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Boeing Realty Corporation's
C-6 Facility • Los Angeles, California
GROUNDWATER MONITORING REPORT
2nd QUARTER 2000

JULY 2000

Prepared for:

BOEING REALTY CORPORATION
4060 Lakewood Boulevard, Sixth Floor
Long Beach, CA 90808

Prepared by:

KENNEDY/JENKS CONSULTANTS
2151 Michelson Drive, Suite 100
Irvine, CA 92612-1311

K/J 004016.00

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1 INTRODUCTION

The Boeing Realty Corporation (BRC) tasked Kennedy/Jenks Consultants (Kennedy/Jenks) to perform ongoing quarterly groundwater monitoring at the BRC, C-6 facility, located at 1905 Normandie Avenue, Los Angeles, California (Site). The location of the Site is shown on Figure 1. This report summarizes monitoring activities and the results of laboratory analysis of groundwater samples for the second quarter 2000 that were collected in June 2000.

The site was formerly the Douglas Aircraft Company (DAC) C-6 Facility. Our field activities were performed in coordination with redevelopment operations for this site.

2 QUARTERLY GROUNDWATER MONITORING PROGRAM

The second quarter 2000 groundwater sampling event included samples from a total of 30 wells. Static water level depths were measured prior to purging the wells, and groundwater samples were collected from 20 June to 26 June 2000. Groundwater samples were collected from the following wells:

WCC-3S	DAC-P1	TMW-7
WCC-4S	BL-1	TMW-8
WCC-5S	BL-2	TMW-9
WCC-6S	BL-3	TMW-10
WCC-7S	TMW-1	TMW-11
WCC-9S	TMW-2	TMW-12
WCC-10S	TMW-3	TMW-13
WCC-11S	TMW-4	TMW-14
WCC-12S	TMW-5	TMW-15
WCC-3D	TMW-6	TMW-16

The WCC and DAC monitoring wells were constructed in 1987 as part of a groundwater investigation (Woodward Clyde, 1987). The TMW monitoring wells were constructed by Kennedy /Jenks in 1998 and 1999 as part of the ongoing subsurface investigation (Kennedy/Jenks, 1999 and 2000). The BL monitoring wells were constructed by Harding Lawson and Associates in 1999. The well construction details for the wells listed above are summarized in Table 1. The well locations are shown on Figure 2.

Groundwater samples collected from these wells were analyzed for:

- Volatile Organic Compounds (VOCs) by EPA Method 8260,
- Diesel (extractable petroleum hydrocarbons) and gasoline (volatile petroleum hydrocarbons) by EPA Method 8015 modified,
- Semi Volatile Organic Compounds (SVOCs) by EPA Method 8270,
- Pesticides by EPA Method 8080,
- Total Metals (Title 22) by EPA Methods 6010, 7471 and 7196.

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WORKPLAN FOR A PROBABILISTIC HEALTH RISK ASSESSMENT

Prepared by: Julio A. Salinas, Ph.D., Biochem.D.
Created: 2000/07/27

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This revision: 2000/09/05

This document is part of a series describing principles and practices in health risk assessment. It was prepared on the basis of approaches and methodologies currently used by regulatory agencies and regulated community. The purpose of the STGHRAs is to ensure the protection of human health and the environment based on sound, state-of-the-art science, and an efficient and consistent risk assessment process.

This guidance should not be construed as final in any way, and it will be revised as new information becomes available. Further, it should be understood that it is not all-inclusive, and there may be topics that are briefly mentioned or not included at all. Documents labeled "do not cite or quote" were not considered for the preparation of this guidance, since their contents could change following revision. Since site-specific data and methods are preferred, topics may be modified as needed, but they should be approved by the Project Manager.

This guidance has not been officially endorsed by OEHHA. The opinions are those of the author and do not necessarily reflect the views and policies of OEHHA, Cal/EPA, or any State of California agency. Mention of trade names or commercial products does not constitute an endorsement or recommendation for or against use.

Purpose

This guidance outlines a Workplan for the probabilistic risk assessment (PRA) of contaminated sites and/or sources of hazardous contaminants. In a probabilistic approach probability density functions of health risks are generated using a Monte Carlo simulation method while considering the variability and uncertainty associated with human exposure factors.

Introduction

A probabilistic (also referred to as stochastic or uncertainty analysis) risk assessment is intended for providing protection of human health while considering the variability and uncertainty associated with human exposure factors.

- Highest Tier Level. PRAs are recognized as Tier 3, the highest level of the available risk assessment methodologies. Compared to a deterministic risk assessment (**DRA**), a PRA is far more complex, requires more resources, hardware and software computer equipment, time, and expertise on the part of the risk assessor, reviewer, and risk manager. It is strongly recommended that a screening (Tier 1) and a detailed DRA (Tier 2) be conducted and serve as the basis for the Tier 3 PRA. *A DRA should always precede a PRA effort.* Further, communicating the results of a PRA may be a challenge, and therefore, if the PRA information is unlikely to affect the risk management decision, then it may not be prudent to proceed with a PRA.

- Early preparation. To maximize utilization of resources and communication, it is recommended that a PRA Workplan be prepared early in the risk assessment process with involvement of the potentially responsible party (PRP), risk manager, and risk assessor, in all decisions regarding the planning, submittal, and technical details of the PRA. At this point, the Project Manager and the consultants, should discuss the scope of the PRA and the potential impact on subsequent site-related activities.

- Verification. A well-designed and well-conducted PRA represents the state-of-the-art, but the effort should include *a priori* verification that it uses sound science and currently accepted risk assessment practices, and that it satisfies regulatory compliance.

The topics below are recommended for consideration in a Tier 3 PRA Workplan. Since site-specific data and methods are preferred, these may be modified as needed. However, once approved, departures from a Workplan require the approval of the lead regulatory agency's Project Manager.

Outline of Contents of a Probabilistic Risk Assessment (PRA)

1. INTRODUCTION

- General aspects - Describe the purpose and scope of the health risk assessment, with special emphasis on the questions the assessment attempts to answer. Specify that evaluation of both current and future risks at the site will be evaluated, whether in absence of any remedial action, or associated with the remedial activities, or post-remediation residual risks. Identify the lead regulatory agency and the regulatory program under which the risk assessment is going to be conducted.
- Tiered risk assessment approach – A point estimate approach should always be performed prior to considering a PRA. Describe preliminary Tier 1(screening) or Tier 2 (detailed risk assessment) point estimate ("deterministic") approach used *prior to* considering the probabilistic approach.
- Probabilistic risk assessment. Describe the use of PRA for characterizing variability and uncertainty in the risk estimates. Provide a rationale or justification for the proposed or required probabilistic approach. Define the concepts of **variability** and **uncertainty** as they will be used in the risk assessment, and provide examples.
- Regulatory guidance - Describe the primary guidance document(s) that will be used for the risk assessment and the probabilistic analysis phases of the effort.

2. SITE AND SETTING INFORMATION

- Site description - General description, location, size, zoning classification, buildings, structures, drinking water supply. Provide maps for the site and location of structures. Clearly identify the areas where hazardous contaminants have been identified. Describe current zoning of the site, and planned or potential future land uses.
- Facility history - Chronology of current and past site use (e.g., industrial, residential) site activities and use of chemicals, and regulatory status. Describe the historical evidence of on-site use and disposal of hazardous chemicals.
- Environmental setting - Brief description of geologic and hydrogeologic information, site soil types, and seasonal groundwater flow direction. Description of adjacent and nearby land use, industrial facilities, residential areas, and susceptible receptors such as schools or hospitals. Describe any corrective action measures carried out within property bounds.

3. SITE CONCEPTUAL MODEL

- Outline a Site Conceptual Model (**SCM**) diagram and a narrative identifying all potential and identified primary sources of contaminants, primary release mechanisms, environmental migration and fate pathways (secondary sources, secondary release mechanisms), exposure media, exposure pathways, and potential receptors. Outline environmental contaminated media (water, soil, air, biota, and food products). Justify components that will not be considered in the HRA.
- Describe the **source(s)** and mechanisms of chemical **release** into environment - Propose approach for assessment of contaminant releases from the contaminated sources. Briefly describe the nature, duration, and frequency of releases.
- Environmental **fate** and **migration** of released COPCs - Describe the migration pathways of potential concern and the methods for identifying these for applicable land uses. Refer to site contamination evidence and present physical and chemical properties of each contaminant and how these relate to the properties of the environmental matrix (carrier). Outline the environmental migration of contaminants in soil, water, air, biota and food products, including fate. Outline potential changes in concentration and/or toxicity of the original contaminant and daughter (degradation, reaction) products. Propose models and data sources for predicting the environmental migration and transport

of COPCs, or describe algorithms for fate and transport, and define each term. Specify the computer software to be used, if applicable.

- Identify **exposure pathways**. - Identify current and future exposure pathways in terms of being (a) complete, (b) potential (incomplete but likely), and (c) incomplete and unlikely exposure pathways. Examples include: inhalation of soil and groundwater-originated VOCs in indoor air, ingestion of untreated groundwater, dermal contact to surface soil, ingestion of backyard-grown food products, and inhalation of resuspended soil particles.
- **Point of contact** and exposure point **concentrations** - Identify the point(s) of potential contact of receptors with the contaminant and/or the contaminated environmental media, including contaminated food products. Describe the methods to locate these on-site and off-site points. Describe the approach for estimating or measuring the concentration for each contaminant present in each environmental media.
- **Exposure scenarios**. Outline the assumptions related to receptors exposure and the circumstances, such as: on-site residents exposed to air, soil, water, and home-grown produce, occasional trespasser child, on-site worker involved in construction activities for about one year, or on-site employees exposed to indoor VOCs intruding the building from subsurface soil volatile contaminants.
- **Receptors** of concern and **route** of exposure. Describe the receptors of concern, including known and potential receptors, current and future, on-site and off-site, workers, farmers, construction workers, and residents, adults and children. Identify potential hypersusceptible subgroups, higher exposure subgroups, schools, hospitals, and pregnant women. Identify the human routes of exposure at the point of contact with the contaminant (inhalation, dermal, ingestion).
- **Data Quality Objectives** (DQOs) - Brief description of the procedures to ensure the necessary quality of data for the risk assessment. Outline methods for addressing data gaps for each of the phases of the SCM. Outline a discussion of data quality issues related to moving to the higher PRA tier.

4. PROBABILISTIC APPROACH

- PRA modeling approach. Define and describe the modeling approach to be used in the PRA to characterize variability or uncertainty. A One-Dimensional Monte Carlo analysis (1-D MCA) is used to characterize uncertainty or variability in each input variable. A Two-Dimensional Monte Carlo analysis (2-D MCA) is a model that simulates both uncertainty and variability in one or more input variables, usually accomplished using nested computational loops. Identify variability and uncertainty associated with exposure factors. Describe the methodology to be used for the 1-D MCA and/or the 2-D MCA.
- Software. Select the commercially available uncertainty analysis software to be used, including version number and date of the product (e.g., Crystal Ball Pro, Decisioneering, Denver, Colorado. Version 4.0, 1998, or later. @RISK, Palisade Corporation, New Jersey. Version 3.0, 1994, or later). Use of proprietary "black box" computer programs is not acceptable, since validation and verification of the computer program, computer code, and output results is outside the scope of the risk assessment review.
- Iterative PRA. A preliminary screening PRA analysis is recommended. As new information becomes available, it may be necessary to move to a higher tier of complexity in the risk assessment. This should be discussed with the leading agency and upon approval, be reflected in the Workplan.

5. CONTAMINANTS CHARACTERIZATION

- Site investigations - Outline the cumulative evidence on contaminants analyzed for, and environmental media (soil, water, air, and food) investigations supporting the objectives of the risk assessment. Provide an outline on groundwater quality, including historical contaminants data, plume isoconcentration contours, hot spots. Include maps showing soil, groundwater, and air sampling locations. Provide and compare background data vs. contaminant levels. Briefly outline the sampling strategy.
- Sampling and chemical analysis - Describe available data on soil, air, and ground water investigations, including location and depth of analyses, sampling strategy. Identify the analytical methods used, chemicals analyzed for, contaminants detected and non-detected, and method detection limits. Provide a listing of Data Quality Descriptors. Provide a list of the Tentatively Identified Chemicals (TICs).

- Data Evaluations - Describe the quality assurance and quality control methods to be used to ensure data quality, and methods for addressing data gaps.
- Selection of Chemicals of Potential Concern (COPCs) - Describe the approach for selecting the COPCs to be included in the exposure assessment phase and the rationale for those eliminated.
- Statistical analysis - Identify the methods (parametric and non-parametric) for the raw data reduction, statistical evaluation of data, and treatment of censored data. Outline a presentation for COPCs isoconcentration contours. Outline an analysis of temporal (over time) and spatial (location) trends in concentration data (e.g., random or seasonal patterns, declining or increasing trends).
- Method for deriving the concentration term. Describe which of the following will be used as descriptor of whether: (a) a deterministic representative chemical concentration will be used in the risk assessment (mean or 95% UCL of the mean), or, (b) a probability density function (PDF) of concentration values. Justify the selection and provide the basis for developing the PDFs.

6. HAZARD IDENTIFICATION

- Selecting and Handling Site Data - Propose methods for addressing data gaps.
- Chemicals of Potential Concern - Justify selection of chemicals of potential concern and environmental media of potential concern. Outline a brief narrative on a toxicological profile of the selected COPCs that is relevant to the exposure scenarios under consideration (e.g., health effects of long-term exposure by the inhalation and ingestion routes of exposure).

7. EXPOSURE ASSESSMENT

Propose an exposure assessment approach based on the Site Conceptual Model

- Identify accurately and unambiguously the data set and evidence to be used in the exposure assessment stage.
- Outline the current complete and potentially complete exposure pathways associated with each applicable on-site and off-site land use, exposure pathways (e.g., air/inhalation, water/ingestion, soil/dermal, soil/inhalation), exposure point concentrations, exposure route at the point of contact, and the human receptors as outlined in the SCM.
- Identify critical assumptions to be used in the exposure assessment.
- Using the SCM, propose the size and number of *exposure units* (i.e., geographical areas where the receptor may be exposed to contaminants over time) based on receptor's activity patterns, chemicals of potential concern, potential exposure media, and incorporate these into the algorithms for exposure.
- Consider temporal and spatial variability in the contaminant concentration term depending on the chemical and exposure medium.

