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FINAL QUARTERLY GROUNDWATER MONITORING REPORT FOR SITE 11 OCTOBER - DECEMBER 2002 NSB KINGS BAY GA

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J A JONES MANAGEMENT SERVICES

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QUARTERLY GROUNDWATER MONITORING REPORT
OCTOBER 2002 –DECEMBER 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
PUBLIC WORKS DIRECTORATE

Prepared by:

J.A. JONES
MANAGEMENT
SERVICES

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

March 2003

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The work described and professional opinions rendered in this document, *Quarterly Groundwater Monitoring Report, October 2002 – December 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
Professional Engineer
State of Georgia License No. 024706
Expires December 31, 2004

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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 Quarterly Groundwater Monitoring Report provides:

- A summary of the quarterly monitoring activities that were performed from October to December 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 January to March 2003.

2.0 SUMMARY OF ACTIVITIES

One quarterly groundwater sampling events were performed by JAJMS during the period, from November 4 to 6, 2002. Activities included well inspections, well measurements, and groundwater sampling and analysis.

Weather conditions during the groundwater sampling event were hot and dry with temperatures from the high 70's in the morning to the high 80's in the afternoon. There was no significant rainfall during the week preceding the groundwater sampling event. For the month of October 2002, a total of 6.86 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 November 4, 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 and Analyses

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. A quarterly sampling event was conducted at Site 11 during the period of November 4 to 6, 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.

All of the groundwater samples were analyzed by Columbia Analytical Services for Groundwater Protection Standards (GWPS) compounds by EPA Method 8260B.

2.3.2 Irrigation Well Sampling and Analyses

Currently a total of two irrigation wells in the Crooked River Plantation subdivision, located at 102 Plantation Court and 122 Plantation Court, across the highway from the Kings Bay Naval Submarine Base, are sampled on a monthly basis. One irrigation well, located at 108 Cottage Court (also in the Crooked River Plantation subdivision), is being sampled on an annual basis per GEPD approval letter dated June 14, 2002. The irrigation well sampling sites are not specified 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 and 122 Plantation Court were sampled on October 22, November 6, and December 18, 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.

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 10 monitoring wells exhibited no response on the PID;
- The average PID response for all 19 monitoring wells analyzed was 151 parts per million (ppm);
- The range of PID responses was 0 to 1,461 ppm (KBA-11-37)

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.

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 November 2002 sampling event is included in Appendix A.

3.4 ANALYTICAL RESULTS

A total of six monitoring wells and two 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 and 5. Analytical laboratory reports are provided in Appendix B.

3.4.1 Analytical Results from Monitoring Well Samples

Of the six 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 20 micrograms per liter (ug/l), trichloroethene (TCE; 10 ug/l), and chlorobenzene (1.4 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; 50 ug/l).
- Monitoring well KBA-11-34, located within the source area, exhibited elevated concentrations of PCE (110 ug/l) and TCE (7.6 ug/l).

- Monitoring well KBA-11-37, located approximately 600 feet downgradient from the source area, exhibited elevated concentrations of chlorobenzene (6.4 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; 120 ug/l), 1,1-DCA (2.9 ug/l), vinyl chloride (3.2 ug/l), and chlorobenzene (1.6 ug/l).
- Monitoring well KBA-11-02 was below the GWPS concentrations for all parameters.

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

3.4.2 Analytical Results from Subdivision Irrigation Well Samples

A total of two 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 and 122 Plantation Court were sampled on October 22, November 6, and December 18, 2002. The analytical results from the December 18, 2002 sampling event were not available when this document was issued and will be included in the next quarterly report. The results from the October and November 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 (4.7 ug/l) that were above the GWPS (2 ug/l). No other detections were noted at this location.

The analytical results are presented in Table 5. 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

The following observations were notable based upon the data from the most recent quarterly monitoring event:

- 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.

- Downgradient monitoring well KBA-11-13A is showing a slight upward trend in PCE concentrations.
- Monitoring wells KBA-11-02 continues to exhibit no detectable concentrations of GWPS constituents.
- The irrigation well located at 102 Plantation Court exhibited non-detectable concentrations of all GWPS constituents for the eighth consecutive monthly sampling event, and exhibited no concentrations above GWPS concentrations for the thirteenth consecutive monthly sampling event.

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 February 2003.

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.*

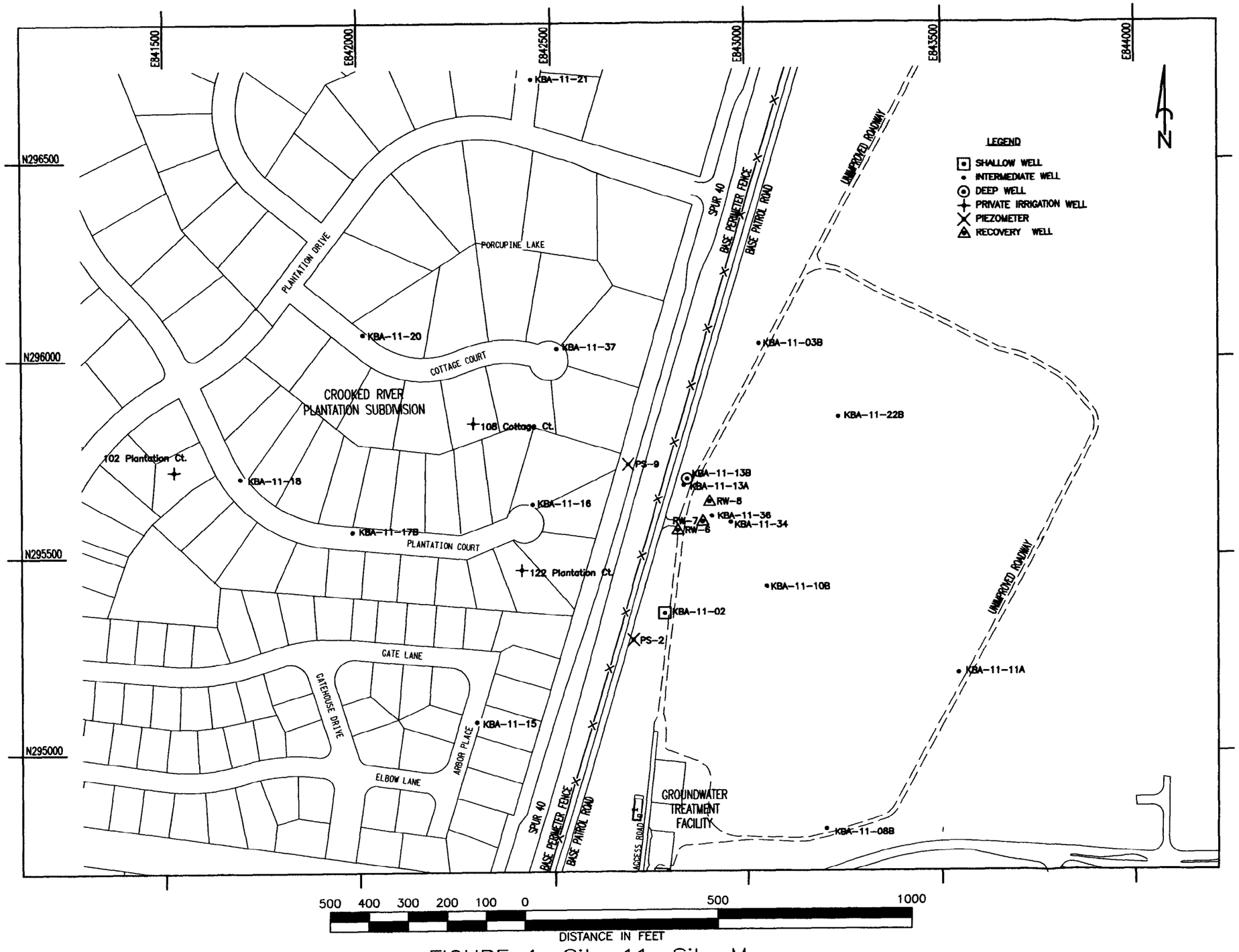

FIGURE 1: Site 11, Site Map

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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
	11/4/2002	0	29.94	85.1
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
	11/4/2002	0	29.94	85.1
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
	11/4/2002	2.6	29.94	86.5
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
	11/4/2002	0	29.94	86

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
	11/4/2002	0	29.94	86
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
	11/4/2002	0	29.94	88
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
	11/4/2002	0	29.94	88

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
	11/4/2002	155.6	30.03	79.7
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
	11/4/2002	49.5	30.03	80.6

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-17B	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
	11/4/2002	377	30.03	80.6
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
	11/4/2002	258	30.03	79.7
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
	11/4/2002	193	30.03	78.8

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-21	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
	11/4/2002	158	30.03	77.9
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
	11/4/2002	26.6	29.94	84.2
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
	11/4/2002	0	29.94	87

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
KBA-11-36	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
	11/4/2002	0	29.94	87
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
	11/4/2002	1461	30.03	79.7
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
	11/4/2002	0	29.94	85.1

NM = not measured
PID = photoionization detector

Table 1
Headspace Readings

Well Identification	Date	PID Measurement (ppm)	Barometer Pressure (Inches of Hg)	Temperature (F°)
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
	11/4/2002	186	30.03	78.8

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
	11/4/2002		6.85	29.17		10.97
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
	11/4/2002		7.65	25.84		47.52
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
	11/4/2002		10.82	27.38		43.50

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
	11/4/2002		11.07	26.96		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
	11/4/2002		8.30	27.55		36.86
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
	11/4/2002		8.20	26.00		42.29

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
	11/4/2002		12.20	22.66		90.51
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
	11/4/2002		3.38	25.11		37.91
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
	11/4/2002		4.00	24.66		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
	11/4/2002		2.66	22.75		44.45
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
	11/4/2002		1.82	20.99		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
	11/4/2002		1.67	21.40		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
	11/4/2002		2.00	21.56		40.31
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
	11/4/2002		9.26	26.87		52.29
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
	11/4/2002		10.95	26.56		40.78

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
	11/4/2002		11.57	26.34		41.38
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
	11/4/2002		2.29	23.97		38.20

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)
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
	8/5/2002		8.01	24.70		37.21
	11/4/2002		6.76	25.95		37.20

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
	11/5/2002	8	24.58	6.14	-47	0.808	-1.9	5.17
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
	11/6/2002	8	23.8	5.84	-2	1.72	16.8	3.57
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
	11/5/2002	8	25.29	5.82	-147	0.339	-0.3	4.3
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
	11/5/2002	8	26.83	4.85	97	0.913	0.3	4.95

°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-11-37	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
	11/5/2002	8	24.95	5.96	-120	0.365	2.2	3.20
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
	11/5/2002	8	22.55	5.61	2	0.312	7.3	4.62

°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
11/5/2002	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	10U	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-11-10B

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
11/6/2002	**20**	**10**	13	1.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.1	1.0U	3.0U	**1.4**	1.5	31	NA	NA
11/6/2002 (dup)	**26**	**9.6**	12	1.1	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.2	1.0U	3.0U	**1.5**	1.5	37	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-11-13B																		
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
11/5/2002	1.0U	1.3	33	1.0U	2.5	**50**	1.0U	1.0U	1.0U	1.0U	5.7	29	10.5	1.0U	1.0U	10U	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-11-17B																		
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
11/5/2002	**110**	**7.6**	3.1	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	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-11-37																		
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
11/5/2002	1.0U	1.0U	4.4	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	4.4	1.0U	3.0U	**6.4**	3.3	30	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

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
11/5/2002	1.0U	1.3	**120**	1.0U	1.0U	**2.9**	1.0U	**3.2**	1.0U	1.6	11	1.2	3.0U	**1.6**	1.0U	10U	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 5
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 5
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 5
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 5
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 5
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
September-02	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
September-02 (dup)	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**2.7**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
October-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**5.3**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
October-02 (dup)	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**5.1**	1.0U	1.0U	1.0U	1.0U	3.0U	1.0U	1.0U	10.0U
November-02	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	**4.7**	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

Table 5
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 5
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
September-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
October-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
November-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

SAMPLING STATION

Well # KBA-11-02	Station Type MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA11-02-NOV-02	WATER	GRAB		11-5-02	0820	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUTI
Conductivity/Temp	HORIBA U22				
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

GEO PUMP 2

PURGE EQUIPMENT: GEO TECH | S/N: | PURGE METHOD: DRAW DOWN | Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-5-02	0823	24.32c	5.95	0.856	S/cm	-2.1	NTU	3.55	G/L	-13
4 GAL	11-5-02	0834	24.44c	6.07	0.840	S/cm	-2.3	NTU	5.03	G/L	-32
6 GAL	11-5-02	0843	24.54c	6.13	0.822	S/cm	~~-2.1~~ 2.1	NTU	4.22	G/L	-45
8 GAL	11-5-02	0852	24.58c	6.14	0.808	S/cm	-1.9	NTU	5.17	G/L	-47

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

Recorded by: TOMMY BRYANT	Date: 11-5-02	Reviewed by:	Date:

COLLECTED SAMPLE - 0900

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-02	11-4-02	1135	6.85'	10.97'	0.0 ppm
KBA-11-02	11-4-02	1345	6.85'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-02	11-4-02	1135	88.7 °F	40%	30.00	PARTLY SUNNY
KBA-11-02	11-4-02	1345	85.1 °F	56%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

\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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-PS9	11-4-02	0907	3.34'	34.15'	186.0 PPm
KBA-11-PS9	11-4-02	1016	3.34'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-PS9	11-4-02	0909	71.6°F	70%	30.03	CLOUDY
KBA-11-PS9	11-4-02	1016	78.8°F	47%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type
KBA-11-PS2	MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA-11-PS2-NOV-5-02	WATER	GRAB		11-5-02	0905	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUTION
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 GEO PUMP 2

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

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-5-02	0911	22.52c	5.59	0.294	S/cm	8.2	NTU	4.12	G/L	7 mv
4 GAL	11-5-02	0918	22.44c	5.60	0.302	S/cm	1.5	NTU	6.93	G/L	8 mv
6 GAL	11-5-02	0927	22.49c	5.53	0.307	S/cm	7.2	NTU	4.27	G/L	5 mv
8 GAL	11-5-02	0936	22.55c	5.61	0.312	S/cm	7.3	NTU	4.62	G/L	2 mv

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

Recorded by: TOMMY BRYANT	Date: 11-5-02	Reviewed by:	Date:

COLLECTED SAMPLES - 0940

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-PS2	11-4-02	1238	6.76'	37.20'	0.0 ppm
KBA-11-PS2	11-4-02	1348	6.76'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-PS2	11-4-02	1238	83.2 °F	46%	29.97	CLOUDY
KBA-11-PS2	11-4-02	1348	85.1 °F	55%	29.94	CLOUDY

SAMPLING STATION

Well # KBA-11-37	Station Type MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA-11-37-NOV-5-02	WATER	GRAB		11-5-02	1052	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUTIO
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

GEO Pump 2

PURGE EQUIPMENT: GEO TECH | S/N: | PURGE METHOD: DRAW DOWN | Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-5-02	1100	25.36c	5.79	0.258	S/cm	22.9	NTU	3.09	G/L	-79 mv
4 GAL	11-5-02	1109	25.09c	5.89	0.329	S/cm	3.9	NTU	3.39	G/L	-108 mv
6 GAL	11-5-02	1118	25.10c	5.97	0.347	S/cm	-0.4	NTU	3.19	G/L	-118 mv
8 GAL	11-5-02	1128	24.95c	5.96	0.365	S/cm	2.2	NTU	3.20	G/L	-120 mv

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

Recorded by: Tommy BRYANT	Date: 11-5-02	Reviewed by:	Date:

COLLECTED SAMPLES - 1135

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-37	11-4-02	0935	2.29'	38.20'	1461.0 ppm
KBA-11-37	11-4-02	1028	2.29'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-37	11-4-02	0935	77.°F	64%	30.03	CLOUDY
KBA-11-37	11-4-02	1028	79.7°F	55%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-36	11-4-02	1305	11.56'	41.38'	0.0 ppm
KBA-11-36	11-4-02	1400	11.57'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-36	11-4-02	1305	86. °F	46%	29.94	CLOUDY
KBA-11-36	11-4-02	1400	87. °F	52%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type
KBA-11-34	MONITORING WELL

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA-11-34-NOV-5-02	WATER	GRAB		11-5-02	1300	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUT.
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

GEO PUMP 2

PURGE EQUIPMENT: GEOTECH S/N: PURGE METHOD: DRAW DOWN Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-5-02	1310	26.79c	5.02	0.633	S/cm	55.2	NTU	3.32	G/L	79 mv
4 GAL	11-5-02	1320	27.03	4.98	0.647	S/cm	47.1	NTU	3.37	G/L	65 mv
6 GAL	11-5-02	1330	26.67c	4.98	0.771	S/cm	9.3	NTU	4.12	G/L	79 mv
8 GAL	11-5-02	1340	26.83c	4.85	0.913	S/cm	0.3	NTU	4.95	G/L	97 mv

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

Recorded by:	Date:	Reviewed by:	Date:
Tommy Bryant	11-5-02		

COLLECTED SAMPLES - 1345

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-34	11-4-02	1255	10.96'	40.78'	0.0 ppm
KBA-11-34	11-4-02	1358	10.95'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-34	11-4-02	1255	86°F	48%	29.97	CLOUDY
KBA-11-34	11-4-02	1358	87°F	51%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-22B	11-4-02	1126	9.27'	52.29'	26.6 ppm
KBA-11-22B	11-4-02	1340	9.26'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-22B	11-4-02	1126	88.7 °F	40%	30.00	PARTY CLOUDY
KBA-11-22B	11-4-02	1340	84.2 °F	56%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-21	11-4-02	0915	2.0'	40.31'	158.0 PPM
KBA-11-21	11-4-02	1020	2.0'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-21	11-4-02	0915	72.5°F	69%	30.03	OVERCAST CLOUDY
KBA-11-21	11-4-02	1020	77.9°F	49%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-20	11-4-02	0925	1.67'	39.85'	193.0 ppm
KBA-11-20	11-4-02	1025	1.67'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-20	11-4-02	0925	74.3°F	68%	30.03	CLOUDY
KBA-11-20	11-4-02	1025	78.8°F	55%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-18	11-4-02	0945	1.81'	45.51'	258.0 ppm
KBA-11-18	11-4-02	1032	1.82'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-18	11-4-02	0945	77.°F	63%	30.03	CLOUDY
KBA-11-18	11-4-02	1032	79.7°F	55%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-17B	11-4-02	0951	2.66'	44.45'	377.0 ppm
KBA-11-17B	11-4-02	1035	2.66'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-17B	11-4-02	0951	78.8°F	62%	30.03	CLOUDY
KBA-11-17B	11-4-02	1035	80.6°F	55%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type
KBA-11-16	MONITORING WELL

MPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA-11-16-NOV-5-02	WATER	GRAB		11-5-02	1002	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUT.
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

GEO PUMP 2

PURGE EQUIPMENT: GEO TECH S/N: PURGE METHOD: DRAW DOWN Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-5-02	1007	25.53c	5.35	0.248	S/cm	-0.6	NTU	3.92	G/L	15 mv
4 GAL.	11-5-02	1016	25.18c	5.45	0.293	S/cm	-0.9	NTU	4.80	G/L	-35 mv
6 GAL.	11-5-02	1025	25.15c	5.74	0.321	S/cm	-0.3	NTU	3.66	G/L	-122 mv
8 GAL.	11-5-02	1034	25.29c	5.82	0.339	S/cm	-0.3	NTU	4.30	G/L	-147 mv

Well purged to dryness: [ ] Yes [ ] No

Recorded by:	Date:	Reviewed by:	Date:
TOMMY BRYANT	11-5-02		

COLLECTED SAMPLES - 1040

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-16	11-4-02	1000	3.99'	44.47'	49.5 ppm
KBA-11-16	11-4-02	1040	4.00'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-16	11-4-02	1000	79.7°F	58%	30.03	CLOUDY
KBA-11-16	11-4-02	1040	80.6°F	55%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-15	11-4-02	0850	3.38'	37.91'	155.6
KBA-11-15	11-4-02	1010	3.38'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-15	11-4-02	0855	70.7°F	68%	30.03	CLOUDY
KBA-11-15	11-4-02	1010	79.7°F	60%	30.03	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-13B	11-4-02	1312	12.20'	90.51'	0.0 ppm
KBA-11-13B	11-4-02	1405	12.20'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-13B	11-4-02	1312	86. °F	46%	29.94	CLOUDY
KBA-11-13B	11-4-02	1405	88. °F	49%	29.94	CLOUDY

SAMPLING STATION

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

SAMPLE

Sample ID	Sample Matrix	Sample Type	Collection Method	Date	Time	By
KBA-11-13A-NOV-6-02	WATER	GRAB		11-6-02	0755	TB/MS

Instruments	Manufacturer/Mode	Serial No.	Date of Cal.	Calib.Due	Reference
pH/Eh	HORIBA U22	00836	10/30/02	CALIB. DAILY	AUTO CAL SOLUT.
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

GEO PUMP 2

PURGE EQUIPMENT: GEOTECH | S/N: | PURGE METHOD: DRAWDOWN | Pump Type:

Proq Cyc	Date	Time	Temp (C)	pH	Cond.	Units	Turb.	Units	D.O.	Units	Redox
2 GAL	11-6-02	0805	23.85c	5.45	1.25	S/cm	-0.1	NTU	5.21	G/L	19 mv
4 GAL	11-6-02	0815	23.76c	5.80	1.48	S/cm	-0.6	NTU	3.64	G/L	-9 mv
6 GAL	11-6-02	0826	23.74c	5.87	1.55	S/cm	4.7	NTU	3.07	G/L	-12 mv
8 GAL	11-6-02	0835	23.80c	5.84	1.72	S/cm	16.8	NTU	3.57	G/L	-2 mv

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

Recorded by:	Date:	Reviewed by:	Date:
Tommy BRYANT	11-6-02		

COLLECTED SAMPLES - REG-0840
DUP-0843
MS/MSD-0846

RINSATE-0855

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-13A	11-4-02	1320	8.21'	42.29'	0.0 ppm
KBA-11-13A	11-4-02	1410	8.20'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-13A	11-4-02	1320	86.°F	48%	29.94	CLOUDY
KBA-11-13A	11-4-02	1410	88°F	48%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-11A	11-4-02	1110	8.30'	36.86'	0.0 ppm
KBA-11-11A	11-4-02	1331	8.30'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-11A	11-4-02	1110	85 °F	46%	30.00	PARTLY CLOUDY
KBA-11-11A	11-4-02	1331	86 °F	51%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-10B	11-4-02	1246	11.06'	51.36'	0.0 ppm
KBA-11-10B	11-4-02	1355	11.07'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-10B	11-4-02	1246	84.2°F	50%	29.97	CLOUDY
KBA-11-10B	11-4-02	1355	86.°F	55%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-8B	11-4-02	1100	10.83'	43.50'	2.6 ppm
KBA-11-8B	11-4-02	1330	10.82'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-8B	11-4-02	1100	84.2°F	47%	30.00	PARTLY CLOUDY
KBA-11-8B	11-4-02	1330	86.5°F	49%	29.94	CLOUDY

SAMPLING STATION

Well #	Station Type

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:	Date:	Reviewed by:	Date:

WELL MEASUREMENTS

WELL NUMBER ID	DATE	TIME	MEASURE TO WATER	MEASURE TO BOTTOM	PHOTO VAC
KBA-11-3B	11-4-02	1120	7.65'	47.52'	0.0 ppm
KBA-11-3B	11-4-02	1335	7.65'		

WEATHER CONDITIONS

WELL NUMBER ID	DATE	TIME	TEMPERATURE	HUMIDITY	BAR. PRESSEVE	SKY CONDITIONS
KBA-11-3B	11-4-02	1120	86.9°F	38%	30.00	PARTLY SUNNY
KBA-11-3B	11-4-02	1335	85.1°F	53%	29.94	CLOUDY

Columbia Analytical Services INC.
An Employee-Owned Company

November 20, 2002

Service Request No. J2203633

Fred Coley
JA Jones Management Services
P.O. Box 47248
Kings Bay, GA 31547

RE: Test Report for
Project No.: Site 11
Project Name: NSB Kings Bay

Dear Fred Coley:

Enclosed are the results of the samples(s) submitted to our laboratory on November 07, 2002. For your reference, these analyses have been assigned our service request number: J2203633.

All analyses were performed according to our laboratory's quality assurance program. NELAP requirements were met unless footnotes in each sample report indicate otherwise. Estimates regarding the degree of uncertainty in measurements can be inferred from the accuracy limits in the laboratory QA manual. However, these limits do not account for possible matrix effects. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted,

Columbia Analytical Services, Inc.

Alex Olis
Project Manager

CAS Jacksonville is NELAC-accredited by the State of Florida (E82502). Other state accreditations include: LA, AI 30759; MA, M-FL937; NC, 527; SC, 96021; WA, C278.

8540 Baycenter Rd. ▪ Jacksonville, FL 32256 ▪ (904) 739-2277 ▪ Fax (904) 739-2011

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Non-CLP Tier IV (Tier III w/out Raw Data)

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This report contains a total of 066 pages

Data Qualifiers

Inorganic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	The tentatively identified compound is a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.

C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Petroleum Hydrocarbon Specific

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

SAMPLE CROSS-REFERENCE

J2203633

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J2203633-001	KBA-11-02-NOV-5-02	11/5/2002	09:00
J2203633-002	KBA-11-PS2-NOV-5-02	11/5/2002	09:40
J2203633-003	KBA-11-16-NOV-5-02	11/5/2002	10:40
J2203633-004	KBA-11-37-NOV-5-02	11/5/2002	11:35
J2203633-005	KBA-11-34-NOV-5-02	11/5/2002	13:45
J2203633-006	KBA-11-13A-NOV-6-02 MS	11/6/2002	08:40
J2203633-006	KBA-11-13A-NOV-6-02 MSD	11/6/2002	08:40
J2203633-006	KBA-11-13A-NOV-6-02	11/6/2002	08:40
J2203633-007	KBA-11-13A-NOV-6-02 DUP	11/6/2002	08:43
J2203633-008	KBA-11-13A-NOV-6-02 Rinsate	11/6/2002	08:55
J2203633-009	KB122PLTCT-NOV-6-02	11/6/2002	09:25
J2203633-010	KB102PLTCT-NOV-6-02	11/6/2002	09:50

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

GC/MS Volatiles

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

Service Request: J2203633

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds by GC/MS

Sample Name	Lab Code	Date Collected	Date Received
KBA-11-02-NOV-5-02	J2203633-001	11/05/2002	11/07/2002
KBA-11-PS2-NOV-5-02	J2203633-002	11/05/2002	11/07/2002
KBA-11-16-NOV-5-02	J2203633-003	11/05/2002	11/07/2002
KBA-11-37-NOV-5-02	J2203633-004	11/05/2002	11/07/2002
KBA-11-34-NOV-5-02	J2203633-005	11/05/2002	11/07/2002
KBA-11-13A-NOV-6-02	J2203633-006	11/06/2002	11/07/2002
KBA-11-13A-NOV-6-02 DUP	J2203633-007	11/06/2002	11/07/2002
KBA-11-13A-NOV-6-02 Rinsate	J2203633-008	11/06/2002	11/07/2002
KB122PLTCT-NOV-6-02	J2203633-009	11/06/2002	11/07/2002
KB102PLTCT-NOV-6-02	J2203633-010	11/06/2002	11/07/2002
KBA-11-13A-NOV-6-02MS	JWG0201112-1	11/06/2002	11/07/2002
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	11/06/2002	11/07/2002

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Bob Demory

Date: 11-2002 Title: Organics Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	JA Jones Management Services	**Service Request No.:**	J2203633
Project:	NSB Kings Bay/ Site 11	**Date Received:**	11/7/02
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Ten water samples were received for analysis at Columbia Analytical Services on 11/7/02. The samples were stored in a refrigerator at 4 ± 2°C upon receipt at the laboratory.

Volatile Organic Compounds by EPA Method 8260B

Continuing Calibration Verification Exceptions

The continuing evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) JWG0201113-2: trans-1,4-Dichloro-2-butene, 1,2-Dibromo-3-chloropropane (DBCP), and Naphthalene. The analytes in question were not detected in the associated field samples. Since the analytes were detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Matrix Spike Recovery Exceptions

The matrix spike and duplicate matrix spike recoveries of Tetrachloroethene (PCE) and Naphthalene for sample KBA-11-13A-NOV-6-02 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS) were acceptable, which indicates the analytical batch was in control. The data quality was not significantly affected and no further corrective action was taken.

