U	2.0	**99**	0.80J	1.0U	**4.2**	1.0U	**2.4**	1.0U	3.4	22	2.7	3.5	0.92J	1.0U	NA	NA	NA
11/7/2001	1.0U	2.0	**110**	0.84J	1.0U	**4.1**	1.0U	**3.0**	1.0U	2.7	20	1.9	2.4J	**1.2**	1.0	3.7JB	NA	NA
2/6/2002	1.0U	1.7	**110**	0.73J	1.0U	**3.4**	1.0U	**2.7**	1.0U	2.1	14	1.5	1.9J	**1.6**	1.0U	1.0U	NA	NA
5/6/2002	1.0U	1.6	**120**	0.80J	1.0U	**3.6**	0.85J	**3.0**	2.3	2.0	13	1.7	1.4J	**1.8**	1.0U	0.061J	0.00043	0.001U
8/6/2002	1.0U	1.5	**110**	1.0U	1.0U	**2.8**	1.0U	**2.3**	1.0U	1.7	12	1.3	3.0U	**2.2**	1.0U	1.0U	0.00053B	0.00003
Criteria	5.0	5.0	70	100	7.0	1.0	5.0	2.0	1.0	5.0	700	1,000	10,000	1.0	75	---	0.1	---

Notes:
I = interference.
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