Human Exposure Factors

- Outline the basis for using exposure factor distributions.
- Explain and justify the selection of each deterministic and stochastic exposure factor, and present this information in a tabular and graphical presentation, including type (e.g., normal, lognormal) of distribution and parameter values that define the distribution. Variability should be identified in terms of the nature of the variable, bounds of the variable, and symmetry and skewness of the distribution.
- Input intake rates. It is strongly recommended that input **contact rates** (e.g., m^3 air/day, mg soil/day) be expressed as *amount of contaminated media per time (hour, day or episode)*. Use of *contact rates normalized by body weights* (e.g., m^3 air/kg bw·day, or mg soil/kg bw·day) is not acceptable since: (a) human contact rates do *not* correlate or covariate with body weight, and hence a ratio of covariates has no biological basis and is unsupported. Breathing rates, water intake, food intake, are body functions that are subject to neurological, biochemical, and endocrine regulatory processes independent from body weight. (b) a contact rate normalized by body weight, that is, contaminated medium per unit body weight per unit of time, is essentially an expression of *average dose intake for constant exposure*, and appears to defeat the purpose of the intake calculation; (c) it leads to serious underestimation of the tails of the PDFs (due to multiple "instantiations" of body weight PDF in the denominator); and (d) there are no probability density functions for human exposure factors

Toxicity profile

- Outline a toxicity profile to be included in the risk assessment for the COPCs that contribute the bulk (e.g., at least 95%) of the total risk.

9. RISK CHARACTERIZATION

- Generate output PDFs of risk estimates. - Describe the risk algorithms for all contaminants, exposure pathways and exposed populations, within each exposure scenario.
- Sampling method, number of iterations, and stability of risk estimates. In a PRA, the modeled "individuals" are represented by Monte Carlo iterations. Propose a sampling method (Monte Carlo or Latin Hypercube) for the simulation analysis (the Latin Hypercube sampling method is suggested because it generates relatively more stable extreme end risk estimates than the Monte Carlo sampling method). Propose a range of iterations to ensure a numerical stability of the output risk estimate of concern (i.e., the central tendency or the higher end) and population under study. Alternatively, (a) propose the use the automatic convergence feature provided in the software, or (b) rerun the entire simulation using the same inputs with different number of iterations, in particular for 2-D Monte Carlo analysis, and show results.
- Target Risk Levels – Specify that the risk decision range is 10^{-6} to 10^{-4}. *Propose* and justify the selection of a target risk level for chronic non-cancer (e.g., Target Hazard Index = 1) and for cancer (e.g., Target Cancer Risk = 10^{-6}) health endpoints.
- High-end RME risk estimates. Generate output PDF (Probability Distribution Function) and CDF (Cumulative Distribution Function) that characterize receptor- and site-specific data. Propose a *RME Risk Estimate* selected within the *recommended RME range* (= the 90th and 99.9th percentiles of the risk distribution, where the 99.99th percentile is a bounding estimate of exposure for a population). This should include describing how the 95th percentile of the output risk PFD will be compared to the target risk level.
- Correlations. Propose an approach for dealing with presence of moderate to strong correlations between input variables. Briefly justify in terms of the effects that these may have on the output risk PDFs.
- Sensitivity analysis. Propose or justify an *initial* sensitivity analysis, and a preliminary Monte Carlo simulation. Conduct a *refined* sensitivity analysis and discuss influential and uncertain variables. Describe the statistical and/or graphical methods to be used in the sensitivity analysis (e.g., square of the Spearman rank correlation coefficient, or tornado plot for rank correlation coefficient).

10. RESULTS

- Presentation of results - Report results of calculations of exposures and risks to the population using point estimate methods and probabilistic methods. Outline the presentation of results lifetime extra cancer risks and non-cancer total hazard indexes, showing the contributions by contaminants and exposure pathways, for each receptor and exposure scenario, and factors of importance to the assessment. Present results of cancer and hazard estimates in adjacent (but not overlaid) plots of probability density function (bell-shaped PDF) and cumulative density function (S-shaped CDF), with a text box in the graphic highlighting summary statistics (50th, 90th, 95th, and 99th percentiles of the PRA).
- Analysis and interpretation of the estimated risks - Describe how the cancer risks and the hazard indexes estimates will be analyzed and interpreted. This outline should include the contributors to the overall risks for each exposure scenario and human receptor. Describe the identification of the Chemicals of Concern (COCs), the exposure pathways of concern (POCs), the receptors of concern (ROCs), and the environmental media of concern (MOCs). Describe the additional endpoint-specific evaluation to be conducted if the total hazard index is greater than one. If relevant, present diagrams showing the $1x10^{-6}$ and $1x10^{-4}$ risk isopleths.
- Sensitivity analysis. Present the results of the preliminary and refined sensitivity analyses in graphical form (tornado graphs).
- Analysis and interpretation of results. Outline an evaluation of the data that can provide the risk assessor and risk manager an overall qualitative indication of whether the data used in the risk

normalized by body weigh published in the literature, nor the interpretation of these arithmetic ratios have been discussed in the peer-reviewed literature.

- Identify exposure factors or what part of each exposure factor will be analyzed for variability and which for uncertainty.
- Document the source of the probability density function (PDFs) for the exposure factors. Alternatively, describe the method and identify the software to be used for developing the exposure factor PDFs.
- Verify that the raw data and the PDFs to be used are representative of the target population at the site, including susceptible and higher exposure subpopulations.
- Describe the relevancy of input PDFs to the site-specific contamination and exposure pathways.
- Develop (biological, physiological, behavioral) *plausible* exposure factors PDFs by bounding or truncating the maximum and minimum values of the PDFs and explain the basis.
- Propose a Goodness-of-Fit test (Shapiro-Wilk Test, Probability Plot Correlation Coefficient Test, Chi-Square Test, Kolmogorov-Smirnov Test, Anderson Darling Test, whichever applicable) to assess quality of fit of parameters to hypothesized PDF; these tests are included in Crystal Ball® and @Risk®.
- Document the degree to which the data to be used is representative of the population under study.
- Provide basic literature and guidance references to support the proposed methods.

Estimation of Dose (or Intake)

- Describe the methodology for estimating the contaminants intake (or dose) in the receptors of concern under the exposure scenarios defined in previous sections.
- Present intake estimates in a tabular form for each exposure scenario, specifying exposure pathways, COPCs, and receptors.
- Explain how calculations will be achieved in the probabilistic risk assessment, i.e., identify the computer software (commercial or proprietary) for the spreadsheet and/or uncertainty analysis. Submission of results generated from proprietary software will require verification of results using the software used in the project.
- Treat the averaging time (AT) for chronic and cancer health effects as a point (deterministic) value, and not as a PDF.

Probabilistic Exposure Uncertainty Analysis

- It is strongly recommended that the PRA be applied only to the exposure assessment, but *not* to the dose-response assessment (subject to the point estimate approach).
- Outline the uncertainty analysis, including critical aspects such assumptions made in modeling, environmental sampling errors.
- Discuss assumptions used in the risk assessment in the context of uncertainty analysis.

8. TOXICITY (DOSE-RESPONSE) ASSESSMENT

Hazard Identification

- Describe the methods to be used and the justification for selecting cancer and non-cancer criteria.
- Determine types of adverse health effects (e.g., long-term, short-term, cancer, reproductive effects) associated with chemical exposures.

Toxicity Values

- Propose priority source (Cal/EPA, USEPA) of toxicity values (e.g., RfDs, RfCs, and cancer slope factor), and methods for developing toxicity values that may not be available (use of surrogate values).
- Outline the information on acute, sub-chronic and chronic toxicity values to be used for the oral, inhalation, and dermal routes of exposure.
- State that the human health PRA will not model variability or uncertainty in the cancer slope factor, reference dose, or reference concentration (i.e., they will be treated as deterministic constants).
- Propose the approach for dealing with carcinogens with Weight-of-Evidence Class A, B, or C.

assessment are likely to over- or underestimate the risk. Describe the approach to be used in interpreting the results of the risk assessment. Describe how the information on uncertainty in the high-end risk estimates will be utilized in the risk assessment. Provide a balanced analysis of factors leading to underestimation and overestimation of the overall health risks.

11. CONCLUSIONS AND RECOMMENDATIONS

- Summary - Outline the conclusions of the study, and the intended use of this information. Describe how overall results will be presented (provide tabular summaries). Analyze and discuss whether the work conducted and results obtained address the objectives of the risk assessment.
- Recommendations. Outline the intended use of the health risk assessment results and how recommendations (if relevant) will be made in terms of the original purpose of the health risk assessment.

12. REFERENCES

- Provide a list of documents and sources of information to be used in the health risk assessment. A list of guidance documents used in human exposure and risk assessment is presented in STGHRA-02.

APPENDIXES

- Provide in an Appendix form, (a) information that may not be readily available, (b) supporting material extracted from other documents, (c) changes to standard analytical methods, or (d) proposed alternative solutions, such as method for developing surrogate values for contaminants for which toxicity criteria are not available.

References

U.S.EPA (1999). ***Risk Assessment Guidance for Superfund: Volume 3 – Part A, Process for Conducting Probabilistic Risk Assessment*** *(RAGS 3A)*. Draft Revision No. 5. Washington, DC: Office of Solid Waste and Emergency Response. EPA 000-0-99-00; OSWER 000.0-000; PB99-000000. Revision No.5. URL: http//www..epa.gov/superfundprograms/risk/rags3adt/index.htm

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U.S.EPA (1998). ***Guidance for Submission of Probabilistic Human Health Exposure Assessments to the Office of Pesticide Programs***. Draft. Washington, D.C.: USEPA, Office of Pesticide Programs, Health Effects Division.

U.S.EPA (1997). ***Policy for Use of Probabilistic Analysis in Risk Assessment at the U.S. Environmental Protection Agency.*** Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development.

U.S.EPA (1997). ***Exposure Factors Handbook***. *Volume 1: General Factors; Volume II: Food Ingestion Factors; Volume III: Activity Factors.* Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development. EPA Publ. EPA/600/P-95/002Fa, EPA/600/P-95/002Fb, and, EPA/600/P-95/002Fc.

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U.S.EPA (1997). ***Guiding Principles for Monte Carlo Analysis.*** Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum, Office of Research and Development. EPA Publication EPA/630/R-97/001.

U.S. DoE (1996). ***Characterization of Uncertainties in Risk Assessment with Special Reference to Probabilistic Uncertainty Analysis***. Washington, DC: U.S. Department of Energy, Office of Environmental policy and Assistance. Publ. EH-413-068/0496

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2.1 Groundwater Sampling Procedures

Second quarter 2000 groundwater sampling was performed in accordance with standard sampling procedures. Field activities performed at each well were documented on purge and sample forms (Appendix A). Prior to collecting groundwater samples from each well, groundwater was purged using an electrical submersible pump that was temporarily installed in the monitoring well. After lowering the pump to the approximate mid-point of the saturated well screen, approximately three wetted-casing volumes of groundwater were purged from the well until successive measurements of pH, electrical conductivity, and temperature had stabilized to within 10% of previous readings. Purged groundwater was collected in DOT approved 55-gallon drums pending the results of laboratory analysis of samples. Drums containing purge water were left onsite at a location designated by BRC personnel. .

Following groundwater purging, the flow rate of the submersible pump was reduced to 200 milliliters/minute and samples were collected in two 40-ml vials. The samples were numbered based on the following convention:

Well Number – Water Sample – Date Sampled

Example: TMW-11-W-062100

The samples were placed in a cooler and were shipped to Orange Coast Analytical Services, a State-certified analytical laboratory, for analysis.

2.2 Field QA/QC Procedures

Samples were collected and handled using industry standard QA/QC Procedures. Samples were transported under strict chain-of-custody procedures. Quality control measures performed during this groundwater monitoring event include collection and analysis of the following QA/QC samples:

- Duplicate groundwater (two per quarter),
- Rinsate sample (two per quarter), and
- Trip blank (one per trip, a total of 4 this quarter).

The following discussion describes and how each of the QA/QC samples were collected.

The duplicate groundwater samples were collected from wells WCC-11S and WCC-3D for the second quarter 2000 sampling event. The same amount of containers were filled for the duplicate samples as for the primary samples. During collection the containers were filled in an alternating sequence between primary and duplicate. The duplicate samples were numbered WCC-11S-D-062200 and WCC-3D-D-062600. The duplicate samples were analyzed using the same methods as the primary samples.

The submersible pump was decontaminated by steam cleaning between uses. Two equipment blanks, or rinsate samples, were collected after two of the decontamination procedures were completed as a check on the effectiveness of the decontamination. The rinsate samples were prepared by pouring Reagent Grade II water, prepared by the analytical laboratory, over the pump and collecting the rinsate in 40-ml vials. For this

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sampling event, the rinsate samples were collected after sampling and decontamination at wells BL-3 and WCC-6S, and they were numbered BL-3-R-062300 and WCC-6S-R-062600. The rinsate samples were analyzed using the same methods as the primary groundwater samples.

A total of four trip blank samples were analyzed as a check for the possible cross-contamination of samples during shipping from the site to the laboratory. The trip blanks consisted of two 40-ml vials that were filled with Reagent Grade II water and sealed by the laboratory. The vials remained unopened and were kept in the sample cooler during the field activities and sample shipment. The samples were numbered according to the first groundwater monitoring well sampled each day (thus: WCC-9S-B-062000, TMW-14-B-062100, WCC-10S-B-062200, and BL-2-B-062600). The trip blanks were submitted to the laboratory with the other samples and analyzed only for VOCs using EPA Method 8260.

3 FINDINGS

The following sections present the findings of the second quarter 2000 groundwater monitoring event, including the results of laboratory testing and groundwater conditions at the site.

3.1 Laboratory Results

The concentrations of chemicals detected in the groundwater samples during the second quarter 2000 sampling event are summarized in Table 2. The complete laboratory reports, including chain-of-custody and laboratory QA/QC documentation, are included in Appendix B.

3.1.1 Comparisons to Maximum Contaminant Levels

The maximum contaminant levels (MCL) established by the California Department of Health Services were exceeded for 13 compounds in one or more groundwater monitoring wells, including:

- Benzene
- Chloroform
- Carbon Tetrachloride
- 1,1-Dichloroethane (1,1-DCA)
- 1,2-Dichloroethane (1,2-DCA)
- 1,1-Dichloroethene (1,1-DCE)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- trans-1,2-Dichloroethene (trans-1,2-DCE)
- Tetrachloroethene (PCE)
- Toluene
- 1,1,1-Trichlorethane (1,1,1-TCA)
- 1,1,2-Trichlorethane (1,1,2-TCA)
- Trichloroethene (TCE)

All of the wells except TMW-10 and TMW-16 contained at least one of these compounds in excess of an MCL in the second quarter 2000 monitoring.

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3.1.2 Frequency of Occurrence

Petroleum hydrocarbons, various VOCs, and selected metals were detected in many of the 30 samples collected during the second quarter 2000 event.