Lab Control Sample Exceptions

The spike recovery of trans-1,4-Dichloro-2-butene for Laboratory Control Sample (LCS) JWG0201112-3 was outside the lower control criterion (41% versus a criterion of 46%). The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

The spike recovery of Iodomethane for Laboratory Control Sample (LCS) JWG0201136-3 was outside the lower control criterion (71% versus a criterion of 78%). The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Approved by Diane Wiegel **Date** 11/27/02

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
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-02-NOV-5-02
Lab Code: J2203633-001

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
-Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
nyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	**15**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	**2.9**		1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

mments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/05/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-02-NOV-5-02	**Units:**	ug/L
Lab Code:	J2203633-001	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	**1.7**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	105	61-133	11/14/02	Acceptable
Dibromofluoromethane	91	65-136	11/14/02	Acceptable
Toluene-d8	108	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-PS2-NOV-5-02
Lab Code: J2203633-002

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
Dichlorodifluoromethane	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	**3.2**		1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
·Dichloroethane	**2.9**		1.0	1	11/14/02	11/14/02	JWG0201112	
.nyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	**120**		1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	**1.6**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	**1.3**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	**1.2**		1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

nments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/05/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-PS2-NOV-5-02	**Units:**	ug/L
Lab Code:	J2203633-002	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	**1.6**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	**11**		1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
's-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
,-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	109	61-133	11/14/02	Acceptable
Dibromofluoromethane	92	65-136	11/14/02	Acceptable
Toluene-d8	108	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-16-NOV-5-02
Lab Code: J2203633-003

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	**2.5**		1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	**110**		50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
·Dichloroethane	**50**		1.0	1	11/14/02	11/14/02	JWG0201112	
..nyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	**33**		1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	**65**		10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	**1.3**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	**200**		25	1	11/14/02	11/14/02	JWG0201112	
Toluene	**29**		1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

nments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/05/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-16-NOV-5-02	**Units:**	ug/L
Lab Code:	J2203633-003	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	**5.7**		1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	**6.4**		2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	**4.1**		1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	104	61-133	11/14/02	Acceptable
Dibromofluoromethane	93	65-136	11/14/02	Acceptable
Toluene-d8	107	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-37-NOV-5-02
Lab Code: J2203633-004

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	11/19/02	11/19/02	JWG0201136	
Chloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Vinyl Chloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichlorofluoromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Acetone	ND	U	50	1	11/19/02	11/19/02	JWG0201136	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	*
Carbon Disulfide	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Methylene Chloride	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Dichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
nyl Acetate	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
cis-1,2-Dichloroethene	**4.4**		1.0	1	11/19/02	11/19/02	JWG0201136	
2-Butanone (MEK)	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Bromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Methacrylonitrile	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Chloroform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Carbon Tetrachloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Benzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichloroethene (TCE)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Dibromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromodichloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Toluene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2-Trichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	

nments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/05/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-37-NOV-5-02	**Units:**	ug/L
Lab Code:	J2203633-004	**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
2-Hexanone	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Dibromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chlorobenzene	**6.4**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Ethylbenzene	**4.4**		1.0	1	11/19/02	11/19/02	JWG0201136	
m,p-Xylenes	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
o-Xylene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Styrene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromoform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2,3-Trichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
1,3-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,4-Dichlorobenzene	**3.3**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Naphthalene	**30**		10	1	11/19/02	11/19/02	JWG0201136	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	56-147	11/19/02	Acceptable
4-Bromofluorobenzene	101	61-133	11/19/02	Acceptable
Dibromofluoromethane	87	65-136	11/19/02	Acceptable
Toluene-d8	105	80-120	11/19/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-34-NOV-5-02
Lab Code: J2203633-005

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
inyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	**3.1**		1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	**7.6**		1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	**110**		1.0	1	11/14/02	11/14/02	JWG0201112	

mments:

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

Service Request: J2203633
Date Collected: 11/05/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-34-NOV-5-02
Lab Code: J2203633-005

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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	87	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	100	61-133	11/14/02	Acceptable
Dibromofluoromethane	90	65-136	11/14/02	Acceptable
Toluene-d8	102	80-120	11/14/02	Acceptable

Comments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02	**Units:**	ug/L
Lab Code:	J2203633-006	**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	11/19/02	11/19/02	JWG0201136	
Chloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Vinyl Chloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichlorofluoromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Acetone	ND	U	50	1	11/19/02	11/19/02	JWG0201136	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	*
Carbon Disulfide	**20**		10	1	11/19/02	11/19/02	JWG0201136	
Methylene Chloride	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,2-Dichloroethene	**1.1**		1.0	1	11/19/02	11/19/02	JWG0201136	
·Dichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
ınyl Acetate	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
cis-1,2-Dichloroethene	**13**		1.0	1	11/19/02	11/19/02	JWG0201136	
2-Butanone (MEK)	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Bromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Methacrylonitrile	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Chloroform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Carbon Tetrachloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Benzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichloroethene (TCE)	**10**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Dibromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromodichloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Toluene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2-Trichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Tetrachloroethene (PCE)	**20**		1.0	1	11/19/02	11/19/02	JWG0201136	

nments:

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

Service Request: J2203633
Date Collected: 11/06/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-13A-NOV-6-02
Lab Code: J2203633-006

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
2-Hexanone	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Dibromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chlorobenzene	**1.4**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Ethylbenzene	**5.1**		1.0	1	11/19/02	11/19/02	JWG0201136	
m,p-Xylenes	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
o-Xylene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Styrene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromoform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2,3-Trichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
1,3-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,4-Dichlorobenzene	**1.5**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Naphthalene	**31**		10	1	11/19/02	11/19/02	JWG0201136	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	56-147	11/19/02	Acceptable
4-Bromofluorobenzene	101	61-133	11/19/02	Acceptable
Dibromofluoromethane	88	65-136	11/19/02	Acceptable
Toluene-d8	101	80-120	11/19/02	Acceptable

Comments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02 DUP	**Units:**	ug/L
Lab Code:	J2203633-007	**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	11/19/02	11/19/02	JWG0201136	
Chloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Vinyl Chloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichlorofluoromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Acetone	ND	U	50	1	11/19/02	11/19/02	JWG0201136	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	*
Carbon Disulfide	**19**		10	1	11/19/02	11/19/02	JWG0201136	
Methylene Chloride	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,2-Dichloroethene	**1.1**		1.0	1	11/19/02	11/19/02	JWG0201136	
-Dichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
nyl Acetate	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
cis-1,2-Dichloroethene	**12**		1.0	1	11/19/02	11/19/02	JWG0201136	
2-Butanone (MEK)	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Bromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Methacrylonitrile	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Chloroform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Carbon Tetrachloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Benzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichloroethene (TCE)	**9.6**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Dibromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromodichloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Toluene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2-Trichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Tetrachloroethene (PCE)	**26**		1.0	1	11/19/02	11/19/02	JWG0201136	

nments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02 DUP	**Units:**	ug/L
Lab Code:	J2203633-007	**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
2-Hexanone	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Dibromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chlorobenzene	**1.5**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Ethylbenzene	**5.2**		1.0	1	11/19/02	11/19/02	JWG0201136	
m,p-Xylenes	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
o-Xylene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Styrene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromoform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2,3-Trichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
1,3-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,4-Dichlorobenzene	**1.5**		1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Naphthalene	**37**		10	1	11/19/02	11/19/02	JWG0201136	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	96	56-147	11/19/02	Acceptable
4-Bromofluorobenzene	97	61-133	11/19/02	Acceptable
Dibromofluoromethane	87	65-136	11/19/02	Acceptable
Toluene-d8	103	80-120	11/19/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/06/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KBA-11-13A-NOV-6-02 Rinsate
Lab Code: J2203633-008

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	**82**		50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
·Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
ınyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

ımments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02 Rinsate	**Units:**	ug/L
Lab Code:	J2203633-008	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	105	61-133	11/14/02	Acceptable
Dibromofluoromethane	88	65-136	11/14/02	Acceptable
Toluene-d8	104	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/06/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB122PLTCT-NOV-6-02
Lab Code: J2203633-009

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	**4.7**		1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
·Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
inyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

mments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT-NOV-6-02	**Units:**	ug/L
Lab Code:	J2203633-009	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	102	61-133	11/14/02	Acceptable
Dibromofluoromethane	92	65-136	11/14/02	Acceptable
Toluene-d8	105	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: 11/06/2002
Date Received: 11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB102PLTCT-NOV-6-02
Lab Code: J2203633-010

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
-Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
yl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

ments:

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Collected:**	11/06/2002
Sample Matrix:	Water	**Date Received:**	11/07/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB102PLTCT-NOV-6-02	**Units:**	ug/L
Lab Code:	J2203633-010	**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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
's-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	106	61-133	11/14/02	Acceptable
Dibromofluoromethane	90	65-136	11/14/02	Acceptable
Toluene-d8	110	80-120	11/14/02	Acceptable

..ments:

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

Service Request: J2203633
Date Collected: NA
Date Received: NA

Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0201112-4

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	11/14/02	11/14/02	JWG0201112	
Chloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Vinyl Chloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichlorofluoromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Acetone	ND	U	50	1	11/14/02	11/14/02	JWG0201112	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Disulfide	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Methylene Chloride	ND	U	5.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
nyl Acetate	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
2-Butanone (MEK)	ND	U	10	1	11/14/02	11/14/02	JWG0201112	
Bromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Methacrylonitrile	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
Chloroform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Carbon Tetrachloride	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Benzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Trichloroethene (TCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Dibromomethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromodichloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Toluene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2-Trichloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	

nments:

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

Service Request: J2203633
Date Collected: NA
Date Received: NA

Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0201112-4

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
2-Hexanone	ND	U	25	1	11/14/02	11/14/02	JWG0201112	
Dibromochloromethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Chlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Ethylbenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
m,p-Xylenes	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	
o-Xylene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Styrene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
Bromoform	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2,3-Trichloropropane	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*
1,3-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,4-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dichlorobenzene	ND	U	1.0	1	11/14/02	11/14/02	JWG0201112	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/14/02	11/14/02	JWG0201112	*
Naphthalene	ND	U	10	1	11/14/02	11/14/02	JWG0201112	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	56-147	11/14/02	Acceptable
4-Bromofluorobenzene	101	61-133	11/14/02	Acceptable
Dibromofluoromethane	91	65-136	11/14/02	Acceptable
Toluene-d8	105	80-120	11/14/02	Acceptable

Comments:

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

Service Request: J2203633
Date Collected: NA
Date Received: NA

Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0201136-4

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	11/19/02	11/19/02	JWG0201136	
Chloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Vinyl Chloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichlorofluoromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Acetone	ND	U	50	1	11/19/02	11/19/02	JWG0201136	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	*
Carbon Disulfide	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Methylene Chloride	ND	U	5.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,2-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
-Dichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
nyl Acetate	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
cis-1,2-Dichloroethene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
2-Butanone (MEK)	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
Bromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Methacrylonitrile	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Chloroform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Carbon Tetrachloride	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Benzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Trichloroethene (TCE)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Dibromomethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromodichloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
cis-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Toluene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
trans-1,3-Dichloropropene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2-Trichloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Tetrachloroethene (PCE)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	

mments:

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

Service Request: J2203633
Date Collected: NA
Date Received: NA

Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0201136-4

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
2-Hexanone	ND	U	25	1	11/19/02	11/19/02	JWG0201136	
Dibromochloromethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Chlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Ethylbenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
m,p-Xylenes	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
o-Xylene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Styrene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
Bromoform	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2,3-Trichloropropane	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
s-1,4-Dichloro-2-butene	ND	U	10	1	11/19/02	11/19/02	JWG0201136	
1,3-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,4-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dichlorobenzene	ND	U	1.0	1	11/19/02	11/19/02	JWG0201136	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	11/19/02	11/19/02	JWG0201136	
Naphthalene	ND	U	10	1	11/19/02	11/19/02	JWG0201136	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	56-147	11/19/02	Acceptable
4-Bromofluorobenzene	103	61-133	11/19/02	Acceptable
Dibromofluoromethane	90	65-136	11/19/02	Acceptable
Toluene-d8	105	80-120	11/19/02	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

QC Summary

QA/QC Report

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

Service Request: J2203633

Surrogate Recovery Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
KBA-11-02-NOV-5-02	J2203633-001	88	105	91	108
KBA-11-PS2-NOV-5-02	J2203633-002	85	109	92	108
KBA-11-16-NOV-5-02	J2203633-003	86	104	93	107
KBA-11-37-NOV-5-02	J2203633-004	97	101	87	105
KBA-11-34-NOV-5-02	J2203633-005	87	100	90	102
KBA-11-13A-NOV-6-02	J2203633-006	97	101	88	101
KBA-11-13A-NOV-6-02 DUP	J2203633-007	96	97	87	103
KBA-11-13A-NOV-6-02 Rinsate	J2203633-008	81	105	88	104
KB122PLTCT-NOV-6-02	J2203633-009	85	102	92	105
KB102PLTCT-NOV-6-02	J2203633-010	85	106	90	110
Method Blank	JWG0201112-4	88	101	91	105
Method Blank	JWG0201136-4	99	103	90	105
KBA-11-13A-NOV-6-02MS	JWG0201112-1	85	100	95	108
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	85	99	92	107
Lab Control Sample	JWG0201112-3	88	95	91	107
Lab Control Sample	JWG0201136-3	97	99	90	107

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.

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

Service Request: J2203633
Date Analyzed: 11/14/2002
Time Analyzed: 16:36

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L14.B\1114-02.D
Instrument ID: MS52.i
Analysis Method: 8260B

Lab Code: JWG0201113-2
Analysis Lot: JWG0201113
Column : DB-624

		1,4-Dichlorobenzene-d4		Chlorobenzene-d5		Fluorobenzene	
		Area	RT	Area	RT	Area	RT
	Results ==>	540,075	11.75	506,130	9.43	1,059,354	6.29
	Upper Limit ==>	1,080,150	12.25	1,012,260	9.93	2,118,708	6.79
	Lower Limit ==>	270,038	11.25	253,065	8.93	529,677	5.79
	ICAL Result ==>	448,490	NA	447,955	NA	937,274	NA
Associated Analyses							
Lab Control Sample	JWG0201112-3	531,045	11.74	520,878	9.44	1,088,857	6.29
KBA-11-13A-NOV-6-02MS	JWG0201112-1	518,891	11.75	501,756	9.43	1,069,493	6.29
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	543,381	11.75	514,350	9.43	1,117,043	6.29
Method Blank	JWG0201112-4	502,783	11.75	518,360	9.43	1,096,161	6.29
KBA-11-02-NOV-5-02	J2203633-001	473,555	11.75	503,474	9.44	1,063,632	6.29
KBA-11-PS2-NOV-5-02	J2203633-002	457,907	11.74	497,138	9.44	1,032,597	6.29
KBA-11-16-NOV-5-02	J2203633-003	465,080	11.75	489,042	9.43	992,955	6.29
KBA-11-37-NOV-5-02	J2203633-004	466,256	11.75	485,507	9.43	1,012,975	6.29
KBA-11-34-NOV-5-02	J2203633-005	460,880	11.74	484,603	9.43	995,729	6.29
KBA-11-13A-NOV-6-02	J2203633-006	463,147	11.75	489,171	9.43	1,011,044	6.29
KBA-11-13A-NOV-6-02 DUP	J2203633-007	450,563	11.75	463,129	9.43	974,117	6.29
KBA-11-13A-NOV-6-02 Rinsate	J2203633-008	438,227	11.74	468,684	9.43	980,254	6.29
KB122PLTCT-NOV-6-02	J2203633-009	434,828	11.75	452,245	9.43	945,589	6.29
KB102PLTCT-NOV-6-02	J2203633-010	421,040	11.74	450,209	9.43	957,412	6.29

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

QA/QC Report

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

Service Request: J2203633
Date Analyzed: 11/19/2002
Time Analyzed: 13:15

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L19.B\1119-02.D
Instrument ID: MS52.i
Analysis Method: 8260B

Lab Code: JWG0201134-2
Analysis Lot: JWG0201134
Column : DB-624

		1,4-Dichlorobenzene-d4		Chlorobenzene-d5		Fluorobenzene	
		Area	RT	Area	RT	Area	RT
	Results ==>	490,234	11.75	519,326	9.43	1,047,546	6.30
	Upper Limit ==>	980,468	12.25	1,038,652	9.93	2,095,092	6.80
	Lower Limit ==>	245,117	11.25	259,663	8.93	523,773	5.80
	ICAL Result ==>	448,490	NA	447,955	NA	937,274	NA
Associated Analyses							
Lab Control Sample	JWG0201136-3	481,866	11.75	493,108	9.43	1,018,823	6.30
Method Blank	JWG0201136-4	414,308	11.75	461,044	9.43	978,733	6.29
KBA-11-37-NOV-5-02RE	J2203633-004	431,366	11.74	460,001	9.43	970,927	6.29
KBA-11-13A-NOV-6-02RE	J2203633-006	413,690	11.74	469,750	9.44	981,071	6.29
KBA-11-13A-NOV-6-02 DUPRE	J2203633-007	416,496	11.74	457,450	9.43	984,489	6.29

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

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/14/2002
Sample Matrix:	Water	**Date Analyzed:**	11/14/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02	**Units:**	ug/L
Lab Code:	J2203633-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201112

		KBA-11-13A-NOV-6-02MS JWG0201112-1 Matrix Spike			KBA-11-13A-NOV-6-02DMS JWG0201112-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limi**
Dichlorodifluoromethane	ND	21.3	20.0	106	21.9	20.0	109	80-135	3	30
Chloromethane	ND	22.5	20.0	112	21.6	20.0	108	70-139	4	30
Vinyl Chloride	ND	22.4	20.0	112	22.9	20.0	115	80-133	2	30
Bromomethane	ND	23.9	20.0	120	23.4	20.0	117	78-138	2	30
Chloroethane	ND	25.4	20.0	127	23.9	20.0	120	66-148	6	30
Trichlorofluoromethane	ND	19.6	20.0	98	19.5	20.0	98	67-153	0	30
1,1-Dichloroethene	ND	21.4	20.0	107	19.6	20.0	98	77-122	9	30
Acetone	ND	71.9	100	72	73.7	100	74	58-149	3	30
Iodomethane (Methyl Iodide)	ND	105	100	105	102	100	102	78-137	3	30
Carbon Disulfide	20	130	100	110	125	100	105	76-144	4	30
Methylene Chloride	ND	18.5	20.0	93	17.6	20.0	88	36-159	5	30
trans-1,2-Dichloroethene	1.1	19.3	20.0	91	19.8	20.0	93	80-120	3	30
1,1-Dichloroethane	ND	18.8	20.0	94	18.0	20.0	90	80-120	4	30
Vinyl Acetate	ND	90.4	100	90	89.9	100	90	77-141	1	30
cis-1,2-Dichloroethene	13	33.2	20.0	101	31.1	20.0	90	80-120	7	30
2-Butanone (MEK)	ND	69.5	100	69	72.7	100	73	63-142	5	30
Bromochloromethane	ND	18.8	20.0	94	18.8	20.0	94	80-120	0	30
Methacrylonitrile	ND	16.8	20.0	84	16.7	20.0	83	80-132	1	30
Chloroform	ND	19.6	20.0	98	18.6	20.0	93	80-120	5	30
1,1,1-Trichloroethane (TCA)	ND	19.3	20.0	97	18.2	20.0	91	80-121	6	30
Carbon Tetrachloride	ND	19.8	20.0	99	18.4	20.0	92	75-126	8	30
Benzene	ND	20.1	20.0	100	19.0	20.0	95	80-120	5	30
1,2-Dichloroethane (EDC)	ND	18.7	20.0	93	18.1	20.0	90	80-120	3	30
Trichloroethene (TCE)	10	31.5	20.0	107	29.6	20.0	98	80-120	6	30
1,2-Dichloropropane	ND	20.3	20.0	101	19.4	20.0	97	80-120	4	30
Dibromomethane	ND	20.1	20.0	100	19.6	20.0	98	80-120	2	30
Bromodichloromethane	ND	19.0	20.0	95	18.2	20.0	91	80-124	5	30
cis-1,3-Dichloropropene	ND	19.6	20.0	98	19.5	20.0	98	78-120	0	30
4-Methyl-2-pentanone (MIBK)	ND	84.7	100	85	93.2	100	93	80-124	10	30
Toluene	ND	22.3	20.0	111	22.0	20.0	110	80-120	1	30
trans-1,3-Dichloropropene	ND	19.1	20.0	95	18.9	20.0	95	77-120	1	30
1,1,2-Trichloroethane	ND	19.1	20.0	96	19.9	20.0	99	80-120	4	30
Tetrachloroethene (PCE)	20	56.5	20.0	182 *	54.0	20.0	170 *	78-120	4	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.

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/14/2002
Sample Matrix:	Water	**Date Analyzed:**	11/14/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KBA-11-13A-NOV-6-02	**Units:**	ug/L
Lab Code:	J2203633-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201112

		KBA-11-13A-NOV-6-02MS JWG0201112-1 Matrix Spike			KBA-11-13A-NOV-6-02DMS JWG0201112-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limi**
2-Hexanone	ND	84.2	100	84	92.4	100	92	75-125	9	30
Dibromochloromethane	ND	19.0	20.0	95	19.4	20.0	97	78-120	2	30
1,2-Dibromoethane (EDB)	ND	18.5	20.0	92	19.3	20.0	96	80-120	4	30
Chlorobenzene	1.4	23.3	20.0	109	22.6	20.0	106	80-120	3	30
1,1,1,2-Tetrachloroethane	ND	20.2	20.0	101	19.8	20.0	99	80-120	2	30
Ethylbenzene	5.1	27.7	20.0	113	27.1	20.0	110	80-120	2	30
m,p-Xylenes	ND	46.6	40.0	117	45.6	40.0	114	80-121	2	30
o-Xylene	ND	21.9	20.0	110	21.5	20.0	107	80-120	2	30
Styrene	ND	21.1	20.0	105	21.2	20.0	106	80-120	1	30
moform	ND	16.6	20.0	83	16.7	20.0	83	64-120	0	30
1,1,2,2-Tetrachloroethane	ND	18.1	20.0	91	19.4	20.0	97	77-125	7	30
1,2,3-Trichloropropane	ND	16.4	20.0	82	16.9	20.0	85	77-120	3	30
trans-1,4-Dichloro-2-butene	ND	11.6	20.0	58	11.8	20.0	59	46-135	3	30
1,3-Dichlorobenzene	ND	21.0	20.0	105	20.8	20.0	104	80-120	1	30
1,4-Dichlorobenzene	1.5	22.4	20.0	105	23.0	20.0	108	80-120	3	30
1,2-Dichlorobenzene	ND	20.3	20.0	101	20.3	20.0	101	80-120	0	30
1,2-Dibromo-3-chloropropane (DBCP	ND	14.6	20.0	73	15.7	20.0	79	48-135	7	30
Naphthalene	31	37.4	20.0	32 *	41.0	20.0	50 *	65-125	9	30

.lts 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.

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/14/2002
Sample Matrix:	Water	**Date Analyzed:**	11/14/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	JWG0201112

	Lab Control Sample JWG0201112-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	18.2	20.0	91	80-135
Chloromethane	20.8	20.0	104	70-139
Vinyl Chloride	21.1	20.0	105	80-133
Bromomethane	21.9	20.0	109	78-138
Chloroethane	23.5	20.0	117	66-148
Trichlorofluoromethane	19.8	20.0	99	67-153
1,1-Dichloroethene	19.7	20.0	99	77-122
Acetone	75.6	100	76	58-149
Iodomethane (Methyl Iodide)	93.6	100	94	78-137
Carbon Disulfide	114	100	114	76-144
thylene Chloride	18.5	20.0	92	36-159
ans-1,2-Dichloroethene	18.5	20.0	92	80-120
1,1-Dichloroethane	18.6	20.0	93	80-120
Vinyl Acetate	92.5	100	92	77-141
cis-1,2-Dichloroethene	18.8	20.0	94	80-120
2-Butanone (MEK)	71.4	100	71	63-142
Bromochloromethane	18.6	20.0	93	80-120
Methacrylonitrile	16.9	20.0	85	80-132
Chloroform	19.0	20.0	95	80-120
1,1,1-Trichloroethane (TCA)	17.7	20.0	88	80-120
Carbon Tetrachloride	17.9	20.0	90	75-126
Benzene	19.4	20.0	97	80-120
1,2-Dichloroethane (EDC)	18.6	20.0	93	80-120
Trichloroethene (TCE)	19.2	20.0	96	80-120
1,2-Dichloropropane	19.4	20.0	97	80-120
Dibromomethane	19.6	20.0	98	80-120
Bromodichloromethane	18.4	20.0	92	80-124
cis-1,3-Dichloropropene	19.7	20.0	98	78-120
4-Methyl-2-pentanone (MIBK)	83.3	100	83	80-120
Toluene	20.5	20.0	103	80-120
trans-1,3-Dichloropropene	18.2	20.0	91	77-120
1,1,2-Trichloroethane	18.5	20.0	92	80-120
Tetrachloroethene (PCE)	20.4	20.0	102	78-120
2-Hexanone	80.8	100	81	75-125
Dibromochloromethane	18.8	20.0	94	78-120

sults 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.

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

Service Request: J2203633
Date Extracted: 11/14/2002
Date Analyzed: 11/14/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0201112

Analyte Name	Lab Control Sample JWG0201112-3 Lab Control Spike Result	Expected	%Rec		%Rec Limits
1,2-Dibromoethane (EDB)	18.7	20.0	93		80-120
Chlorobenzene	20.4	20.0	102		80-120
1,1,1,2-Tetrachloroethane	18.9	20.0	95		80-120
Ethylbenzene	20.4	20.0	102		80-120
m,p-Xylenes	42.5	40.0	106		80-121
o-Xylene	20.3	20.0	101		80-120
Styrene	20.2	20.0	101		80-120
Bromoform	16.0	20.0	80		64-120
1,1,2,2-Tetrachloroethane	17.6	20.0	88		77-125
1,2,3-Trichloropropane	16.2	20.0	81		77-120
s-1,4-Dichloro-2-butene	8.18	20.0	41	*	46-135
1,3-Dichlorobenzene	19.6	20.0	98		80-120
1,4-Dichlorobenzene	19.8	20.0	99		80-120
1,2-Dichlorobenzene	19.3	20.0	97		80-120
1,2-Dibromo-3-chloropropane (DBCP	13.6	20.0	68		48-135
Naphthalene	14.5	20.0	72		65-125

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.

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/19/2002
Sample Matrix:	Water	**Date Analyzed:**	11/19/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	JWG0201136

	Lab Control Sample JWG0201136-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	18.5	20.0	92	80-135
Chloromethane	18.6	20.0	93	70-139
Vinyl Chloride	18.5	20.0	93	80-133
Bromomethane	15.8	20.0	79	78-138
Chloroethane	20.0	20.0	100	66-148
Trichlorofluoromethane	17.7	20.0	89	67-153
1,1-Dichloroethene	16.8	20.0	84	77-122
Acetone	101	100	101	58-149
Iodomethane (Methyl Iodide)	71.0	100	71 *	78-137
Carbon Disulfide	104	100	104	76-144
hylene Chloride	17.3	20.0	87	36-159
ns-1,2-Dichloroethene	16.4	20.0	82	80-120
1,1-Dichloroethane	19.4	20.0	97	80-120
Vinyl Acetate	112	100	112	77-141
cis-1,2-Dichloroethene	18.2	20.0	91	80-120
2-Butanone (MEK)	103	100	103	63-142
Bromochloromethane	17.9	20.0	89	80-120
Methacrylonitrile	20.4	20.0	102	80-132
Chloroform	20.2	20.0	101	80-120
1,1,1-Trichloroethane (TCA)	17.7	20.0	89	80-120
Carbon Tetrachloride	17.0	20.0	85	75-126
Benzene	21.6	20.0	108	80-120
1,2-Dichloroethane (EDC)	21.0	20.0	105	80-120
Trichloroethene (TCE)	18.7	20.0	94	80-120
1,2-Dichloropropane	22.4	20.0	112	80-120
Dibromomethane	20.4	20.0	102	80-120
Bromodichloromethane	19.6	20.0	98	80-124
cis-1,3-Dichloropropene	21.1	20.0	106	78-120
4-Methyl-2-pentanone (MIBK)	111	100	111	80-120
Toluene	21.9	20.0	110	80-120
trans-1,3-Dichloropropene	20.3	20.0	101	77-120
1,1,2-Trichloroethane	20.8	20.0	104	80-120
Tetrachloroethene (PCE)	18.6	20.0	93	78-120
2-Hexanone	112	100	112	75-125
Dibromochloromethane	17.8	20.0	89	78-120

ults 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.

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

Service Request: J2203633
Date Extracted: 11/19/2002
Date Analyzed: 11/19/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0201136

	Lab Control Sample JWG0201136-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	20.2	20.0	101	80-120
Chlorobenzene	20.6	20.0	103	80-120
1,1,1,2-Tetrachloroethane	18.0	20.0	90	80-120
Ethylbenzene	21.6	20.0	108	80-120
m,p-Xylenes	44.0	40.0	110	80-121
o-Xylene	20.7	20.0	104	80-120
Styrene	21.5	20.0	107	80-120
Bromoform	15.0	20.0	75	64-120
1,1,2,2-Tetrachloroethane	21.2	20.0	106	77-125
1,2,3-Trichloropropane	19.2	20.0	96	77-120
s-1,4-Dichloro-2-butene	18.2	20.0	91	46-135
1,3-Dichlorobenzene	20.8	20.0	104	80-120
1,4-Dichlorobenzene	21.7	20.0	108	80-120
1,2-Dichlorobenzene	21.1	20.0	105	80-120
1,2-Dibromo-3-chloropropane (DBCP	19.7	20.0	99	48-135
Naphthalene	23.7	20.0	119	65-125

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.

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/14/2002
Sample Matrix:	Water	**Date Analyzed:**	11/14/2002
		Time Analyzed:	18:26

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**File ID:**	J:\MS52\DATA\MS522L14.B\1114-06.D
Lab Code:	JWG0201112-4	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201112

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	JWG0201112-3	J:\MS52\DATA\MS522L14.B\1114-03.D	11/14/02	17:04
KBA-11-13A-NOV-6-02MS	JWG0201112-1	J:\MS52\DATA\MS522L14.B\1114-04.D	11/14/02	17:31
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	J:\MS52\DATA\MS522L14.B\1114-05.D	11/14/02	17:58
KBA-11-02-NOV-5-02	J2203633-001	J:\MS52\DATA\MS522L14.B\1114-08.D	11/14/02	19:21
KBA-11-PS2-NOV-5-02	J2203633-002	J:\MS52\DATA\MS522L14.B\1114-09.D	11/14/02	19:48
KBA-11-16-NOV-5-02	J2203633-003	J:\MS52\DATA\MS522L14.B\1114-10.D	11/14/02	20:16
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L14.B\1114-11.D	11/14/02	20:43
KBA-11-34-NOV-5-02	J2203633-005	J:\MS52\DATA\MS522L14.B\1114-12.D	11/14/02	21:11
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L14.B\1114-13.D	11/14/02	21:38
A-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L14.B\1114-14.D	11/14/02	22:06
BA-11-13A-NOV-6-02 Rinsate	J2203633-008	J:\MS52\DATA\MS522L14.B\1114-15.D	11/14/02	22:33
KB122PLTCT-NOV-6-02	J2203633-009	J:\MS52\DATA\MS522L14.B\1114-16.D	11/14/02	23:00
KB102PLTCT-NOV-6-02	J2203633-010	J:\MS52\DATA\MS522L14.B\1114-17.D	11/14/02	23:28

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/19/2002
Sample Matrix:	Water	**Date Analyzed:**	11/19/2002
		Time Analyzed:	14:13

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**File ID:**	J:\MS52\DATA\MS522L19.B\1119-04.D
Lab Code:	JWG0201136-4	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201136

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	JWG0201136-3	J:\MS52\DATA\MS522L19.B\1119-03.D	11/19/02	13:45
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L19.B\1119-05.D	11/19/02	14:39
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L19.B\1119-06.D	11/19/02	15:07
KBA-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L19.B\1119-07.D	11/19/02	15:34

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/14/2002
Sample Matrix:	Water	**Date Analyzed:**	11/14/2002
		Time Analyzed:	17:04

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS52\DATA\MS522L14.B\1114-03.D
Lab Code:	JWG0201112-3	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201112

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
KBA-11-13A-NOV-6-02MS	JWG0201112-1	J:\MS52\DATA\MS522L14.B\1114-04.D	11/14/02	17:31
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	J:\MS52\DATA\MS522L14.B\1114-05.D	11/14/02	17:58
Method Blank	JWG0201112-4	J:\MS52\DATA\MS522L14.B\1114-06.D	11/14/02	18:26
KBA-11-02-NOV-5-02	J2203633-001	J:\MS52\DATA\MS522L14.B\1114-08.D	11/14/02	19:21
KBA-11-PS2-NOV-5-02	J2203633-002	J:\MS52\DATA\MS522L14.B\1114-09.D	11/14/02	19:48
KBA-11-16-NOV-5-02	J2203633-003	J:\MS52\DATA\MS522L14.B\1114-10.D	11/14/02	20:16
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L14.B\1114-11.D	11/14/02	20:43
KBA-11-34-NOV-5-02	J2203633-005	J:\MS52\DATA\MS522L14.B\1114-12.D	11/14/02	21:11
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L14.B\1114-13.D	11/14/02	21:38
A-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L14.B\1114-14.D	11/14/02	22:06
3A-11-13A-NOV-6-02 Rinsate	J2203633-008	J:\MS52\DATA\MS522L14.B\1114-15.D	11/14/02	22:33
KB122PLTCT-NOV-6-02	J2203633-009	J:\MS52\DATA\MS522L14.B\1114-16.D	11/14/02	23:00
KB102PLTCT-NOV-6-02	J2203633-010	J:\MS52\DATA\MS522L14.B\1114-17.D	11/14/02	23:28

Client:	JA Jones Management Services	**Service Request:**	J2203633
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	11/19/2002
Sample Matrix:	Water	**Date Analyzed:**	11/19/2002
		Time Analyzed:	13:45

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS52\DATA\MS522L19.B\1119-03.D
Lab Code:	JWG0201136-3	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201136

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	JWG0201136-4	J:\MS52\DATA\MS522L19.B\1119-04.D	11/19/02	14:13
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L19.B\1119-05.D	11/19/02	14:39
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L19.B\1119-06.D	11/19/02	15:07
KBA-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L19.B\1119-07.D	11/19/02	15:34

QA/QC Results

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

Service Request: J2203633
Date Analyzed: 11/14/2002
Time Analyzed: 16:09

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L14.B\1114-01.D
Instrument ID: MS52.i
Column:

Analysis Method: 8260B
Analysis Lot: JWG0201113

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.7	9833	PASS
75	95	30	60	53.5	25384	PASS
95	95	100	100	100.0	47448	PASS
96	95	5	9	6.2	2959	PASS
173	174	0	2	0.2	86	PASS
174	95	50	120	90.8	43088	PASS
175	174	5	9	7.6	3271	PASS
176	174	95	101	99.5	42856	PASS
177	176	5	9	6.9	2961	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	JWG0201113-2	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	16:36	
Control Sample	JWG0201112-3	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	17:04	
KBA-11-13A-NOV-6-02MS	JWG0201112-1	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	17:31	
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	17:58	
Method Blank	JWG0201112-4	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	18:26	
KBA-11-02-NOV-5-02	J2203633-001	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	19:21	
KBA-11-PS2-NOV-5-02	J2203633-002	J:\MS52\DATA\MS522L14.B\1114-0	11/14/2002	19:48	
KBA-11-16-NOV-5-02	J2203633-003	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	20:16	
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	20:43	
KBA-11-34-NOV-5-02	J2203633-005	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	21:11	
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	21:38	
KBA-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	22:06	
KBA-11-13A-NOV-6-02 Rinsate	J2203633-008	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	22:33	
KB122PLTCT-NOV-6-02	J2203633-009	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	23:00	
KB102PLTCT-NOV-6-02	J2203633-010	J:\MS52\DATA\MS522L14.B\1114-1	11/14/2002	23:28	

sults flagged with an asterisk (*) indicate the analysis performed outside specified tune window

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

Service Request: J2203633
Date Analyzed: 11/19/2002
Time Analyzed: 11:48

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L19.B\1119-01.D
Instrument ID: MS52.i
Column:

Analysis Method: 8260B
Analysis Lot: JWG0201134

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
173	174	0	2	0.6	293	PASS
174	95	50	120	86.5	47976	PASS
175	174	5	9	7.0	3344	PASS
176	174	95	101	98.9	47432	PASS
177	176	5	9	6.2	2925	PASS
50	95	15	40	24.4	13549	PASS
75	95	30	60	51.8	28696	PASS
95	95	100	100	100.0	55448	PASS
96	95	5	9	6.6	3687	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	JWG0201134-2	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	13:15	
Control Sample	JWG0201136-3	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	13:45	
Method Blank	JWG0201136-4	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	14:13	
KBA-11-37-NOV-5-02	J2203633-004	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	14:39	
KBA-11-13A-NOV-6-02	J2203633-006	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	15:07	
KBA-11-13A-NOV-6-02 DUP	J2203633-007	J:\MS52\DATA\MS522L19.B\1119-0	11/19/2002	15:34	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