The most frequently detected VOCs were TCE (30 samples) and 1,1-DCE (22 samples). Other frequently detected VOCs included the related solvents cis-1,2-DCE (13 samples) and trans-1,2-DCE (six samples). Other constituents detected included the related solvents: 1,1,1-TCA (four samples); 1,1,2-TCA (three samples); 1,1-DCA (nine samples) and 1,2-DCA (two samples). Tetrachloroethene (seven samples), and carbon tetrachloride (three samples) were also detected. Two trihalomethanes were detected including chloroform (14 samples) and trichlorofluoromethane (1 sample).

Some of the groundwater samples also contained benzene, toluene, ethylbenzene, and xylenes (BTEX). Benzene was detected in three samples, and toluene was detected in six samples. Ethylbenzene and xylenes were each detected in only one sample.

Barium (30 samples), total chromium and chromium VI (23 samples and 8 samples, respectively), and zinc (18 samples) were frequently detected at the site. Other metals detected less frequently included vanadium (five samples), copper (three samples), and nickel (two samples).

3.1.3 Distribution and Concentration

The spatial distributions of VOCs at the site are illustrated in Figure 3. TCE concentrations exceeded 10,000 μg/l at TMW-2, and DAC-P1. 1,1-DCE concentrations exceeded 10,000 μg/l at TMW-2 and WCC-3S. TCE and/or 1,1-DCE concentrations ranged between 1,000 and 10,000 μg/l in wells WCC-4S and 6S; BL-3; and TMW-3, 4, 5, 7, 8, and 9. TCE and/or 1,1-DCE concentrations ranged between 100 and 1,000 μg/l in wells WCC 3S, 7S, 10S, 11S, and 12S; BL-2; and TMW- 1, 4, 6, 7, and 12. The remaining wells contain less than 100 μg/l of both TCE and 1,1-DCE.

Benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in some of the wells along the east side of building 1, including WCC-3S, 3D, 6S, and TMW-2 and 8. The highest concentrations of benzene (380 μg/l) and toluene (48,000 μg/l) were detected at WCC-3S. WCC-6S had a lower concentration of benzene (43 μg/l) and toluene (4,700 μg/l). TMW-8 contained benzene at 23 μg/l. TMW-2 contained toluene at 480 μg/l. Individual BTEX components were detected at TMW-14 and TMW-16 at concentrations that were no greater than 6.2 μg/l.

3.1.4 QA/QC Laboratory Results

Samples analyzed at the laboratory for quality control include two duplicate samples, two rinsate samples, and four trip blanks. The analytical results for these samples are summarized in Table 3 and are contained along with internal laboratory QA/QC results in the laboratory report (Appendix B).

During the second quarter 2000 sampling event, the duplicate samples were collected at WCC-11S and WCC-3D. The results of the duplicate samples are in reasonable agreement with the primary samples at both groundwater monitoring wells, indicating that the analytical

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data are reliable. Analysis of the rinsate sample did not detect any of the VOCs present at the site. A trace concentration of copper (0.017 mg/l) was detected in one rinsate sample and zinc (0.029 and 0.021 mg/l) was detected in both rinsate samples. VOCs were not detected in any of the trip blanks; indicating that cross contamination among samples is not occurring in transport.

3.2 Groundwater Conditions

The following sections discuss the physical characteristics of the groundwater during this monitoring event including elevations, gradient, and flow direction. Specific observations regarding field conditions noted at the time of sampling are also provided.

3.2.1 Groundwater Elevations, Gradient and Flow Direction

The depth to water was measured in each of the wells prior to purging and sampling. Static groundwater elevations were calculated based on the measured depths and surveyed reference points at the wells that are summarized on Table 4. Figure 4 shows the groundwater elevations at the wells, and groundwater contours based on these elevations. The data indicate that groundwater elevations ranged from a high of 12.88 feet below mean sea level (-12.88 ft MSL) at WWC-11S to a low of 14.97 feet below MSL (-14.97 ft MSL) at TMW-12. The groundwater contours show a generally southward sloping water table. Locally the direction of groundwater flow ranges from southwest to south to southeast. The contours also show a southeast-trending trough extending from TMW-1 toward WCC-10S. The average gradient across the site is 0.0007 ft/ft (0.7 ft/1000 ft). The gradient southeast of TMW-16 is approximately 0.0027 ft/ft (2.7 ft/1000 ft). These conditions are consistent with flow directions documented during previous quarterly monitoring events. On the average, water levels at the site declined by approximately 0.2 ft since the previous monitoring event in July of 1999.

3.2.2 Field Observations

Following are selected field observations that were made during purging and sampling the monitoring wells. These observations are based on information recorded on the purge and sample forms (Appendix A) at the time of sampling:

- Good recoveries were noted during purging in all the wells.
- During purging, the groundwater became clear in WCC-3S through 12S, WCC-3D, DAC-P1, BL-3, and TMW-3-6, 8, and 10-14. The groundwater was light yellow in BL-1, and 2, and TMW-1, 7, and 9; olive brown in TMW-15 and 16; and light greenish yellow in TMW-2.
- Odors were noted while purging at WCC-3S, WCC-6S and TMW-2. Laboratory results that detected high concentrations of solvents in wells are consistent with this field note. Odors were not noted at DAC-P1, however, where TCE concentrations are also high.

4 REFERENCES

Woodward Clyde Consultants, 1990, Douglas Aircraft Company Torrance (C-6) Facility, Phase III Groundwater and Soil Investigation Report, March 1990.

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Kennedy/Jenks Consultants, 1999, Boeing Realty Corporation's C-6 Facility, Los Angeles California, Installation of Temporary Monitoring Wells in Area of Buildings 1 and 2, October 1999.

Kennedy/Jenks Consultants, 2000, Boeing Realty Corporation's C-6 Facility, Los Angeles California, Installation of Temporary Monitoring Wells TMW-10 Through TMW-17 and 2nd Quarter (March/April 1999) Groundwater Monitoring Results April 2000.

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TABLES

TABLE 1
MONITORING WELL CONSTRUCTION DETAILS
BOEING REALTY CORPORATION, C-6 FACILITY
LOS ANGELES, CALIFORNIA
K/J 004016.00

Well	Date Constructed	Well Diameter (inches)	Total Depth of Borehole (Feet)	Depth of Screened Interval (Feet)		Depth to top of Sand Filter Pack (Feet)	Well Casing Material and Slot Size	Hydrogeologic Unit Screened
				Top	Bottom			
WCC-3S[1]	10/26/87	4	92	69	89	64	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-4S[1]	10/27/87	4	91.5	70.5	90.5	65	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-5S[1]	11/24/87	4	91	60.5	91	58.5	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-6S[2]	9/22/89	4	91	60	90	N/A[4]	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-7S[2]	6/8/89	4	90.5	60	90	54	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-9S[2]	9/21/89	4	91.5	60	90	55	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-10S[2]	6/7/89	4	90.8	60	90	54	Schedule 40 PVC0.010-Inch Slots	Shallow
WCC-11S[2]	N/A	4	N/A	60	90	N/A	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-12S[2]	N/A	4	N/A	60	90	N/A	Schedule 40 PVC, 0.010-Inch Slots	Shallow
WCC-3D[2]	6/27/89	4	140	120	140	114	Schedule 40 PVC, 0.010-Inch Slots	Deeper
DAC-P1[1]	9/25/89	4	N/A	60	90	N/A	Schedule 40 PVC0.010-Inch Slots	Shallow
BL-1[3]	2/2/99	2	81.5	61.5	81.5	56.5	Schedule 40 PVC0.010-Inch Slots	Shallow
BL-2[3]	2/3/99	2	81.5	61.5	81.5	56.5	Schedule 40 PVC0.010-Inch Slots	Shallow
BL-3[3]	2/8/99	2	82	62	82	59	Schedule 40 PVC0.010-Inch Slots	Shallow
TMW-1	6/28/98	2	86	61	81	59	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-2	6/28/98	2	87	62	82	57	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-3	7/21/98	2	87	62.5	82.5	60	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-4	6/30/98	2	86	60	80	58	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-5	7/2/98	2	86	61.3	81.3	58.9	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-6	7/1/98	2	86	61.2	81.2	59.1	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-7	6/29/98	2	89.5	64	84	62	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-8	6/29/98	2	89.5	61	81	59	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-9	6/30/98	2	86	61	81	59	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-10	1/28/99	2	85	60.5	80.5	57.6	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-11	2/1/99	2	83	58	78	54.5	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-12	1/27/99	2	88	62	82	59.3	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-13	2/2/99	2	85	60	80	58	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-14	2/3/99	2	90	65	85	63	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-15	2/4/99	2	92	62	87	60	Schedule 40 PVC, 0.010-Inch Slots	Shallow
TMW-16	1/29/99	2	82.5	56.5	76.5	54.5	Schedule 40 PVC, 0.010-Inch Slots	Shallow

NOTES:
1. Data from Woodward-Clyde Consultants Phase II Report, May 1988
2. Data from Woodward-Clyde Consultants Phase III Report, March 1990
3. Data from Integrated Environmental Services, April 2000
4. N/A = Not Available.

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TABLE 2
SUMMARY OF ORGANIC COMPOUNDS AND METALS IN GROUNDWATER, JUNE 2000

Boeing Realty Corporation, C-6 Facility
Los Angeles, California
K/J 004016.00

Well	Sample Date	EPA 8260 µg/L																	EPA 6010 mg/L	EPA 7196 mg/L	EPA 6010 mg/L				
		Detection Limit[1]	Benzene	Carbon Tetrachloride	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	Ethylbenzene	PCE	Toluene	1,1,1-TCA	1,1,2-TCA	TCE	cis-1,2-DCE	Total Xylenes	TCFM	DCFM	Barium	Chromium (VI)[3]	Chromium (total)	Copper	Nickel	Vanadium	Zinc
																			Detection Limit[2]	0.010	0.010	0.010	0.010	0.010	0.010	0.010
WCC-3S	7/16/99	250	380			780		32,000	1000			54,000	2,700		810	8,600				0.26						0.025
	6/26/00	125	380			630		25,000	840			48,000	2,400		770	7,600				0.32						0.024
WCC-4S	7/14/99	10						2,100	19						1,500	12				0.28		0.012				0.013
	6/21/00	10						1,800							1,300					0.33	0.012	0.012				
WCC-5S	7/15/99	0.5						14							2.3					0.24						0.017
	6/22/00	0.5						9							2.7					0.24						0.024
WCC-6S	7/16/99	50				94		7,300	130			860	390		3,000	1,000				0.14						0.017
	6/26/00	25	43			76		5,300	91			4,700	1,600		1,500	2,000				0.19						0.012
WCC-7S	7/14/99	1.0						32							120	9.3				0.082		0.014				0.013
	6/22/00	0.5			0.67	1.1		190						1.7	170	1.1				0.180	0.012	0.013				0.011
WCC-9S	7/13/99	0.5			24				12				56	2.2		1.3			0.19			0.025				
	6/20/00	0.5			49			14							78					0.25		0.013				
WCC-10S	7/14/99	1.0						190						1.2	200	1.3				0.18		0.012				0.012
	6/22/00	0.5		1.3	2.8	0.94		34			3.0				160					0.029		0.012				
WCC-11S	7/14/99	0.5		1.1	2.8			38			3.1				170	1.2				0.029		0.011				0.013
	6/22/00	0.5			0.58			25							110	12				0.083		0.015				0.020
WCC-12S	7/13/99	0.5			1.9	20		49			0.63				130	3.0				0.10		0.012				0.011
	6/21/00	0.5			2.8	24		47			1.0				160	1.9				0.12		0.013				
WCC-3D	7/16/99	0.5						4.7				1.7	6.4		6.2	1.8				0.093						0.014
	6/26/00	0.5						54				37	50.0		9.9	2.1				0.082						0.027
DAC-P1	7/16/99	125													18,000					0.10	0.24	0.29				0.016
	6/26/00	50													14,000	79				0.12	0.28	0.35				
BL-1	6/26/00	0.5				0.85									3.1	20				0.10		0.016			0.018	0.039
BL-2	6/26/00	5													940					0.13	0.012	0.028			0.011	0.023
BL-3	6/23/00	13									59				1,300					0.41		0.029	0.018			0.030
TMW-1	7/15/99	2.5						600							340			14		0.24	0.042	0.042				0.020
	6/23/00	2.5						340							350			19		0.28		0.056			0.010	0.033
TMW-2	7/16/99	125			280	1,900		43,000	930				2,700		32,000	1,000				0.38	0.12	0.12				0.040
	6/26/00	100			230	1,400		28,000	580			480	1,900		28,000	850				0.39		0.35				0.031
TMW-3	7/15/99	50						340							7,800					0.12		0.023				0.110
	6/22/00	10						96							3,500	12				0.11	0.012	0.036				0.031

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TABLE 2
SUMMARY OF ORGANIC COMPOUNDS AND METALS IN GROUNDWATER, JUNE 2000

Boeing Realty Corporation, C-6 Facility
Los Angeles, California
K/J 004016.00

Well	Sample Date	EPA 8260 µg/L																		EPA 6010	EPA 7196	EPA 6010 mg/L				
		Detection Limit[1]	Benzene	Carbon Tetrachloride	*Chloroform*	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	Ethylbenzene	PCE	Toluene	1,1,1-TCA	1,1,2-TCA	TCE	cis-1,2-DCE	Total Xylenes	TCFM	DCFM	Barium	Chromium (VI)[3]	Chromium (total)	Copper	Nickel	Vanadium	Zinc
																			Detection Limit[2]	0.010	0.010	0.010	0.010	0.010	0.010	0.010
TMW-4	7/15/99	10				42	23	2,500	64						2,500	77						0.017				0.016
	6/22/00	5			17	22	15	890	27					11	1,700	39				0.120	0.020	0.025				
TMW-5	7/14/99	50						710							4,300					0.055		0.015				0.014
	6/22/00	13						650							4,100					0.067		0.021				0.013
TMW-6	7/15/99	2.5			560			8.6							130						0.024	0.024				0.028
	6/22/00	2.5			100										540					0.200		0.021				
TMW-7	7/15/99	13	13		13	36	18	2,100	57						2,500	69				0.11		0.016				0.045
	6/23/00	10						850	24						2,000	34				0.19	0.047		0.017	0.015	0.03	0.120
TMW-8	7/15/99	13	27		16	52	19	3,500	74					13	3,000	92				0.088						0.022
	6/23/00	13	23			45	22	2,300	56					13	2,900	81				0.10						0.035
TMW-9	7/14/99	5.0						290							1,200					0.11	0.024	0.024				0.019
	6/23/00	5.0						220							1,000					0.14		0.033				0.028
TMW-10	7/13/99	0.5			4.9			0.58			1.3				4.4			0.80	2.3	0.16		0.019				0.024
	6/20/00	0.5			4.7			1.0							4.1					0.14		0.014				
TMW-11	7/13/99	1.3		1.7	450			1.5			1.7				23					0.39		0.014				0.023
	6/20/00	2.5			740										47					0.41		0.013				
TMW-12	7/13/99	10			2,800			32							760					0.29						0.026
	6/21/00	10			2,100			25			13				440					0.34						
TMW-13	7/13/99	0.5		4.5	29			0.6			5.6				120					0.18						0.015
	6/21/00	0.5		2.9	14						2.9				97					0.13		0.011				
TMW-14	7/13/99	0.5		2.9	4.4						1.8				13					0.17		0.012				0.015
	6/21/00	0.5		1.8	5.8					0.57	1.0	1.3			10		1.8			0.19	0.017	0.015				
TMW-15	7/13/99	0.5			11			1.5							39					0.085		0.011			0.018	0.026
	6/22/00	0.5			11			1.7							35					0.076		0.017				0.037
TMW-16	7/16/99	0.5									0.98				2.7					0.072		0.023		0.010		0.042
	6/26/00	0.5						2.7			2.1	6.2			2.9					0.100		0.058	0.012	0.016	0.025	0.066

Table Notes:
Blank cell indicates constituent result was below the detection limit.
Shaded cell indicates sample was not tested for the given constituent.
1. Detection limits varied between well samples for volatile organics analyses.
2. Dectection limits were consistent between well samples for metals analyses.
Table shows only compounds that were detected at least once in the groundwater samples.