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

Service Request: J2203633

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analysis Lot: JWG0201113
Instrument ID: MS52.i
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1114-01.D	GC/MS Tuning - Bromofluorobenzene	JWG0201113-1	11/14/2002	16:09		11/14/2002	16:09
\1114-02.D	Continuing Calibration Verification	JWG0201113-2	11/14/2002	16:36		11/14/2002	16:51
\1114-03.D	Lab Control Sample	JWG0201112-3	11/14/2002	17:04		11/14/2002	17:19
\1114-04.D	KBA-11-13A-NOV-6-02MS	JWG0201112-1	11/14/2002	17:31		11/14/2002	17:46
\1114-05.D	KBA-11-13A-NOV-6-02DMS	JWG0201112-2	11/14/2002	17:58		11/14/2002	18:13
\1114-06.D	Method Blank	JWG0201112-4	11/14/2002	18:26		11/14/2002	18:41
\1114-07.D	ZZZZZZ	ZZZZZZ	11/14/2002	18:54		11/14/2002	19:09
\1114-08.D	KBA-11-02-NOV-5-02	J2203633-001	11/14/2002	19:21		11/14/2002	19:36
\1114-09.D	KBA-11-PS2-NOV-5-02	J2203633-002	11/14/2002	19:48		11/14/2002	20:03
\1114-10.D	KBA-11-16-NOV-5-02	J2203633-003	11/14/2002	20:16		11/14/2002	20:31
\1114-11.D	KBA-11-37-NOV-5-02	J2203633-004	11/14/2002	20:43		11/14/2002	20:58
\1114-12.D	KBA-11-34-NOV-5-02	J2203633-005	11/14/2002	21:11		11/14/2002	21:26
14-13.D	KBA-11-13A-NOV-6-02	J2203633-006	11/14/2002	21:38		11/14/2002	21:53
14-14.D	KBA-11-13A-NOV-6-02 DUP	J2203633-007	11/14/2002	22:06		11/14/2002	22:21
\1114-15.D	KBA-11-13A-NOV-6-02 Rinsate	J2203633-008	11/14/2002	22:33		11/14/2002	22:48
\1114-16.D	KB122PLTCT-NOV-6-02	J2203633-009	11/14/2002	23:00		11/14/2002	23:15
\1114-17.D	KB102PLTCT-NOV-6-02	J2203633-010	11/14/2002	23:28		11/14/2002	23:43
\1114-18.D	ZZZZZZ	ZZZZZZ	11/14/2002	23:55		11/15/2002	00:10
\1114-19.D	ZZZZZZ	ZZZZZZ	11/15/2002	00:22		11/15/2002	00:37
\1114-21.D	ZZZZZZ	ZZZZZZ	11/15/2002	01:17		11/15/2002	01:32
\1114-23.D	ZZZZZZ	ZZZZZZ	11/15/2002	02:12		11/15/2002	02:27

its flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Service Request: J2203633

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analysis Lot: JWG0201134
Instrument ID: MS52.i
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1119-01.D	GC/MS Tuning - Generic	JWG0201134-1	11/19/2002	11:48		11/19/2002	11:48
\1119-02.D	Continuing Calibration Verification	JWG0201134-2	11/19/2002	13:15		11/19/2002	13:30
\1119-03.D	Lab Control Sample	JWG0201136-3	11/19/2002	13:45		11/19/2002	14:00
\1119-04.D	Method Blank	JWG0201136-4	11/19/2002	14:13		11/19/2002	14:28
\1119-05.D	KBA-11-37-NOV-5-02	J2203633-004	11/19/2002	14:39		11/19/2002	14:54
\1119-06.D	KBA-11-13A-NOV-6-02	J2203633-006	11/19/2002	15:07		11/19/2002	15:22
\1119-07.D	KBA-11-13A-NOV-6-02 DUP	J2203633-007	11/19/2002	15:34		11/19/2002	15:49
\1119-08.D	ZZZZZZ	ZZZZZZ	11/19/2002	16:06		11/19/2002	16:21
\1119-09.D	ZZZZZZ	ZZZZZZ	11/19/2002	16:33		11/19/2002	16:48
\1119-10.D	ZZZZZZ	ZZZZZZ	11/19/2002	17:01		11/19/2002	17:16
\1119-11.D	ZZZZZZ	ZZZZZZ	11/19/2002	17:28		11/19/2002	17:43
\1119-12.D	ZZZZZZ	ZZZZZZ	11/19/2002	17:55		11/19/2002	18:10
\1119-13.D	ZZZZZZ	ZZZZZZ	11/19/2002	18:23		11/19/2002	[illegible]
\1119-14.D	ZZZZZZ	ZZZZZZ	11/19/2002	18:50		11/19/2002	[illegible]
\1119-15.D	ZZZZZZ	ZZZZZZ	11/19/2002	19:18		11/19/2002	19:33
\1119-16.D	ZZZZZZ	ZZZZZZ	11/19/2002	19:45		11/19/2002	20:00
\1119-17.D	ZZZZZZ	ZZZZZZ	11/19/2002	20:12		11/19/2002	20:27
\1119-18.D	ZZZZZZ	ZZZZZZ	11/19/2002	20:39		11/19/2002	20:54
\1119-19.D	ZZZZZZ	ZZZZZZ	11/19/2002	21:06		11/19/2002	21:21
\1119-20.D	ZZZZZZ	ZZZZZZ	11/19/2002	21:33		11/19/2002	21:48
\1119-21.D	ZZZZZZ	ZZZZZZ	11/19/2002	22:00		11/19/2002	22:15
\1119-22.D	ZZZZZZ	ZZZZZZ	11/19/2002	22:28		11/19/2002	22:43
\1119-23.D	ZZZZZZ	ZZZZZZ	11/19/2002	22:55		11/19/2002	23:10
\1119-24.D	ZZZZZZ	ZZZZZZ	11/19/2002	23:22		11/19/2002	23:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Service Request: J2203633
Date Extracted: 11/14/2002

Extraction Prep Log
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: JWG0201112
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
KBA-11-02-NOV-5-02	J2203633-001	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-PS2-NOV-5-02	J2203633-002	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-16-NOV-5-02	J2203633-003	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-37-NOV-5-02	J2203633-004	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-34-NOV-5-02	J2203633-005	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02	J2203633-006	11/06/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02 DUP	J2203633-007	11/06/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02 Rin	J2203633-008	11/06/02	11/07/02	5ml	5ml	NA	
KB122PLTCT-NOV-6-02	J2203633-009	11/06/02	11/07/02	5ml	5ml	NA	
KB102PLTCT-NOV-6-02	J2203633-010	11/06/02	11/07/02	5ml	5ml	NA	
Method Blank	JWG0201112-4	NA	NA	5ml	5ml	NA	
KBA-11-13A-NOV-6-02MS	JWG0201112-1	11/06/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02DMS	JWG0201112-2	11/06/02	11/07/02	5ml	5ml	NA	
Lab Control Sample	JWG0201112-3	NA	NA	5ml	5ml	NA	

ults flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Service Request: J2203633
Date Extracted: 11/19/2002

Extraction Prep Log
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: JWG0201136
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
KBA-11-37-NOV-5-02RE	J2203633-004	11/05/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02RE	J2203633-006	11/06/02	11/07/02	5ml	5ml	NA	
KBA-11-13A-NOV-6-02 DUP	J2203633-007	11/06/02	11/07/02	5ml	5ml	NA	
Method Blank	JWG0201136-4	NA	NA	5ml	5ml	NA	
Lab Control Sample	JWG0201136-3	NA	NA	5ml	5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Standards Data

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Level ID	File ID	Level ID	File ID
A	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-03.D	E	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-07.D
B	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-04.D	F	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-08.D
C	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-05.D	G	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-09.D
D	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-06.D	H	\\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-10.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane				B	2.0	0.420	C	5.0	0.406	D	20	0.394	E	50	0.359
	F	100	0.333	G	150	0.316	H	200	0.302						
† Chloromethane	A	1.0	0.648	B	2.0	0.662	C	5.0	0.589	D	20	0.624	E	50	0.569
	F	100	0.531	G	150	0.531	H	200	0.470						
‡ Vinyl Chloride	A	1.0	0.395	B	2.0	0.439	C	5.0	0.430	D	20	0.465	E	50	0.422
	F	100	0.386	G	150	0.399	H	200	0.350						
Bromomethane	A	1.0	0.308	B	2.0	0.284	C	5.0	0.271	D	20	0.277	E	50	0.263
	F	100	0.237	G	150	0.229	H	200	0.201						
Chloroethane	A	1.0	0.237	B	2.0	0.214	C	5.0	0.238	D	20	0.247	E	50	0.249
	F	100	0.230	G	150	0.197	H	200	0.193						
Trichlorofluoromethane	A	1.0	0.539	B	2.0	0.567	C	5.0	0.554	D	20	0.593	E	50	0.9
	F	100	0.533	G	150	0.548	H	200	0.558						
‡ 1,1-Dichloroethene	A	1.0	0.279	B	2.0	0.288	C	5.0	0.281	D	20	0.281	E	50	0.277
	F	100	0.257	G	150	0.257	H	200	0.260						
Acetone	A	5.0	0.104	B	10	0.0961	C	25	0.0905	D	100	0.0931	E	250	0.0925
	F	500	0.0860	G	750	0.0870	H	1000	0.0783						
Iodomethane (Methyl Iodide)	A	5.0	0.521	B	10	0.510	C	25	0.513	D	100	0.517	E	250	0.497
	F	500	0.484	G	750	0.483	H	1000	0.466						
Carbon Disulfide	A	5.0	1.04	B	10	1.00	C	25	1.01	D	100	0.996	E	250	0.986
	F	500	0.926	G	750	0.896	H	1000	0.855						
Methylene Chloride	A	1.0	0.370	B	2.0	0.400	C	5.0	0.362	D	20	0.332	E	50	0.333
	F	100	0.320	G	150	0.319	H	200	0.319						
trans-1,2-Dichloroethene	A	1.0	0.347	B	2.0	0.297	C	5.0	0.316	D	20	0.320	E	50	0.317
	F	100	0.300	G	150	0.305	H	200	0.302						
† 1,1-Dichloroethane	A	1.0	0.618	B	2.0	0.624	C	5.0	0.608	D	20	0.620	E	50	0.626
	F	100	0.601	G	150	0.611	H	200	0.600						
Vinyl Acetate	A	5.0	0.561	B	10	0.537	C	25	0.557	D	100	0.560	E	250	0.543
	F	500	0.531	G	750	0.498	H	1000	0.480						

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
cis-1,2-Dichloroethene	A	1.0	0.313	B	2.0	0.328	C	5.0	0.334	D	20	0.327	E	50	0.323
	F	100	0.304	G	150	0.316	H	200	0.315						
2-Butanone (MEK)	A	5.0	0.175	B	10	0.147	C	25	0.137	D	100	0.129	E	250	0.134
	F	500	0.126	G	750	0.132	H	1000	0.120						
Bromochloromethane	A	1.0	0.144	B	2.0	0.159	C	5.0	0.142	D	20	0.150	E	50	0.153
	F	100	0.146	G	150	0.152	H	200	0.149						
Methacrylonitrile	A	1.0	0.0934	B	2.0	0.106	C	5.0	0.103	D	20	0.103	E	50	0.106
	F	100	0.102	G	150	0.106	H	200	0.101						
‡ Chloroform	A	1.0	0.554	B	2.0	0.575	C	5.0	0.550	D	20	0.561	E	50	0.558
	F	100	0.538	G	150	0.566	H	200	0.559						
1,1,1-Trichloroethane (TCA)	A	1.0	0.490	B	2.0	0.513	C	5.0	0.525	D	20	0.529	E	50	0.533
	F	100	0.512	G	150	0.553	H	200	0.555						
Carbon Tetrachloride	A	1.0	0.429	B	2.0	0.417	C	5.0	0.423	D	20	0.451	E	50	0.456
	F	100	0.445	G	150	0.475	H	200	0.480						
ızene	A	1.0	1.33	B	2.0	1.22	C	5.0	1.19	D	20	1.20	E	50	1.18
	F	100	1.14	G	150	1.18	H	200	1.18						
1,2-Dichloroethane (EDC)	A	1.0	0.469	B	2.0	0.457	C	5.0	0.447	D	20	0.462	E	50	0.458
	F	100	0.451	G	150	0.468	H	200	0.462						
Trichloroethene (TCE)	A	1.0	0.318	B	2.0	0.307	C	5.0	0.311	D	20	0.312	E	50	0.312
	F	100	0.305	G	150	0.317	H	200	0.308						
‡ 1,2-Dichloropropane	A	1.0	0.335	B	2.0	0.329	C	5.0	0.333	D	20	0.327	E	50	0.330
	F	100	0.322	G	150	0.334	H	200	0.323						
Dibromomethane	A	1.0	0.362	B	2.0	0.355	C	5.0	0.349	D	20	0.375	E	50	0.370
	F	100	0.362	G	150	0.357	H	200	0.344						
Bromodichloromethane	A	1.0	0.466	B	2.0	0.432	C	5.0	0.439	D	20	0.433	E	50	0.448
	F	100	0.450	G	150	0.455	H	200	0.458						
cis-1,3-Dichloropropene	A	1.0	1.13	B	2.0	1.15	C	5.0	1.10	D	20	1.11	E	50	1.10
	F	100	1.04	G	150	1.05	H	200	1.02						
4-Methyl-2-pentanone (MIBK)	A	5.0	0.716	B	10	0.661	C	25	0.640	D	100	0.623	E	250	0.639
	F	500	0.577	G	750	0.572	H	1000	0.515						
‡ Toluene	A	1.0	2.85	B	2.0	2.74	C	5.0	2.59	D	20	2.57	E	50	2.53
	F	100	2.41	G	150	2.41	H	200	2.36						
trans-1,3-Dichloropropene	A	1.0	1.05	B	2.0	1.02	C	5.0	0.998	D	20	1.04	E	50	1.02
	F	100	0.976	G	150	1.00	H	200	0.988						

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ı **SPCC Compound** ‡ **CCC Compound**

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,1,2-Trichloroethane	A	1.0	0.579	B	2.0	0.550	C	5.0	0.525	D	20	0.519	E	50	0.510
	F	100	0.490	G	150	0.497	H	200	0.485						
Tetrachloroethene (PCE)	A	1.0	0.529	B	2.0	0.565	C	5.0	0.541	D	20	0.548	E	50	0.539
	F	100	0.507	G	150	0.535	H	200	0.536						
2-Hexanone	A	5.0	0.459	B	10	0.417	C	25	0.426	D	100	0.416	E	250	0.422
	F	500	0.394	G	750	0.395	H	1000	0.358						
Dibromochloromethane	A	1.0	0.478	B	2.0	0.447	C	5.0	0.483	D	20	0.511	E	50	0.514
	F	100	0.514	G	150	0.523	H	200	0.526						
1,2-Dibromoethane (EDB)	A	1.0	0.577	B	2.0	0.520	C	5.0	0.539	D	20	0.544	E	50	0.541
	F	100	0.524	G	150	0.536	H	200	0.523						
† Chlorobenzene	A	1.0	1.84	B	2.0	1.76	C	5.0	1.75	D	20	1.72	E	50	1.73
	F	100	1.68	G	150	1.69	H	200	1.67						
1,1,1,2-Tetrachloroethane	A	1.0	0.704	B	2.0	0.672	C	5.0	0.673	D	20	0.698	E	50	0.703
	F	100	0.707	G	150	0.714	H	200	0.732						
‡ ylbenzene	A	1.0	3.01	B	2.0	2.99	C	5.0	2.89	D	20	2.90	E	50	87
	F	100	2.88	G	150	2.82	H	200	2.75						
m,p-Xylenes	A	2.0	2.35	B	4.0	2.32	C	10	2.31	D	40	2.32	E	100	2.28
	F	200	2.24	G	300	2.13	H	400	1.97						
o-Xylene	A	1.0	2.53	B	2.0	2.47	C	5.0	2.38	D	20	2.43	E	50	2.41
	F	100	2.39	G	150	2.41	H	200	2.39						
Styrene	A	1.0	1.90	B	2.0	1.90	C	5.0	1.81	D	20	1.88	E	50	1.90
	F	100	1.84	G	150	1.89	H	200	1.88						
† Bromoform	A	1.0	0.459	B	2.0	0.425	C	5.0	0.425	D	20	0.458	E	50	0.471
	F	100	0.471	G	150	0.516	H	200	0.516						
† 1,1,2,2-Tetrachloroethane	A	1.0	0.748	B	2.0	0.701	C	5.0	0.685	D	20	0.686	E	50	0.673
	F	100	0.632	G	150	0.646	H	200	0.614						
1,2,3-Trichloropropane	A	1.0	0.226	B	2.0	0.190	C	5.0	0.197	D	20	0.193	E	50	0.193
	F	100	0.184	G	150	0.196	H	200	0.193						
trans-1,4-Dichloro-2-butene	A	1.0	0.187	B	2.0	0.178	C	5.0	0.192	D	20	0.193	E	50	0.199
	F	100	0.193	G	150	0.202	H	200	0.199						
1,3-Dichlorobenzene	A	1.0	1.48	B	2.0	1.48	C	5.0	1.40	D	20	1.46	E	50	1.43
	F	100	1.38	G	150	1.41	H	200	1.42						
1,4-Dichlorobenzene	A	1.0	1.56	B	2.0	1.52	C	5.0	1.42	D	20	1.47	E	50	1.41
	F	100	1.38	G	150	1.41	H	200	1.43						

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichlorobenzene	A	1.0	1.51	B	2.0	1.47	C	5.0	1.36	D	20	1.43	E	50	1.37
	F	100	1.31	G	150	1.32	H	200	1.33						
1,2-Dibromo-3-chloropropane (DBCP	A	1.0	0.0864	B	2.0	0.109	C	5.0	0.109	D	20	0.115	E	50	0.109
	F	100	0.104	G	150	0.109	H	200	0.104						
Naphthalene	A	1.0	1.19	B	2.0	1.18	C	5.0	1.25	D	20	1.33	E	50	1.37
	F	100	1.28	G	150	1.39	H	200	1.32						
1,2-Dichloroethane-d4							C	5.0	0.326	D	20	0.316	E	50	0.329
	F	100	0.315	G	150	0.330	H	200	0.328						
4-Bromofluorobenzene							C	5.0	0.798	D	20	0.815	E	50	0.821
	F	100	0.794	G	150	0.834	H	200	0.856						
Dibromofluoromethane							C	5.0	0.256	D	20	0.262	E	50	0.268
	F	100	0.252	G	150	0.271	H	200	0.268						
Toluene-d8							C	5.0	1.81	D	20	1.76	E	50	1.83
	F	100	1.67	G	150	1.71	H	200	1.68						

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, SPCC Compound ‡ CCC Compound

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Dichlorodifluoromethane	MS	AverageRF	% RSD	12.8		≤ 15	0.361		0.01
† Chloromethane	MS	AverageRF	% RSD	11.4		≤ 15	0.578		0.1
‡ Vinyl Chloride	MS	AverageRF	% RSD	8.7		≤ 15	0.411		0.01
Bromomethane	MS	AverageRF	% RSD	13.2		≤ 15	0.259		0.01
Chloroethane	MS	AverageRF	% RSD	9.6		≤ 15	0.226		0.01
Trichlorofluoromethane	MS	AverageRF	% RSD	3.4		≤ 15	0.558		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.6		≤ 15	0.272		0.01
Acetone	MS	AverageRF	% RSD	8.4		≤ 15	0.0910		0.01
Iodomethane (Methyl Iodide)	MS	AverageRF	% RSD	4.0		≤ 15	0.499		0.01
Carbon Disulfide	MS	AverageRF	% RSD	6.7		≤ 15	0.964		0.01
Methylene Chloride	MS	AverageRF	% RSD	8.7		≤ 15	0.344		0.01
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	5.2		≤ 15	0.313		0.01
† 1,1-Dichloroethane	MS	AverageRF	% RSD	1.7		≤ 15	0.614		0.1
Vinyl Acetate	MS	AverageRF	% RSD	5.6		≤ 15	0.534		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	3.0		≤ 15	0.320		0.01
2-Butanone (MEK)	MS	AverageRF	% RSD	12.4		≤ 15	0.137		0.01
Bromochloromethane	MS	AverageRF	% RSD	3.8		≤ 15	0.149		0.01
ethacrylonitrile	MS	AverageRF	% RSD	4.0		≤ 15	0.102		0.
‡ Chloroform	MS	AverageRF	% RSD	2.0		≤ 15	0.558		0.01
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	4.1		≤ 15	0.526		0.01
Carbon Tetrachloride	MS	AverageRF	% RSD	5.2		≤ 15	0.447		0.01
Benzene	MS	AverageRF	% RSD	4.6		≤ 15	1.20		0.01
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	1.7		≤ 15	0.459		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	1.5		≤ 15	0.311		0.01
‡ 1,2-Dichloropropane	MS	AverageRF	% RSD	1.4		≤ 15	0.329		0.01
Dibromomethane	MS	AverageRF	% RSD	2.8		≤ 15	0.359		0.01
Bromodichloromethane	MS	AverageRF	% RSD	2.7		≤ 15	0.448		0.01
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	4.0		≤ 15	1.09		0.01
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	10.0		≤ 15	0.618		0.01
‡ Toluene	MS	AverageRF	% RSD	6.7		≤ 15	2.56		0.01
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	2.5		≤ 15	1.01		0.01
1,1,2-Trichloroethane	MS	AverageRF	% RSD	6.1		≤ 15	0.519		0.01
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	3.1		≤ 15	0.537		0.01
2-Hexanone	MS	AverageRF	% RSD	7.1		≤ 15	0.411		0.01
Dibromochloromethane	MS	AverageRF	% RSD	5.5		≤ 15	0.499		0.01
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	3.4		≤ 15	0.538		0.01
† Chlorobenzene	MS	AverageRF	% RSD	3.2		≤ 15	1.73		0.3
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	2.9		≤ 15	0.701		0.01
‡ Ethylbenzene	MS	AverageRF	% RSD	2.9		≤ 15	2.89		0.01
m,p-Xylenes	MS	AverageRF	% RSD	5.7		≤ 15	2.24		0.01
o-Xylene	MS	AverageRF	% RSD	2.1		≤ 15	2.42		0.01

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
ICAL Date: 11/13/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL353
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	1.8		≤ 15	1.87		0.01
† Bromoform	MS	AverageRF	% RSD	7.4		≤ 15	0.468		0.1
† 1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	6.3		≤ 15	0.673		0.3
1,2,3-Trichloropropane	MS	AverageRF	% RSD	6.4		≤ 15	0.197		0.01
trans-1,4-Dichloro-2-butene	MS	AverageRF	% RSD	4.0		≤ 15	0.193		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	2.5		≤ 15	1.43		0.01
1,4-Dichlorobenzene	MS	AverageRF	% RSD	4.2		≤ 15	1.45		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	5.5		≤ 15	1.39		0.01
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	8.1		≤ 15	0.106		0.01
Naphthalene	MS	AverageRF	% RSD	5.9		≤ 15	1.29		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	2.1		≤ 15	0.324		
4-Bromofluorobenzene	SURR	AverageRF	% RSD	2.8		≤ 15	0.820		
Dibromofluoromethane	SURR	AverageRF	% RSD	2.9		≤ 15	0.263		
Toluene-d8	SURR	AverageRF	% RSD	3.7		≤ 15	1.74		

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

PCC Compound

‡ CCC Compound

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

Service Request: J2203633
ICAL Date: 11/13/2002
Date Analyzed: 11/13/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL353
Units: ug/L

File ID: \\JAX1\Organics\MS52\DATA\Ms522L13.b\1113-12.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	56	0.361	0.402	11	NA	± 30 %	AverageRF
† Chloromethane	50	57	0.578	0.664	15	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	61	0.411	0.502	22	NA	± 30 %	AverageRF
Bromomethane	50	53	0.259	0.275	6	NA	± 30 %	AverageRF
Chloroethane	50	57	0.226	0.259	15	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	56	0.558	0.624	12	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	57	0.272	0.309	14	NA	± 30 %	AverageRF
Acetone	250	260	0.0910	0.0950	4	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	260	0.499	0.528	6	NA	± 30 %	AverageRF
Carbon Disulfide	250	310	0.964	1.19	23	NA	± 30 %	AverageRF
Methylene Chloride	50	53	0.344	0.367	6	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	55	0.313	0.341	9	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	58	0.614	0.713	16	NA	± 30 %	AverageRF
Vinyl Acetate	250	270	0.534	0.572	7	NA	± 30 %	AverageRF
1,2-Dichloroethene	50	55	0.320	0.351	10	NA	± 30 %	Avera
Butanone (MEK)	250	240	0.137	0.132	-4	NA	± 30 %	Avera
Bromochloromethane	50	56	0.149	0.167	12	NA	± 30 %	AverageRF
Methacrylonitrile	50	54	0.102	0.110	7	NA	± 30 %	AverageRF
‡ Chloroform	50	56	0.558	0.622	12	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	56	0.526	0.585	11	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	58	0.447	0.518	16	NA	± 30 %	AverageRF
Benzene	50	55	1.20	1.32	9	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	54	0.459	0.499	9	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	56	0.311	0.348	12	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	55	0.329	0.360	9	NA	± 30 %	AverageRF
Dibromomethane	50	55	0.359	0.395	10	NA	± 30 %	AverageRF
Bromodichloromethane	50	55	0.448	0.491	10	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	56	1.09	1.21	12	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	260	0.618	0.637	3	NA	± 30 %	AverageRF
‡ Toluene	50	54	2.56	2.78	9	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	50	54	1.01	1.09	8	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	51	0.519	0.534	3	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	55	0.537	0.595	11	NA	± 30 %	AverageRF
2-Hexanone	250	260	0.411	0.423	3	NA	± 30 %	AverageRF
Dibromochloromethane	50	56	0.499	0.558	12	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	53	0.538	0.574	7	NA	± 30 %	AverageRF
† Chlorobenzene	50	54	1.73	1.87	8	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	54	0.701	0.759	8	NA	± 30 %	AverageRF
‡ Ethylbenzene	50	56	2.89	3.21	11	NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
ICAL Date: 11/13/2002
Date Analyzed: 11/13/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL353
Units: ug/L

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
m,p-Xylenes	100	110	2.24	2.54	14	NA	± 30 %	AverageRF
o-Xylene	50	55	2.42	2.67	10	NA	± 30 %	AverageRF
Styrene	50	54	1.87	2.03	8	NA	± 30 %	AverageRF
† Bromoform	50	52	0.468	0.491	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	51	0.673	0.686	2	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	49	0.197	0.194	-1	NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	55	0.193	0.211	10	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	53	1.43	1.52	6	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	54	1.45	1.55	7	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	53	1.39	1.48	6	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	51	0.106	0.108	2	NA	± 30 %	AverageRF
Naphthalene	50	51	1.29	1.30	1	NA	± 30 %	AverageRF

ıts flagged with an asterisk (*) indicate values outside control criteria.
CC Compound ‡ CCC Compound

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

Service Request: J2203633
Date Analyzed: 11/14/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 11/13/2002
ICAL ID: CAL353
Analysis Lot: JWG0201113
Units: ug/L

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L14.B\1114-02.D

Column ID: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	45	0.01	0.361	0.328	-9	NA	± 30 %	AverageRF
† Chloromethane	50	48	0.1	0.578	0.556	-4	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	45	0.01	0.411	0.371	-10	NA	± 20 %	AverageRF
Bromomethane	50	50	0.01	0.259	0.261	1	NA	± 30 %	AverageRF
Chloroethane	50	56	0.01	0.226	0.253	12	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	43	0.01	0.558	0.478	-14	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	48	0.01	0.272	0.261	-4	NA	± 20 %	AverageRF
Acetone	250	190	0.01	0.0910	0.0676	-26	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	260	0.01	0.499	0.528	6	NA	± 30 %	AverageRF
Carbon Disulfide	250	250	0.01	0.964	0.960	0	NA	± 30 %	AverageRF
Methylene Chloride	50	44	0.01	0.344	0.302	-12	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	47	0.01	0.313	0.293	-6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	45	0.1	0.614	0.548	-11	NA	± 30 %	AverageRF
[illegible]nyl Acetate	250	230	0.01	0.534	0.485	-9	NA	± 30 %	Averag[illegible]
[illegible]-1,2-Dichloroethene	50	47	0.01	0.320	0.299	-7	NA	± 30 %	Averag[illegible]
2-Butanone (MEK)	250	180	0.01	0.137	0.0963	-30	NA	± 30 %	AverageRF
Bromochloromethane	50	47	0.01	0.149	0.140	-7	NA	± 30 %	AverageRF
Methacrylonitrile	50	43	0.01	0.102	0.0875	-15	NA	± 30 %	AverageRF
‡ Chloroform	50	47	0.01	0.558	0.529	-5	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	47	0.01	0.526	0.489	-7	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	47	0.01	0.447	0.424	-5	NA	± 30 %	AverageRF
Benzene	50	48	0.01	1.20	1.16	-3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	46	0.01	0.459	0.425	-8	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	49	0.01	0.311	0.307	-1	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	50	0.01	0.329	0.327	-1	NA	± 20 %	AverageRF
Dibromomethane	50	48	0.01	0.359	0.344	-4	NA	± 30 %	AverageRF
Bromodichloromethane	50	46	0.01	0.448	0.415	-7	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	47	0.01	1.09	1.03	-5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	200	0.01	0.618	0.491	-20	NA	± 30 %	AverageRF
‡ Toluene	50	51	0.01	2.56	2.61	2	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	50	46	0.01	1.01	0.929	-8	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	46	0.01	0.519	0.482	-7	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	53	0.01	0.537	0.567	6	NA	± 30 %	AverageRF
2-Hexanone	250	200	0.01	0.411	0.325	-21	NA	± 30 %	AverageRF
Dibromochloromethane	50	48	0.01	0.499	0.476	-5	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	47	0.01	0.538	0.506	-6	NA	± 30 %	AverageRF
† Chlorobenzene	50	52	0.3	1.73	1.82	5	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	49	0.01	0.701	0.687	-2	NA	± 30 %	AverageRF

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

† SPCC Compound ‡ CCC Compound

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

Service Request: J2203633
Date Analyzed: 11/14/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 11/13/2002
ICAL ID: CAL353
Analysis Lot: JWG0201113
Units: ug/L

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
‡ Ethylbenzene	50	52	0.01	2.89	3.02	5		NA	± 20 %	AverageRF
m,p-Xylenes	100	110	0.01	2.24	2.52	12		NA	± 30 %	AverageRF
o-Xylene	50	55	0.01	2.42	2.66	10		NA	± 30 %	AverageRF
Styrene	50	55	0.01	1.87	2.07	10		NA	± 30 %	AverageRF
† Bromoform	50	42	0.1	0.468	0.397	-15		NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	44	0.3	0.673	0.595	-12		NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	39	0.01	0.197	0.153	-22		NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	25	0.01	0.193	0.0976	-49	*	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	51	0.01	1.43	1.47	3		NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	51	0.01	1.45	1.48	2		NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	49	0.01	1.39	1.36	-2		NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	31	0.01	0.106	0.0666	-37	*	NA	± 30 %	AverageRF
Naphthalene	50	34	0.01	1.29	0.864	-33	*	NA	± 30 %	AverageRF
1,2-Dichloroethane-d4	50	42		0.324	0.270	-17		NA	± 30 %	AverageRF
4-Bromofluorobenzene	50	47		0.820	0.766	-7		NA	± 30 %	AverageRF
Bromofluoromethane	50	48		0.263	0.250	-5		NA	± 30 %	AverageRF
Toluene-d8	50	51		1.74	1.79	3		NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
Date Analyzed: 11/19/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 11/13/2002
ICAL ID: CAL353
Analysis Lot: JWG0201134
Units: ug/L

File ID: \\JAX1\ORGANICS\MS52\DATA\MS522L19.B\1119-02.D

Column ID: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	47	0.01	0.361	0.340	-6	NA	± 30 %	AverageRF
† Chloromethane	50	49	0.1	0.578	0.561	-3	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	49	0.01	0.411	0.403	-2	NA	± 20 %	AverageRF
Bromomethane	50	39	0.01	0.259	0.204	-21	NA	± 30 %	AverageRF
Chloroethane	50	50	0.01	0.226	0.225	0	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	45	0.01	0.558	0.499	-11	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	45	0.01	0.272	0.244	-11	NA	± 20 %	AverageRF
Acetone	250	260	0.01	0.0910	0.0944	4	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	180	0.01	0.499	0.361	-28	NA	± 30 %	AverageRF
Carbon Disulfide	250	270	0.01	0.964	1.04	8	NA	± 30 %	AverageRF
Methylene Chloride	50	42	0.01	0.344	0.288	-16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	43	0.01	0.313	0.269	-14	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	50	0.1	0.614	0.610	-1	NA	± 30 %	AverageRF
yl Acetate	250	310	0.01	0.534	0.652	22	NA	± 30 %	Averag
-1,2-Dichloroethene	50	46	0.01	0.320	0.292	-9	NA	± 30 %	Averag
2-Butanone (MEK)	250	260	0.01	0.137	0.145	6	NA	± 30 %	AverageRF
Bromochloromethane	50	47	0.01	0.149	0.140	-6	NA	± 30 %	AverageRF
Methacrylonitrile	50	57	0.01	0.102	0.117	14	NA	± 30 %	AverageRF
‡ Chloroform	50	51	0.01	0.558	0.569	2	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	47	0.01	0.526	0.492	-6	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	47	0.01	0.447	0.418	-6	NA	± 30 %	AverageRF
Benzene	50	56	0.01	1.20	1.35	12	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	55	0.01	0.459	0.507	10	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	51	0.01	0.311	0.317	2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	59	0.01	0.329	0.391	19	NA	± 20 %	AverageRF
Dibromomethane	50	54	0.01	0.359	0.389	8	NA	± 30 %	AverageRF
Bromodichloromethane	50	53	0.01	0.448	0.471	5	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	55	0.01	1.09	1.20	10	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	300	0.01	0.618	0.751	22	NA	± 30 %	AverageRF
‡ Toluene	50	56	0.01	2.56	2.86	12	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	50	54	0.01	1.01	1.10	9	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	53	0.01	0.519	0.553	6	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	49	0.01	0.537	0.532	-1	NA	± 30 %	AverageRF
2-Hexanone	250	300	0.01	0.411	0.500	22	NA	± 30 %	AverageRF
Dibromochloromethane	50	49	0.01	0.499	0.487	-3	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	51	0.01	0.538	0.554	3	NA	± 30 %	AverageRF
† Chlorobenzene	50	52	0.3	1.73	1.82	5	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	47	0.01	0.701	0.652	-7	NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203633
Date Analyzed: 11/19/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 11/13/2002
ICAL ID: CAL353
Analysis Lot: JWG0201134
Units: ug/L

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
‡ Ethylbenzene	50	56	0.01	2.89	3.21	11	NA	± 20 %	AverageRF
m,p-Xylenes	100	110	0.01	2.24	2.51	12	NA	± 30 %	AverageRF
o-Xylene	50	54	0.01	2.42	2.60	7	NA	± 30 %	AverageRF
Styrene	50	55	0.01	1.87	2.05	9	NA	± 30 %	AverageRF
† Bromoform	50	44	0.1	0.468	0.416	-11	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	54	0.3	0.673	0.724	8	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	54	0.01	0.197	0.214	9	NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	50	0.01	0.193	0.193	0	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	54	0.01	1.43	1.55	8	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	55	0.01	1.45	1.61	11	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	53	0.01	1.39	1.48	7	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	58	0.01	0.106	0.122	16	NA	± 30 %	AverageRF
Naphthalene	50	62	0.01	1.29	1.60	24	NA	± 30 %	AverageRF
1,2-Dichloroethane-d4	50	48		0.324	0.310	-4	NA	± 30 %	AverageRF
Bromofluorobenzene	50	49		0.820	0.807	-2	NA	± 30 %	AverageRF
romofluoromethane	50	44		0.263	0.230	-13	NA	± 30 %	AverageRF
luene-d8	50	51		1.74	1.78	2	NA	± 30 %	AverageRF

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

CC Compound

‡ CCC Compound

Analytical Services inc.
An Employee-Owned Company

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

Chain of Custody Documentation

Columbia Analytical Services

CONDITION UPON RECEIPT FORM

Client: J. A. JONES

Project name: KINGS BAY

Date received: 11/7/02 13:22

Service request number: J2203633

Received by: CF

CUR completed by: CF

Cooler/Shipping Information:

Courier: ☐ CAS ☑ Client ☐ UPS ☐ Airborne ☐ FedEx ☐ Other (describe):

Type: ☑ Cooler ☐ Box ☐ Other (describe)

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID	1				
Temp (°C)	1.6				
Temp taken from	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle
Temp measured with	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):

Other Information:

Any "NO" responses or discrepancies should be explained in the "Comments" section below or an NCM if so required. If an NCM was initiated, write the NCM number in the appropriate space.