Table Key:

BDCM	Bromodichloromethane	TCA	Trichloroethane
CDBM	Chlorodibromomethane	TCE	Trichloroethene
DCA	Dichloroethane	TCFM	Trichlorofluoromethane
DCE	Dichloroethene	DCFM	Dichlorofluoromethane
PCE	*Tetrachloroethene*		

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TABLE 3
SUMMARY OF QUALITY CONTROL RESULTS, JUNE 2000

Boeing Realty Corporation, C-6 Facility
Los Angeles, California
K/J 004016.00

			EPA 8260 µg/L																		EPA 6010	EPA 7196	EPA 6010 mg/L				
Sample Number	Sample Description	Sample Date	Detection Limit[1]	Benzene	Carbon Tetrachloride	Chloroform	1,1-DCA	1,2,DCA	1,1-DCE	trans-1,2-DCE	Ethylbenzene	PCE	Toluene	1,1,1-TCA	1,1,2-TCA	TCE	cis-1,2-DCE	Total Xylenes	TCFM	DCFM	Barium	Chromium (VI)[3]	Chromium (total)	Copper	Nickel	Vanadium	Zinc
																				Detection Limit[2]	0.010	0.010	0.010	0.010	0.010	0.010	0.010
WCC-11S-W-062200	WCC-11S primary	6/22/00	0.5			0.58			25							110	12				0.083		0.015				0.020
WCC-11S-D-062200	WCC-11S duplicate	6/22/00	0.5						24							110	11				0.083		0.015				
WCC-3D-W-062600	WCC-3D primary	6/26/00	0.5						54				37	50		9.9	2.1				0.082						0.027
WCC-3D-D-062600	WCC-3D duplicate	6/26/00	0.5						68				42	54		11	2.1				0.082						0.013
BL-3-R-062300	Rinsate	6/23/00	0.5																								0.029
WCC-6S-R-062600	Rinsate	6/26/00	0.5																					0.017			0.021
WCC-9S-B-062000	Trip Blank	6/20/00	0.5																								
TMW-14-B-062100	Trip Blank	6/21/00	0.5																								
WCC-10S-B-062200	Trip Blank	6/22/00	0.5																								
BL-2-B-062600	Trip Blank	6/26/00	0.5																								

Table Notes:
Blank cell indicates constituent result was below the detection limit.
Shaded cell indicates sample was not tested for the given constituent.
1. Detection limits varied between well samples for volatile organics analyses.
2. Dectection limits were consistent between well samples for metals analyses.
Table shows only compounds that were detected at least once in the primary groundwater samples.

Table Key:

BDCM	Bromodichloromethane	TCA	Trichloroethane
CDBM	Chlorodibromomethane	TCE	Trichloroethene
DCA	Dichloroethane	TCFM	Trichlorofluoromethane
DCE	Dichloroethene	DCFM	Dichlorofluoromethane
PCE	Tetrachloroethene		

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TABLE 4
SUMMARY OF GROUNDWATER ELEVATION DATA, JUNE 2000

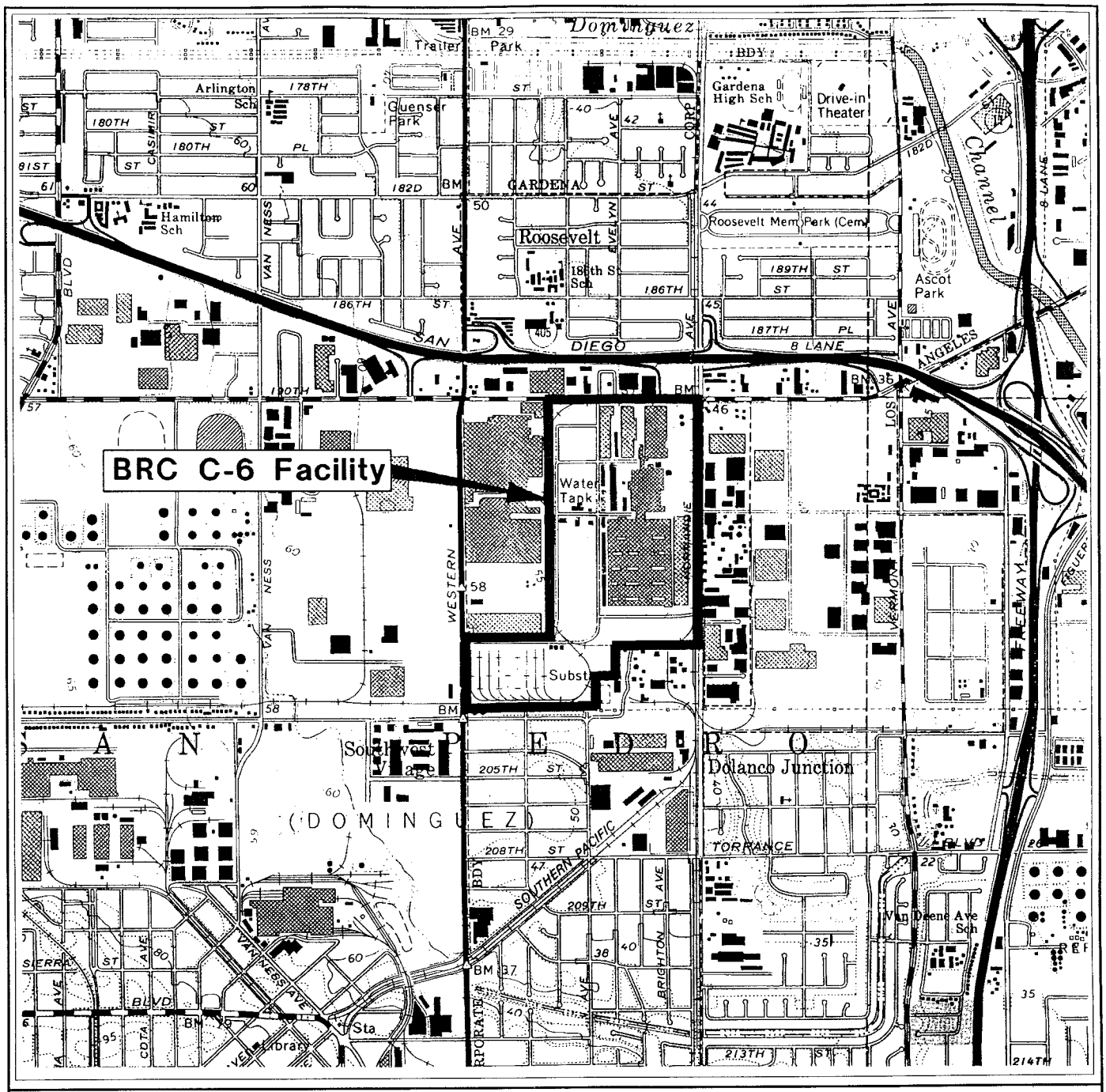
BOEING REALTY CORPORATION, C-6 FACILITY
LOS ANGELES, CALIFORNIA
K/J 004016.00

Well	Reference Point[1] Elevation (Feet Above MSL)	June 20-26, 2000	
		Depth[2]	Elevation
WCC-3S	51.16	64.63	-13.47
WCC-4S	49.65	63.16	-13.51
WCC-5S	48.84	62.30	-13.46
WCC-6S	51.32	64.98	-13.66
WCC-7S	50.23	63.90	-13.67
WCC-9S	46.93	60.63	-13.70
WCC-10S	58.17	71.30	-13.13
WCC-11S	51.37	64.25	-12.88
WCC-12S	46.93	60.78	-13.85
WCC-3D	51.16	64.86	-13.70
DAC-P1	58.85	71.86	-13.01
BL-1	58.34	71.20	-12.86
BL-2	58.15	71.66	-13.51
BL-3	59.33	73.58	-14.25
TMW-1	51.24	64.89	-13.65
TMW-2	51.18	64.64	-13.46
TMW-3	51.07	65.19	-14.12
TMW-4	50.35	64.61	-14.26
TMW-5	50.12	64.67	-14.55
TMW-6	50.13	64.59	-14.46
TMW-7	51.12	65.15	-14.03
TMW-8	51.06	64.98	-13.92
TMW-9	51.21	65.22	-14.01
TMW-10	47.52	61.57	-14.05
TMW-11	47.47	62.10	-14.63
TMW-12	50.85	65.82	-14.97
TMW-13	50.91	65.82	-14.91
TMW-14	58.21	72.96	-14.75
TMW-15	55.26	69.30	-14.04
TMW-16	50.91	63.77	-12.86

Notes:

1. Reference point is north side, top of well casing
2. Depth in feet below reference point.

FIGURES



Source: Basemap modified from
U.S.G.S. Torrance, California
7.5 Minute Quadrangle
Photorevised 1981

0 2000 4000

Approximate Scale in Feet

N

Kennedy/Jenks Consultants

Boeing Realty Corporation
C-6 Facility

Site Location Map

July 2000
K/J 004016.00

Figure 1

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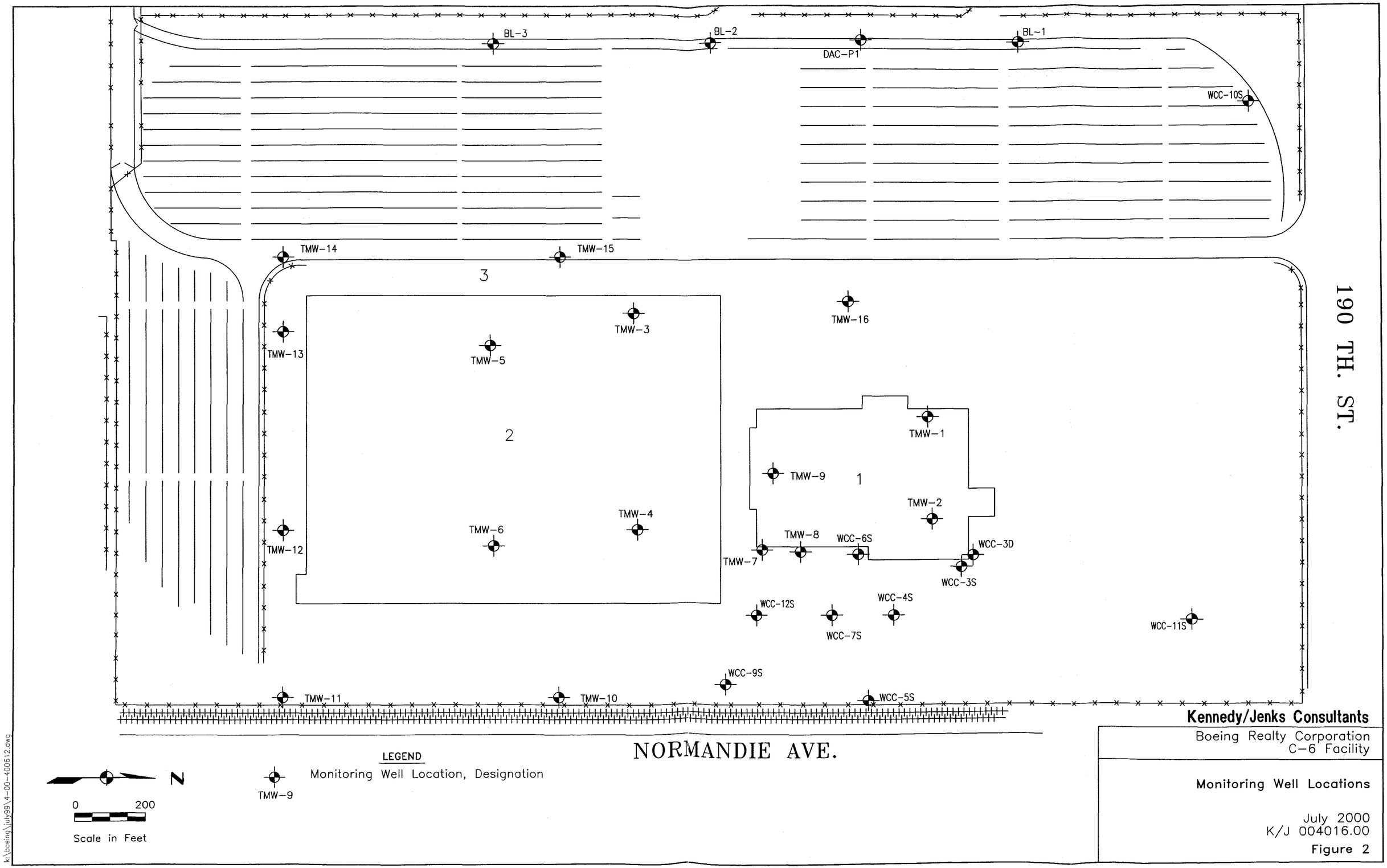
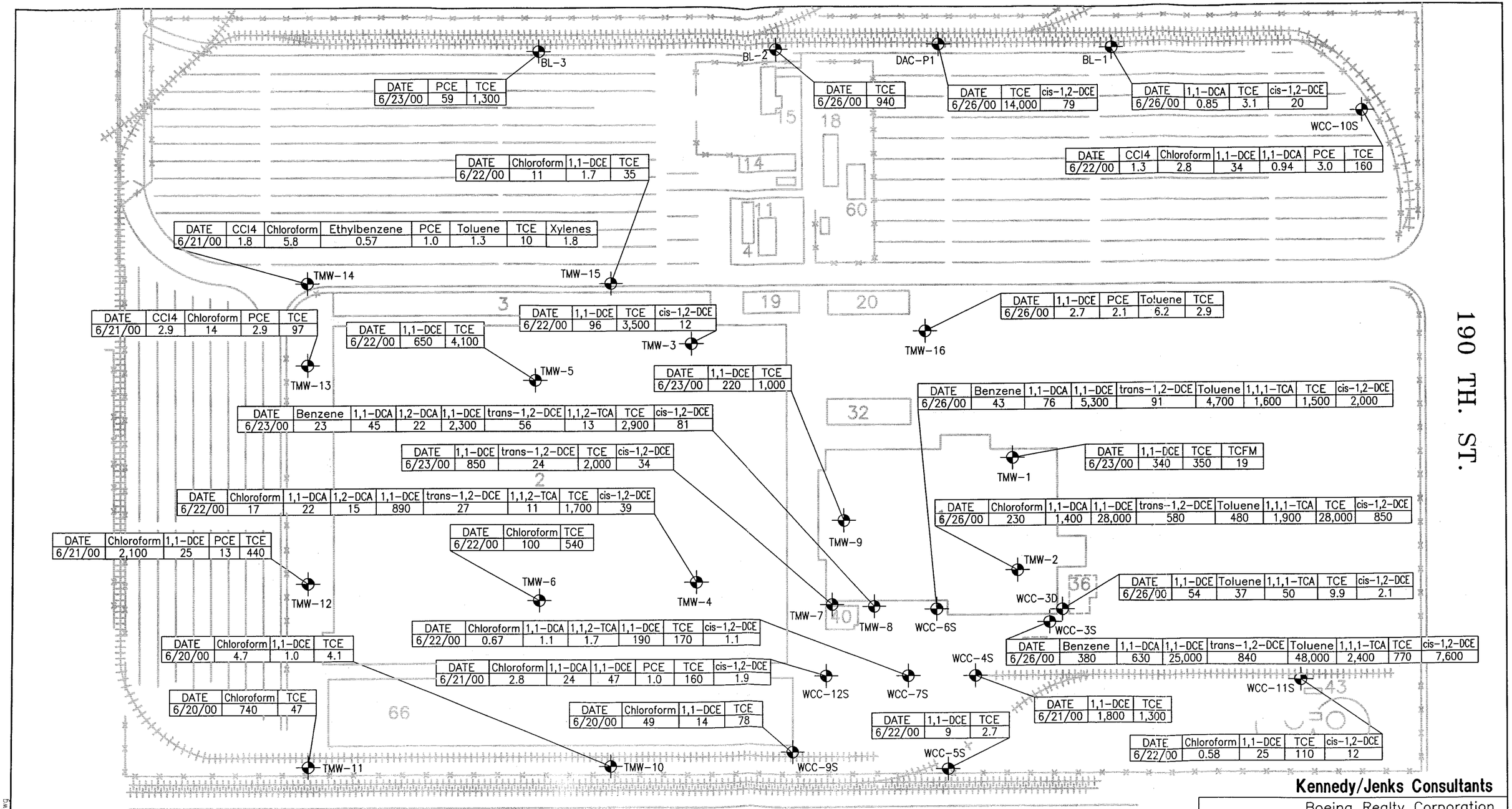