CHECKLIST	YES	NO	NA	NCM #
1. Were custody seals on shipping container(s) intact? **If "No", NCM required.**	✓			
2. Were custody papers properly included with samples?	✓			
3. Were custody papers properly filled out (ink, signed, match labels)?	✓			
4. Did all bottles arrive in good condition (unbroken)?	✓			
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓			
6. Did the sample labels agree with the chain of custody?	✓			
7. Were correct bottles used for the tests indicated?	✓			
8. Were proper sample preservation techniques indicated on the label?	✓			
9. Were samples received within holding times? **If "No," NCM required.**	✓			
10. Were all VOA vials checked for the presence of air bubbles? **If "No", NCM required.**	✓			
11. Were there air bubbles present in the VOA vials? **If "Yes", NCM required.**	✓			
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓			
13. Was the cooler temperature less than 6°C?	✓			
14. Were sample pHs checked and recorded by Sample control? Checks are on reverse side of form. *NOTE: VOA samples are checked by laboratory analysts.*				
15. Were the sample containers provided by CAS?	✓			
16. Were samples accepted into the laboratory?	✓			

Comments:

11. KBA-11-[illegible]-NOV-5-02 - small air bubble (A1)
KBA-11-16-NOV-5-02 - med. air bubble (A1)
KBA-11-16-NOV-5-02 - med air bubble (A3)

Columbia Analytical Services™

Jacksonville Laborato
Condition Upon Receipt - Sample

SR #: J 2203633 Date: 11/7/02 Initials: CG

A check mark in any space under the appropriate column headings for the selected sample indicates that the pH was checked and met the required pH criterion listed in the column heading.

	Bottle Code																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	40-mL	40-mL	125-mL	250-mL	500-mL	1-L	250-mL	1-L	2-oz	4-oz	8-oz	16-oz	5 g	100-mL	250-mL	500-mL	1-L	1-L	250-mL	500-mL	1-L	250-mL	250-mL	1.75-L	500-mL	Misc.
Container	G	G	P	P	P	P	G	G	G	G	G	G	ENC	P	P	P	P	G	P	P	P	G	P	P	P	Misc.
Pres.	HCl		HCl											Sodium Thiosulfate	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	HNO3	HNO3	NaOH	NaOH	ZnAcetate NaOH	
Req. pH	<2	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2	<2	<2	<2	>12	>12	>9	N/A
Sample #	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
-001	3																									
-002	3																									
-003	3																									
-004	3																									
-005	3																									
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-039																										
-040																										

64

For aqueou samples with multiple containers, only 1 bottle is checked for pH
NOTE: V checks are performed by the analytical area, not sample 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 1 OF 2

SF
C J2203633

Project Name: Kings Bay GA
Project Number: Site 11
Project Manager: Cafuy
Report CC: Cafuy
Company/Address: J.A. Jones Mgt Services, P.O Box 47248, Kings 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	Site 11 Groundwater Pollution Monitoring to include Naphthalene	REMARKS/ ALTERNATE DESCRIPTION
KBA-11-02-NOV-5-02		11-5-02	0900	WATER	3	✓	
KBA-11-PS2-NOV-5-02		11-5-02	0940	WATER	3	✓	
KBA-11-16-NOV-5-02		11-5-02	1040	WATER	3	✓	
KBA-11-37-NOV-5-02		11-5-02	1135	WATER	3	✓	
KBA-11-34-NOV-5-02		11-5-02	1345	WATER	3	✓	
KBA-11-13A-NOV-6-02	REG	11-6-02	0840	WATER	3	✓	
KBA-11-13A-NOV-6-02	DUP	11-6-02	0843	WATER	3	✓	
KBA-11-13A-NOV-6-02	MS/MSD	11-6-02	0846	WATER	3	✓	
KBA-11-13A-NOV-6-02	RINSATE	11-6-02	0855	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 _____

SPECIAL INSTRUCTIONS/COMMENTS

to include Naphthalene

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE: 21 Nov 2002
REQUESTED REPORT DATE: 21 Nov 2002

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
PO# 19865314
BILL TO: J.A. Jones Mgt. Ser. P.O 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: Glenn Drawdy	Signature	Signature: Chris Jackson	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: GLENN DRAWDY	Printed Name	Printed Name	Printed Name	Printed Name
Firm: J.A. Jones	Firm: JA JONES	Firm	Firm: CAS	Firm	Firm
Date/Time: 11-7-02 / 0735	Date/Time: 11-7-2 7:38	Date/Time	Date/Time: 11/7/02 1322	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

Columbia Analytical Services, Inc.
An Employee-Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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SR #

CAS Contact

Project Name: NSB Kings Bay, Ga	Project Number: Site 11
Project Manager: Cafy	Report CC: Cafy
Company/Address: J.A. Jones Mgt Services, P.O Box 47248, Kings Bay, Ga 31547	
Phone #: 912-673-2001 ext. 8526	FAX#: 912-673-4037
Sampler's Signature: Tommy Bryant	Sampler's Printed Name: TOMMY BRYANT

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

NUMBER OF CONTAINERS: Site 11 Groundwater Protection Standards to include Napthalene

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 _____

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	REMARKS/ ALTERNATE DESCRIPTION
KBA122PLTCT NOV-6-02	REG.	11-6-02	0925	WATER	3	✓
KBA122PLTCT NOV-6-02	DUP.	11-6-02	0928	WATER	3	✓
KBA122PLTCT NOV-6-02	MS/MSD	11-6-02	0940	WATER	3	✓
KBA102PLTCT NOV-6-02		11-6-02	0950	WATER	3	✓

Cancelled per client. 11/8/02

SPECIAL INSTRUCTIONS/COMMENTS

to include Napthalene

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE: 21 NOV 2002
REQUESTED REPORT DATE: 21 NOV 2002

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
19065314
PO#: J.A. Jones Mgt Ser
BILL TO: P.O Box 47248, Kings Bay, Ga 31537

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: Glenn Drawdy	Signature	Signature: Chris Ferguson	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: GLENN DRAWDY	Printed Name	Printed Name	Printed Name	Printed Name
Firm: J.A. Jones	Firm: JA JONES	Firm	Firm: CAS	Firm	Firm
Date/Time: 11-7-02 0735	Date/Time: 11-7-02 7:38	Date/Time	Date/Time: 11/7/02 13:37	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC 1000.07

Columbia Analytical Services INC.
An Employee-Owned Company

November 06, 2002

Service Request No. J2203500

Fred Coley
JA Jones Management Services
P.O. Box 47248
Kings Bay, GA 31547

RE: Test Report for
Project No.: Site 11
Project Name: NSB Kings Bay

Dear Fred Coley:

Enclosed are the results of the samples(s) submitted to our laboratory on October 23, 2002. For your reference, these analyses have been assigned our service request number: J2203500.

All analyses were performed according to our laboratory's quality assurance program. NELAP requirements were met unless footnotes in each sample report indicate otherwise. Estimates regarding the degree of uncertainty in measurements can be inferred from the accuracy limits in the laboratory QA manual. However, these limits do not account for possible matrix effects. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted,

Columbia Analytical Services, Inc.

Alex Olis
Project Manager

CAS Jacksonville is NELAC-accredited by the State of Florida (E82502). Other state accreditations include: LA, AI 30759; MA, M-FL937; NC, 527; SC, 96021; WA, C278.

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Non-CLP Tier IV (Tier III w/ Raw Data)

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Sample Results	041
Chain of Custody Documentation	066

This report contains a total of 071 pages

Data Qualifiers

Inorganic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	The tentatively identified compound is a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.

C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Petroleum Hydrocarbon Specific

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Columbia Analytical Services

CONDITION UPON RECEIPT FORM

Client: JA Jones **Project name:** NSB Kings Bay

Date received: 10/23/02 1300 **Service request number:** J2203500

Received by: [illegible] **CUR completed by:** [illegible]

Cooler/Shipping Information:

Courier: ☐ CAS ☑ Client ☐ UPS ☐ Airborne ☐ FedEx ☐ Other (describe):

Type: ☑ Cooler ☑ Box ☐ Other (describe)

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID	1				
Temp (°C)	38				
Temp taken from	☐ Temp blank ☑ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle
Temp measured with	☑ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):

Other Information:

Any "NO" responses or discrepancies should be explained in the "Comments" section below or an NCM if so required. If an NCM was initiated, write the NCM number in the appropriate space.

CHECKLIST	YES	NO	NA	NCM #
1. Were custody seals on shipping container(s) intact? **If "No", NCM required.**	✓			
2. Were custody papers properly included with samples?	✓			
3. Were custody papers properly filled out (ink, signed, match labels)?	✓			
4. Did all bottles arrive in good condition (unbroken)?	✓			
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓			
6. Did the sample labels agree with the chain of custody?	✓			
7. Were correct bottles used for the tests indicated?	✓			
8. Were proper sample preservation techniques indicated on the label?	✓			
9. Were samples received within holding times? **If "No," NCM required.**	✓			
10. Were all VOA vials checked for the presence of air bubbles? **If "No", NCM required.**	✓			
11. Were there air bubbles present in the VOA vials? **If "Yes", NCM required.**		✓		
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓			
13. Was the cooler temperature less than 6°C?	✓			
14. Were sample pHs checked and recorded by Sample control? Checks are on reverse side of form. *NOTE: VOA samples are checked by laboratory analysts.*			✓	
15. Were the sample containers provided by CAS?	✓	✓		
16. Were samples accepted into the laboratory?	✓			

Comments:

Analytical Services

SR #: J 2203500

Date: 10/23/02

Initials: AB

Condition Upon Receipt - Sample pH

A check mark in any space under the appropriate column headings for the selected sample indicates that the pH was checked and met the required pH criterion listed in the column heading.

	Bottle Code																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	40-mL	40-mL	125-mL	250-mL	500-mL	1-L	250-mL	1-L	2-oz	4-oz	8-oz	16-oz	5 g	100-mL	250-mL	500-mL	1-L	1-L	250-mL	500-mL	1-L	250-mL	250-mL	1.75-L	500-mL	Misc.
Container	G	G	P	P	P	P	G	G	G	G	G	G	ENC	P	P	P	P	G	P	P	P	G	P	P	P	Misc
Pres.	HCl		HCl											Sodium Thiosulfate	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	HNO3	HNO3	NaOH	NaOH	ZnAcetate NaOH	
Req. pH	<2	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2	<2	<2	<2	>12	>12	>9	N/A
Sample #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-001	6																									
-002	3																									
-003	3																									
-004																										1
-005																										1
-006																										
-007																										
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-032																										
-033																										
-034																										
-035																										
-036																										
-037																										
-038																										
-039																										
-040																										

or aqueous samples multiple containers, only 1 bottle is checked for pH
OTE: VOA pH chec erformed by the analytical area, not sample control

Q:\Forms\Sample Receiving\CUR Prints

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

CAS Contact: J22035u0

Project Name: NSB Kings Bay, Ga	Project Number: Site 11 irrigation well
Project Manager: Coby	Report CC: Coby
Company/Address: TA Jones Mgt Svc, P.O. Box 47248, Kings 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 Key: 0. NONE 1. HCL 2. HNO_3 3. H_2SO_4 4. NaOH 5. Zn. Acetate 6. MeOH 7. $NaHSO_4$ 8. Other _____

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GPS to include Naphthalene	TCLP Metals Lead	Chromium	Cadmium	Barium	REMARKS/ ALTERNATE DESCRIPTION
KB122PLTCT-OCT-02	REG.	10/22/02	1300	Water	3	✓ ✓ ✓					
KB122PLTCT-OCT-02	DUP.	10/22/02	1305	✓	3	✓ ✓ ✓					
KB122PLTCT-OCT-02	MS/MSD	10/22/02	1310	✓	3	✓ ✓ ✓					
KB102PLTCT-OCT-02		10/22/02	1330	✓	3	✓ ✓ ✓					
LEPB-SJB-OCT-02		10/22/02	1000	Solid	1		✓ ✓	✓	✓	✓	
CSA-SJB-OCT-02		10/22/02	1045	Solid	1		✓ ✓	✓	✓	✓	
											19065308

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE _____
REQUESTED REPORT DATE 8 NOV 2002

REPORT REQUIREMENTS
1 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
19065309
PO# TA Jones Mgt Svc
BILL TO: P.O. 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: Glenn L Drawdy	Signature	Signature: April Ferguson	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: GLENN L DRAWDY	Printed Name	Printed Name: April Ferguson	Printed Name	Printed Name
Firm: TA Jones	Firm	Firm	Firm: CAS	Firm	Firm
Date/Time: 10/23/02 0740	Date/Time	Date/Time	Date/Time: 10/23/02 1300	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1000-07

J.A. JONES
MANAGEMENT SERVICES

MATERIAL/SERVICES REQUISITION 065308

ANNEX: 19 | SERVICE CHIT NO./WORK ORDER NO.: 646735 | DO-0044 | NSB KINGS BAY, GA

DATE SUBMITTED	REQUIRED DELIVERY DATE	REQUIRED COMPLETION DATE	SI S2 MI M2
10-21-2002	8 Nov 2002	8 Nov 2002	

REQUESTER	DEPARTMENT	PHONE NO. EXT.	SUPPLY DELIVER TO BLDG. NO.
Coby	19	8536	6020

SUGGESTED VENDOR	CONTACT NAME	PHONE NO.	FAX NO.
Columbia Analytical		904-739-2277	904-739-2011

ITEM NO.	ORDER QTY.	UNIT OF MEASURE	STOCK-PART NUMBER	COMPLETE DESCRIPTION	EST. PRICE	PURCHASE PRICE UNIT	PURCHASE PRICE EXTN.
1	2	ea	Sampling	Analyze samples for			
				TCLP			
				• Lead			
				• Chromium			
				• Cadmium			
				• Barium			
					$280.00		

VENDOR #	COMMENTS:	SUBTOTAL		
VENDOR (FOR PURCHASING USE ONLY)		% TAX		
		FREIGHT		
		TOTAL		

PURCHASE ORDER #	P.O. DATE	DELIVERY/PICKUP DATE
BUYER:	CONFIRMED ORDER TO:	

SUPERVISOR: Coby — DATE: 10 18 02
MANAGER — DATE: / /
DIVISION MANAGER — DATE: / /
GENERAL MANAGER — DATE: / /

SUPPLY DEPARTMENT TIME STAMP: SD 10-23 1300

TYPE OF BUSINESS
( ) LARGE BUSINESS
( ) SMALL BUSINESS
( ) DISADVAN. BUSINESS
( ) SM. WOMEN OWNED
( ) DISADVAN. WOMEN

TERMS
( ) DISCOUNT TERMS
( ) NET 30
( ) PREPAY
( ) C.O.D.
( ) PETTY CASH
( ) OTHER

FREIGHT
( ) PREPAY & ADD
( ) K.B.N.F.
( ) THIRD PARTY BILLING

F.O.B.
( ) ORIGIN
( ) KINGS BAY, GA

MODE OF SHIPMENT
( ) VENDOR DELIVERY
( ) UPS GROUND
( ) PICKUP, WILL CALL
( ) MOTOR FREIGHT
( ) AIR FREIGHT
( ) U.S. MAIL/FAX
( ) SUBCONTRACT

PURCHASING TIME STAMP:

WHITE-PURCHASING YELLOW-EXPEDITOR PINK-SUPPLY GOLDENROD-ORIGINATOR

J.A. JONES
MANAGEMENT SERVICES

MATERIAL/SERVICES REQUISITION

065309

ANNEX: 19 | SERVICE CHIT NO./WORK ORDER NO.: 574670 | NSB KINGS BAY,

DATE SUBMITTED	REQUIRED DELIVERY DATE	REQUIRED COMPLETION DATE	SI S2 MI M2
10-21-2002	8 NOV 2002	8 NOV 2002	

REQUESTER	DEPARTMENT	PHONE NO. EXT.	SUPPLY DELIVER TO BLDG. NO.
Coley	19	8536	6020

SUGGESTED VENDOR	CONTACT NAME	PHONE NO.	FAX NO.
Columbia Analytical		904-739-2277	904-739-2011

ITEM NO.	ORDER QTY.	UNIT OF MEASURE	STOCK-PART NUMBER	COMPLETE DESCRIPTION	EST. PRICE	PURCHASE PRICE UNIT	PURCHASE PRICE EXTN.
1	~~3~~ 4	EA	Samples	Analyze monitor well samples for Groundwater Protection Standards to include Naphthalene			
					300.0		
					~~225.00~~		

VENDOR #	COMMENTS:	SUBTOTAL	
VENDOR (FOR PURCHASING USE ONLY)		% TAX	
		FREIGHT	
		TOTAL	

PURCHASE ORDER #	P.O. DATE	DELIVERY/PICKUP DATE
BUYER:	CONFIRMED ORDER TO:	

SUPERVISOR: Coley DATE 10/21/02

MANAGER: DATE / /

DIVISION MANAGER: DATE / /

GENERAL MANAGER: DATE / /

TYPE OF BUSINESS
( ) LARGE BUSINESS
( ) SMALL BUSINESS
( ) DISADVAN. BUSINESS
( ) SM. WOMEN OWNED
( ) DISADVAN. WOMEN

TERMS
( ) DISCOUNT TERMS
( ) NET 30
( ) PREPAY
( ) C.O.D.
( ) PETTY CASH
( ) OTHER

FREIGHT
( ) PREPAY & ADD
( ) K.B.N.F.
( ) THIRD PARTY BILLING

F.O.B.
( ) ORIGIN
( ) KINGS BAY, GA

MODE OF SHIPMENT
( ) VENDOR DELIVERY
( ) UPS GROUND
( ) PICKUP, WILL CALL
( ) MOTOR FREIGHT
( ) AIR FREIGHT
( ) U.S. MAIL/FAX
( ) SUBCONTRACT

PURCHASING TIME STAMP:

SUPPLY DEPARTMENT TIME STAMP:
ND 10-23 7:44

WHITE-PURCHASING YELLOW-EXPEDITOR PINK-SUPPLY GOLDENROD-ORIGINATOR

Columbia Analytical Services INC.
An Employee-Owned Company

November 06, 2002

Service Request No. J2203500

Fred Coley
JA Jones Management Services
P.O. Box 47248
Kings Bay, GA 31547

RE: Test Report for
Project No.: Site 11
Project Name: NSB Kings Bay

Dear Fred Coley:

Enclosed are the results of the samples(s) submitted to our laboratory on October 23, 2002. For your reference, these analyses have been assigned our service request number: J2203500.

All analyses were performed according to our laboratory's quality assurance program. NELAP requirements were met unless footnotes in each sample report indicate otherwise. Estimates regarding the degree of uncertainty in measurements can be inferred from the accuracy limits in the laboratory QA manual. However, these limits do not account for possible matrix effects. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted,

Columbia Analytical Services, Inc.

Alex Olis
Project Manager

CAS Jacksonville is NELAC-accredited by the State of Florida (E82502). Other state accreditations include: LA, AI 30759; MA, M-FL937; NC, 527; SC, 96021; WA, C278.

8540 Baycenter Rd. ▪ Jacksonville, FL 32256 ▪ (904) 739-2277 ▪ Fax (904) 739-2011

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This report contains a total of 071 pages

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E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
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M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
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Organic Data

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B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.

C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.

D The reported result is from a dilution.

E The result is an estimated amount because the value exceeded the instrument calibration range.

J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.

P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)

U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.

i The MRL/MDL has been elevated due to a chromatographic interference.

X See case narrative.

Petroleum Hydrocarbon Specific

F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.

L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.

H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.

O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.

Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Z The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

SAMPLE CROSS-REFERENCE

J2203500

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J2203500-001	KB122PLTCT 10/02 MS	10/22/2002	13:00
J2203500-001	KB122PLTCT 10/02 MSD	10/22/2002	13:00
J2203500-001	KB122PLTCT 10/02	10/22/2002	13:00
J2203500-002	KB122PLTCT 10/02 DUP	10/22/2002	13:05
J2203500-003	KB102PLTCT 10/02	10/22/2002	13:30
J2203500-004	LEPB-SJB-OCT-02	10/22/2002	10:00
J2203500-005	CSA-SJB-OCT-02	10/22/2002	10:45

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

GC/MS Volatiles

Organics Data Review and Narrative Worksheet

Service Request: J2203500 Date: November 5, 2002

Product Code: 8260 Matrix: Water

Yes ☒ No ☐	Are all samples analyzed within hold times?
Yes ☒ No ☐ NA ☐	Are all samples analyzed within an acceptable GC/MS tune window?
Yes ☐ No ☒	Are all calibrations within primary evaluation criteria (including RRF checks)?
Yes ☒ No ☐	Are Second Source standards within primary evaluation criteria?
Yes ☐ No ☒	Are CCVs within primary evaluation criteria (including RRF Checks)?
Yes ☒ No ☐	Are method blanks <MRL or less than 5% of the sample results?
Yes ☒ No ☐	Are all surrogate recoveries within control criteria?
Yes ☒ No ☐ NA ☐	Are all internal standard recoveries within control criteria?
Yes ☒ No ☐	Are all spike recoveries in MS/DMS samples within control criteria?
Yes ☒ No ☐	Are all MS/DMS or DUP RPDs within control criteria?
Yes ☐ No ☒	Are all LCS recoveries within control criteria?
Yes ☐ No ☐ NA ☐	Are RPDs for LCS/DLCS within control criteria?
Yes ☒ No ☐	Are all confirmation results within advisory limits (explain all C, P, and N Flags)?
Yes ☒ No ☐	Have MRLs been achieved in all samples (note dilutions and matrix interferences)?
Yes ☒ No ☐	All results over the calibration range have been reanalyzed at a dilution?
Yes ☒ No ☐	No other discussion required (discuss X flags and other anomalies as needed)?
	Batch QC ☐ No Problems to Discuss ☐

For "No" responses see case narrative below.

Signature: Diane Weigel Name:

Date: 11/5/02 Title:

File Path: R:\VOA\Casenarrative\J2203500_8260.doc

2

Data Validation Notes and Discussion

Initial Calibration Exceptions

The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL 342: trans-1, 3-Dichloropropene, Styrene, Bromoform, and Naphthalene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the calibration. The calibration meets the alternative evaluation criteria. These analytes all had %D <30%.

Continuing Calibration Verification Exceptions

The upper control criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) JWG0201045-2: Styrene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Lab Control Sample Exceptions

The spike recovery of Vinyl Acetate for Laboratory Control Sample (LCS) JWG0201046-3 was outside the lower control criterion (74% versus a criterion of 77%). The analyte in question was not detected in the associated field samples. The error associated with reduced recovery equates to a potential low bias. The data is flagged to indicate the problem.

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

Service Request: J2203500

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds by GC/MS

Sample Name	Lab Code	Date Collected	Date Received
KB122PLTCT 10/02	J2203500-001	10/22/2002	10/23/2002
KB122PLTCT 10/02 DUP	J2203500-002	10/22/2002	10/23/2002
KB102PLTCT 10/02	J2203500-003	10/22/2002	10/23/2002
KB122PLTCT 10/02MS	JWG0201046-1	10/22/2002	10/23/2002
KB122PLTCT 10/02DMS	JWG0201046-2	10/22/2002	10/23/2002

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Martha Monte

Name: Martha Monteu

Date: 11/5/02

Title: Operation Manager

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
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2203500
Date Collected: 10/22/2002
Date Received: 10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB122PLTCT 10/02
Lab Code: J2203500-001

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	10/30/02	10/31/02	JWG0201046	
Chloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Chloride	**5.3**		1.0	1	10/30/02	10/31/02	JWG0201046	
Bromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichlorofluoromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Acetone	ND	U	50	1	10/30/02	10/31/02	JWG0201046	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Disulfide	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Methylene Chloride	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Acetate	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
2-Butanone (MEK)	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Bromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Methacrylonitrile	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Chloroform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Tetrachloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Benzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichloroethene (TCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Dibromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromodichloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Toluene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2-Trichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	

Comments:

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Collected:**	10/22/2002
Sample Matrix:	Water	**Date Received:**	10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 10/02	**Units:**	ug/L
Lab Code:	J2203500-001	**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
2-Hexanone	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Dibromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Ethylbenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
m,p-Xylenes	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
o-Xylene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Styrene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromoform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2,3-Trichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,4-Dichloro-2-butene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
1,3-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,4-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Naphthalene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	56-147	10/31/02	Acceptable
4-Bromofluorobenzene	100	61-133	10/31/02	Acceptable
Dibromofluoromethane	94	65-136	10/31/02	Acceptable
Toluene-d8	95	80-120	10/31/02	Acceptable

nments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Collected:**	10/22/2002
Sample Matrix:	Water	**Date Received:**	10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 10/02 DUP	**Units:**	ug/L
Lab Code:	J2203500-002	**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	10/30/02	10/31/02	JWG0201046	
Chloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Chloride	**5.1**		1.0	1	10/30/02	10/31/02	JWG0201046	
Bromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichlorofluoromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Acetone	ND	U	50	1	10/30/02	10/31/02	JWG0201046	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Disulfide	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Methylene Chloride	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Acetate	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
2-Butanone (MEK)	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Bromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Methacrylonitrile	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Chloroform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Tetrachloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Benzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichloroethene (TCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Dibromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromodichloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Toluene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2-Trichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Collected:**	10/22/2002
Sample Matrix:	Water	**Date Received:**	10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 10/02 DUP	**Units:**	ug/L
Lab Code:	J2203500-002	**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
2-Hexanone	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Dibromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Ethylbenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
m,p-Xylenes	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
o-Xylene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Styrene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromoform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
3-Trichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
s-1,4-Dichloro-2-butene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
,3-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,4-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Naphthalene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	56-147	10/31/02	Acceptable
4-Bromofluorobenzene	103	61-133	10/31/02	Acceptable
Dibromofluoromethane	93	65-136	10/31/02	Acceptable
Toluene-d8	83	80-120	10/31/02	Acceptable

ments:

Analytical Results

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

Service Request: J2203500
Date Collected: 10/22/2002
Date Received: 10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB102PLTCT 10/02
Lab Code: J2203500-003

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	10/30/02	10/31/02	JWG0201046	
Chloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Chloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichlorofluoromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Acetone	ND	U	50	1	10/30/02	10/31/02	JWG0201046	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Disulfide	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Methylene Chloride	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
·Dichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Acetate	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
2-Butanone (MEK)	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Bromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Methacrylonitrile	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Chloroform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Tetrachloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Benzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichloroethene (TCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Dibromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromodichloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Toluene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2-Trichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	

Comments:

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

Service Request: J2203500
Date Collected: 10/22/2002
Date Received: 10/23/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB102PLTCT 10/02
Lab Code: J2203500-003

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
2-Hexanone	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Dibromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Ethylbenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
m,p-Xylenes	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
o-Xylene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Styrene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromoform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
3-Trichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
is-1,4-Dichloro-2-butene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
,3-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,4-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Naphthalene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	10/31/02	Acceptable
4-Bromofluorobenzene	106	61-133	10/31/02	Acceptable
Dibromofluoromethane	86	65-136	10/31/02	Acceptable
Toluene-d8	97	80-120	10/31/02	Acceptable

nments:

Analytical Results

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

Service Request: J2203500
Date Collected: NA
Date Received: NA

Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0201046-4

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	10/30/02	10/31/02	JWG0201046	
Chloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Chloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichlorofluoromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Acetone	ND	U	50	1	10/30/02	10/31/02	JWG0201046	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Disulfide	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Methylene Chloride	ND	U	5.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Dichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Vinyl Acetate	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
2-Butanone (MEK)	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
Bromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Methacrylonitrile	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Chloroform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Carbon Tetrachloride	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Benzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Trichloroethene (TCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Dibromomethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromodichloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Toluene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2-Trichloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	

Comments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0201046-4	**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
2-Hexanone	ND	U	25	1	10/30/02	10/31/02	JWG0201046	
Dibromochloromethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Chlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Ethylbenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
m,p-Xylenes	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
o-Xylene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Styrene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
Bromoform	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2,3-Trichloropropane	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
cis-1,4-Dichloro-2-butene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	
1,3-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,4-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dichlorobenzene	ND	U	1.0	1	10/30/02	10/31/02	JWG0201046	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/30/02	10/31/02	JWG0201046	
Naphthalene	ND	U	10	1	10/30/02	10/31/02	JWG0201046	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	56-147	10/31/02	Acceptable
4-Bromofluorobenzene	99	61-133	10/31/02	Acceptable
Dibromofluoromethane	93	65-136	10/31/02	Acceptable
Toluene-d8	96	80-120	10/31/02	Acceptable

mments:

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

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: J2203500

Surrogate Recovery Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
KB122PLTCT 10/02	J2203500-001	97	100	94	95
KB122PLTCT 10/02 DUP	J2203500-002	100	103	93	83
KB102PLTCT 10/02	J2203500-003	90	106	86	97
Method Blank	JWG0201046-4	99	99	93	96
KB122PLTCT 10/02MS	JWG0201046-1	84	98	80	100
KB122PLTCT 10/02DMS	JWG0201046-2	101	100	95	92
Lab Control Sample	JWG0201046-3	99	103	95	88

Surrogate Recovery Control Limits (%)

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

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

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

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

Service Request: J2203500
Date Analyzed: 10/31/2002
Time Analyzed: 08:46

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\VOLATILES\MS52\DATA\MS522K30.B\1030-39.D
Instrument ID: MS52.i
Analysis Method: 8260B

Lab Code: JWG0201045-2
Analysis Lot: JWG02001045
Column : DB-624

		1,4-Dichlorobenzene-d4		Chlorobenzene-d5		Fluorobenzene	
		Area	RT	Area	RT	Area	RT
	Results ==>	737,854	11.75	551,858	9.43	1,225,844	6.29
	Upper Limit ==>	1,475,708	12.25	1,103,716	9.93	2,451,688	6.79
	Lower Limit ==>	368,927	11.25	275,929	8.93	612,922	5.79
	ICAL Result ==>	648,133	NA	581,221	NA	1,269,901	NA
Associated Analyses							
Lab Control Sample	JWG0201046-3	687,821	11.75	631,863	9.44	1,222,600	6.29
Method Blank	JWG0201046-4	615,022	11.75	582,881	9.43	1,171,298	6.29
KB122PLTCT 10/02	J2203500-001	565,608	11.75	502,290	9.43	1,132,089	6.30
KB122PLTCT 10/02 DUP	J2203500-002	562,720	11.75	575,179	9.44	1,119,427	6.29
KB102PLTCT 10/02	J2203500-003	578,898	11.75	570,558	9.44	1,265,863	6.29
KB122PLTCT 10/02MS	JWG0201046-1	730,871	11.75	662,547	9.44	1,383,574	6.29
KB122PLTCT 10/02DMS	JWG0201046-2	749,841	11.75	665,769	9.43	1,363,224	6.29

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

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/30/2002
Sample Matrix:	Water	**Date Analyzed:**	10/31/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 10/02	**Units:**	ug/L
Lab Code:	J2203500-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201046

		KB122PLTCT 10/02MS JWG0201046-1 Matrix Spike			KB122PLTCT 10/02DMS JWG0201046-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	23.2	20.0	116	22.5	20.0	113	80-135	3	30
Chloromethane	ND	23.3	20.0	116	22.1	20.0	111	70-139	5	30
Vinyl Chloride	5.3	27.8	20.0	112	27.6	20.0	111	80-133	1	30
Bromomethane	ND	23.1	20.0	116	24.4	20.0	122	78-138	5	30
Chloroethane	ND	21.1	20.0	105	24.1	20.0	121	66-148	13	30
Trichlorofluoromethane	ND	21.1	20.0	106	22.1	20.0	111	67-153	5	30
1,1-Dichloroethene	ND	21.6	20.0	108	22.7	20.0	113	77-122	5	30
Acetone	ND	112	100	112	121	100	121	58-149	8	30
methane (Methyl Iodide)	ND	93.5	100	94	97.7	100	98	78-137	4	30
bon Disulfide	ND	111	100	111	115	100	115	76-144	3	30
Methylene Chloride	ND	21.3	20.0	106	22.0	20.0	110	36-159	3	30
trans-1,2-Dichloroethene	ND	20.3	20.0	101	21.4	20.0	107	80-120	5	30
1,1-Dichloroethane	ND	21.2	20.0	106	23.4	20.0	117	80-120	10	30
Vinyl Acetate	ND	105	100	105	124	100	124	77-141	17	30
cis-1,2-Dichloroethene	ND	17.5	20.0	88	21.0	20.0	105	80-120	18	30
2-Butanone (MEK)	ND	88.1	100	88	110	100	110	63-142	22	30
Bromochloromethane	ND	17.7	20.0	88	20.9	20.0	105	80-120	17	30
Methacrylonitrile	ND	18.6	20.0	93	23.2	20.0	116	80-132	22	30
Chloroform	ND	17.3	20.0	87	20.4	20.0	102	80-120	16	30
1,1,1-Trichloroethane (TCA)	ND	16.8	20.0	84	19.9	20.0	99	80-121	17	30
Carbon Tetrachloride	ND	17.3	20.0	86	20.6	20.0	103	75-126	17	30
Benzene	ND	17.8	20.0	89	20.9	20.0	105	80-120	16	30
1,2-Dichloroethane (EDC)	ND	17.3	20.0	86	20.3	20.0	102	80-120	16	30
Trichloroethene (TCE)	ND	21.1	20.0	106	19.9	20.0	100	80-120	6	30
1,2-Dichloropropane	ND	21.8	20.0	109	20.5	20.0	103	80-120	6	30
Dibromomethane	ND	20.7	20.0	104	19.1	20.0	95	80-120	8	30
Bromodichloromethane	ND	21.5	20.0	107	20.0	20.0	100	80-124	7	30
cis-1,3-Dichloropropene	ND	19.6	20.0	98	18.2	20.0	91	78-120	7	30
4-Methyl-2-pentanone (MIBK)	ND	112	100	112	106	100	106	80-124	6	30
Toluene	ND	21.2	20.0	106	19.6	20.0	98	80-120	8	30
trans-1,3-Dichloropropene	ND	19.8	20.0	99	20.1	20.0	100	77-120	1	30
1,1,2-Trichloroethane	ND	21.2	20.0	106	20.9	20.0	105	80-120	1	30
Tetrachloroethene (PCE)	ND	20.4	20.0	102	20.3	20.0	101	78-120	0	30

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

..esults 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.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/30/2002
Sample Matrix:	Water	**Date Analyzed:**	10/31/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 10/02	**Units:**	ug/L
Lab Code:	J2203500-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201046

Analyte Name	Sample Result	KB122PLTCT 10/02MS JWG0201046-1 Matrix Spike			KB122PLTCT 10/02DMS JWG0201046-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
2-Hexanone	ND	116	100	116	119	100	119	75-125	2	30
Dibromochloromethane	ND	19.5	20.0	97	19.6	20.0	98	78-120	0	30
1,2-Dibromoethane (EDB)	ND	21.4	20.0	107	21.5	20.0	107	80-120	0	30
Chlorobenzene	ND	20.3	20.0	102	20.3	20.0	101	80-120	0	30
1,1,1,2-Tetrachloroethane	ND	19.5	20.0	97	19.5	20.0	97	80-120	0	30
Ethylbenzene	ND	21.3	20.0	106	21.1	20.0	106	80-120	1	30
m,p-Xylenes	ND	45.3	40.0	113	45.0	40.0	113	80-121	1	30
o-Xylene	ND	20.2	20.0	101	20.6	20.0	103	80-120	2	30
[illegible]ene	ND	20.4	20.0	102	20.7	20.0	104	80-120	2	30
Bromoform	ND	18.4	20.0	92	19.0	20.0	95	64-120	3	
1,1,2,2-Tetrachloroethane	ND	21.3	20.0	107	22.6	20.0	113	77-125	6	30
1,2,3-Trichloropropane	ND	22.0	20.0	110	22.8	20.0	114	77-120	4	30
trans-1,4-Dichloro-2-butene	ND	18.6	20.0	93	19.4	20.0	97	46-135	4	30
1,3-Dichlorobenzene	ND	19.6	20.0	98	19.4	20.0	97	80-120	1	30
1,4-Dichlorobenzene	ND	19.7	20.0	98	20.3	20.0	102	80-120	3	30
1,2-Dichlorobenzene	ND	19.8	20.0	99	19.6	20.0	98	80-120	1	30
1,2-Dibromo-3-chloropropane (DBCP	ND	19.8	20.0	99	18.6	20.0	93	48-135	6	30
Naphthalene	ND	19.7	20.0	99	19.9	20.0	100	65-125	1	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.

QA/QC Report

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

Service Request: J2203500
Date Extracted: 10/30/2002
Date Analyzed: 10/31/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0201046

Analyte Name	Lab Control Sample JWG0201046-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
Dichlorodifluoromethane	23.3	20.0	117	80-135
Chloromethane	22.1	20.0	110	70-139
Vinyl Chloride	22.9	20.0	114	80-133
Bromomethane	25.2	20.0	126	78-138
Chloroethane	23.9	20.0	119	66-148
Trichlorofluoromethane	23.4	20.0	117	67-153
1,1-Dichloroethene	23.1	20.0	115	77-122
Acetone	123	100	123	58-149
Iodomethane (Methyl Iodide)	102	100	102	78-137
Carbon Disulfide	112	100	112	76-144
Methylene Chloride	23.3	20.0	117	36-159
trans-1,2-Dichloroethene	22.0	20.0	110	80-120
1,1-Dichloroethane	22.0	20.0	110	80-120
Vinyl Acetate	74.5	100	74 *	77-141
cis-1,2-Dichloroethene	20.6	20.0	103	80-120
2-Butanone (MEK)	104	100	104	63-142
Bromochloromethane	21.3	20.0	106	80-120
Methacrylonitrile	22.0	20.0	110	80-132
Chloroform	20.6	20.0	103	80-120
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	80-120
Carbon Tetrachloride	20.2	20.0	101	75-126
Benzene	21.0	20.0	105	80-120
1,2-Dichloroethane (EDC)	20.6	20.0	103	80-120
Trichloroethene (TCE)	20.9	20.0	104	80-120
1,2-Dichloropropane	20.8	20.0	104	80-120
Dibromomethane	18.2	20.0	91	80-120
Bromodichloromethane	20.3	20.0	102	80-124
cis-1,3-Dichloropropene	17.8	20.0	89	78-120
4-Methyl-2-pentanone (MIBK)	93.7	100	94	80-120
Toluene	18.3	20.0	92	80-120
trans-1,3-Dichloropropene	17.1	20.0	86	77-120
1,1,2-Trichloroethane	18.0	20.0	90	80-120
Tetrachloroethene (PCE)	17.2	20.0	86	78-120
2-Hexanone	96.1	100	96	75-125
Dibromochloromethane	19.9	20.0	100	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.

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

Service Request: J2203500
Date Extracted: 10/30/2002
Date Analyzed: 10/31/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0201046

	Lab Control Sample JWG0201046-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	20.9	20.0	105	80-120
Chlorobenzene	20.1	20.0	101	80-120
1,1,1,2-Tetrachloroethane	19.5	20.0	97	80-120
Ethylbenzene	21.2	20.0	106	80-120
m,p-Xylenes	44.4	40.0	111	80-121
o-Xylene	20.5	20.0	102	80-120
Styrene	20.9	20.0	105	80-120
Bromoform	20.0	20.0	100	64-120
1,1,2,2-Tetrachloroethane	20.2	20.0	101	77-125
1,2,3-Trichloropropane	22.3	20.0	112	77-120
1,4-Dichloro-2-butene	24.7	20.0	123	46-135
1,3-Dichlorobenzene	19.9	20.0	100	80-120
1,4-Dichlorobenzene	19.5	20.0	97	80-120
1,2-Dichlorobenzene	20.0	20.0	100	80-120
1,2-Dibromo-3-chloropropane (DBCP	19.8	20.0	99	48-135
Naphthalene	21.2	20.0	106	65-125

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.

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/30/2002
Sample Matrix:	Water	**Date Analyzed:**	10/31/2002
		Time Analyzed:	09:43

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**File ID:**	J:\MS52\DATA\MS522K30.B\1030-41.D
Lab Code:	JWG0201046-4	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201046

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	JWG0201046-3	J:\MS52\DATA\MS522K30.B\1030-40.D	10/31/02	09:14
KB122PLTCT 10/02	J2203500-001	J:\MS52\DATA\MS522K30.B\1030-43.D	10/31/02	10:40
KB122PLTCT 10/02 DUP	J2203500-002	J:\MS52\DATA\MS522K30.B\1030-44.D	10/31/02	11:08
KB102PLTCT 10/02	J2203500-003	J:\MS52\DATA\MS522K30.B\1030-45.D	10/31/02	11:36
KB122PLTCT 10/02MS	JWG0201046-1	J:\MS52\DATA\MS522K30.B\1030-46.D	10/31/02	12:04
KB122PLTCT 10/02DMS	JWG0201046-2	J:\MS52\DATA\MS522K30.B\1030-47.D	10/31/02	12:33

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2203500
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/30/2002
Sample Matrix:	Water	**Date Analyzed:**	10/31/2002
		Time Analyzed:	09:14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS52\DATA\MS522K30.B\1030-40.D
Lab Code:	JWG0201046-3	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0201046

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	JWG0201046-4	J:\MS52\DATA\MS522K30.B\1030-41.D	10/31/02	09:43
KB122PLTCT 10/02	J2203500-001	J:\MS52\DATA\MS522K30.B\1030-43.D	10/31/02	10:40
KB122PLTCT 10/02 DUP	J2203500-002	J:\MS52\DATA\MS522K30.B\1030-44.D	10/31/02	11:08
KB102PLTCT 10/02	J2203500-003	J:\MS52\DATA\MS522K30.B\1030-45.D	10/31/02	11:36
KB122PLTCT 10/02MS	JWG0201046-1	J:\MS52\DATA\MS522K30.B\1030-46.D	10/31/02	12:04
KB122PLTCT 10/02DMS	JWG0201046-2	J:\MS52\DATA\MS522K30.B\1030-47.D	10/31/02	12:33

QA/QC Results

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

Service Request: J2203500
Date Analyzed: 10/31/2002
Time Analyzed: 08:17

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\VOLATILES\MS52\DATA\MS522K30.B\1030-38.D
Instrument ID: MS52.i
Column:

Analysis Method: 8260B
Analysis Lot: JWG0200104

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.1	7961	PASS
75	95	30	60	54.6	18832	PASS
95	95	100	100	100.0	34480	PASS
96	95	5	9	7.4	2562	PASS
173	174	0	2	0.3	87	PASS
174	95	50	120	86.9	29952	PASS
175	174	5	9	6.7	2014	PASS
176	174	95	101	96.2	28824	PASS
177	176	5	9	6.7	1944	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
tinuing Calibration Verification	JWG0201045-2	J:\MS52\DATA\MS522K30.B\1030-3	10/31/2002	08:46	
Control Sample	JWG0201046-3	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	09:14	
thod Blank	JWG0201046-4	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	09:43	
KB122PLTCT 10/02	J2203500-001	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	10:40	
KB122PLTCT 10/02 DUP	J2203500-002	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	11:08	
KB102PLTCT 10/02	J2203500-003	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	11:36	
KB122PLTCT 10/02MS	JWG0201046-1	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	12:04	
KB122PLTCT 10/02DMS	JWG0201046-2	J:\MS52\DATA\MS522K30.B\1030-4	10/31/2002	12:33	

ults flagged with an asterisk (*) indicate the analysis performed outside specified tune window

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

Service Request: J2203500

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analysis Lot: JWG0200104
Instrument ID: MS52.i
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1030-38.D	GC/MS Tuning - Bromofluorobenzene	JWG0201045-1	10/31/2002	08:17		10/31/2002	08:17
\1030-39.D	Continuing Calibration Verification	JWG0201045-2	10/31/2002	08:46		10/31/2002	09:01
\1030-40.D	Lab Control Sample	JWG0201046-3	10/31/2002	09:14		10/31/2002	09:29
\1030-41.D	Method Blank	JWG0201046-4	10/31/2002	09:43		10/31/2002	09:58
\1030-42.D	ZZZZZZ	ZZZZZZ	10/31/2002	10:11		10/31/2002	10:26
\1030-43.D	KB122PLTCT 10/02	J2203500-001	10/31/2002	10:40		10/31/2002	10:55
\1030-44.D	KB122PLTCT 10/02 DUP	J2203500-002	10/31/2002	11:08		10/31/2002	11:23
\1030-45.D	KB102PLTCT 10/02	J2203500-003	10/31/2002	11:36		10/31/2002	11:51
\1030-46.D	KB122PLTCT 10/02MS	JWG0201046-1	10/31/2002	12:04		10/31/2002	12:19
\1030-47.D	KB122PLTCT 10/02DMS	JWG0201046-2	10/31/2002	12:33		10/31/2002	12:48
\1030-48.D	ZZZZZZ	ZZZZZZ	10/31/2002	13:01		10/31/2002	13:16
\1030-49.D	ZZZZZZ	ZZZZZZ	10/31/2002	13:30		10/31/2002	13:45
\1030-50.D	ZZZZZZ	ZZZZZZ	10/31/2002	13:58		10/31/2002	14:13
\1030-51.D	ZZZZZZ	ZZZZZZ	10/31/2002	14:26		10/31/2002	[illegible]
\1030-52.D	ZZZZZZ	ZZZZZZ	10/31/2002	14:55		10/31/2002	15:10
\1030-53.D	ZZZZZZ	ZZZZZZ	10/31/2002	15:23		10/31/2002	15:38
\1030-54.D	ZZZZZZ	ZZZZZZ	10/31/2002	15:51		10/31/2002	16:06
\1030-55.D	ZZZZZZ	ZZZZZZ	10/31/2002	16:19		10/31/2002	16:34
\1030-56.D	ZZZZZZ	ZZZZZZ	10/31/2002	16:48		10/31/2002	17:03
\1030-57.D	ZZZZZZ	ZZZZZZ	10/31/2002	17:16		10/31/2002	17:31
\1030-58.D	ZZZZZZ	ZZZZZZ	10/31/2002	17:45		10/31/2002	18:00
\1030-59.D	ZZZZZZ	ZZZZZZ	10/31/2002	18:13		10/31/2002	18:28
\1030-60.D	ZZZZZZ	ZZZZZZ	10/31/2002	18:42		10/31/2002	18:57
\1030-61.D	ZZZZZZ	ZZZZZZ	10/31/2002	19:10		10/31/2002	19:25
\1030-62.D	ZZZZZZ	ZZZZZZ	10/31/2002	19:38		10/31/2002	19:53

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

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

Service Request: J2203500
Date Extracted: 10/30/2002

Extraction Prep Log
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: JWG0201046
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
KB122PLTCT 10/02	J2203500-001	10/22/02	10/23/02	5ml	5ml	NA	
KB122PLTCT 10/02 DUP	J2203500-002	10/22/02	10/23/02	5ml	5ml	NA	
KB102PLTCT 10/02	J2203500-003	10/22/02	10/23/02	5ml	5ml	NA	
Method Blank	JWG0201046-4	NA	NA	5ml	5ml	NA	
KB122PLTCT 10/02MS	JWG0201046-1	10/22/02	10/23/02	5ml	5ml	NA	
KB122PLTCT 10/02DMS	JWG0201046-2	10/22/02	10/23/02	5ml	5ml	NA	
Lab Control Sample	JWG0201046-3	NA	NA	5ml	5ml	NA	

..sults flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Standards Data

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

Level ID	File ID	Level ID	File ID
A	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-03.D	E	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-07.D
B	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-04.D	F	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-08.D
C	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-05.D	G	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-09.D
D	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-06.D	H	\\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-10.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane	A	1.0	0.330	B	2.0	0.319	C	5.0	0.347	D	20	0.368	E	50	0.364
	F	100	0.323	G	150	0.326	H	200	0.309						
† Chloromethane	A	1.0	0.558	B	2.0	0.479	C	5.0	0.525	D	20	0.519	E	50	0.490
	F	100	0.443	G	150	0.438	H	200	0.431						
‡ Vinyl Chloride	A	1.0	0.424	B	2.0	0.369	C	5.0	0.400	D	20	0.397	E	50	0.392
	F	100	0.373	G	150	0.372	H	200	0.370						
Bromomethane	A	1.0	0.202	B	2.0	0.182	C	5.0	0.194	D	20	0.214	E	50	0.220
	F	100	0.222	G	150	0.225	H	200	0.214						
Chloroethane	A	1.0	0.283	B	2.0	0.250	C	5.0	0.258	D	20	0.274	E	50	0.271
	F	100	0.267	G	150	0.265	H	200	0.257						
richlorofluoromethane	A	1.0	0.574	B	2.0	0.527	C	5.0	0.534	D	20	0.527	E	50	0.525
	F	100	0.505	G	150	0.504	H	200	0.489						
‡ 1,1-Dichloroethene	A	1.0	0.326	B	2.0	0.293	C	5.0	0.309	D	20	0.310	E	50	0.299
	F	100	0.289	G	150	0.295	H	200	0.288						
Acetone	A	5.0	0.0832	B	10	0.0717	C	25	0.0671	D	100	0.0702	E	250	0.0675
	F	500	0.0640	G	750	0.0616	H	1000	0.0597						
Iodomethane (Methyl Iodide)	A	5.0	0.564	B	10	0.481	C	25	0.503	D	100	0.507	E	250	0.504
	F	500	0.510	G	750	0.507	H	1000	0.464						
Carbon Disulfide	A	5.0	1.02	B	10	0.918	C	25	0.972	D	100	0.970	E	250	0.945
	F	500	0.968	G	750	0.958	H	1000	0.897						
Methylene Chloride				B	2.0	0.394	C	5.0	0.377	D	20	0.360	E	50	0.345
	F	100	0.332	G	150	0.323	H	200	0.310						
trans-1,2-Dichloroethene	A	1.0	0.369	B	2.0	0.337	C	5.0	0.347	D	20	0.348	E	50	0.345
	F	100	0.342	G	150	0.346	H	200	0.331						
† 1,1-Dichloroethane	A	1.0	0.675	B	2.0	0.597	C	5.0	0.624	D	20	0.620	E	50	0.598
	F	100	0.584	G	150	0.579	H	200	0.531						
Vinyl Acetate	A	5.0	0.402	B	10	0.408	C	25	0.389	D	100	0.403	E	250	0.399
	F	500	0.411	G	750	0.417	H	1000	0.332						

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
cis-1,2-Dichloroethene	A	1.0	0.299	B	2.0	0.277	C	5.0	0.280	D	20	0.310	E	50	0.293
	F	100	0.304	G	150	0.313	H	200	0.314						
2-Butanone (MEK)	A	5.0	0.100	B	10	0.0914	C	25	0.0800	D	100	0.0878	E	250	0.0832
	F	500	0.0828	G	750	0.0832	H	1000	0.0832						
Bromochloromethane	A	1.0	0.141	B	2.0	0.132	C	5.0	0.134	D	20	0.152	E	50	0.143
	F	100	0.146	G	150	0.149	H	200	0.149						
Methacrylonitrile	A	1.0	0.0667	B	2.0	0.0605	C	5.0	0.0641	D	20	0.0820	E	50	0.0834
	F	100	0.0831	G	150	0.0847	H	200	0.0877						
‡ Chloroform	A	1.0	0.549	B	2.0	0.514	C	5.0	0.527	D	20	0.544	E	50	0.523
	F	100	0.521	G	150	0.526	H	200	0.537						
1,1,1-Trichloroethane (TCA)	A	1.0	0.501	B	2.0	0.467	C	5.0	0.482	D	20	0.509	E	50	0.499
	F	100	0.513	G	150	0.533	H	200	0.543						
Carbon Tetrachloride	A	1.0	0.405	B	2.0	0.362	C	5.0	0.398	D	20	0.437	E	50	0.427
	F	100	0.437	G	150	0.458	H	200	0.468						
[illegible]zene	A	1.0	1.21	B	2.0	1.10	C	5.0	1.13	D	20	1.21	E	50	[illegible]
	F	100	1.16	G	150	1.18	H	200	1.13						
1,2-Dichloroethane (EDC)	A	1.0	0.436	B	2.0	0.405	C	5.0	0.401	D	20	0.450	E	50	0.438
	F	100	0.441	G	150	0.450	H	200	0.449						
Trichloroethene (TCE)	A	1.0	0.312	B	2.0	0.278	C	5.0	0.283	D	20	0.310	E	50	0.303
	F	100	0.304	G	150	0.312	H	200	0.324						
‡ 1,2-Dichloropropane	A	1.0	0.281	B	2.0	0.264	C	5.0	0.281	D	20	0.301	E	50	0.292
	F	100	0.296	G	150	0.306	H	200	0.300						
Dibromomethane	A	1.0	0.374	B	2.0	0.360	C	5.0	0.346	D	20	0.393	E	50	0.361
	F	100	0.357	G	150	0.368	H	200	0.379						
Bromodichloromethane	A	1.0	0.383	B	2.0	0.372	C	5.0	0.387	D	20	0.423	E	50	0.419
	F	100	0.426	G	150	0.439	H	200	0.431						
cis-1,3-Dichloropropene	A	1.0	0.904	B	2.0	0.830	C	5.0	0.867	D	20	1.02	E	50	0.986
	F	100	1.01	G	150	1.05	H	200	1.05						
4-Methyl-2-pentanone (MIBK)	A	5.0	0.447	B	10	0.406	C	25	0.397	D	100	0.472	E	250	0.456
	F	500	0.438	G	750	0.438	H	1000	0.421						
‡ Toluene	A	1.0	2.85	B	2.0	2.55	C	5.0	2.63	D	20	3.04	E	50	2.83
	F	100	2.81	G	150	2.77	H	200	2.59						
trans-1,3-Dichloropropene	A	1.0	0.721	B	2.0	0.666	C	5.0	0.702	D	20	0.894	E	50	0.898
	F	100	0.922	G	150	0.956	H	200	0.989						

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

† **SPCC Compound** ‡ **CCC Compound**

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,1,2-Trichloroethane	A	1.0	0.513	B	2.0	0.492	C	5.0	0.476	D	20	0.551	E	50	0.521
	F	100	0.505	G	150	0.521	H	200	0.541						
Tetrachloroethene (PCE)	A	1.0	0.574	B	2.0	0.476	C	5.0	0.503	D	20	0.580	E	50	0.548
	F	100	0.549	G	150	0.575	H	200	0.607						
2-Hexanone	A	5.0	0.263	B	10	0.236	C	25	0.240	D	100	0.299	E	250	0.288
	F	500	0.285	G	750	0.284	H	1000	0.285						
Dibromochloromethane	A	1.0	0.446	B	2.0	0.396	C	5.0	0.413	D	20	0.507	E	50	0.497
	F	100	0.514	G	150	0.522	H	200	0.557						
1,2-Dibromoethane (EDB)	A	1.0	0.471	B	2.0	0.430	C	5.0	0.433	D	20	0.527	E	50	0.502
	F	100	0.491	G	150	0.496	H	200	0.520						
† Chlorobenzene	A	1.0	2.04	B	2.0	1.74	C	5.0	1.78	D	20	1.93	E	50	1.92
	F	100	1.97	G	150	2.00	H	200	1.88						
1,1,1,2-Tetrachloroethane	A	1.0	0.751	B	2.0	0.599	C	5.0	0.648	D	20	0.714	E	50	0.712
	F	100	0.716	G	150	0.754	H	200	0.773						
ylbenzene	A	1.0	3.03	B	2.0	2.64	C	5.0	2.80	D	20	3.13	E	50	3.15
	F	100	3.11	G	150	2.98	H	200	2.67						
m,p-Xylenes	A	2.0	2.37	B	4.0	2.04	C	10	2.21	D	40	2.54	E	100	2.61
	F	200	2.43	G	300	2.11	H	400	1.75						
o-Xylene	A	1.0	2.23	B	2.0	1.99	C	5.0	2.18	D	20	2.62	E	50	2.67
	F	100	2.78	G	150	2.75	H	200	2.48						
Styrene	A	1.0	1.49	B	2.0	1.46	C	5.0	1.62	D	20	2.05	E	50	2.11
	F	100	2.21	G	150	2.23	H	200	2.05						
† Bromoform	A	1.0	0.308	B	2.0	0.279	C	5.0	0.254	D	20	0.339	E	50	0.361
	F	100	0.358	G	150	0.374	H	200	0.402						
† 1,1,2,2-Tetrachloroethane	A	1.0	0.618	B	2.0	0.563	C	5.0	0.551	D	20	0.623	E	50	0.612
	F	100	0.602	G	150	0.610	H	200	0.601						
1,2,3-Trichloropropane	A	1.0	0.164	B	2.0	0.154	C	5.0	0.135	D	20	0.165	E	50	0.164
	F	100	0.151	G	150	0.152	H	200	0.162						
trans-1,4-Dichloro-2-butene							C	5.0	0.0521	D	20	0.0549	E	50	0.0775
	F	100	0.108	G	150	0.116	H	200	0.125						
1,3-Dichlorobenzene	A	1.0	1.52	B	2.0	1.33	C	5.0	1.33	D	20	1.45	E	50	1.39
	F	100	1.37	G	150	1.38	H	200	1.36						
1,4-Dichlorobenzene	A	1.0	1.76	B	2.0	1.44	C	5.0	1.45	D	20	1.51	E	50	1.48
	F	100	1.45	G	150	1.43	H	200	1.39						

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

† **SPCC Compound** ‡ **CCC Compound**

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichlorobenzene	A	1.0	1.50	B	2.0	1.25	C	5.0	1.28	D	20	1.51	E	50	1.37
	F	100	1.38	G	150	1.35	H	200	1.30						
1,2-Dibromo-3-chloropropane (DBCP	A	1.0	0.0611	B	2.0	0.0675	C	5.0	0.0664	D	20	0.0775	E	50	0.0729
	F	100	0.0712	G	150	0.0725	H	200	0.0842						
Naphthalene	A	1.0	1.08	B	2.0	0.793	C	5.0	0.760	D	20	1.04	E	50	1.09
	F	100	1.15	G	150	1.19	H	200	1.21						
1,2-Dichloroethane-d4							C	5.0	0.301	D	20	0.313	E	50	0.301
	F	100	0.301	G	150	0.303	H	200	0.304						
4-Bromofluorobenzene							C	5.0	0.608	D	20	0.736	E	50	0.742
	F	100	0.757	G	150	0.754	H	200	0.772						
Dibromofluoromethane							C	5.0	0.247	D	20	0.256	E	50	0.246
	F	100	0.256	G	150	0.260	H	200	0.263						
Toluene-d8							C	5.0	1.82	D	20	2.01	E	50	1.93
	F	100	1.93	G	150	1.95	H	200	1.92						

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

		Calibration Evaluation					RRF Evaluation	
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Dichlorodifluoromethane	MS	AverageRF	% RSD	6.4		≤ 15	0.336		0.01
† Chloromethane	MS	AverageRF	% RSD	9.6		≤ 15	0.485		0.1
‡ Vinyl Chloride	MS	AverageRF	% RSD	5.1		≤ 15	0.387		0.01
Bromomethane	MS	AverageRF	% RSD	7.1		≤ 15	0.209		0.01
Chloroethane	MS	AverageRF	% RSD	4.0		≤ 15	0.266		0.01
Trichlorofluoromethane	MS	AverageRF	% RSD	4.9		≤ 15	0.523		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.3		≤ 15	0.301		0.01
Acetone	MS	AverageRF	% RSD	10.8		≤ 15	0.0681		0.01
Iodomethane (Methyl Iodide)	MS	AverageRF	% RSD	5.7		≤ 15	0.505		0.01
Carbon Disulfide	MS	AverageRF	% RSD	3.9		≤ 15	0.956		0.01
Methylene Chloride	MS	AverageRF	% RSD	8.6		≤ 15	0.349		0.01
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	3.2		≤ 15	0.346		0.01
† 1,1-Dichloroethane	MS	AverageRF	% RSD	6.9		≤ 15	0.601		0.1
Vinyl Acetate	MS	AverageRF	% RSD	6.8		≤ 15	0.395		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	4.8		≤ 15	0.299		0.01
2-Butanone (MEK)	MS	AverageRF	% RSD	7.6		≤ 15	0.0865		0.01
omochloromethane	MS	AverageRF	% RSD	5.0		≤ 15	0.143		0.01
ethacrylonitrile	MS	AverageRF	% RSD	14.1		≤ 15	0.0765		0.01
† Chloroform	MS	AverageRF	% RSD	2.3		≤ 15	0.530		0.01
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	4.9		≤ 15	0.506		0.01
Carbon Tetrachloride	MS	AverageRF	% RSD	8.1		≤ 15	0.424		0.01
Benzene	MS	AverageRF	% RSD	3.3		≤ 15	1.16		0.01
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	4.5		≤ 15	0.434		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.1		≤ 15	0.303		0.01
‡ 1,2-Dichloropropane	MS	AverageRF	% RSD	4.8		≤ 15	0.290		0.01
Dibromomethane	MS	AverageRF	% RSD	4.0		≤ 15	0.367		0.01
Bromodichloromethane	MS	AverageRF	% RSD	6.2		≤ 15	0.410		0.01
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	8.9		≤ 15	0.964		0.01
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	5.8		≤ 15	0.434		0.01
‡ Toluene	MS	AverageRF	% RSD	5.9		≤ 15	2.76		0.01
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	15.0	*	≤ 15	0.843		0.01
1,1,2-Trichloroethane	MS	AverageRF	% RSD	4.8		≤ 15	0.515		0.01
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	7.8		≤ 15	0.552		0.01
2-Hexanone	MS	AverageRF	% RSD	8.6		≤ 15	0.273		0.01
Dibromochloromethane	MS	AverageRF	% RSD	11.8		≤ 15	0.481		0.01
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	7.6		≤ 15	0.484		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.4		≤ 15	1.91		0.3
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	8.2		≤ 15	0.708		0.01
‡ Ethylbenzene	MS	AverageRF	% RSD	7.1		≤ 15	2.94		0.01
m,p-Xylenes	MS	AverageRF	% RSD	12.8		≤ 15	2.26		0.01
o-Xylene	MS	AverageRF	% RSD	11.9		≤ 15	2.46		0.01