BL-3
BL-2
DAC-P1
BL-1
WCC-10S
TMW-14
TMW-15
3
TMW-16
TMW-3
TMW-13
TMW-5
2
TMW-1
TMW-9
1
TMW-2
TMW-4
TMW-6
TMW-8
WCC-6S
WCC-3D
TMW-7
WCC-3S
WCC-12S
WCC-4S
WCC-7S
WCC-11S
WCC-9S
TMW-12
TMW-11
TMW-10
WCC-5S
190 TH. ST.
NORMANDIE AVE.
N
0
200
Scale in Feet
LEGEND
Monitoring Well Location, Designation
TMW-9
Kennedy/Jenks Consultants
Boeing Realty Corporation
C-6 Facility
Monitoring Well Locations
July 2000
K/J 004016.00
Figure 2
k:\boeing\july99\4-00-400612.dwg



DATE	PCE	TCE
6/23/00	59	1,300

DATE	TCE
6/26/00	940

DATE	TCE	cis-1,2-DCE
6/26/00	14,000	79

DATE	1,1-DCA	TCE	cis-1,2-DCE
6/26/00	0.85	3.1	20

DATE	CCl4	Chloroform	1,1-DCE	1,1-DCA	PCE	TCE
6/22/00	1.3	2.8	34	0.94	3.0	160

DATE	Chloroform	1,1-DCE	TCE
6/22/00	11	1.7	35

DATE	CCl4	Chloroform	Ethylbenzene	PCE	Toluene	TCE	Xylenes
6/21/00	1.8	5.8	0.57	1.0	1.3	10	1.8

DATE	1,1-DCE	PCE	Toluene	TCE
6/26/00	2.7	2.1	6.2	2.9

DATE	CCl4	Chloroform	PCE	TCE
6/21/00	2.9	14	2.9	97

DATE	1,1-DCE	TCE	cis-1,2-DCE
6/22/00	96	3,500	12

DATE	1,1-DCE	TCE
6/22/00	650	4,100

DATE	1,1-DCE	TCE
6/23/00	220	1,000

DATE	Benzene	1,1-DCA	1,1-DCE	trans-1,2-DCE	Toluene	1,1,1-TCA	TCE	cis-1,2-DCE
6/26/00	43	76	5,300	91	4,700	1,600	1,500	2,000

DATE	Benzene	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	1,1,2-TCA	TCE	cis-1,2-DCE
6/23/00	23	45	22	2,300	56	13	2,900	81

DATE	1,1-DCE	TCE	TCFM
6/23/00	340	350	19

DATE	1,1-DCE	trans-1,2-DCE	TCE	cis-1,2-DCE
6/23/00	850	24	2,000	34

DATE	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	1,1,2-TCA	TCE	cis-1,2-DCE
6/22/00	17	22	15	890	27	11	1,700	39

DATE	Chloroform	1,1-DCA	1,1-DCE	trans-1,2-DCE	Toluene	1,1,1-TCA	TCE	cis-1,2-DCE
6/26/00	230	1,400	28,000	580	480	1,900	28,000	850

DATE	Chloroform	1,1-DCE	PCE	TCE
6/21/00	2,100	25	13	440

DATE	Chloroform	TCE
6/22/00	100	540

DATE	1,1-DCE	Toluene	1,1,1-TCA	TCE	cis-1,2-DCE
6/26/00	54	37	50	9.9	2.1

DATE	Chloroform	1,1-DCA	1,1,2-TCA	1,1-DCE	TCE	cis-1,2-DCE
6/22/00	0.67	1.1	1.7	190	170	1.1

DATE	Benzene	1,1-DCA	1,1-DCE	trans-1,2-DCE	Toluene	1,1,1-TCA	TCE	cis-1,2-DCE
6/26/00	380	630	25,000	840	48,000	2,400	770	7,600

DATE	Chloroform	1,1-DCE	TCE
6/20/00	4.7	1.0	4.1

DATE	Chloroform	1,1-DCA	1,1-DCE	PCE	TCE	cis-1,2-DCE
6/21/00	2.8	24	47	1.0	160	1.9

DATE	Chloroform	TCE
6/20/00	740	47

DATE	Chloroform	1,1-DCE	TCE
6/20/00	49	14	78

DATE	1,1-DCE	TCE
6/21/00	1,800	1,300

DATE	1,1-DCE	TCE
6/22/00	9	2.7

DATE	Chloroform	1,1-DCE	TCE	cis-1,2-DCE
6/22/00	0.58	25	110	12

N

0 200

Scale in Feet

TMW-9 Monitoring Well Location, Designation

LEGEND

BDCM – Bromodichloromethane
CDBM – Chlorodibromomethane
CCl4 – Carbon Tetrachloride
DCA – Dichloroethane
DCE – Dichloroethene
PCE – Tetrachloroethene
TCA – Trichloroethane
TCE – Trichloroethene
TCFM – Trichlorofluoromethane
DCFM – Dichlorofluoromethane

Kennedy/Jenks Consultants

Boeing Realty Corporation
C-6 Facility

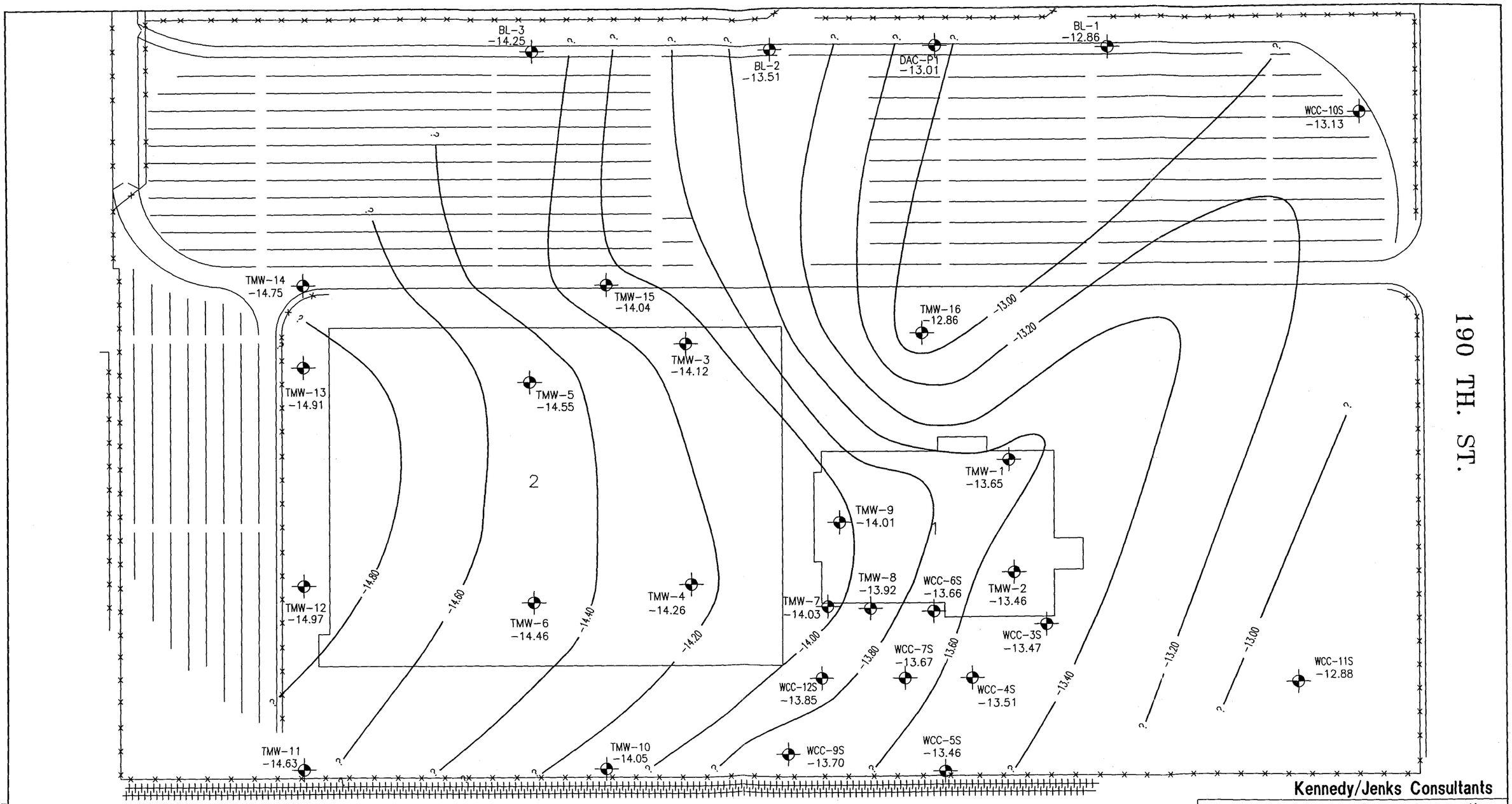
Detected Concentrations of Volatile Organic Compounds in Groundwater
June 2000

July 2000
K/J 004016.00

Figure 3

K:\BOEING\JULY99\4-00-400613.dwg

BOE-C6-0066493



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C-6 Facility

Estimated Groundwater Elevation Contour Map, Shallow Zone, June 2000

July 2000
K/J 004016.00

Figure 4

LEGEND

TMW-9 -13.70 — Monitoring Well Location, Designation and groundwater elevation, feet MSL,

-14.6 — Groundwater Elevation contours, dashed where inferred, queried where uncertain.

NOTE: 1) Contour Interval = 0.2 feet

N

0 200
Scale in Feet

\BOEING\JULY99\4-00-400614.dwg

BOE-C6-0066494

APPENDIX A

GROUNDWATER PURGE AND SAMPLE FORMS

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-95

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 60.63 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: ~~Bady~~ Ready Flow-2

TIME START PURGE: 1336 PURGE DEPTH (FT) 75'

TIME END PURGE: 1402

TIME SAMPLED: 1410

COMMENTS: Sample # WCC-95-W062000

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 55 CASING VOLUME (GAL)
	89.35		60.63		28.72		0.16	0.64	1.44		18.38

TIME	1340	1345	1354	1402			
VOLUME PURGED (GAL)	8	19	40	55			
PURGE RATE (GPM)	1.6	1.6	1.6	1.6			
TEMPERATURE (°C)	75.5	73.9	73.6	74.7			
pH	6.89	6.76	6.63	6.57			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,570.	1,581.	1,573.	1,580.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear	Clear			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'	75'			
DEPTH TO WATER DURING PURGE (FT)	61.43	61.45	61.50	61.52			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-9S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1410 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-9S-	2	VOA	HCL		50 mL				See	
W062000	2	Plastics	HNO_3	—	1250 mL	—	Clear	Yes	C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 55 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-11

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 62.10 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1450 PURGE DEPTH (FT) 75'

TIME END PURGE: 1505

TIME SAMPLED: 1510

COMMENTS: Sample # TMW-11-W062000

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 7.8 CASING VOLUME (GAL)
	78.45		62.10		16.30		0.16	0.64	1.44		2.60

TIME	1455	1500	1505				
VOLUME PURGED (GAL)	2	6	10				
PURGE RATE (GPM)	.5	.5	.5				
TEMPERATURE (°C)	75.6	75.2	74.8				
pH	6.68	6.59	6.64				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2130.	2190.	2180.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light olive brown	V. light olive brown	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-11

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1510 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-11-W062000	2	VOA	HCL		80mL				See C.O.C	
	2	Plastic	HNO_3	NO	1250 mL	—	Clear	YES		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 10 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): Drum shared with TMW-10, 12 + 13.

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-10

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 61.57 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1542 PURGE DEPTH (FT)

TIME END PURGE: 1600 Sampled

TIME SAMPLED: 1540 - Re-calibrated pH probe.