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

† SPCC Compound ‡ CCC Compound

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

Service Request: J2203500
ICAL Date: 10/30/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL342
Instrument ID: MS52.i

Column: DB-624

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	17.1	*	≤ 15	1.90		0.01
† Bromoform	MS	AverageRF	% RSD	15.0	*	≤ 15	0.334		0.1
† 1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	4.4		≤ 15	0.597		0.3
1,2,3-Trichloropropane	MS	AverageRF	% RSD	6.4		≤ 15	0.156		0.01
trans-1,4-Dichloro-2-butene	MS	Linear	R2	0.993		≥ 0.99	0.0891		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	4.7		≤ 15	1.39		0.01
1,4-Dichlorobenzene	MS	AverageRF	% RSD	7.8		≤ 15	1.49		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	7.0		≤ 15	1.37		0.01
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	9.8		≤ 15	0.0717		0.01
Naphthalene	MS	AverageRF	% RSD	16.6	*	≤ 15	1.04		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	1.6		≤ 15	0.304		
4-Bromofluorobenzene	SURR	AverageRF	% RSD	8.3		≤ 15	0.728		
Dibromofluoromethane	SURR	AverageRF	% RSD	2.7		≤ 15	0.255		
Toluene-d8	SURR	AverageRF	% RSD	3.3		≤ 15	1.93		

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

† *SPCC Compound* ‡ *CCC Compound*

QA/QC Results

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

Service Request: J2203500
ICAL Date: 10/30/2002
Date Analyzed: 10/30/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL342
Units: ug/L

File ID: \\jax1\volatiles\MS52\DATA\Ms522k30.b\1030-12.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	57	0.336	0.385	15	NA	± 30 %	AverageRF
† Chloromethane	50	48	0.485	0.470	-3	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	51	0.387	0.397	3	NA	± 30 %	AverageRF
Bromomethane	50	55	0.209	0.229	10	NA	± 30 %	AverageRF
Chloroethane	50	52	0.266	0.274	3	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	52	0.523	0.543	4	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	50	0.301	0.301	0	NA	± 30 %	AverageRF
Acetone	250	250	0.0681	0.0675	-1	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	220	0.505	0.455	-10	NA	± 30 %	AverageRF
Carbon Disulfide	250	250	0.956	0.967	1	NA	± 30 %	AverageRF
Methylene Chloride	50	49	0.349	0.341	-2	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	47	0.346	0.326	-6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	48	0.601	0.582	-3	NA	± 30 %	AverageRF
Vinyl Acetate	250	250	0.395	0.395	0	NA	± 30 %	AverageRF
1,2-Dichloroethene	50	52	0.299	0.313	5	NA	± 30 %	AverageRF
Butanone (MEK)	250	250	0.0865	0.0866	0	NA	± 30 %	AverageRF
Bromochloromethane	50	53	0.143	0.151	6	NA	± 30 %	AverageRF
Methacrylonitrile	50	57	0.0765	0.0873	14	NA	± 30 %	AverageRF
‡ Chloroform	50	51	0.530	0.543	3	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	51	0.506	0.515	2	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	53	0.424	0.447	5	NA	± 30 %	AverageRF
Benzene	50	50	1.16	1.17	1	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	51	0.434	0.441	2	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	51	0.303	0.310	2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	50	0.290	0.290	0	NA	± 30 %	AverageRF
Dibromomethane	50	52	0.367	0.379	3	NA	± 30 %	AverageRF
Bromodichloromethane	50	51	0.410	0.419	2	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	54	0.964	1.04	8	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	260	0.434	0.460	6	NA	± 30 %	AverageRF
‡ Toluene	50	52	2.76	2.90	5	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	50	55	0.843	0.933	11	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	51	0.515	0.526	2	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	52	0.552	0.569	3	NA	± 30 %	AverageRF
2-Hexanone	250	270	0.273	0.299	10	NA	± 30 %	AverageRF
Dibromochloromethane	50	54	0.481	0.517	7	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	53	0.484	0.515	7	NA	± 30 %	AverageRF
† Chlorobenzene	50	51	1.91	1.95	2	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	52	0.708	0.730	3	NA	± 30 %	AverageRF
‡ Ethylbenzene	50	54	2.94	3.17	8	NA	± 30 %	AverageRF

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

† SPCC Compound ‡ CCC Compound

QA/QC Results

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

Service Request: J2203500
ICAL Date: 10/30/2002
Date Analyzed: 10/30/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL342
Units: ug/L

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
m,p-Xylenes	100	110	2.26	2.56	14	NA	± 30 %	AverageRF
o-Xylene	50	55	2.46	2.70	10	NA	± 30 %	AverageRF
Styrene	50	54	1.90	2.07	9	NA	± 30 %	AverageRF
† Bromoform	50	56	0.334	0.373	12	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	52	0.597	0.625	5	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	55	0.156	0.172	10	NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	49	0.0891	0.0944	NA	-3	± 30 %	Linear
1,3-Dichlorobenzene	50	51	1.39	1.41	1	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	49	1.49	1.45	-3	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	51	1.37	1.39	2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	62	0.0717	0.0884	23	NA	± 30 %	AverageRF
Naphthalene	50	61	1.04	1.26	21	NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203500
Date Analyzed: 10/31/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 10/30/2002
ICAL ID: CAL342
Analysis Lot: JWG0200104
Units: ug/L

File ID: \\JAX1\VOLATILES\MS52\DATA\MS522K30.B\1030-39.D

Column ID: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	54	0.01	0.336	0.361	7	NA	± 30 %	AverageRF
† Chloromethane	50	56	0.1	0.485	0.539	11	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	57	0.01	0.387	0.442	14	NA	± 20 %	AverageRF
Bromomethane	50	56	0.01	0.209	0.235	12	NA	± 30 %	AverageRF
Chloroethane	50	54	0.01	0.266	0.285	7	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	54	0.01	0.523	0.566	8	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	57	0.01	0.301	0.343	14	NA	± 20 %	AverageRF
Acetone	250	250	0.01	0.0681	0.0692	2	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	280	0.01	0.505	0.563	11	NA	± 30 %	AverageRF
Carbon Disulfide	250	280	0.01	0.956	1.09	14	NA	± 30 %	AverageRF
Methylene Chloride	50	54	0.01	0.349	0.373	7	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	56	0.01	0.346	0.384	11	NA	± 30 %	AverageRF
† [illegible] Dichloroethane	50	56	0.1	0.601	0.668	11	NA	± 30 %	AverageRF
[illegible]yl Acetate	250	190	0.01	0.395	0.306	-23	NA	± 30 %	AverageRF
[illegible]-1,2-Dichloroethene	50	56	0.01	0.299	0.335	12	NA	± 30 %	AverageRF
2-Butanone (MEK)	250	250	0.01	0.0865	0.0849	-2	NA	± 30 %	AverageRF
Bromochloromethane	50	52	0.01	0.143	0.149	4	NA	± 30 %	AverageRF
Methacrylonitrile	50	51	0.01	0.0765	0.0788	3	NA	± 30 %	AverageRF
‡ Chloroform	50	51	0.01	0.530	0.542	2	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	52	0.01	0.506	0.523	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	53	0.01	0.424	0.445	5	NA	± 30 %	AverageRF
Benzene	50	53	0.01	1.16	1.24	7	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	50	0.01	0.434	0.434	0	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	55	0.01	0.303	0.335	10	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	52	0.01	0.290	0.303	4	NA	± 20 %	AverageRF
Dibromomethane	50	49	0.01	0.367	0.363	-1	NA	± 30 %	AverageRF
Bromodichloromethane	50	52	0.01	0.410	0.427	4	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	52	0.01	0.964	1.01	4	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	250	0.01	0.434	0.439	1	NA	± 30 %	AverageRF
‡ Toluene	50	56	0.01	2.76	3.10	12	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	50	53	0.01	0.843	0.896	6	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	52	0.01	0.515	0.535	4	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	54	0.01	0.552	0.598	8	NA	± 30 %	AverageRF
2-Hexanone	250	260	0.01	0.273	0.284	4	NA	± 30 %	AverageRF
Dibromochloromethane	50	53	0.01	0.481	0.506	5	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	51	0.01	0.484	0.497	3	NA	± 30 %	AverageRF
† Chlorobenzene	50	52	0.3	1.91	1.98	4	NA	± 30 %	AverageRF
[illegible] 1,2-Tetrachloroethane	50	51	0.01	0.708	0.722	2	NA	± 30 %	AverageRF

[illegible]lts flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

QA/QC Results

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

Service Request: J2203500
Date Analyzed: 10/31/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 10/30/2002
ICAL ID: CAL342
Analysis Lot: JWG0200104
Units: ug/L

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
‡ Ethylbenzene	50	56	0.01	2.94	3.27	11		NA	± 20 %	AverageRF
m,p-Xylenes	100	120	0.01	2.26	2.71	20		NA	± 30 %	AverageRF
o-Xylene	50	65	0.01	2.46	3.20	30		NA	± 30 %	AverageRF
Styrene	50	66	0.01	1.90	2.53	33	*	NA	± 30 %	AverageRF
† Bromoform	50	48	0.1	0.334	0.323	-3		NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	55	0.3	0.597	0.658	10		NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	49	0.01	0.156	0.152	-3		NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	45	0.01	0.0891	0.0850	NA		-10	± 30 %	Linear
1,3-Dichlorobenzene	50	50	0.01	1.39	1.38	-1		NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	49	0.01	1.49	1.46	-2		NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	50	0.01	1.37	1.36	0		NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	45	0.01	0.0717	0.0646	-10		NA	± 30 %	AverageRF
Naphthalene	50	48	0.01	1.04	0.994	-4		NA	± 30 %	AverageRF
1,2-Dichloroethane-d4	50	46		0.304	0.277	-9		NA	± 30 %	AverageRF
·omofluorobenzene	50	50		0.728	0.726	0		NA	± 30 %	AverageRF
D.ıromofluoromethane	50	47		0.255	0.240	-6		NA	± 30 %	Averag
Toluene-d8	50	51		1.93	1.98	3		NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

TCLP Cations

Metals Data Review and Narrative Worksheet

Service Request: J2203500 | Date: October 31, 2002

Product Code(s): All | Matrix: Misc.

Yes ☒ No ☐	Are all samples analyzed within hold times?
Yes ☐ No ☐ NA ☒	Are all samples analyzed within and acceptable ICP-MS tune window?
Yes ☒ No ☐	Are all calibration checks acceptable (including interference checks)?
Yes ☒ No ☐	Are Second Source standards acceptable?
Yes ☒ No ☐	Are CCVs acceptable?
Yes ☒ No ☐	Are method blanks for all methods <MRL or less than 5% of the sample results?
Yes ☒ No ☐	Are CCBs less than 2X the IDL (or within method required acceptance criteria)?
Yes ☐ No ☐ NA ☒	Are all internal standard recoveries within control criteria?
Yes ☒ No ☐	Are all spike recoveries in MS/DMS samples within control criteria?
Yes ☒ No ☐	Are all MS/DMS or DUP RPDs within control criteria?
Yes ☒ No ☐	Are all LCS recoveries within control criteria?
Yes ☐ No ☐ NA ☒	Are RPDs for LCS/DLCS within control criteria?
Yes ☒ No ☐	Are all post-spike recoveries acceptable?
Yes ☒ No ☐	Have MRLs been achieved in all samples (note dilutions and matrix interferences)?
Yes ☒ No ☐	All results over the linear range have been reanalyzed at a dilution?
Yes ☒ No ☐	No other discussion required (discuss X flags and other anomalies as needed)?

For "No" responses see case narrative below.

Signature: Martin Mills | Name: _____

Date: 10/11/02 | Title: _____

File Path: R:\GFA\Casenarrative\J2203500.doc

Data Validation Notes and Discussion

Columbia Analytical Services, Inc.

TCLP METALS
- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Contract: JA Jones Management Services SDG No.: J2203500

Lab Code: JAX Case No.: SAS No.:

SOW No.: 6010B

Sample No.	Lab Sample ID.
LEPB-SJB-OCT-02	J2203500-004
LEPB-SJB-OCT-02S	J2203500-004S
LEPB-SJB-OCT-02SD	J2203500-004SD
CSA-SJB-OCT-02	J2203500-005

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Martha Montes Name: Martha Montes

Date: 11/01/02 Title: Operations Manager.

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

TCLP METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

LEPB-SJB-OCT-02

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): TCLP Lab Sample ID: J2203500-004

Level (low/med): LOW Date Received: 10/23/02

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7440-39-3	Barium	4590			P
7440-43-9	Cadmium	29.7	B		P
7440-47-3	Chromium	2650			P
7439-92-1	Lead	140	U		P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: LT. YELLOW Clarity After: CLEAR Artifacts:

Comments:

TCLP METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
CSA-SJB-OCT-02

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): TCLP Lab Sample ID: J2203500-005

Level (low/med): LOW Date Received: 10/23/02

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7440-39-3	Barium	1680			P
7440-43-9	Cadmium	20.3	B		P
7440-47-3	Chromium	24.0	U		P
7439-92-1	Lead	140	U		P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: LT. YELLOW Clarity After: CLEAR Artifacts:

Comments:

TCLP METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Initial Calibration Source: INORGANIC / ENVIRONMENTAL

Continuing Calibration Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Barium	2000	2030	102	500	498	100	503	101	P
Cadmium	2000	2010	101	500	491	98	515	103	P
Chromium	2000	2040	102	2500	2430	97	2580	103	P
Lead	2000	1980	99	5000	4840	97	5090	102	P

TCLP METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Initial Calibration Source:

Continuing Calibration Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Barium				500	498	100	501	100	P
Cadmium				500	511	102	524	105	P
Chromium				2500	2580	103	2610	104	P
Lead				5000	5020	100	5130	103	P

TCLP METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG No.: J2203500

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Barium				10	10.9	109		
Cadmium				10	8.89	89		
Chromium				30	25.6	85		
Lead				100	90.6	91		

TCLP METALS
-3-
BLANKS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Barium	24.5	U	24.5	U	24.5	U	24.5	U	24.5	U	P
Cadmium	11.5	U	11.5	U	11.5	U	11.5	U	11.5	U	P
Chromium	24.0	U	24.0	U	24.0	U	24.0	U	24.0	U	P
Lead	140	U	140	U	140	U	140	U	140	U	P

TCLP METALS
- 3 -
BLANKS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Barium			24.5	U							P
Cadmium			11.5	U							P
Chromium			24.0	U							P
Lead			140	U							P

TCLP METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES ICS Source: INORGANIC

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Barium		300		301	100			
Cadmium		300	-4.510	286	95			
Chromium		300	-1.470	289	96			
Lead		1000	-3.280	947	95			

TCLP METALS

- 5a -

SPIKE SAMPLE RECOVERY

SAMPLE NO.

LEPB-SJB-OCT-02S

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): TCLP Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Barium	75 - 125	8420		4590		4000	96		P
Cadmium	75 - 125	2110		29.7	B	2000	104		P
Chromium	75 - 125	4560		2650		2000	96		P
Lead	75 - 125	4060		140	U	4000	102		P

Comments:

TCLP METALS
- 5a -
SPIKE SAMPLE RECOVERY

SAMPLE NO.

LEPB-SJB-OCT-02SD

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): TCLP Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Barium	75 - 125	8820		4590		4000	106		P
Cadmium	75 - 125	2200		29.7	B	2000	109		P
Chromium	75 - 125	4760		2650		2000	105		P
Lead	75 - 125	4150		140	U	4000	104		P

Comments:

TCLP METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

LEPB-SJB-OCT-02AS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Barium		13800		4590		20000	46		P
Cadmium		10600		29.7	B	10000	106		P
Chromium		13200		2650		10000	105		P
Lead		20300		140	U	20000	102		P

Comments:

TCLP METALS
- 6 -
DUPLICATES

SAMPLE NO.

LEPB-SJB-OCT-02S

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): TCLP Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Barium		8420		8820		5		P
Cadmium		2110		2200		5		P
Chromium		4560		4760		4		P
Lead		4060		4150		2		P

TCLP METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Barium	4000	4330	108						
Cadmium	2000	2240	112						
Chromium	2000	2220	111						
Lead	4000	4260	107						

TCLP METALS
- 9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

LEPB-SJB-OCT-02L

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Barium	4590		4680		2		P
Cadmium	29.7	B	34.9	B	18		P
Chromium	2650		2730		3		P
Lead	140	U	140	U			P

TCLP METALS
-10-
METHOD DETECTION LIMITS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 12/5/01

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	M
Barium	493.60		10.0	4.900	P
Cadmium	228.80		10.0	2.300	P
Chromium	267.70		30.0	4.800	P
Lead	220.30		100	28.0	P

Comments

TCLP METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

ontract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 11/6/2000

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ag
Aluminum	396.15	0.0000000	0.0007800	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.64	0.0083000	0.0000000	0.0017700	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0016600	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0003000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000740	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0001460	0.0000000	0.0002490	0.0000000
Lead	220.35	0.0009580	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0001670	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0033400	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	-0.0000590	0.0000250	0.0000000
Sodium	588.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0036500	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0000770	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0001150	0.0000000	0.0000000

Comments:

TCLP METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 11/6/2000

Analyte	Wave-length (nm)	Interelement Correction Factors for: As	B	Ba	Be	Cd
Aluminum	396.15	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.64	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0006840	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0005600	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	588.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

TCLP METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

ntract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 11/6/2000

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Cu	K	Mn
Aluminum	396.15	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	-0.0022750	0.0099700	0.0000000	0.0000000	0.0000000
Arsenic	193.64	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0001450	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0242260	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	-0.0020800	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	588.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.0031940	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0042660	0.0000000	0.0000000

ıments:

TCLP METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 11/6/2000

Analyte	Wave-length (nm)	Interelement Correction Factors for: Mo	Na	Ni	Pb	Sb
Aluminum	396.15	0.0179760	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0033730	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.64	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	588.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	-0.0191470	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

TCLP METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

.ıtract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 11/6/2000

Analyte	Wave-length (nm)	Interelement Correction Factors for: Se	Tl	V	Zn
Aluminum	396.15	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	-0.0078590	0.0000000
Arsenic	193.64	0.0000000	0.0000000	0.0169130	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0059490	0.0000000
Boron	249.70	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	-0.0062920	0.0000000
Sodium	588.99	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.86	0.0000000	0.0000000	0.0007255	0.0000000

.ments:

TCLP METALS
- 12 -
ICP LINEAR RANGES

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

ICP ID Number: TJA ICP-OES Date: 2/4/02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Barium	5.00	80000.0	P
Cadmium	5.00	30000.0	P
Chromium	5.00	70000.0	P
Lead	5.00	200000.0	P

Comments:

TCLP METALS
- 13 -
PREPARATION LOG

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG NO.: J2203500

Method: P

Sample No.	Preparation Date	Weight (grams)	Volume (mL)
CSA-SJB-OCT-02	10/28/02		25
LCSW	10/28/02		25
LEPB-SJB-OCT-02	10/28/02		25
LEPB-SJB-OCT-02	10/28/02		25
LEPB-SJB-OCT-02	10/28/02		25
PBW	10/28/02		25

TCLP METALS
- 14 -
ANALYSIS RUN LOG

ntract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG No.: J2203500

Instrument ID Number: TJA ICP-OES Method: P

Start Date: 10/28/2002 End Date: 10/28/2002

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	14:39					X		X		X				X												
CAL-STD3A	1.00	14:42					X				X																
CAL-STD3B	1.00	14:45					X				X																
CAL-STD2A	1.00	14:48							X						X												
CAL-STD2B	1.00	14:51							X						X												
ICV1	1.00	15:00					X		X		X				X												
ICB1	1.00	15:03					X		X		X				X												
CRDL1	1.00	15:06					X		X		X				X												
ICS-A1	1.00	15:09					X		X		X				X												
ICS-AB1	1.00	15:12					X		X		X				X												
V1	1.00	15:16					X		X		X				X												
CCB1	1.00	15:19					X		X		X				X												
ZZZZZZ	1.00	15:22																									
ZZZZZZ	1.00	15:25																									
ZZZZZZ	1.00	15:28																									
ZZZZZZ	1.00	15:31																									
ZZZZZZ	1.00	15:34																									
ZZZZZZ	1.00	15:37																									
ZZZZZZ	5.00	15:40																									
ZZZZZZ	1.00	15:43																									
ZZZZZZ	1.00	15:46																									
ZZZZZZ	1.00	15:49																									
CCV2	1.00	15:53					X		X		X				X												
CCB2	1.00	15:56					X		X		X				X												
ZZZZZZ	1.00	15:59																									
ZZZZZZ	1.00	16:02																									
ZZZZZZ	1.00	16:05																									
ZZZZZZ	1.00	16:08																									
ZZZZZZ	1.00	16:11																									
ZZZZZZ	1.00	16:14																									
ZZZZ	1.00	16:17																									
ZZZZZZ	1.00	16:20																									
CCV3	1.00	16:23					X		X		X				X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

TCLP METALS
- 14 -
ANALYSIS RUN LOG

Contract: JA Jones Management Services

Lab Code: JAX Case No.: SAS No.: SDG No.: J2203500

Instrument ID Number: TJA ICP-OES Method: P

Start Date: 10/28/2002 End Date: 10/28/2002

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.00	16:26					X		X		X				X												
PBW	5.00	16:32					X		X		X				X												
ZZZZZZ	5.00	16:35																									
LCSW	5.00	16:40					X		X		X				X												
ZZZZZZ	5.00	16:43																									
LEPB-SJB-OCT-02	5.00	16:46					X		X		X				X												
LEPB-SJB-OCT-02S	5.00	16:49					X		X		X				X												
LEPB-SJB-OCT-02SD	5.00	16:52					X		X		X				X												
LEPB-SJB-OCT-02L	25.00	16:55					X		X		X				X												
LEPB-SJB-OCT-02AS	5.00	16:59					X		X		X				X												
[illegible]A-SJB-OCT-02	5.00	17:02					X		X		X				X												
CV4	1.00	17:05					X		X		X				X												
CCB4	1.00	17:08					X		X		X				X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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

Chain of Custody Documentation

Columbia Analytical Services

JACKSONVILLE LABORATORY

CONDITION UPON RECEIPT FORM

Client: JA Jones **Project name:** NSB Kings Bay

Date received: 10/23/02 1300 **Service request number:** J2203500

Received by: [illegible] **CUR completed by:** [illegible]

Cooler/Shipping Information:

Courier: ☐ CAS ☑ Client ☐ UPS ☐ Airborne ☐ FedEx ☐ Other (describe):

Type: ☑ Cooler ☑ Box ☐ Other (describe)

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID	1				
Temp (°C)	38				
Temp taken from	☐ Temp blank ☑ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle
Temp measured with	☑ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):

Other Information:

Any "NO" responses or discrepancies should be explained in the "Comments" section below or an NCM if so required. If an NCM was initiated, write the NCM number in the appropriate space.

CHECKLIST	YES	NO	NA	NCM #
1. Were custody seals on shipping container(s) intact? **If "No", NCM required.**	✓			
2. Were custody papers properly included with samples?	✓			
3. Were custody papers properly filled out (ink, signed, match labels)?	✓			
4. Did all bottles arrive in good condition (unbroken)?	✓			
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓			
6. Did the sample labels agree with the chain of custody?	✓			
7. Were correct bottles used for the tests indicated?	✓			
8. Were proper sample preservation techniques indicated on the label?	✓			
9. Were samples received within holding times? **If "No," NCM required.**	✓			
10. Were all VOA vials checked for the presence of air bubbles? **If "No", NCM required.**	✓			
11. Were there air bubbles present in the VOA vials? **If "Yes", NCM required.**		✓		
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓			
13. Was the cooler temperature less than 6°C?	✓			
14. Were sample pHs checked and recorded by Sample control? Checks are on reverse side of form. *NOTE: VOA samples are checked by laboratory analysts.*			✓	
15. Were the sample containers provided by CAS?	✓	✓		
16. Were samples accepted into the laboratory?	✓			

Comments:

Analytical Services

SR 2203500

Date: 10/23/

Initials: QB

Condition Upon Receipt - Sample pH

A check mark in any space under the appropriate column headings for the selected sample indicates that the pH was checked and met the required pH criterion listed in the column heading.

	Bottle Code																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	40-mL	40-mL	125-mL	250-mL	500-mL	1-L	250-mL	1-L	2-oz	4-oz	8-oz	16-oz	5 g	100-mL	250-mL	500-mL	1-L	1-L	250-mL	500-mL	1-L	250-mL	250-mL	1.75-L	500-mL	Misc.
Container	G	G	P	P	P	P	G	G	G	G	G	G	ENC	P	P	P	P	G	P	P	P	G	P	P	P	Misc.
Pres.	HCl		HCl											Sodium Thiosulfate	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	HNO3	HNO3	NaOH	NaOH	ZnAcetate NaOH	
Req. pH	<2	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2	<2	<2	<2	>12	>12	>9	N/A
Sample #	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-001	6																									
-002	3																									
-003	3																									
-004																										1
-005																										1
-006																										
-007																										
-008																										
-009																										
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-031																										
-032																										
-033																										
-034																										
-035																										
-036																										
-037																										
-038																										
-039																										
-040																										

or aqueous samples with multiple containers, only 1 bottle is checked for pH

OTE: VOA pH check performed by the analytical area, not sample control

Q:\Forms\Sample Receiving\CUR Preservation

Page 2

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Columbia Analytical Services INC.
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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 1

CAS Contact: J2203500

Project Name: NSB Kings Bay Ar
Project Number: Site 11 migration well
Project Manager: Caley
Report CC: Caley
Company/Address: TA Jones Mgt Sv, P.O Box 47248, Kings 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	GPS to include Naphthalene	TCLP Metals Lead Chromium Cadmium Barium	REMARKS/ ALTERNATE DESCRIPTION
KB122PLTCT-OCT-02	REG.	10/22/02	1300	Water	3	✓ ✓ ✓		
KB122PLTCT-OCT-02	DUP.	10/22/02	1305	✓	3	✓ ✓ ✓		
KB122PLTCT-OCT-02	MS/MSD	10/22/02	1310	✓	3	✓ ✓ ✓		
KB102PLTCT-OCT-02		10/22/02	1330	✓	3	✓ ✓ ✓		
LEPB-SJB-OCT-02		10/22/02	1000	Solid	1		✓ ✓ ✓ ✓ ✓	
CSA-SJB-OCT-02		10/22/02	1045	Solid	1		✓ ✓ ✓ ✓ ✓	

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

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
✓ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE: 8 NOV 2002

REPORT REQUIREMENTS
1 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
19065308
19065309
PO#
BILL TO: TA Jones Mgt Sv, P.O 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: Glenn L Drawdy	Signature	Signature: Carol Ferguson	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: GLENN L DRAWDY	Printed Name	Printed Name	Printed Name	Printed Name
Firm: TA Jones	Firm	Firm	Firm: CAS	Firm	Firm
Date/Time: 10/23/02 0740	Date/Time	Date/Time	Date/Time: 10/23/02 1300	Date/Time	Date/Time

Distribution: White - Return with originator; Yellow - Lab Copy; Pink - Retained by Client

SCCC-1000-07

J.A. JONES
MANAGEMENT SERVICES

MATERIAL/SERVICES REQUISITION 065308

ANNEX: 19 | SERVICE CHIT NO./WORK ORDER NO.: 646735 | DO-0044 NSB KINGS BAY

DATE SUBMITTED	REQUIRED DELIVERY DATE	REQUIRED COMPLETION DATE	SI S2 MI M2
10-21-2002	8 Nov 2002	8 Nov 2002	

REQUESTER	DEPARTMENT	PHONE NO. EXT.	SUPPLY DELIVER TO BLDG. NO.
Coby	19	8536	6020

SUGGESTED VENDOR	CONTACT NAME	PHONE NO.	FAX NO.
Columbia Analytical		904-739-2277	904-739-2011

ITEM NO.	ORDER QTY.	UNIT OF MEASURE	STOCK-PART NUMBER	COMPLETE DESCRIPTION	EST. PRICE	PURCHASE PRICE UNIT	PURCHASE PRICE EXTN.
1	2	ea	Samples	Analyze samples for			
				TCLP			
				• Lead			
				• Chromium			
				• Cadmium			
				• Barium			
					$280.00		

VENDOR #	COMMENTS:	SUBTOTAL		
VENDOR (FOR PURCHASING USE ONLY)		% TAX		
		FREIGHT		
		TOTAL		

PURCHASE ORDER #	P.O. DATE	DELIVERY/PICKUP DATE
BUYER:	CONFIRMED ORDER TO:	

SUPERVISOR Coby	DATE 10/18/02	/ /
MANAGER	DATE	/ /
DIVISION MANAGER	DATE	/ /
GENERAL MANAGER	DATE	/ /

SUPPLY DEPARTMENT TIME STAMP: DO 10-23 1350

TYPE OF BUSINESS
( ) LARGE BUSINESS
( ) SMALL BUSINESS
( ) DISADVAN. BUSINESS
( ) SM. WOMEN OWNED
( ) DISADVAN. WOMEN

TERMS
( ) DISCOUNT TERMS
( ) NET 30
( ) PREPAY
( ) C.O.D.
( ) PETTY CASH
( ) OTHER

FREIGHT
( ) PREPAY &ADD
( ) K.B.N.F.
( ) THIRD PARTY BILLING

F.O.B.
( ) ORIGIN
( ) KINGS BAY, GA

MODE OF SHIPMENT
( ) VENDOR DELIVERY
( ) UPS GROUND
( ) PICKUP, WILL CALL
( ) MOTOR FREIGHT
( ) AIR FREIGHT
( ) U.S. MAIL/FAX
( ) SUBCONTRACT

PURCHASING TIME STAMP:

WHITE-PURCHASING YELLOW-EXPEDITOR PINK-SUPPLY GOLDENROD-ORIGINATOR

J.A. JONES
MANAGEMENT SERVICES

MATERIAL/SERVICES REQUISITION 065309

ANNEX: 19 | SERVICE CHIT NO./WORK ORDER NO.: 574670

NSB KINGS BAY, GA

DATE SUBMITTED	REQUIRED DELIVERY DATE	REQUIRED COMPLETION DATE	SI S2 MI M2
10-21-2002	8 NOV 2002	8 NOV 2002	

REQUESTER	DEPARTMENT	PHONE NO. EXT.	SUPPLY DELIVER TO BLDG. NO.
Coley	19	8536	6020

SUGGESTED VENDOR	CONTACT NAME	PHONE NO.	FAX NO.
Columbia Analytical		904-739-2277	904-739-2011

ITEM NO.	ORDER QTY.	UNIT OF MEASURE	STOCK-PART NUMBER	COMPLETE DESCRIPTION	EST. PRICE	PURCHASE PRICE UNIT	PURCHASE PRICE EXTN.
1	~~3~~ 4	EA	Samples	Analyze megatin well samples for Groundwater Protection Standards to include Naphthalene			
					300.0		
					~~225.00~~		

VENDOR #	COMMENTS:	SUBTOTAL	
VENDOR (FOR PURCHASING USE ONLY)		% TAX	
		FREIGHT	
		TOTAL	

PURCHASE ORDER #	P.O. DATE	DELIVERY/PICKUP DATE
BUYER:	CONFIRMED ORDER TO:	

SUPERVISOR: Coley DATE 10/21/2002
MANAGER DATE / /
DIVISION MANAGER DATE / /
GENERAL MANAGER DATE / /

TYPE OF BUSINESS
( ) LARGE BUSINESS
(✓) SMALL BUSINESS
( ) DISADVAN. BUSINESS
( ) SM. WOMEN OWNED
( ) DISADVAN. WOMEN

TERMS
( ) DISCOUNT TERMS
( ) NET 30
( ) PREPAY
( ) C.O.D.
( ) PETTY CASH
( ) OTHER

FREIGHT
( ) PREPAY &ADD
( ) K.B.N.F.
( ) THIRD PARTY BILLING

F.O.B.
( ) ORIGIN
( ) KINGS BAY, GA

MODE OF SHIPMENT
( ) VENDOR DELIVERY
( ) UPS GROUND
( ) PICKUP, WILL CALL
( ) MOTOR FREIGHT
( ) AIR FREIGHT
( ) U.S. MAIL/FAX
( ) SUBCONTRACT

PURCHASING TIME STAMP:

SUPPLY DEPARTMENT TIME STAMP:
10-23 7:44

WHITE-PURCHASING YELLOW-EXPEDITOR PINK-SUPPLY GOLDENROD-ORIGINATOR

Columbia Analytical Services INC.
An Employee-Owned Company

November 06, 2002

Service Request No. J2203196

Fred Coley
JA Jones Management Services
P.O. Box 47248
Kings Bay, GA 31547

RE: Test Report for
Project No.: Site 11
Project Name: NSB Kings Bay

Dear Fred Coley:

Enclosed are the results of the samples(s) submitted to our laboratory on September 25, 2002. For your reference, hese analyses have been assigned our service request number: J2203196.

All analyses were performed according to our laboratory's quality assurance program. NELAP requirements were met unless footnotes in each sample report indicate otherwise. Estimates regarding the degree of uncertainty in measurements can be inferred from the accuracy limits in the laboratory QA manual. However, these limits do not account for possible matrix effects. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted,

Columbia Analytical Services, Inc.

Alex Olis
Project Manager

CAS Jacksonville is NELAC-accredited by the State of Florida (E82502). Other state accreditations include: LA, AI 30759; MA, M-FL937; NC, 527; SC, 96021; WA, C278.

8540 Baycenter Rd. ▪ Jacksonville, FL 32256 ▪ (904) 739-2277 ▪ Fax (904) 739-2011

TABLE OF CONTENTS

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Non-CLP Tier IV (Tier III w/ Raw Data)

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Sample Results	005
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This report contains a total of 041 pages

Data Qualifiers

Inorganic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	The tentatively identified compound is a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.

C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.

D The reported result is from a dilution.

E The result is an estimated amount because the value exceeded the instrument calibration range.

J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.

P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)

U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.

i The MRL/MDL has been elevated due to a chromatographic interference.

X See case narrative.

Petroleum Hydrocarbon Specific

F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.

L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.

H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.

O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.

Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Z The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

SAMPLE CROSS-REFERENCE

J2203196

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J2203196-001	KB122PLTCT 9/24 MS	9/24/2002	10:00
J2203196-001	KB122PLTCT 9/24 MSD	9/24/2002	10:00
J2203196-001	KB122PLTCT 9/24	9/24/2002	10:02
J2203196-002	KB122PLTCT 9/24 DUP	9/24/2002	10:05
J2203196-003	KB102PLTCT 9/24	9/24/2002	10:15

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

GC/MS Volatiles

Organics Data Review and Narrative Worksheet

Service Request: J2203196 Date: October 12, 2002

Product Code: 8260 Matrix: All Matrices

Yes ☒ No ☐	Are all samples analyzed within hold times?
Yes ☐ No ☐ NA ☐	Are all samples analyzed within an acceptable GC/MS tune window?
Yes ☐ No ☒	Are all calibrations within primary evaluation criteria (including RRF checks)?
Yes ☒ No ☐	Are Second Source standards within primary evaluation criteria?
Yes ☐ No ☒	Are CCVs within primary evaluation criteria (including RRF Checks)?
Yes ☒ No ☐	Are method blanks <MRL or less than 5% of the sample results?
Yes ☒ No ☐	Are all surrogate recoveries within control criteria?
Yes ☒ No ☐ NA ☐	Are all internal standard recoveries within control criteria?
Yes ☐ No ☒	Are all spike recoveries in MS/DMS samples within control criteria?
Yes ☒ No ☐	Are all MS/DMS or DUP RPDs within control criteria?
Yes ☐ No ☒	Are all LCS recoveries within control criteria?
Yes ☐ No ☐ NA ☐	Are RPDs for LCS/DLCS within control criteria?
Yes ☒ No ☐	Are all confirmation results within advisory limits (explain all C, P, and N Flags)?
Yes ☒ No ☐	Have MRLs been achieved in all samples (note dilutions and matrix interferences)?
Yes ☒ No ☐	All results over the calibration range have been reanalyzed at a dilution?
Yes ☒ No ☐	No other discussion required (discuss X flags and other anomalies as needed)?

For "No" responses see case narrative below.

Signature: Martin Montes Name:

Date: 10/12/02 Title:

File Path: Document4

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Data Validation Notes and Discussion

Initial Calibration Exceptions:

The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID 329: Chloromethane, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, Carbon Disulfide, Dibromochloromethane, m,p-Xylenes, Bromoform, DBCP, Naphthalene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the calibration. The calibration meets the alternative evaluation criteria.

Continuing Calibration Verification Exceptions:

The primary evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) JWG0200907-39: Bromomethane. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Matrix Spike Recovery Exceptions:

The upper control criterion was exceeded for the following analytes in Matrix Spike (MS) KB122PLTCT 9/24/MS and Matrix Spike Duplicate (MSD) KB122PLTCT 9/24/MSD: Bromomethane, MIBK1,2,2 Tetrachlorethane and 1,2,3 Trichloropropane. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

The lower control criterion was exceeded for the following analytes in Matrix Spike (MS) KB122PLTCT 9/24/MS and Matrix Spike Duplicate (MSD) KB122PLTCT 9/24/MSD: trans-1-2 Dichloroethene. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a low bias. The sample data is not significantly affected. No further corrective action was appropriate

Lab Control Sample Exceptions:

The spike recovery of Bromomethane and MIBK for Laboratory Control Sample (LCS) JWG0200909-3 were outside the upper control criterion. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

The spike recovery of trans-1-2-Dichloroethene for Laboratory Control Sample (LCS) JWG0200909-3 was outside the lower control criterion (68% versus a criterion of 80%). The analyte in question was not detected in the associated field samples. The error associated with reduced recovery equates to a potential low bias. This analyte was detected in the MRL check standard, instrument sensitivity was documented. The data is flagged to indicate the problem.

COLUMBIA ANALYTICAL SERVICES, INC.

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

Service Request: J2203196

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds by GC/MS

Sample Name	Lab Code	Date Collected	Date Received
KB122PLTCT 9/24	J2203196-001	09/24/2002	09/25/2002
KB122PLTCT 9/24 DUP	J2203196-002	09/24/2002	09/25/2002
KB102PLTCT 9/24	J2203196-003	09/24/2002	09/25/2002
KB122PLTCT 9/24MS	JWG0200909-1	09/24/2002	09/25/2002
KB122PLTCT 9/24DMS	JWG0200909-2	09/24/2002	09/25/2002

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Martha Mata

Name: Martha Mata

Date: 10/12/02

Title: Operations Manager

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

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Collected:**	09/24/2002
Sample Matrix:	Water	**Date Received:**	09/25/200

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 9/24	**Units:**	ug/L
Lab Code:	J2203196-001	**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
Dichlorodifluoromethane	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Chloromethane	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Chloride	**4.3**		1.0	1	10/04/02	10/04/02	JWG0200909	
Bromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Chloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichlorofluoromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Acetone	ND	U	50	1	10/04/02	10/04/02	JWG0200909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Disulfide	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Methylene Chloride	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Dichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Acetate	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
2-Butanone (MEK)	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Bromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Methacrylonitrile	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Chloroform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Tetrachloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Benzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichloroethene (TCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Dibromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromodichloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/04/02	10/04/02	JWG0200909	*
Toluene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2-Trichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	

ments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Collected:**	09/24/2002
Sample Matrix:	Water	**Date Received:**	09/25/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 9/24	**Units:**	ug/L
Lab Code:	J2203196-001	**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
2-Hexanone	ND	U	25	1	10/04/02	10/04/02	JWG0200909	
Dibromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Chlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Ethylbenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
m,p-Xylenes	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
o-Xylene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Styrene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromoform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2,3-Trichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
-1,4-Dichloro-2-butene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
,3-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,4-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Naphthalene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	56-147	10/04/02	Acceptable
4-Bromofluorobenzene	105	61-133	10/04/02	Acceptable
Dibromofluoromethane	99	65-136	10/04/02	Acceptable
Toluene-d8	98	80-120	10/04/02	Acceptable

ments:

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

Service Request: J2203196
Date Collected: 09/24/2002
Date Received: 09/25/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB122PLTCT 9/24 DUP
Lab Code: J2203196-002

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
Dichlorodifluoromethane	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Chloromethane	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Chloride	**2.7**		1.0	1	10/04/02	10/04/02	JWG0200909	
Bromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Chloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichlorofluoromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Acetone	ND	U	50	1	10/04/02	10/04/02	JWG0200909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Disulfide	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Methylene Chloride	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Dichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Acetate	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
2-Butanone (MEK)	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Bromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Methacrylonitrile	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Chloroform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Tetrachloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Benzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichloroethene (TCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Dibromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromodichloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/04/02	10/04/02	JWG0200909	*
Toluene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2-Trichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	

ments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

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

Service Request: J2203196
Date Collected: 09/24/2002
Date Received: 09/25/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB122PLTCT 9/24 DUP
Lab Code: J2203196-002

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
2-Hexanone	ND	U	25	1	10/04/02	10/04/02	JWG0200909	
Dibromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Chlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Ethylbenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
m,p-Xylenes	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
o-Xylene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Styrene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromoform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2,3-Trichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,4-Dichloro-2-butene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
1,3-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,4-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Naphthalene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	96	56-147	10/04/02	Acceptable
4-Bromofluorobenzene	105	61-133	10/04/02	Acceptable
Dibromofluoromethane	99	65-136	10/04/02	Acceptable
Toluene-d8	98	80-120	10/04/02	Acceptable

ments:

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

Service Request: J2203196
Date Collected: 09/24/2002
Date Received: 09/25/2002

Volatile Organic Compounds by GC/MS

Sample Name: KB102PLTCT 9/24
Lab Code: J2203196-003

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	10/04/02	10/04/02	JWG0200909	
Chloromethane	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Chloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Chloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichlorofluoromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Acetone	ND	U	50	1	10/04/02	10/04/02	JWG0200909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Disulfide	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Methylene Chloride	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Dichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Acetate	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
2-Butanone (MEK)	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Bromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Methacrylonitrile	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Chloroform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Tetrachloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Benzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichloroethene (TCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Dibromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromodichloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/04/02	10/04/02	JWG0200909	*
Toluene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2-Trichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	

nments:

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Collected:**	09/24/2002
Sample Matrix:	Water	**Date Received:**	09/25/2002

Volatile Organic Compounds by GC/MS

Sample Name:	KB102PLTCT 9/24	**Units:**	ug/L
Lab Code:	J2203196-003	**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
2-Hexanone	ND	U	25	1	10/04/02	10/04/02	JWG0200909	
Dibromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Chlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Ethylbenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
m,p-Xylenes	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
o-Xylene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Styrene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromoform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2,3-Trichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
-1,4-Dichloro-2-butene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
1,3-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,4-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Naphthalene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	56-147	10/04/02	Acceptable
4-Bromofluorobenzene	106	61-133	10/04/02	Acceptable
Dibromofluoromethane	99	65-136	10/04/02	Acceptable
Toluene-d8	98	80-120	10/04/02	Acceptable

ments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200909-4	**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	10/04/02	10/04/02	JWG0200909	
Chloromethane	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Chloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Chloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichlorofluoromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Acetone	ND	U	50	1	10/04/02	10/04/02	JWG0200909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Disulfide	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Methylene Chloride	ND	U	5.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	*
Dichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Vinyl Acetate	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
cis-1,2-Dichloroethene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
2-Butanone (MEK)	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
Bromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Methacrylonitrile	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Chloroform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Carbon Tetrachloride	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Benzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloroethane (EDC)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Trichloroethene (TCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Dibromomethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromodichloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
cis-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	1	10/04/02	10/04/02	JWG0200909	*
Toluene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
trans-1,3-Dichloropropene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2-Trichloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Tetrachloroethene (PCE)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	

nents:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JWG0200909-4	**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
2-Hexanone	ND	U	25	1	10/04/02	10/04/02	JWG0200909	
Dibromochloromethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromoethane (EDB)	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Chlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Ethylbenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
m,p-Xylenes	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
o-Xylene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Styrene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
Bromoform	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2,3-Trichloropropane	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
-1,4-Dichloro-2-butene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	
1,3-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,4-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dichlorobenzene	ND	U	1.0	1	10/04/02	10/04/02	JWG0200909	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	2.0	1	10/04/02	10/04/02	JWG0200909	
Naphthalene	ND	U	10	1	10/04/02	10/04/02	JWG0200909	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	56-147	10/04/02	Acceptable
4-Bromofluorobenzene	102	61-133	10/04/02	Acceptable
Dibromofluoromethane	94	65-136	10/04/02	Acceptable
Toluene-d8	98	80-120	10/04/02	Acceptable

ments:

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

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: J2203196

Surrogate Recovery Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
KB122PLTCT 9/24	J2203196-001	93	105	99	98
KB122PLTCT 9/24 DUP	J2203196-002	96	105	99	98
KB102PLTCT 9/24	J2203196-003	95	106	99	98
Method Blank	JWG0200909-4	90	102	94	98
KB122PLTCT 9/24MS	JWG0200909-1	102	96	103	97
KB122PLTCT 9/24DMS	JWG0200909-2	99	94	101	97
Lab Control Sample	JWG0200909-3	101	97	95	94

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

ts 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:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Analyzed:**	10/04/2002
		Time Analyzed:	09:45

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID:	\\JAX1\VOLATILES\MS52\DATA\MS522K03.B\1003-39.D	**Lab Code:**	JWG0200907-2
Instrument ID:	MS52.i	**Analysis Lot:**	JWG0200907
Analysis Method:	8260B	**Column :**	Rtx-VMS

		1,4-Dichlorobenzene-d4		Chlorobenzene-d5		Fluorobenzene	
		Area	RT	Area	RT	Area	RT
	Results ==>	904,432	14.74	895,849	12.26	2,193,991	9.02
	Upper Limit ==>	1,808,864	15.24	1,791,698	12.76	4,387,982	9.52
	Lower Limit ==>	452,216	14.24	447,925	11.76	1,096,996	8.52
	ICAL Result ==>	845,729	NA	849,731	NA	2,240,968	NA
Associated Analyses							
Lab Control Sample	JWG0200909-3	858,522	14.74	901,100	12.26	2,053,381	9.02
Method Blank	JWG0200909-4	795,216	14.75	842,320	12.26	2,053,090	9.02
KB122PLTCT 9/24	J2203196-001	736,452	14.74	882,235	12.26	2,019,846	9.02
KB122PLTCT 9/24 DUP	J2203196-002	721,219	14.74	817,149	12.26	2,007,371	9.02
KB102PLTCT 9/24	J2203196-003	732,949	14.74	854,340	12.26	2,019,002	9.02
KB122PLTCT 9/24MS	JWG0200909-1	898,081	14.74	914,007	12.26	2,003,321	9.03
KB122PLTCT 9/24DMS	JWG0200909-2	891,552	14.75	893,385	12.26	1,993,130	9.02

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

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/04/2002
Sample Matrix:	Water	**Date Analyzed:**	10/04/2002

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 9/24	**Units:**	ug/L
Lab Code:	J2203196-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200909

		KB122PLTCT 9/24MS JWG0200909-1 Matrix Spike			KB122PLTCT 9/24DMS JWG0200909-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	21.1	20.0	105	22.6	20.0	113	80-135	7	30
Chloromethane	ND	16.2	20.0	81	19.1	20.0	95	70-139	17	30
Vinyl Chloride	4.3	22.1	20.0	89	26.1	20.0	109	80-133	16	30
Bromomethane	ND	28.5	20.0	142 *	30.9	20.0	154 *	78-138	8	30
Chloroethane	ND	26.1	20.0	130	29.8	20.0	149 *	66-148	13	30
Trichlorofluoromethane	ND	25.1	20.0	126	26.6	20.0	133	67-153	6	30
1,1-Dichloroethene	ND	20.1	20.0	100	22.9	20.0	115	77-122	13	30
Acetone	ND	76.3	100	76	79.0	100	79	58-149	3	30
Iodomethane (Methyl Iodide)	ND	112	100	112	117	100	117	78-137	5	30
Carbon Disulfide	ND	131	100	131	137	100	137	76-144	4	30
Methylene Chloride	ND	15.8	20.0	79	16.0	20.0	80	36-159	2	30
trans-1,2-Dichloroethene	ND	14.5	20.0	72 *	15.1	20.0	75 *	80-120	4	30
1,1-Dichloroethane	ND	21.7	20.0	108	22.3	20.0	112	80-120	3	30
Vinyl Acetate	ND	110	100	110	110	100	110	77-141	0	30
cis-1,2-Dichloroethene	ND	21.6	20.0	108	21.9	20.0	109	80-120	1	30
2-Butanone (MEK)	ND	114	100	114	123	100	123	63-142	8	30
Bromochloromethane	ND	22.7	20.0	113	22.9	20.0	115	80-120	1	30
Methacrylonitrile	ND	23.5	20.0	118	24.3	20.0	122	80-132	3	30
Chloroform	ND	21.8	20.0	109	22.2	20.0	111	80-120	2	30
1,1,1-Trichloroethane (TCA)	ND	20.8	20.0	104	21.2	20.0	106	80-121	2	30
Carbon Tetrachloride	ND	21.4	20.0	107	21.5	20.0	107	75-126	0	30
Benzene	ND	23.0	20.0	115	22.7	20.0	113	80-120	1	30
1,2-Dichloroethane (EDC)	ND	22.0	20.0	110	21.9	20.0	110	80-120	0	30
Trichloroethene (TCE)	ND	21.3	20.0	106	21.2	20.0	106	80-120	0	30
1,2-Dichloropropane	ND	22.0	20.0	110	22.7	20.0	113	80-120	3	30
Dibromomethane	ND	23.3	20.0	116	23.1	20.0	116	80-120	1	30
Bromodichloromethane	ND	23.5	20.0	117	23.4	20.0	117	80-124	0	30
cis-1,3-Dichloropropene	ND	19.7	20.0	98	20.4	20.0	102	78-120	3	30
4-Methyl-2-pentanone (MIBK)	ND	117	100	117	127	100	127 *	80-124	8	30
Toluene	ND	20.9	20.0	105	21.3	20.0	107	80-120	2	30
trans-1,3-Dichloropropene	ND	20.0	20.0	100	21.7	20.0	108	77-120	8	30
1,1,2-Trichloroethane	ND	21.6	20.0	108	22.6	20.0	113	80-120	5	30
Tetrachloroethene (PCE)	ND	19.3	20.0	96	20.3	20.0	101	78-120	5	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:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/04/2002
Sample Matrix:	Water	**Date Analyzed:**	10/04/2[illegible]

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	KB122PLTCT 9/24	**Units:**	ug/L
Lab Code:	J2203196-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200909

Analyte Name	Sample Result	KB122PLTCT 9/24MS JWG0200909-1 Matrix Spike			KB122PLTCT 9/24DMS JWG0200909-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
2-Hexanone	ND	116	100	116	120	100	120	75-125	4	30
Dibromochloromethane	ND	20.8	20.0	104	22.3	20.0	111	78-120	7	30
1,2-Dibromoethane (EDB)	ND	21.3	20.0	107	22.2	20.0	111	80-120	4	30
Chlorobenzene	ND	20.9	20.0	105	21.3	20.0	106	80-120	2	30
1,1,1,2-Tetrachloroethane	ND	19.3	20.0	97	20.0	20.0	100	80-120	4	30
Ethylbenzene	ND	21.0	20.0	105	21.5	20.0	107	80-120	2	30
m,p-Xylenes	ND	44.8	40.0	112	45.4	40.0	113	80-121	1	30
o-Xylene	ND	20.2	20.0	101	20.5	20.0	102	80-120	1	30
Styrene	ND	20.4	20.0	102	20.6	20.0	103	80-120	1	
[illegible]noform	ND	20.6	20.0	103	21.2	20.0	106	64-120	3	
1,1,2,2-Tetrachloroethane	ND	25.7	20.0	128 *	26.4	20.0	132 *	77-125	3	30
1,2,3-Trichloropropane	ND	23.7	20.0	118	24.2	20.0	121 *	77-120	2	30
trans-1,4-Dichloro-2-butene	ND	18.2	20.0	91	18.9	20.0	94	46-135	4	30
1,3-Dichlorobenzene	ND	19.7	20.0	98	19.7	20.0	98	80-120	0	30
1,4-Dichlorobenzene	ND	20.7	20.0	103	20.7	20.0	103	80-120	0	30
1,2-Dichlorobenzene	ND	20.5	20.0	103	20.5	20.0	103	80-120	0	30
1,2-Dibromo-3-chloropropane (DBCP	ND	19.8	20.0	99	20.5	20.0	103	48-135	3	30
Naphthalene	ND	18.3	20.0	92	20.7	20.0	103	65-125	12	30

[illegible]ts flagged with an asterisk (*) indicate values outside control criteria.

[illegible]ts 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
Project: NSB Kings Bay/Site 11
Sample Matrix: Water

Service Request: J2203196
Date Extracted: 10/04/2002
Date Analyzed: 10/04/2002

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG0200909

	Lab Control Sample JWG0200909-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	20.8	20.0	104	80-135
Chloromethane	16.9	20.0	85	70-139
Vinyl Chloride	20.8	20.0	104	80-133
Bromomethane	29.5	20.0	147 *	78-138
Chloroethane	26.3	20.0	132	66-148
Trichlorofluoromethane	22.1	20.0	110	67-153
1,1-Dichloroethene	21.1	20.0	106	77-122
Acetone	85.5	100	86	58-149
Iodomethane (Methyl Iodide)	115	100	115	78-137
Carbon Disulfide	130	100	130	76-144
hylene Chloride	15.5	20.0	78	36-159
s-1,2-Dichloroethene	13.7	20.0	68 *	80-120
1,1-Dichloroethane	19.2	20.0	96	80-120
Vinyl Acetate	127	100	127	77-141
cis-1,2-Dichloroethene	19.7	20.0	98	80-120
2-Butanone (MEK)	124	100	124	63-142
Bromochloromethane	21.6	20.0	108	80-120
Methacrylonitrile	24.5	20.0	123	80-132
Chloroform	20.4	20.0	102	80-120
1,1,1-Trichloroethane (TCA)	19.3	20.0	96	80-120
Carbon Tetrachloride	19.5	20.0	97	75-126
Benzene	21.8	20.0	109	80-120
1,2-Dichloroethane (EDC)	22.3	20.0	112	80-120
Trichloroethene (TCE)	20.5	20.0	103	80-120
1,2-Dichloropropane	20.9	20.0	104	80-120
Dibromomethane	22.4	20.0	112	80-120
Bromodichloromethane	22.2	20.0	111	80-124
cis-1,3-Dichloropropene	21.5	20.0	108	78-120
4-Methyl-2-pentanone (MIBK)	123	100	123 *	80-120
Toluene	20.3	20.0	101	80-120
trans-1,3-Dichloropropene	21.6	20.0	108	77-120
1,1,2-Trichloroethane	22.1	20.0	110	80-120
Tetrachloroethene (PCE)	18.8	20.0	94	78-120
2-Hexanone	123	100	123	75-125
Dibromochloromethane	21.9	20.0	109	78-120

ts 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.

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/04/2002
Sample Matrix:	Water	**Date Analyzed:**	10/04/20

Lab Control Spike Summary
Volatile Organic Compounds by GC/MS

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	JWG0200909

	Lab Control Sample JWG0200909-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	22.4	20.0	112	80-120
Chlorobenzene	20.8	20.0	104	80-120
1,1,1,2-Tetrachloroethane	19.7	20.0	99	80-120
Ethylbenzene	21.0	20.0	105	80-120
m,p-Xylenes	44.8	40.0	112	80-121
o-Xylene	20.1	20.0	100	80-120
Styrene	20.4	20.0	102	80-120
Bromoform	21.8	20.0	109	64-120
1,1,2,2-Tetrachloroethane	24.5	20.0	122	77-125
1,2,3-Trichloropropane	23.6	20.0	118	77-120
t -1,4-Dichloro-2-butene	20.5	20.0	102	46-135
1,3-Dichlorobenzene	20.2	20.0	101	80-120
1,4-Dichlorobenzene	20.8	20.0	104	80-120
1,2-Dichlorobenzene	21.4	20.0	107	80-120
1,2-Dibromo-3-chloropropane (DBCP	21.6	20.0	108	48-135
Naphthalene	24.6	20.0	123	65-125

s 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	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/04/2002
Sample Matrix:	Water	**Date Analyzed:**	10/04/2002
		Time Analyzed:	10:39

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**File ID:**	J:\MS52\DATA\MS522K03.B\1003-41.D
Lab Code:	JWG0200909-4	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200909

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	JWG0200909-3	J:\MS52\DATA\MS522K03.B\1003-40.D	10/04/02	10:14
KB122PLTCT 9/24	J2203196-001	J:\MS52\DATA\MS522K03.B\1003-43.D	10/04/02	11:30
KB122PLTCT 9/24 DUP	J2203196-002	J:\MS52\DATA\MS522K03.B\1003-44.D	10/04/02	11:56
KB102PLTCT 9/24	J2203196-003	J:\MS52\DATA\MS522K03.B\1003-45.D	10/04/02	12:21
KB122PLTCT 9/24MS	JWG0200909-1	J:\MS52\DATA\MS522K03.B\1003-62.D	10/04/02	19:38
KB122PLTCT 9/24DMS	JWG0200909-2	J:\MS52\DATA\MS522K03.B\1003-63.D	10/04/02	20:04

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	JA Jones Management Services	**Service Request:**	J2203196
Project:	NSB Kings Bay/Site 11	**Date Extracted:**	10/04/2002
Sample Matrix:	Water	**Date Analyzed:**	10/04/20
		Time Analyzed:	10:14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS52\DATA\MS522K03.B\1003-40.D
Lab Code:	JWG0200909-3	**Instrument ID:**	MS52.i
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	JWG0200909

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	JWG0200909-4	J:\MS52\DATA\MS522K03.B\1003-41.D	10/04/02	10:39
KB122PLTCT 9/24	J2203196-001	J:\MS52\DATA\MS522K03.B\1003-43.D	10/04/02	11:30
KB122PLTCT 9/24 DUP	J2203196-002	J:\MS52\DATA\MS522K03.B\1003-44.D	10/04/02	11:56
KB102PLTCT 9/24	J2203196-003	J:\MS52\DATA\MS522K03.B\1003-45.D	10/04/02	12:21
KB122PLTCT 9/24MS	JWG0200909-1	J:\MS52\DATA\MS522K03.B\1003-62.D	10/04/02	19:38
KB122PLTCT 9/24DMS	JWG0200909-2	J:\MS52\DATA\MS522K03.B\1003-63.D	10/04/02	20:04

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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

Service Request: J2203196
Date Analyzed: 10/04/2002
Time Analyzed: 09:19

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: \\JAX1\VOLATILES\MS52\DATA\MS522K03.B\1003-38.D
Instrument ID: MS52.i
Column:

Analysis Method: 8260B
Analysis Lot: JWG0200907

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
173	174	0	2	1.0	483	PASS
174	95	50	120	83.4	49304	PASS
175	174	5	9	7.3	3583	PASS
176	174	95	101	98.3	48488	PASS
177	176	5	9	8.8	4288	PASS
50	95	15	40	19.2	11356	PASS
75	95	30	60	49.6	29320	PASS
95	95	100	100	100.0	59152	PASS
96	95	5	9	7.1	4185	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	JWG0200907-2	J:\MS52\DATA\MS522K03.B\1003-3	10/04/2002	09:45	
Control Sample	JWG0200909-3	J:\MS52\DATA\MS522K03.B\1003-4	10/04/2002	10:14	
Method Blank	JWG0200909-4	J:\MS52\DATA\MS522K03.B\1003-4	10/04/2002	10:39	
KB122PLTCT 9/24	J2203196-001	J:\MS52\DATA\MS522K03.B\1003-4	10/04/2002	11:30	
KB122PLTCT 9/24 DUP	J2203196-002	J:\MS52\DATA\MS522K03.B\1003-4	10/04/2002	11:56	
KB102PLTCT 9/24	J2203196-003	J:\MS52\DATA\MS522K03.B\1003-4	10/04/2002	12:21	
KB122PLTCT 9/24MS	JWG0200909-1	J:\MS52\DATA\MS522K03.B\1003-6	10/04/2002	19:38	
KB122PLTCT 9/24DMS	JWG0200909-2	J:\MS52\DATA\MS522K03.B\1003-6	10/04/2002	20:04	

ts flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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

Service Request: J2203196

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analysis Lot: JWG0200907
Instrument ID: MS52.i
Column: Rtx-VMS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1003-38.D	GC/MS Tuning - Bromofluorobenzene	JWG0200907-1	10/4/2002	09:19		10/4/2002	09:24
\1003-39.D	Continuing Calibration Verification	JWG0200907-2	10/4/2002	09:45		10/4/2002	09:49
\1003-40.D	Lab Control Sample	JWG0200909-3	10/4/2002	10:14		10/4/2002	10:18
\1003-41.D	Method Blank	JWG0200909-4	10/4/2002	10:39		10/4/2002	10:43
\1003-42.D	ZZZZZZ	ZZZZZZ	10/4/2002	11:05		10/4/2002	11:09
\1003-43.D	KB122PLTCT 9/24	J2203196-001	10/4/2002	11:30		10/4/2002	11:34
\1003-44.D	KB122PLTCT 9/24 DUP	J2203196-002	10/4/2002	11:56		10/4/2002	12:00
\1003-45.D	KB102PLTCT 9/24	J2203196-003	10/4/2002	12:21		10/4/2002	12:25
\1003-46.D	ZZZZZZ	ZZZZZZ	10/4/2002	12:47		10/4/2002	12:51
\1003-47.D	ZZZZZZ	ZZZZZZ	10/4/2002	13:13		10/4/2002	13:17
\1003-48.D	ZZZZZZ	ZZZZZZ	10/4/2002	13:38		10/4/2002	13:42
\1003-49.D	ZZZZZZ	ZZZZZZ	10/4/2002	14:04		10/4/2002	14:08
\1003-50.D	ZZZZZZ	ZZZZZZ	10/4/2002	14:30		10/4/2002	14:[illegible]
\1003-51.D	ZZZZZZ	ZZZZZZ	10/4/2002	14:55		10/4/2002	14:59
\1003-52.D	ZZZZZZ	ZZZZZZ	10/4/2002	15:21		10/4/2002	15:25
\1003-53.D	ZZZZZZ	ZZZZZZ	10/4/2002	15:47		10/4/2002	15:51
\1003-54.D	ZZZZZZ	ZZZZZZ	10/4/2002	16:12		10/4/2002	16:16
\1003-55.D	ZZZZZZ	ZZZZZZ	10/4/2002	16:38		10/4/2002	16:42
\1003-56.D	ZZZZZZ	ZZZZZZ	10/4/2002	17:04		10/4/2002	17:08
\1003-57.D	ZZZZZZ	ZZZZZZ	10/4/2002	17:30		10/4/2002	17:34
\1003-58.D	ZZZZZZ	ZZZZZZ	10/4/2002	17:56		10/4/2002	18:00
\1003-59.D	ZZZZZZ	ZZZZZZ	10/4/2002	18:21		10/4/2002	18:25
\1003-60.D	ZZZZZZ	ZZZZZZ	10/4/2002	18:47		10/4/2002	18:51
\1003-61.D	ZZZZZZ	ZZZZZZ	10/4/2002	19:13		10/4/2002	19:17
\1003-62.D	KB122PLTCT 9/24MS	JWG0200909-1	10/4/2002	19:38		10/4/2002	19:42
\1003-63.D	KB122PLTCT 9/24DMS	JWG0200909-2	10/4/2002	20:04		10/4/2002	20:08

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Service Request: J2203196
Date Extracted: 10/04/2002

Extraction Prep Log
Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: JWG0200909
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
KB122PLTCT 9/24	J2203196-001	09/24/02	09/25/02	5ml	5ml	NA	
KB122PLTCT 9/24 DUP	J2203196-002	09/24/02	09/25/02	5ml	5ml	NA	
KB102PLTCT 9/24	J2203196-003	09/24/02	09/25/02	5ml	5ml	NA	
Method Blank	JWG0200909-4	NA	NA	5ml	5ml	NA	
KB122PLTCT 9/24MS	JWG0200909-1	09/24/02	09/25/02	5ml	5ml	NA	
KB122PLTCT 9/24DMS	JWG0200909-2	09/24/02	09/25/02	5ml	5ml	NA	
Lab Control Sample	JWG0200909-3	NA	NA	5ml	5ml	NA	