COMMENTS: Sample # TMW-10-W062000

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 7.86 CASING VOLUME (GAL)
	78.00		61.57		16.43		0.16	0.64	1.44		2.62

TIME	1545	1552	1555				
VOLUME PURGED (GAL)	3 gal.	7 gal.	10 gal.				
PURGE RATE (GPM)	.5	.5	.5				
TEMPERATURE (°C)	75.7	75.9	75.8				
pH	7.72	7.89	7.91				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1544.	1524.	1523.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	U.U. light Yellow	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-20-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-10

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1540 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-10-	2	VOA	HCL		80 mL					
W062000	2	Plastic	HNO3	NO	1250mL	—	Clear	Yes	See COC.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 10 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-12S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 60.78 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0842 PURGE DEPTH (FT) 75'

TIME END PURGE: 0908

TIME SAMPLED: 0915

COMMENTS: Sample # WCC-12S-W062100

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	X 3 = 57 CASING VOLUME (GAL)
	90.30		60.78		29.52		0.16	0.64	1.44		18.89

TIME	0852	0900	0908				
VOLUME PURGED (GAL)	20	40	58				
PURGE RATE (GPM)	3	3	3				
TEMPERATURE (°C)	73.4	73.3	73.4				
pH	7.54	7.44	7.47				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,310.	1,291.	1,275.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-12 S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0915 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAIN-ERS	CON-TAINER TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-12S-	2	VOA	HCL		80 mL				See C.O.C.	
W062100	2	Plastic	HNO3	NO	1250 mL	—	Clear	Yes		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 58 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum, excess water shared with TMW-14+15

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 70°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-12

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 65.82 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electronic Purge PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0945 PURGE DEPTH (FT) 75'

TIME END PURGE: 0956

TIME SAMPLED: 1000

COMMENTS: Sample # TMW-12-W062100

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 7.5 CASING VOLUME (GAL)
	81.30		65.68		15.62		0.16	0.64	1.44		2.5

TIME	0949	0953	0956				
VOLUME PURGED (GAL)	2.5gal.	5gal.	8gal.				
PURGE RATE (GPM)	.75	.75	.75				
TEMPERATURE (°C)	74.3	75.0	75.1				
pH	7.25	7.13	7.10				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,765.	1,763.	1,770.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light olive brown	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-12

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Sorimshine

SAMPLE DATA:

TIME SAMPLED: 1000 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-12-	2	VOA	HCL		80 mL				See	
W062100	2	Plastic	HNO_3	NO	1250 mL	—	Clear	Yes	C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum stored with other TMW wells (13 + 6)

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 75°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-13

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 65.82 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electronic Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1042 PURGE DEPTH (FT) 75'

TIME END PURGE: 1051

TIME SAMPLED: 1056

COMMENTS: Sample # TMW-13-W062100

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3=6.4 CASING VOLUME (GAL)
	79.15		65.82		13.33		0.16	0.64	1.44		2.13

TIME	1046	1049	1051				
VOLUME PURGED (GAL)	3 gal.	5 gal.	7 gal.				
PURGE RATE (GPM)	.5	.5	.5				
TEMPERATURE (°C)	74.0	74.1	74.0				
pH	7.13	7.12	7.10				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1581.	1587.	1588.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light, olive tan	light yellow	clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-13

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1056 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-13-	2	VOA	HCL		80 mL					
W062100	2	Plastic	HNO3	NO	1250 mL	—	Clear	YES	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum shared with TMW-12 + TMW-6

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 78°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-14

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 72.96 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electronic Sounder PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1417 PURGE DEPTH (FT) 85'

TIME END PURGE: 1459

TIME SAMPLED: ~~1430~~ 1505

COMMENTS: Sample # TMW-14-W062100

Generator died at 1421. 1452, repaired gen. + resumed purge.

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	CASING VOLUME (GAL)
	88.30		72.96		15.34		0.16	0.64	1.44		2.25

TIME	1420	1453 ~~1423~~	1455 ~~1425~~	1459			
VOLUME PURGED (GAL)	2.5 gal.	5 ~~7~~ gal.	7 gal.	9 gal.			
PURGE RATE (GPM)	.5	.5	.5	.5			
TEMPERATURE (°C)	74.6	73.9	74.1	73.8			
pH	7.42	7.21	7.19	7.19			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2030.	2210.	2230.	2240.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Light Yellow	Light Yellow	Clear	Clear			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	85'	85'	85'	85'			
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-14

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1505 COMMENTS:

DEPTH SAMPLED (FT): 85'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-14-	2	VOA	HCL		80 mL					
W062100	2	Plastic	HNO3	NO	1250 mL	—	Clear	YES	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 9 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum shared with

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES NO

WELL CASING OK?: YES NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS:

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-4S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 63.16 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1635 PURGE DEPTH (FT) 75'

TIME END PURGE: 1653

TIME SAMPLED: 1658

COMMENTS: Sample # WCC-4S-W062100

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 35 CASING VOLUME (GAL)
	89.70		63.16		16.54		0.16	0.64	1.44		10.58

TIME	1640	1645	1650	1653			
VOLUME PURGED (GAL)	11	22	35	43			
PURGE RATE (GPM)	2	2	2	2			
TEMPERATURE (°C)	79.7	75.7	74.6	74.6			
pH	7.62	7.44	7.31	7.30			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2050.	2000.	1940.	1930.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear	Clear			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'	75'			
DEPTH TO WATER DURING PURGE (FT)	63.90	63.92	63.94	63.95			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-21-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-4S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1658 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-4S-	2	VOA	HCL		80 mL				See	
W062100	2	Plastic	HNO_3	NO	1250mL	—	Clear	Yes	C.O.C	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 43 COMMENTS:

DISPOSAL METHOD: Drum storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6

WELL NUMBER: TMW-15

PROJECT NUMBER: 004016.00

PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 69.30

MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe

PURGE METHOD: Redi-Flow 2

TIME START PURGE: ~~0745~~ 0748

PURGE DEPTH (FT) 75'

TIME END PURGE: 0800

TIME SAMPLED: 0805

COMMENTS: Sample # TMW-15-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 9 CASING VOLUME (GAL)
	87.65		69.30		18.35		0.16	0.64	1.44		2.93

TIME	0751	0755	0758	0800 ~~0795~~			
VOLUME PURGED (GAL)	3gal.	7gal.	10gal.	12gal.			
PURGE RATE (GPM)	1	1	1	1			
TEMPERATURE (°C)	73.7	74.4	74.5	74.5			
pH	7.69	7.49	7.48	7.47			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	745.	885.	935.	940.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	olive brown	olive brown	olive brown	olive brown			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'	75'			
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-15

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0805 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-15-	2	VOA	HCL		80 mL		clear		See	
W062200	2	Plastic	HNO_3	NO	1250 mL	—	brown	YES	C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 12 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 70°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-7S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 63.90 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electronic Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0831 PURGE DEPTH (FT) 75'

TIME END PURGE: 0856

TIME SAMPLED: 0900

COMMENTS: Sample # WCC-7S-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 53 CASING VOLUME (GAL)
	90.35		63.90		27.45		0.16	0.64	1.44		17.6

TIME	0837	0846	0856				
VOLUME PURGED (GAL)	18 gal.	35 gal.	55 gal.				
PURGE RATE (GPM)	2	2	2				
TEMPERATURE (°C)	73.4	73.5	72.9				
pH	7.14	7.05	7.01				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1689.	1,598.	1593.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)	64.45	64.55	64.58				
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-75

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0900 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-75-	2	VOA	HCL		40 mL				See C.O.C.	
W062200	2	Plastic	HNO_3	NO	1250 mL	—	Clear	Yes		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 55 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES (NO)

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES (NO)

WELL CASING OK?: (YES) NO

COMMENTS: Well plug doesn't seal. Well head is threaded + plug won't open large enough to close the gap. Threads can be plugged with a coupler without changing well elevation.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 75°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-55

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 62.30 MEASURING POINT DESCRIPTION: Top of casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0941 PURGE DEPTH (FT) 75'

TIME END PURGE: 1002

TIME SAMPLED: 1006

COMMENTS: Sample # WCC-55-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 53 CASING VOLUME (GAL)
	90.10		62.30		27.80		0.16	0.64	1.44		17.80

TIME	0947	0954	1002				
VOLUME PURGED (GAL)	18	36	55				
PURGE RATE (GPM)	2.5	2.5	2.5				
TEMPERATURE (°~~C~~F	74.1	73.9	73.9				
pH	7.07	6.83	6.76				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,553.	1,557.	1,561.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)	62.90	62.85	62.85				
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-55

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1006 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT:

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-55	2	VOA	HCL		40 mL				See C.O.C.	
W062200	2	Plastic	HNO_3	No	1250 mL	—	Clear	Yes		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 55 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 70°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-115

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.25 MEASURING POINT DESCRIPTION: Top of casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1105 PURGE DEPTH (FT) 75'

TIME END PURGE: 1126

TIME SAMPLED: 1130 + 1135

COMMENTS: Sample # WCC-115-W062200 + WCC-115-D062200.

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 51 CASING VOLUME (GAL)
	90.90		64.25		26.65		0.16	0.64	1.44		17

TIME	1112	1118	1126				
VOLUME PURGED (GAL)	18	35	54				
PURGE RATE (GPM)	2.5	2.5	2.5				
TEMPERATURE (°C)	75.6	73.3	72.5				
pH	7.64	7.32	7.07				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1374.	1362.	1364.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)	67.38	67.53	67.				
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-11S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1130 + 1135 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-11S-W062200	2 2	VOA HNO_3	HCL HNO_3	NO	60 mL 1250 mL	—	Clear	YES	See C.O.C.	
WCC-11S-D062200	"	"	"	"	"	"	"	"	"	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 54 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6

WELL NUMBER: WCC-10S

PROJECT NUMBER: 004016.00

PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 71.30

MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe

PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1351

PURGE DEPTH (FT) 85'

TIME END PURGE: 1412

TIME SAMPLED: 1417

COMMENTS: Sample # WCC-10S-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 48 CASING VOLUME (GAL)
	96.40		71.30		25.10		0.16	0.64	1.44		16

TIME	1357	1404	1412				
VOLUME PURGED (GAL)	16	33	50				
PURGE RATE (GPM)	2.5	2.5	2.5				
TEMPERATURE (°C)	74.7	73.0	72.9				
pH	7.43	7.21	7.10				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	998.	979.	976.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	85'	85'	85'				
DEPTH TO WATER DURING PURGE (FT)	72.50	72.60	72.64				
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-10S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1417 COMMENTS:

DEPTH SAMPLED (FT): 85'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-10S	2	VOA	HCL		60 mL					
-W062200	2	Plastic	HNO_3	NO	1250 mL	—	Clear	Yes	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 50 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: Well + outer casing is standing in a 4-5' deep hole.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 85°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6

WELL NUMBER: TMW-6

PROJECT NUMBER: 004016.00

PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.59

MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe

PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1510

PURGE DEPTH (FT) 75'

TIME END PURGE: 1522

TIME SAMPLED: 1525

COMMENTS: Sample # TMW-6-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 7.2 CASING VOLUME (GAL)
	79.45		64.59		14.86		0.16	0.64	1.44		2.4

TIME	1513	1518	1522				
VOLUME PURGED (GAL)	2.5	5.0	8.0				
PURGE RATE (GPM)	.5	.5	.5				
TEMPERATURE (°C)	75.3	75.3	75.0				
pH	7.30	7.10	7.08				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1822.	1835.	1822				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	V. light olive brown	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-6

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1528 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-6-	2	VOA	HCL		80 mL					
W062200	2	Plastic	HNO_3	NO	1250 mL	—	Clear	Yes	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8.0 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 85°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-4

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.61 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electronic Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1607 PURGE DEPTH (FT) 77'

TIME END PURGE: 1617

TIME SAMPLED: 1622

COMMENTS: Sample # TMW-4-W062200.

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 6.6 CASING VOLUME (GAL)
	78.35		64.61		13.74		0.16	0.64	1.44		2.2

TIME	1611	1614	1617				
VOLUME PURGED (GAL)	2.5	5.0	7.5				
PURGE RATE (GPM)	.75	.75	.75				
TEMPERATURE (°C) F	75.1	74.9	74.7				
pH	7.07	7.00	6.98				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,545.	1,541.	1,547.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	V. light Yellow	Clear	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	77'	77'	77'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-4

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1622 COMMENTS:

DEPTH SAMPLED (FT): 77'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-4-	2	VOA	HCL		80 mL				See	
W0622-00	2	Plastic	HNO_3	NO	1250 mL	—	Clear	Yes	C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7.5 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-3

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 65.19 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1659 PURGE DEPTH (FT) 75'

TIME END PURGE: 1709

TIME SAMPLED: 1715

COMMENTS: Sample # TMW-3-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	CASING VOLUME (GAL)
	82.05		65.19		16.86		0.16	0.64	1.44		2.7

TIME	1702	1705	1709				
VOLUME PURGED (GAL)	3gal.	6gal.	9gal.				
PURGE RATE (GPM)	.5	.5	.5				
TEMPERATURE (°C)	73.6	73.5	73.6				
pH	7.16	7.12	7.02				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1291.	1266.	1253				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Light Yellow	V. light Yellow	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-3

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1715 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-3-	2	VOA	HCL	50 mL					See	
W062200	2	Plastic	HNO3	1250 mL	—	—	Clear	Yes	COC	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 9 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-5

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.67 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1759 PURGE DEPTH (FT) 75'

TIME END PURGE: 1807

TIME SAMPLED: 1812

COMMENTS: Sample # TMW-5-W062200

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 7.3 CASING VOLUME (GAL)
	79.95		64.67		15.28		0.16	0.64	1.44		2.44

TIME	1802	1804	1807				
VOLUME PURGED (GAL)	2.5	5.0	7.5				
PURGE RATE (GPM)	1.0	1.0	1.0				
TEMPERATURE (°C)	72.7	72.9	72.9				
pH	7.22	~~6.~~ 7.23	7.19				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	763.	755.	756.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	V. light Yellow	V.V light Yellow	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-22-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-5

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1812 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAIN-ERS	CON-TAINER TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-5-W062200	2	VOA	HCL		50 mL				See C.O.C.	
	2	Plastic	HNO3	NO	1250 mL	—	Clear	Yes		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7.5 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 75°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-9

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 65.22 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0711 PURGE DEPTH (FT) 75'

TIME END PURGE: 0722

TIME SAMPLED: 0728

COMMENTS: Sample # TMW-9-W062300

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	CASING VOLUME (GAL)
	79.15		65.22		13.93		0.16	0.64	1.44		2.22

TIME	0715	0718	0722				
VOLUME PURGED (GAL)	2.5	5.0	7.5				
PURGE RATE (GPM)	.70	.70	.70				
TEMPERATURE (°C)	72.9	73.9	73.7				
pH	6.86	6.62	6.57				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1359.	1356.	1347.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light Yellow	V. light Yellow	V.V. light Yellow				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-9