ıts flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

Level ID	File ID	Level ID	File ID
A	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-09.D	E	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-05.D
B	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-10.D	F	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-06.D
C	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-03.D	G	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-07.D
D	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-04.D	H	\\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-08.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane	A	150	0.401	B	200	0.393	C	1.0	0.439	D	2.0	0.418	E	5.0	0.436
	F	20	0.407	G	50	0.367	H	100	0.345						
† Chloromethane	A	150	0.379	B	200	0.348				D	2.0	0.553	E	5.0	0.501
	F	20	0.358	G	50	0.352	H	100	0.301						
‡ Vinyl Chloride	A	150	0.356	B	200	0.330	C	1.0	0.382	D	2.0	0.314	E	5.0	0.361
	F	20	0.302	G	50	0.329	H	100	0.290						
Bromomethane	A	150	0.186	B	200	0.195	C	1.0	0.212	D	2.0	0.138	E	5.0	0.201
	F	20	0.137	G	50	0.197	H	100	0.122						
Chloroethane							C	1.0	0.163	D	2.0	0.118	E	5.0	0.176
	F	20	0.104	G	50	0.118									
ı richlorofluoromethane	A	150	0.351				C	1.0	0.498	D	2.0	0.335	E	5.0	0.469
	F	20	0.335	G	50	0.379	H	100	0.335						
‡ 1,1-Dichloroethene	A	150	0.202	B	200	0.187	C	1.0	0.283	D	2.0	0.218	E	5.0	0.242
	F	20	0.196	G	50	0.199	H	100	0.168						
Acetone	A	750	0.0180	B	1000	0.0160				D	10	0.0214	E	25	0.0191
	F	100	0.0156	G	250	0.0160	H	500	0.0150						
Iodomethane (Methyl Iodide)	A	750	0.299	B	1000	0.259	C	5.0	0.395	D	10	0.324	E	25	0.368
	F	100	0.338	G	250	0.327	H	500	0.272						
Carbon Disulfide	A	750	0.467	B	1000	0.384	C	5.0	0.893	D	10	0.705	E	25	0.801
	F	100	0.692	G	250	0.652	H	500	0.466						
Methylene Chloride	A	150	0.337	B	200	0.317				D	2.0	0.370	E	5.0	0.365
	F	20	0.333	G	50	0.316	H	100	0.287						
trans-1,2-Dichloroethene	A	150	0.347	B	200	0.337	C	1.0	0.405	D	2.0	0.354	E	5.0	0.354
	F	20	0.352	G	50	0.319	H	100	0.297						
† 1,1-Dichloroethane	A	150	0.611	B	200	0.574	C	1.0	0.622	D	2.0	0.502	E	5.0	0.596
	F	20	0.596	G	50	0.554	H	100	0.513						
Vinyl Acetate	A	750	0.320				C	5.0	0.342	D	10	0.311	E	25	0.357
	F	100	0.341	G	250	0.346	H	500	0.291						

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

† SPCC Compound ‡ CCC Compound

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
cis-1,2-Dichloroethene	A	150	0.331	B	200	0.362	C	1.0	0.375	D	2.0	0.304	E	5.0	0.356
	F	20	0.354	G	50	0.338	H	100	0.306						
2-Butanone (MEK)	A	750	0.0755	B	1000	0.0658	C	5.0	0.0894	D	10	0.0911	E	25	0.0804
	F	100	0.0667	G	250	0.0760	H	500	0.0719						
Bromochloromethane	A	150	0.144	B	200	0.132	C	1.0	0.164	D	2.0	0.138	E	5.0	0.162
	F	20	0.148	G	50	0.147	H	100	0.132						
Methacrylonitrile	A	150	0.0800	B	200	0.0705	C	1.0	0.0884	D	2.0	0.0777	E	5.0	0.0764
	F	20	0.0677	G	50	0.0790	H	100	0.0772						
‡ Chloroform	A	150	0.541	B	200	0.506	C	1.0	0.611	D	2.0	0.558	E	5.0	0.618
	F	20	0.585	G	50	0.555	H	100	0.505						
1,1,1-Trichloroethane (TCA)	A	150	0.515	B	200	0.487	C	1.0	0.531	D	2.0	0.565	E	5.0	0.547
	F	20	0.512	G	50	0.529	H	100	0.486						
Carbon Tetrachloride	A	150	0.493	B	200	0.470	C	1.0	0.452	D	2.0	0.518	E	5.0	0.496
	F	20	0.471	G	50	0.494	H	100	0.458						
zene	A	150	1.09	B	200	1.00	C	1.0	1.35	D	2.0	1.20	E	5.0	
	F	20	1.18	G	50	1.22	H	100	1.10						
1,2-Dichloroethane (EDC)	A	150	0.362	B	200	0.340	C	1.0	0.402	D	2.0	0.372	E	5.0	0.379
	F	20	0.350	G	50	0.372	H	100	0.347						
Trichloroethene (TCE)	A	150	0.306	B	200	0.291	C	1.0	0.334	D	2.0	0.316	E	5.0	0.313
	F	20	0.302	G	50	0.312	H	100	0.292						
‡ 1,2-Dichloropropane	A	150	0.301	B	200	0.281	C	1.0	0.314	D	2.0	0.302	E	5.0	0.306
	F	20	0.301	G	50	0.309	H	100	0.256						
Dibromomethane	A	150	0.166	B	200	0.153	C	1.0	0.190	D	2.0	0.152	E	5.0	0.161
	F	20	0.155	G	50	0.163	H	100	0.140						
Bromodichloromethane	A	150	0.388	B	200	0.363	C	1.0	0.370	D	2.0	0.342	E	5.0	0.359
	F	20	0.370	G	50	0.388	H	100	0.332						
cis-1,3-Dichloropropene	A	150	1.12	B	200	1.12	C	1.0	1.10	D	2.0	0.958	E	5.0	1.04
	F	20	1.04	G	50	1.24	H	100	1.04						
4-Methyl-2-pentanone (MIBK)	A	750	0.420	B	1000	0.384	C	5.0	0.447	D	10	0.377	E	25	0.397
	F	100	0.373	G	250	0.481	H	500	0.392						
‡ Toluene	A	150	2.69	B	200	2.54	C	1.0	3.24	D	2.0	2.77	E	5.0	2.99
	F	20	2.98	G	50	3.39	H	100	2.67						
trans-1,3-Dichloropropene	A	150	1.00	B	200	0.972	C	1.0	0.949	D	2.0	0.819	E	5.0	0.890
	F	20	0.906	G	50	1.09	H	100	0.915						

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

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,1,2-Trichloroethane	A	150	0.549	B	200	0.535	C	1.0	0.548	D	2.0	0.490	E	5.0	0.522
	F	20	0.500	G	50	0.607	H	100	0.505						
Tetrachloroethene (PCE)	A	150	0.593	B	200	0.594	C	1.0	0.641	D	2.0	0.551	E	5.0	0.602
	F	20	0.599	G	50	0.681	H	100	0.553						
2-Hexanone	A	750	0.290	B	1000	0.264	C	5.0	0.271	D	10	0.248	E	25	0.255
	F	100	0.242	G	250	0.278	H	500	0.264						
Dibromochloromethane	A	150	0.514	B	200	0.508	C	1.0	0.382	D	2.0	0.344	E	5.0	0.389
	F	20	0.413	G	50	0.528	H	100	0.460						
1,2-Dibromoethane (EDB)	A	150	0.537	B	200	0.521	C	1.0	0.527	D	2.0	0.476	E	5.0	0.477
	F	20	0.459	G	50	0.514	H	100	0.491						
† Chlorobenzene	A	150	1.89	B	200	1.78	C	1.0	2.11	D	2.0	1.94	E	5.0	1.93
	F	20	1.90	G	50	1.94	H	100	1.80						
1,1,1,2-Tetrachloroethane	A	150	0.775	B	200	0.762	C	1.0	0.704	D	2.0	0.666	E	5.0	0.681
	F	20	0.693	G	50	0.747	H	100	0.710						
·lbenzene	A	150	2.89	B	200	2.59	C	1.0	3.76	D	2.0	3.32	E	5.0	3.36
	F	20	3.35	G	50	3.37	H	100	2.95						
m,p-Xylenes	A	300	1.86	B	400	1.63	C	2.0	2.85	D	4.0	2.62	E	10	2.67
	F	40	2.64	G	100	2.62	H	200	2.04						
o-Xylene	A	150	2.58	B	200	2.41	C	1.0	2.95	D	2.0	2.67	E	5.0	2.82
	F	20	2.77	G	50	2.84	H	100	2.51						
Styrene	A	150	2.10	B	200	2.02	C	1.0	1.87	D	2.0	1.86	E	5.0	1.92
	F	20	2.04	G	50	2.15	H	100	1.96						
† Bromoform	A	150	0.437	B	200	0.436	C	1.0	0.307	D	2.0	0.299	E	5.0	0.290
	F	20	0.306	G	50	0.371	H	100	0.379						
† 1,1,2,2-Tetrachloroethane	A	150	0.587	B	200	0.543	C	1.0	0.623	D	2.0	0.517	E	5.0	0.593
	F	20	0.508	G	50	0.562	H	100	0.551						
1,2,3-Trichloropropane	A	150	0.185	B	200	0.171	C	1.0	0.192	D	2.0	0.166	E	5.0	0.181
	F	20	0.159	G	50	0.175	H	100	0.166						
trans-1,4-Dichloro-2-butene	A	150	0.167	B	200	0.157	C	1.0	0.173	D	2.0	0.147	E	5.0	0.113
	F	20	0.130	G	50	0.141	H	100	0.147						
1,3-Dichlorobenzene	A	150	1.58	B	200	1.52	C	1.0	2.02	D	2.0	1.68	E	5.0	1.70
	F	20	1.65	G	50	1.69	H	100	1.55						
1,4-Dichlorobenzene	A	150	1.59	B	200	1.47	C	1.0	2.05	D	2.0	1.79	E	5.0	1.79
	F	20	1.68	G	50	1.74	H	100	1.59						

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

† SPCC Compound

‡ CCC Compound

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichlorobenzene	A	150	1.51	B	200	1.40	C	1.0	1.81	D	2.0	1.57	E	5.0	1.59
	F	20	1.52	G	50	1.59	H	100	1.48						
1,2-Dibromo-3-chloropropane (DBCP	A	150	0.119	B	200	0.108				D	2.0	0.0952	E	5.0	0.0969
	F	20	0.0817	G	50	0.0878	H	100	0.122						
Naphthalene	A	150	1.41	B	200	1.37				D	2.0	1.03	E	5.0	0.809
	F	20	0.945	G	50	1.16	H	100	1.27						
1,2-Dichloroethane-d4	A	150	0.305	B	200	0.285				D	2.0	0.338	E	5.0	0.320
	F	20	0.284	G	50	0.310	H	100	0.288						
4-Bromofluorobenzene	A	150	0.959	B	200	0.967				D	2.0	1.14	E	5.0	1.05
	F	20	0.856	G	50	0.992	H	100	0.905						
Dibromofluoromethane	A	150	0.259	B	200	0.247				D	2.0	0.286	E	5.0	0.278
	F	20	0.243	G	50	0.256	H	100	0.242						
Toluene-d8	A	150	2.12	B	200	2.07				D	2.0	2.14	E	5.0	2.13
	F	20	2.13	G	50	2.52	H	100	2.00						

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† SPCC Compound ‡ CCC Compound

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Dichlorodifluoromethane	MS	AverageRF	% RSD	8.0		≤ 15	0.401		0.01
† Chloromethane	MS	AverageRF	% RSD	23.0	*	≤ 15	0.399		0.1
‡ Vinyl Chloride	MS	AverageRF	% RSD	9.4		≤ 15	0.333		0.01
Bromomethane	MS	AverageRF	% RSD	20.2	*	≤ 15	0.174		0.01
Chloroethane	MS	AverageRF	% RSD	23.3	*	≤ 15	0.136		0.01
Trichlorofluoromethane	MS	AverageRF	% RSD	17.9	*	≤ 15	0.386		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	16.9	*	≤ 15	0.212		0.01
Acetone	MS	AverageRF	% RSD	13.2		≤ 15	0.0173		0.01
Iodomethane (Methyl Iodide)	MS	AverageRF	% RSD	14.2		≤ 15	0.323		0.01
Carbon Disulfide	MS	AverageRF	% RSD	28.2	*	≤ 15	0.633		0.01
Methylene Chloride	MS	AverageRF	% RSD	8.7		≤ 15	0.332		0.01
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	9.1		≤ 15	0.346		0.01
† 1,1-Dichloroethane	MS	AverageRF	% RSD	7.8		≤ 15	0.571		0.1
Vinyl Acetate	MS	AverageRF	% RSD	7.0		≤ 15	0.330		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	7.6		≤ 15	0.341		0.01
2-Butanone (MEK)	MS	AverageRF	% RSD	12.3		≤ 15	0.0771		0.01
omochloromethane	MS	AverageRF	% RSD	8.2		≤ 15	0.146		0.01
ethacrylonitrile	MS	AverageRF	% RSD	8.1		≤ 15	0.0771		0.01
‡ Chloroform	MS	AverageRF	% RSD	7.7		≤ 15	0.560		0.01
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	5.2		≤ 15	0.522		0.01
Carbon Tetrachloride	MS	AverageRF	% RSD	4.6		≤ 15	0.482		0.01
Benzene	MS	AverageRF	% RSD	9.0		≤ 15	1.17		0.01
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	5.5		≤ 15	0.365		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	4.5		≤ 15	0.308		0.01
‡ 1,2-Dichloropropane	MS	AverageRF	% RSD	6.3		≤ 15	0.296		0.01
Dibromomethane	MS	AverageRF	% RSD	9.0		≤ 15	0.160		0.01
Bromodichloromethane	MS	AverageRF	% RSD	5.5		≤ 15	0.364		0.01
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	7.8		≤ 15	1.08		0.01
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	9.3		≤ 15	0.409		0.01
‡ Toluene	MS	AverageRF	% RSD	10.2		≤ 15	2.91		0.01
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	8.6		≤ 15	0.943		0.01
1,1,2-Trichloroethane	MS	AverageRF	% RSD	7.1		≤ 15	0.532		0.01
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	7.1		≤ 15	0.602		0.01
2-Hexanone	MS	AverageRF	% RSD	6.0		≤ 15	0.264		0.01
Dibromochloromethane	MS	AverageRF	% RSD	15.8	*	≤ 15	0.442		0.01
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	5.6		≤ 15	0.500		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.2		≤ 15	1.91		0.3
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	5.5		≤ 15	0.717		0.01
‡ Ethylbenzene	MS	AverageRF	% RSD	11.5		≤ 15	3.20		0.01
m,p-Xylenes	MS	AverageRF	% RSD	19.2	*	≤ 15	2.37		0.01
o-Xylene	MS	AverageRF	% RSD	6.8		≤ 15	2.69		0.01

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

† **SPCC Compound** ‡ **CCC Compound**

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

Service Request: J2203196
ICAL Date: 10/02/2002

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

ICAL ID: CAL329
Instrument ID: MS52.i

Column: Rtx-VMS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	5.3		≤ 15	1.99		0.01
† Bromoform	MS	AverageRF	% RSD	17.4	*	≤ 15	0.353		0.1
† 1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	7.0		≤ 15	0.560		0.3
1,2,3-Trichloropropane	MS	AverageRF	% RSD	6.3		≤ 15	0.174		0.01
trans-1,4-Dichloro-2-butene	MS	AverageRF	% RSD	13.4		≤ 15	0.147		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	9.1		≤ 15	1.67		0.01
1,4-Dichlorobenzene	MS	AverageRF	% RSD	10.2		≤ 15	1.71		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	7.7		≤ 15	1.56		0.01
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	15.0	*	≤ 15	0.101		0.01
Naphthalene	MS	AverageRF	% RSD	19.6	*	≤ 15	1.14		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	6.6		≤ 15	0.304		
4-Bromofluorobenzene	SURR	AverageRF	% RSD	9.5		≤ 15	0.981		
Dibromofluoromethane	SURR	AverageRF	% RSD	6.7		≤ 15	0.259		
Toluene-d8	SURR	AverageRF	% RSD	7.7		≤ 15	2.16		

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† SPCC Compound ‡ CCC Compound

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

Service Request: J2203196
ICAL Date: 10/02/2002
Date Analyzed: 10/02/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL329
Units: ug/L

File ID: \\jax1\volatiles\MS52\DATA\Ms522k02.b\1002-12.D

Column ID: Rtx-VMS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	54	0.401	0.433	8	NA	± 30 %	AverageRF
† Chloromethane	50	45	0.399	0.359	-10	NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	49	0.333	0.329	-1	NA	± 30 %	AverageRF
Bromomethane	50	50	0.174	0.175	1	NA	± 30 %	AverageRF
Chloroethane	50	38	0.136	0.103	-24	NA	± 30 %	AverageRF
Trichlorofluoromethane	50	47	0.386	0.359	-7	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	35	0.212	0.150	-29	NA	± 30 %	AverageRF
Acetone	250	230	0.0173	0.0158	-9	NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	220	0.323	0.278	-14	NA	± 30 %	AverageRF
Carbon Disulfide	250	190	0.633	0.491	-22	NA	± 30 %	AverageRF
Methylene Chloride	50	46	0.332	0.304	-8	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	49	0.346	0.338	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	54	0.571	0.616	8	NA	± 30 %	AverageRF
Vinyl Acetate	250	260	0.330	0.338	3	NA	± 30 %	AverageRF
1,2-Dichloroethene	50	48	0.341	0.324	-5	NA	± 30 %	AverageRF
utanone (MEK)	250	220	0.0771	0.0682	-11	NA	± 30 %	AverageRF
Bromochloromethane	50	47	0.146	0.137	-6	NA	± 30 %	AverageRF
Methacrylonitrile	50	46	0.0771	0.0707	-8	NA	± 30 %	AverageRF
‡ Chloroform	50	48	0.560	0.538	-4	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	47	0.522	0.495	-5	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	50	0.482	0.478	-1	NA	± 30 %	AverageRF
Benzene	50	49	1.17	1.15	-1	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	47	0.365	0.342	-6	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	49	0.308	0.301	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	49	0.296	0.293	-1	NA	± 30 %	AverageRF
Dibromomethane	50	48	0.160	0.152	-5	NA	± 30 %	AverageRF
Bromodichloromethane	50	51	0.364	0.372	2	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	49	1.08	1.06	-2	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	230	0.409	0.376	-8	NA	± 30 %	AverageRF
‡ Toluene	50	49	2.91	2.88	-1	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	50	47	0.943	0.893	-5	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	45	0.532	0.477	-10	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	47	0.602	0.571	-5	NA	± 30 %	AverageRF
2-Hexanone	250	230	0.264	0.242	-8	NA	± 30 %	AverageRF
Dibromochloromethane	50	49	0.442	0.435	-2	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	46	0.500	0.464	-7	NA	± 30 %	AverageRF
† Chlorobenzene	50	49	1.91	1.88	-1	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	49	0.717	0.708	-1	NA	± 30 %	AverageRF
‡ Ethylbenzene	50	51	3.20	3.28	3	NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203196
ICAL Date: 10/02/2002
Date Analyzed: 10/02/2002

Second Source Calibration Verification
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL ID: CAL329
Units: ug/L

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
m,p-Xylenes	100	110	2.37	2.52	7	NA	± 30 %	AverageRF
o-Xylene	50	52	2.69	2.79	3	NA	± 30 %	AverageRF
Styrene	50	53	1.99	2.09	5	NA	± 30 %	AverageRF
† Bromoform	50	47	0.353	0.333	-6	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	41	0.560	0.459	-18	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	45	0.174	0.158	-9	NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	45	0.147	0.132	-10	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	51	1.67	1.70	2	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	49	1.71	1.66	-3	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	46	1.56	1.44	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	44	0.101	0.0892	-12	NA	± 30 %	AverageRF
Naphthalene	50	52	1.14	1.20	5	NA	± 30 %	AverageRF

(ts flagged with an asterisk (*) indicate values outside control criteria.
† SPCC Compound ‡ CCC Compound

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

Service Request: J2203196
Date Analyzed: 10/04/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 10/02/2002
ICAL ID: CAL329
Analysis Lot: JWG0200907
Units: ug/L

File ID: \\JAX1\VOLATILES\MS52\DATA\MS522K03.B\1003-39.D

Column ID: Rtx-VMS

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	49	0.01	0.401	0.393	-2		NA	± 30 %	AverageRF
† Chloromethane	50	42	0.1	0.399	0.337	-16		NA	± 30 %	AverageRF
‡ Vinyl Chloride	50	49	0.01	0.333	0.329	-1		NA	± 20 %	AverageRF
Bromomethane	50	67	0.01	0.174	0.234	35	*	NA	± 30 %	AverageRF
Chloroethane	50	46	0.01	0.136	0.125	-8		NA	± 30 %	AverageRF
Trichlorofluoromethane	50	49	0.01	0.386	0.377	-2		NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	48	0.01	0.212	0.206	-3		NA	± 20 %	AverageRF
Acetone	250	200	0.01	0.0173	0.0136	-21		NA	± 30 %	AverageRF
Iodomethane (Methyl Iodide)	250	230	0.01	0.323	0.292	-9		NA	± 30 %	AverageRF
Carbon Disulfide	250	240	0.01	0.633	0.602	-5		NA	± 30 %	AverageRF
Methylene Chloride	50	38	0.01	0.332	0.255	-23		NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	37	0.01	0.346	0.253	-27		NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	44	0.1	0.571	0.504	-12		NA	± 30 %	AverageRF
/l Acetate	250	240	0.01	0.330	0.321	-3		NA	± 30 %	AverageRF
-1,2-Dichloroethene	50	49	0.01	0.341	0.333	-2		NA	± 30 %	AverageRF
2-Butanone (MEK)	250	280	0.01	0.0771	0.0878	14		NA	± 30 %	AverageRF
Bromochloromethane	50	55	0.01	0.146	0.160	10		NA	± 30 %	AverageRF
Methacrylonitrile	50	60	0.01	0.0771	0.0926	20		NA	± 30 %	AverageRF
‡ Chloroform	50	52	0.01	0.560	0.579	3		NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	51	0.01	0.522	0.534	2		NA	± 30 %	AverageRF
Carbon Tetrachloride	50	51	0.01	0.482	0.493	2		NA	± 30 %	AverageRF
Benzene	50	54	0.01	1.17	1.27	9		NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	53	0.01	0.365	0.385	5		NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	52	0.01	0.308	0.321	4		NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	54	0.01	0.296	0.319	8		NA	± 20 %	AverageRF
Dibromomethane	50	56	0.01	0.160	0.178	11		NA	± 30 %	AverageRF
Bromodichloromethane	50	57	0.01	0.364	0.416	14		NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	52	0.01	1.08	1.13	4		NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	250	280	0.01	0.409	0.466	14		NA	± 30 %	AverageRF
‡ Toluene	50	52	0.01	2.91	3.01	4		NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	50	54	0.01	0.943	1.02	9		NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	55	0.01	0.532	0.590	11		NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	49	0.01	0.602	0.587	-2		NA	± 30 %	AverageRF
2-Hexanone	250	300	0.01	0.264	0.312	18		NA	± 30 %	AverageRF
Dibromochloromethane	50	58	0.01	0.442	0.517	17		NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	56	0.01	0.500	0.561	12		NA	± 30 %	AverageRF
† Chlorobenzene	50	53	0.3	1.91	2.01	5		NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	50	51	0.01	0.717	0.738	3		NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Service Request: J2203196
Date Analyzed: 10/04/2002

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

ICAL Type: Internal Standard
Analysis Method: 8260B

ICAL Date: 10/02/2002
ICAL ID: CAL329
Analysis Lot: JWG0200907
Units: ug/L

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
‡ Ethylbenzene	50	52	0.01	3.20	3.34	4	NA	± 20 %	AverageRF
m,p-Xylenes	100	110	0.01	2.37	2.58	9	NA	± 30 %	AverageRF
o-Xylene	50	52	0.01	2.69	2.80	4	NA	± 30 %	AverageRF
Styrene	50	55	0.01	1.99	2.17	9	NA	± 30 %	AverageRF
† Bromoform	50	60	0.1	0.353	0.423	20	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	61	0.3	0.560	0.684	22	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	58	0.01	0.174	0.201	16	NA	± 30 %	AverageRF
trans-1,4-Dichloro-2-butene	50	55	0.01	0.147	0.160	9	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	51	0.01	1.67	1.72	2	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	52	0.01	1.71	1.77	3	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	52	0.01	1.56	1.62	4	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	50	54	0.01	0.101	0.109	7	NA	± 30 %	AverageRF
Naphthalene	50	59	0.01	1.14	1.36	19	NA	± 30 %	AverageRF
1,2-Dichloroethane-d4	50	49		0.304	0.298	-2	NA	± 30 %	AverageRF
4-Bromofluorobenzene	50	46		0.981	0.904	-8	NA	± 30 %	Averag
Dibromofluoromethane	50	48		0.259	0.250	-3	NA	± 30 %	Averag
Toluene-d8	50	48		2.16	2.07	-4	NA	± 30 %	AverageRF

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

† SPCC Compound **‡ CCC Compound**

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

Chain of Custody Documentation

Analytical Services™

CONDITION UPON RECEIPT FORM

Client: JA Jones Mgt Services Project name: NSB Kings Bay G

Date received: 9/25/02 12:00 Service request number: J2203196

Received by: KMH CUR completed by: KMH

Cooler/Shipping Information:

Courier: ☐ CAS ☑ Client ☐ UPS ☐ Airborne ☐ FedEx ☐ Other (describe):

Type: ☑ Cooler ☐ Box ☐ Other (describe)

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID	1				
Temp (°C)	2.2°				
Temp taken from	☐ Temp blank ☑ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle	☐ Temp blank ☐ Sample bottle
Temp measured with	☑ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):	☐ IR gun ☐ Thermometer (enter ID):

Other Information:

Any "NO" responses or discrepancies should be explained in the "Comments" section below or an NCM if so required. If an NCM was initiated, write the NCM number in the appropriate space.

CHECKLIST	YES	NO	NA	NCM #
1. Were custody seals on shipping container(s) intact? **If "No", NCM required.**			✓	—
2. Were custody papers properly included with samples?	✓			
3. Were custody papers properly filled out (ink, signed, match labels)?	✓			
4. Did all bottles arrive in good condition (unbroken)?	✓			
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓			
6. Did the sample labels agree with the chain of custody?	✓			
7. Were correct bottles used for the tests indicated?	✓			
8. Were proper sample preservation techniques indicated on the label?	✓			
9. Were samples received within holding times? **If "No," NCM required.**	✓			—
10. Were all VOA vials checked for the presence of air bubbles? **If "No", NCM required.**	✓			—
11. Were there air bubbles present in the VOA vials? **If "Yes", NCM required.**		✓		—
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓			
13. Was the cooler temperature less than 6°C?	✓			
14. Were sample pHs checked and recorded by Sample control? Checks are on reverse side of form. *NOTE: VOA samples are checked by laboratory analysts.*			✓	
15. Were the sample containers provided by CAS?	✓			
16. Were samples accepted into the laboratory?	✓			

Comments:

Columbia Analytical Services

Jacksonville Laboratory
Condition Upon Receipt - Sample pH

SR #: J 2203196 Date: 9/25/02 Initials: EM

A check mark in any space under the appropriate column headings for the selected sample indicates that the pH was checked and met the required pH criterion listed in the column heading.

	Bottle Code																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	40-mL	40-mL	125-mL	250-mL	500-mL	1-L	250-mL	1-L	2-oz	4-oz	8-oz	16-oz	5 g	100-mL	250-mL	500-mL	1-L	1-L	250-mL	500-mL	1-L	250-mL	250-mL	1.75-L	500-mL	Misc.
Container	G	G	P	P	P	P	G	G	G	G	G	G	ENC	P	P	P	P	G	P	P	P	G	P	P	P	Misc.
Pres.	HCl		HCl											Sodium Thiosulfate	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	HNO3	HNO3	NaOH	NaOH	ZnAcetate NaOH	
Req. pH	<2	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2	<2	<2	<2	>12	>12	>9	N/A
Sample #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-001		3																								
-002		3																								
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-040																										

For aqueous samples with multiple containers, only 1 bottle is checked for pH
NOTE: VOA pH chec performed by the analytical area, not sample control

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J.A. JONES
MANAGEMENT SERVICES

MATERIAL/SERVICES REQUISITION

065301

ANNEX: 19
SERVICE CHIT NO./WORK ORDER NO.: 574670
NSB KINGS BAY,

DATE SUBMITTED	REQUIRED DELIVERY DATE	REQUIRED COMPLETION DATE	SI S2 MI M2
9-24-2002	10-8-2002	10-8-2002	

REQUESTER	DEPARTMENT	PHONE NO. EXT.	SUPPLY DELIVER TO BLDG. NO.
Cofy	19	8536	6020

SUGGESTED VENDOR	CONTACT NAME	PHONE NO.	FAX NO.
Columbia Analytical	Tom	904-739-2277	904-739-2011

ITEM NO.	ORDER QTY.	UNIT OF MEASURE	STOCK-PART NUMBER	COMPLETE DESCRIPTION	EST. PRICE	PURCHASE PRICE UNIT	PURCHASE PRICE EXTN.
1	4	EA	Sample	Groundwater Protection			
				Standards by 8260 B			
				to include Naphthalene	75.00		
					300.00		

VENDOR #

VENDOR (FOR PURCHASING USE ONLY)

COMMENTS:

SUBTOTAL	
% TAX	
FREIGHT	
TOTAL	

PURCHASE ORDER #	P.O. DATE	DELIVERY/PICKUP DATE
BUYER:	CONFIRMED ORDER TO:	

SUPERVISOR Cofy DATE 9/27/2002

MANAGER DATE / /

DIVISION MANAGER DATE / /

GENERAL MANAGER DATE / /

SUPPLY DEPARTMENT TIME STAMP:

MB 0747 9/25/02

TYPE OF BUSINESS
( ) LARGE BUSINESS
( ) SMALL BUSINESS
( ) DISADVAN. BUSINESS
( ) SM. WOMEN OWNED
( ) DISADVAN. WOMEN

TERMS
( ) DISCOUNT TERMS
( ) NET 30
( ) PREPAY
( ) C.O.D.
( ) PETTY CASH
( ) OTHER

FREIGHT
( ) PREPAY & ADD
( ) K.B.N.F.
( ) THIRD PARTY BILLING

F.O.B.
( ) ORIGIN
( ) KINGS BAY, GA

MODE OF SHIPMENT
( ) VENDOR DELIVERY
( ) UPS GROUND
( ) PICKUP, WILL CALL
( ) MOTOR FREIGHT
( ) AIR FREIGHT
( ) U.S. MAIL/FAX
( ) SUBCONTRACT

PURCHASING TIME STAMP:

WHITE-PURCHASING YELLOW-EXPEDITOR PINK-SUPPLY GOLDENROD-ORIGINATOR

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 1

SF J2203196
CAS Contact

Project Name: NS B Kings Bay, Ga
Project Number: Site 11 irrigation well
Project Manager: Cathy
Report CC: Cathy
Company/Address: J.A. Jones Mgt Services
PO Box 47248
Kings Bay, Ga 31547
Phone #: 912-673-3001 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

NUMBER OF CONTAINERS: 41

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 _____

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	VOCs 8260B including Naphthalene	REMARKS/ ALTERNATE DESCRIPTION
KB122PLTCTSEP-24-02		9-24-02	1000	WATER	3	✓ ✓	
KB122PLTCTSEP-24-02		9-24-02	1002	WATER	3	✓ ✓	
KB122PLTCTSEP-24-02		9-24-02	1005	WATER	3	✓ ✓	
KB102PLTCTSEP-24-02		9-24-02	1015	WATER	3	✓ ✓	

SPECIAL INSTRUCTIONS/COMMENTS
PLS Return Cooler

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
19065301
PO#
BILL TO: J.A. Jones Mgt Svcs
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: Cheryl Cash	Signature	Signature: [illegible]	Signature	Signature
Printed Name: TOMMY BRYANT	Printed Name: Cheryl Cash	Printed Name	Printed Name	Printed Name	Printed Name
Firm: J.A. Jones	Firm: JA Jones	Firm	Firm: CAS	Firm	Firm
Date/Time: 9/25/02 42	Date/Time: 9/25/02 0747	Date/Time	Date/Time: 9/25/02 Rec'd	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1000-07