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0728 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-9-	2	VOA	HCL		80 mL		U.V. light Yellow		See C.O.C	
W062300	2	Plastic	HNO3	NO	1250 mL	—		YES		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7.5 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 70°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-1

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.89 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0757 PURGE DEPTH (FT) 75'

TIME END PURGE: 0810

TIME SAMPLED: 0815

COMMENTS: Sample # TMW-1-W062300

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 7 CASING VOLUME (GAL)
	79.51		64.89		14.62		0.16	0.64	1.44		2.33

TIME	0801	0803	0807	0810			
VOLUME PURGED (GAL)	2.5	5.0	7.5	10gal.			
PURGE RATE (GPM)	.75	.75	.75	.75			
TEMPERATURE (°C)	71.3	71.9	72.3	72.5			
pH	6.45	6.41	6.36	6.35			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2,530.	2,670.	2840.	2870.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light Yellow	V. light Yellow	V. light Yellow	V. light Yellow			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'	75'			
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-1

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0815 COMMENTS:

DEPTH SAMPLED (FT): 75

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAIN-ERS	CON-TAINER TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-1-	2	VOA	HCL		80 mL		v. light			
W062300	2	Plastic	HNO_3	NO	1250 mL	—	Yellow	YES	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): ~~7.5~~ 10 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 72 °F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-7

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 65.15 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0854 PURGE DEPTH (FT) 75'

TIME END PURGE: 0906

TIME SAMPLED: 0910

COMMENTS: Sample # TMW-7-W062300

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 7 CASING VOLUME (GAL)
	79.81		65.15		14.16		0.16	0.64	1.44		2.34

TIME	0859	0902	0906				
VOLUME PURGED (GAL)	2.5	5.0	8.0				
PURGE RATE (GPM)	.70	.70	.70				
TEMPERATURE (°C)	72.5	73.7	73.7				
pH	6.36	6.25	6.23				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1680.	1,670.	1640.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light Yellow	light Yellow	light Yellow				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-7

PROJECT NUMBER: 0040 16.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0910 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-7-W062300	2	VOA	HCL		80 mL		light		SEE C.O.C.	
	2	Plastic	HNO3	NO	1250 mL	—	Yellow	YES		

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8.0 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-8

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.98 MEASURING POINT DESCRIPTION: Top of casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0940 PURGE DEPTH (FT) 75'

TIME END PURGE: 0949

TIME SAMPLED: 0955

COMMENTS: Sample # TMW-8-W062300

0946 - Re-calibrated pH probe.

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3=7 CASING VOLUME (GAL)
	79.65		64.98		14.67		0.16	0.64	1.44		2.34

TIME	0943	0946	0949				
VOLUME PURGED (GAL)	2.5	5.0	8.0				
PURGE RATE (GPM)	1.0	1.0	1.0				
TEMPERATURE (°C)	72.7	73.7	73.9				
pH	6.11	7.52	7.53				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,430.	1,500.	1,430.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light Yellow	V. light Yellow	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-8

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 0955 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAIN-ERS	CON-TAINER TYPE	PRESER-VATIVE	FIELD FILTRA-TION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-8-	2	VOA	HCL		80 mL					
W062300	2	Plastic	HNO_3	NO	1250 mL	—	Clear	YES	See C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80 °F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: BL-3

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 73.58 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1040 PURGE DEPTH (FT) 80'

TIME END PURGE: 1053

TIME SAMPLED: 1058 + 1130

COMMENTS: Sample #s BL-3-W062300 + BL-3-R062300

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 5.22 CASING VOLUME (GAL)
	84.10		73.58		10.52		0.16	0.64	1.44		1.74

TIME	1046	1050	1053				
VOLUME PURGED (GAL)	2 gal.	4 gal.	6 gal.				
PURGE RATE (GPM)	.50	.50	.50				
TEMPERATURE (°C)	75.3	75.8	75.3				
pH	7.17	6.77	6.89				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	3050.	3,130.	3,150.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Light olive brown	light yellow	Clear				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	80'	80'	80'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-23-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: BL-3

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1058 (W) + 1130 (R) COMMENTS: BL-3-R062300 is a Rinsate Blank collected after decon using D.I. water.

DEPTH SAMPLED (FT): 80'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
BL-3-W062300	2 2	VOA Plastic	HCL HNO_3	NO	80 mL 1250 mL	—	Clear	Yes	See C.O.C.	
BL-3-R062300	"	"	"	"	"	"	"	"	"	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 6 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): Water shared with BL-1 + BL-2.

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES (NO)

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: No box or standpipe over well, Protected by an inverted drum.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager: Rus Purell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: BL-2

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 71.66 MEASURING POINT DESCRIPTION: Top of casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 0949 PURGE DEPTH (FT) 80'

TIME END PURGE: 1003

TIME SAMPLED: 1008

COMMENTS: BL-2-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 4.89 CASING VOLUME (GAL)
	83.75		71.66		12.09		0.16	0.64	1.44		1.93

TIME	0956	0959	1001	1003			
VOLUME PURGED (GAL)	2gal.	4gal.	6gal.	8gal.			
PURGE RATE (GPM)	.50	.50	.50	.50			
TEMPERATURE (°C)	78.6	77.2	75.8	75.5			
pH	6.89	6.58	6.55	6.52			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1550.	1680.	1700.	1710.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light, olive brown	light yellow	light yellow	V. light yellow			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	80'	80'	80'	80'			
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: BL-2

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1008 COMMENTS:

DEPTH SAMPLED (FT): 80'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
BL-2-W002600	4	40 mls Vial, 250 ml Plastic + 1,000 ml Plastic	HNO_3 + HCL	NO	1290 mL	—	Clear	Yes	See COC	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): Partial drum, shared with BL-1 + BL-3 + TMW-16

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES (NO)

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: No lock or surface box.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 85°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6

WELL NUMBER: BL-1

PROJECT NUMBER: 004016.00

PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 71.20

MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe

PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1054

PURGE DEPTH (FT) 80'

TIME END PURGE: 1104

TIME SAMPLED: 1110

COMMENTS: Sample # BL-1-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 6 CASING VOLUME (GAL)
	83.65		71.20		12.45		0.16	0.64	1.44		1.99

TIME	1057	1100	1102	1104			
VOLUME PURGED (GAL)	2	4	6	8			
PURGE RATE (GPM)	.75	.75	.75	.75			
TEMPERATURE (°C)	78.6	76.7	76.2	76.4			
pH	6.57	6.53	6.44	6.37			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2,170.	2,120.	2,110.	2,110.			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light, olive brown	light Yellow	light Yellow	light Yellow			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	80'	80'	80'	80			
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: BL-1

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1110 COMMENTS:

DEPTH SAMPLED (FT): 80'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
BL-1-W062600	4	2 VOAs 2 plastics	HCL HNO_3	NO	1290mL	—	Clear	Yes	See COC	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): Partial drum, shared with BL-2 + BL-3 & TMW-16

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES (NO)

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: No lock, no surface box.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR (F)): 85±

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-3D

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.86 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1156 PURGE DEPTH (FT) 90'

TIME END PURGE: 1258

TIME SAMPLED: 1303 + 1308

COMMENTS: Sample #s WCC-3D-W062600 + WCC-3D-D062600 (Duplicate)

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 143 CASING VOLUME (GAL)
	139.45		64.86		74.59		0.16	0.64	1.44		47.7

TIME	1204	1221	1239	1258			
VOLUME PURGED (GAL)	20 gal.	50 gal.	100 gal.	150 gal.			
PURGE RATE (GPM)	2.4	2.4	2.4	2.4			
TEMPERATURE (°C)	76.1	74.6	74.3	74.5			
pH	6.93	7.05	7.16	7.13			
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	661.	653.	702.	7.05			
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear	Clear			
ODOR	NO	NO	NO	NO			
DEPTH OF PURGE INTAKE (FT)	90'	90'	90'	90'			
DEPTH TO WATER DURING PURGE (FT)	78.16	81.20	82.18	82.45			
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-3D

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1303 + 1308 COMMENTS: WCC-3D-D062600 is a duplicate sample.

DEPTH SAMPLED (FT): 90'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-3D-W062600	4	2-VOAs 2-Plastics	HCL HNO3	NO	80 mL + 1250 mL	—	Clear	Yes	See COC	
WCC-3D-D062600	4	"	"	"	"	"	"	"	"	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 150 gal. COMMENTS:

DISPOSAL METHOD: Drum storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 3 drums, labeled w/ contents + date.

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: YES (NO)

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: Well cap doesn't seal.

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 86 °F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Durrell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-16

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimgeire

STATIC WATER LEVEL (FT): 63.77 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1355 PURGE DEPTH (FT) 73'

TIME END PURGE: 1407

TIME SAMPLED: 1412

COMMENTS: Sample # TMW-16-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3= 5.4 CASING VOLUME (GAL)
	75.10		63.77		11.33		0.16	0.64	1.44		1.81

TIME	1359	1404	1407				
VOLUME PURGED (GAL)	2 gal.	4 gal.	6 gal.				
PURGE RATE (GPM)	.5 gpm	.5 gpm	.5 gpm				
TEMPERATURE (°C)	76.8	78.1	77.9				
pH	6.96	6.92	6.88				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,748.	1,842.	1,877.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	olive brown	light, olive brown	v. light olive brown				
ODOR	NO	NO	NO				
DEPTH OF PURGE INTAKE (FT)	73'	73'	73'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-16

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1412 COMMENTS:

DEPTH SAMPLED (FT): 73'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-16 W062600	4	2-VOA's + 2-Plastic	HCL + HNO_3	NO	80 mL + 1250 mL	—	V. light olive brown	YES	See COC	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 6 gal. COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): Partial drum shared w/ BL-wells.

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 90° F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-2

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.64 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1438 PURGE DEPTH (FT) 75'

TIME END PURGE: 1448

TIME SAMPLED: 1453

COMMENTS: Sample # TMW-2-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3 = 7.2 CASING VOLUME (GAL)
	79.75		64.64		15.11		0.16	0.64	1.44		2.4

TIME	1441	1444	1448				
VOLUME PURGED (GAL)	2.5	5gal.	7.5				
PURGE RATE (GPM)	.75	.75	.75				
TEMPERATURE (°C)	74.7	74.3	73.9				
pH	6.35	6.21	6.19				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2,590.	2,530.	2,530.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	light olive green	light olive green	light greenish yellow				
ODOR	Sour odor	Sour odor	Sour odor				
DEPTH OF PURGE INTAKE (FT)	75'	75'	75'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: TMW-2

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1453 COMMENTS:

DEPTH SAMPLED (FT): 75'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
TMW-2-W062600	4	2-VOAs + 2-Plastics	HCL + HNO3	NO	80 mL + 1250 mL	—	light, greenish yellow	Yes	See C.O.C	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7.5 COMMENTS:

DISPOSAL METHOD: Drum storage.

DRUM DESIGNATION(S)/VOLUME PER (GAL): Drum shared w/ WCC-35

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 90°

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: # WCC-3S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 63.64 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Sounder PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1533 PURGE DEPTH (FT) 77'

TIME END PURGE: 1551

TIME SAMPLED: 1556

COMMENTS: Sample # WCC-3S-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3=48 CASING VOLUME (GAL)
	88.85		64.63 ~~63.64~~		25.21		0.16	0.64	1.44		16.13

TIME	1539	1546	1551 ~~1541~~				
VOLUME PURGED (GAL)	16	32	48				
PURGE RATE (GPM)	2.5	2.5	2.5				
TEMPERATURE (°C)	75.4	74.9	74.8				
pH	6.28	6.10	6.03				
SPECIFIC CONDUCTIVITY (micromhos/cm) (~~uncorrected~~)	3190.	2760.	2780.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	Sour odor	Sour odor	Sour odor				
DEPTH OF PURGE INTAKE (FT)	77'	77'	77'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-3S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1556 COMMENTS:

DEPTH SAMPLED (FT): 77'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-3S-W062600	4	2-VOAS 2-Plastic	HCL HNO3	50mL 1250mL		—	Clear	Yes	See COC.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 48 COMMENTS:

DISPOSAL METHOD: Drum storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 85°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? NO

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-65

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 64.98 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1625 PURGE DEPTH (FT) 77'

TIME END PURGE: 1645

TIME SAMPLED: 1650 & 1710

COMMENTS: Sample #s WCC-65-W062600 + WCC-65-R062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x3=45 CASING VOLUME (GAL)
	88.40		64.98		23.42		0.16	0.64	1.44		15

TIME	1633	1639	1645				
VOLUME PURGED (GAL)	15gal.	30gal.	45gal.				
PURGE RATE (GPM)	2.25	2.25	2.25				
TEMPERATURE (°C)	75.0	74.9	74.8				
pH	6.30	6.27	6.18				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	2030.	1,930.	1,910.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	v.v slightly turbid, brown	Clear	Clear				
ODOR	Sour odor	Sour odor	Sour odor				
DEPTH OF PURGE INTAKE (FT)	77'	77'	77'				
DEPTH TO WATER DURING PURGE (FT)							
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: WCC-6S

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1650 + 1710 COMMENTS: WCC-6S-R062600 is an equipment rinsate blank that was collected after decon.

DEPTH SAMPLED (FT): 77'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
WCC-6S-W062600	2 2	VOA's Plastics	HCL HNO3	NO	50 mL 1250 mL	—	Clear	Yes	See C.O.C	
WCC6S-R062600	"	"	"	"	"	—	"	"	"	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 45 gal. COMMENTS:

DISPOSAL METHOD: Drum storage

DRUM DESIGNATION(S)/VOLUME PER (GAL): 1 drum

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 85°F

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: DAC-P1

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

STATIC WATER LEVEL (FT): 71.86 MEASURING POINT DESCRIPTION: Top of Casing

WATER LEVEL MEASUREMENT METHOD: Electric Probe PURGE METHOD: Redi-Flow 2

TIME START PURGE: 1741 PURGE DEPTH (FT) 90'

TIME END PURGE: 1812

TIME SAMPLED: 1817

COMMENTS: Sample # DAC-P1-W062600

WELL VOLUME CALCULATION (FILL IN BEFORE PURGING)	TOTAL DEPTH (FT)	-	DEPTH TO WATER (FT)	=	WATER COLUMN (FT)	X	MULTIPLIER FOR CASING DIAMETER (IN) 2	4	6	=	x 3 = 47.28 CASING VOLUME (GAL)
	96.50		71.86		24.64		0.16	0.64	1.44		15.76

TIME	1750	1800	1812				
VOLUME PURGED (GAL)	16	35	50				
PURGE RATE (GPM)	1.60	1.60	1.60				
TEMPERATURE (°C)	74.0	73.8	73.6				
pH	6.43	6.26	6.20				
SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected)	1,777.	1,859.	1,828.				
DISSOLVED OXYGEN (mg/L)							
eH(MV)Pt-AgCl ref.							
TURBIDITY/COLOR	Clear	Clear	Clear				
ODOR	No	No	No				
DEPTH OF PURGE INTAKE (FT)	90'	90'	90'				
DEPTH TO WATER DURING PURGE (FT)	75.20	75.45	75.70				
NUMBER OF CASING VOLUMES REMOVED							
DEWATERED?							

Groundwater Purge and Sample Form Date: 6-26-00 **Kennedy/Jenks Consultants**

PROJECT NAME: Boeing C-6 WELL NUMBER: DAC-P1

PROJECT NUMBER: 004016.00 PERSONNEL: Shane Scrimshire

SAMPLE DATA:

TIME SAMPLED: 1817 COMMENTS:

DEPTH SAMPLED (FT): 90'

SAMPLING EQUIPMENT: Redi-Flow 2

SAMPLE NO.	NO. OF CONTAINERS	CONTAINER TYPE	PRESERVATIVE	FIELD FILTRATION	VOLUME FILLED (ml or L)	TURBIDITY	COLOR	SHIPPED UNDER CHAIN-OF-CUSTODY AT 4°C?	ANALYSIS REQUEST (METHOD)	COMMENTS
DAC-P1-	2	VOAs	HCL		80 mL				See	
W062600	2	Plastics	HNO3	NO	1250 mL	—	Clear	Yes	C.O.C.	

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 50 COMMENTS:

DISPOSAL METHOD: Drum Storage

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Clear

TEMPERATURE (SPECIFY °C OR °F): 80 °F

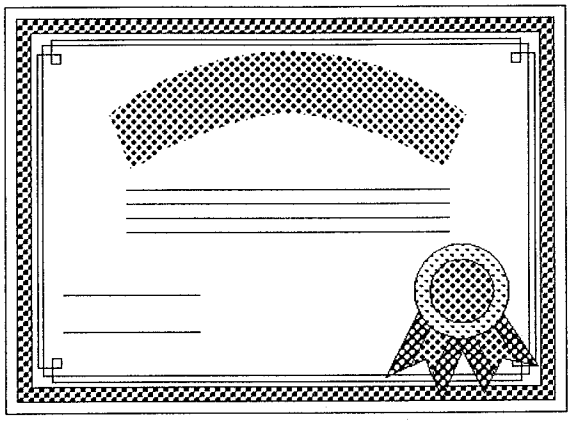
PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? No

cc: Project Manager: Rus Purcell
Job File:
Other:

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY RECORDS

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970



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JUL 8 2004
KENNEDY/JENKS CONSULTANTS
IRVINE CA

ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification
(ELAP) No.: 1416 Expiration Date: 2001

Laboratory Director's Name (Print) : Mark Noorani

Client: Kennedy Jenks Consultants

Project No.: Boeing C-6

Project Name: 004016.00

Laboratory Reference: KJC 11587

Analytical Method: 8260, Metals

Date Sampled: 06-20/21-00
Date Received: 06/21/00
Date Reported: 06/28/00

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Burt Serens for

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11587

Sampled:	---	06/20/00	06/20/00	06/20/00
Received:	---	06/21/00	06/21/00	06/21/00
Analyzed:	06/26/00	06/26/00	06/26/00	06/26/00
Reported:				
Lab Sample I.D.	MB	00060127	00060128	00060129
Client Sample I.D.	---	WCC-9S -W062000	TMW-11 -W062000	TMW-10 -W062000

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		µg/l	***µg/l***	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5	<2.5	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0	<5.0	<1.0
Bromoform	75-25-2	0.5	<0.5	<0.5	<2.5	<0.5
Bromomethane	74-83-9	1.0	<1.0	<1.0	<5.0	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5	<2.5	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	<0.5	<2.5	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<0.5	<2.5	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5	<2.5	<0.5
Chloroethane	75-00-3	0.5	<0.5	<0.5	<2.5	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5	<2.5	<0.5
Chloroform	67-66-3	0.5	<0.5	49	740	4.7
Chloromethane	74-87-3	0.5	<0.5	<0.5	<2.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	<0.5	<0.5	<2.5	<0.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5	<2.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	<0.5	14	<2.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5	<2.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5	<2.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5	<2.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5	<2.5	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	<0.5	<2.5	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<2.5	<13	<2.5
Styrene	100-42-5	0.5	<0.5	<0.5	<2.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<2.5	<0.5
Tetrachloroethene	127-18-4	0.5	<0.5	<0.5	<2.5	1.0
Toluene	108-88-3	0.5	<0.5	<0.5	<2.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<0.5	<2.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<0.5	<2.5	<0.5
Trichloroethene	79-01-6	0.5	<0.5	78	47	4.1
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5	<2.5	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<1.0	<5.0	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<0.5	<2.5	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	<1.0	<5.0	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5	<2.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	<0.5	<0.5	<2.5	<0.5
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5	<2.5	<0.5

INT

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11587

Client Project ID: Boeing C-6

Client Project #: 004016.00

Sampled:	---	06/20/00	06/20/00	06/20/00
Received:	---	06/21/00	06/21/00	06/21/00
Analyzed:	06/26/00	06/26/00	06/26/00	06/26/00
Reported:	01/00/00	01/00/00	01/00/00	01/00/00
Lab Sample I.D.	MB	00060127	00060128	00060129
Client Sample I.D.	---	WCC-9S -W062000	TMW-11 -W062000	TMW-10 -W062000

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***		***SAMPLE RESULTS***		
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5	<2.5	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5	<2.5	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<0.5	<2.5	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5	<2.5	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5	<2.5	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5	<2.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<2.5	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5	<2.5	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<0.5	<2.5	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5	<2.5	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5	<2.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5	<2.5	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5	<2.5	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5	<2.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5	<2.5	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5	<2.5	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5	<2.5	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5	<2.5	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5	<2.5	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5	<2.5	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5	<2.5	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0	<5.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5	<2.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5	<2.5	<0.5
Naphthalene	91-20-3	0.5	<0.5	<0.5	<2.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5	<2.5	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	87	93	97	97
Toluene-d8	93	96	95	94
4-Bromofluorobenzene	107	114	116	113

INT BS

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11587

Sampled:	06/21/00	06/21/00	06/21/00	06/20/00
Received:	06/21/00	06/21/00	06/21/00	06/21/00
Analyzed:	06/26/00	06/26/00	06/26/00	06/26/00
Reported:				
Lab Sample I.D.	00060130	00060131	00060132	00060133
Client Sample I.D.	WCC-12S -W062100	TMW-12 -W062100	TMW-13 -W062100	WCC-9S -B062000

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS*** µg/l	µg/l	µg/l	µg/l
Benzene	71-43-2	0.5	<0.5	<10	<0.5	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<20	<1.0	<1.0
Bromoform	75-25-2	0.5	<0.5	<10	<0.5	<0.5
Bromomethane	74-83-9	1.0	<1.0	<20	<1.0	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<10	<0.5	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	<10	2.9	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<10	<0.5	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<10	<0.5	<0.5
Chloroethane	75-00-3	0.5	<0.5	<10	<0.5	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<10	<0.5	<0.5
Chloroform	67-66-3	0.5	2.8	2100	14	<0.5
Chloromethane	74-87-3	0.5	<0.5	<10	<0.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	24	<10	<0.5	<0.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<10	<0.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	47	25	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<10	<0.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<10	<0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<10	<0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<10	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	<10	<0.5	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<50	<2.5	<2.5
Styrene	100-42-5	0.5	<0.5	<10	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<10	<0.5	<0.5
Tetrachloroethene	127-18-4	0.5	1.0	13	2.9	<0.5
Toluene	108-88-3	0.5	<0.5	<10	<0.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<10	<0.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<10	<0.5	<0.5
Trichloroethene	79-01-6	0.5	160	440	97	<0.5
Trichlorofluoromethane	75-69-4	0.5	<0.5	<10	<0.5	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<20	<1.0	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<10	<0.5	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	<20	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<10	<0.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	1.9	<10	<0.5	<0.5
2,2-Dichloropropane	594-20-7	0.5	<0.5	<10	<0.5	<0.5

INT_____

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11587

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/21/00	06/21/00	06/21/00	06/20/00
Received:	06/21/00	06/21/00	06/21/00	06/21/00
Analyzed:	06/26/00	06/26/00	06/26/00	06/26/00
Reported:	01/00/00	01/00/00	01/00/00	01/00/00
Lab Sample I.D.	00060130	00060131	00060132	00060133
Client Sample I.D.	WCC-12S	TMW-12 -W062100	TMW-13 -W062100	WCC-9S -B062000

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<10	<0.5	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<10	<0.5	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<10	<0.5	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<10	<0.5	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<10	<0.5	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<10	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<10	<0.5	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<10	<0.5	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<10	<0.5	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<10	<0.5	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<10	<0.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<10	<0.5	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<10	<0.5	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<10	<0.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<10	<0.5	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<10	<0.5	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<10	<0.5	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<10	<0.5	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<10	<0.5	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<10	<0.5	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<10	<0.5	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<20	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<10	<0.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<10	<0.5	<0.5
Naphthalene	91-20-3	0.5	<0.5	<10	<0.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<10	<0.5	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	91	97	92	95
Toluene-d8	94	94	95	98
4-Bromofluorobenzene	111	114	109	113

INT

Orange Coast Analytical, Inc

Address Here
Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11587

Sampled:	---	06/20/00	06/20/00	06/20/00
Received:	---	06/21/00	06/21/00	06/21/00
Reported:				
Lab Sample I.D.	MB	00060127	00060128	00060129
Client Sample I.D.	---	WCC-9S -W062000	TMW-11 -W062000	TMW-10 -W062000

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	06/26/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/26/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	06/26/00	6010	0.01	<0.01	0.25	0.41	0.14
Beryllium	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/21/00	7196	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Total)	06/26/00	6010	0.01	<0.01	0.013	0.013	0.014
Cobalt	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/26/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/23/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	06/26/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/26/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	06/26/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	06/26/00	6010	0.01	<0.01	<0.01	<0.01	<0.01

INT

Orange Coast Analytical, Inc

Address Here
Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11587

Sampled:	06/21/00	06/21/00	06/21/00
Received:	06/21/00	06/21/00	06/21/00
Reported:			
Lab Sample I.D.	00060130	00060131	00060132
Client Sample I.D.	WCC-12S -W062100	TMW-12 -W062100	TMW-13 -W062100

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***		
				mg/l	***mg/l***	***mg/l***
Antimony	06/26/00	6010	0.1	<0.1	<0.1	<0.1
Arsenic	06/26/00	6010	0.1	<0.1	<0.1	<0.1
Barium	06/26/00	6010	0.01	0.12	0.34	0.13
Beryllium	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Cadmium	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/21/00	7196	0.01	<0.01	<0.01	<0.01
Chromium (Total)	06/26/00	6010	0.01	0.013	<0.01	0.011
Cobalt	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Copper	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Lead	06/26/00	6010	0.05	<0.05	<0.05	<0.05
Mercury	06/23/00	7471	0.001	<0.001	<0.001	<0.001
Molybdenum	06/26/00	6010	0.05	<0.05	<0.05	<0.05
Nickel	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Selenium	06/26/00	6010	0.1	<0.1	<0.1	<0.1
Silver	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Thallium	06/26/00	6010	0.1	<0.1	<0.1	<0.1
Vanadium	06/26/00	6010	0.01	<0.01	<0.01	<0.01
Zinc	06/26/00	6010	0.01	<0.01	<0.01	<0.01

INT BS

Orange Coast Analytical, Inc

QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 06/26/00
Laboratory Sample No : 00060127
Laboratory Reference No : KJC 11587

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
1,1-Dichloroethene	14	20	35	35	35	30	0
Benzene	0.0	20	21	20	35	30	5
Trichloroethene	78	20	102	100	120	110	2
Toluene	0.0	20	21	20	105	100	5
Chlorobenzene	0.0	20	22	21	110	105	5

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT

Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Metals

Laboratory Reference No : KJC 11587

Analyte	Date Tested	QC Sample	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	06/26/00	00060132	0.00	1.00	1.04	0.986	104	99	5
Arsenic	06/26/00	00060132	0.00	1.00	0.960	0.965	96	96.5	1
Barium	06/26/00	00060132	0.13	0.100	0.220	0.222	90	92	1
Beryllium	06/26/00	00060132	0.00	0.100	0.102	0.102	102	102	0
Cadmium	06/26/00	00060132	0.00	0.100	0.100	0.101	100	101	1
Chromium (Total)	06/26/00	00060132	0.011	0.100	0.115	0.115	104	104	0
Chromium (VI)	06/21/00	00060132	0.00	0.10	0.108	0.114	108	114	5
Cobalt	06/26/00	00060132	0.00	0.100	0.089	0.090	89	90	1
Copper	06/26/00	00060132	0.00	0.100	0.098	0.098	98	98	0
Lead	06/26/00	00060132	0.00	0.50	0.465	0.472	93	94	1
Mercury	06/23/00	00060132	0.00	0.010	0.0097	0.0100	97	100	3
Molybdenum	06/26/00	00060132	0.00	0.50	0.498	0.496	100	99.2	0
Nickel	06/26/00	00060132	0.00	0.500	0.412	0.414	82	83	0
Selenium	06/26/00	00060132	0.00	1.00	0.950	0.975	95	98	3
Silver	06/26/00	00060132	0.00	0.100	0.090	0.089	90	89	1
Thallium	06/26/00	00060132	0.00	1.00	0.910	0.928	91	93	2
Vanadium	06/26/00	00060132	0.00	0.500	0.512	0.509	102	102	1
Zinc	06/26/00	00060132	0.00	0.100	0.089	0.091	89	91	2

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT

Orange Coast Analytical, Inc.

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
☐ 630 South 336th St., Federal Way, WA 98003
☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
☐ 5190 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-21-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-835-9785

Project No. 004016.00

Report To Rus Purcell

Company Kennedy / Jenks

Address 2151 Michelson Dr. Ste 100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(5) ANALYSES REQUESTED

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	VOCs - 8260	T-22 metals - 6010	Hex. chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	WCC-9S-W062000	6/20/00	1410	W	75'	—	HCL	Norm	X	X	X						
	THW-11-W062000	"	1510	W	75'	—	"	"	X	X	X						
	THW-10-W062000	"	1600	W	75'	—	"	"	X	X	X						
	WCC-12S-W062100	6/21/00	0915	W	75'	—	"	"	X	X	X						
	THW-12-W062100	"	1000	W	75'	—	"	"	X	X	X						
	THW-13-W062100	"	1056	W	75'	—	"	"	X	X	X						
	WCC-9S-B062000	6/20/00	—	W	—	—	"	"	X								

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/21/00	1130
Isaac Navarro	[signature]	OCA	6/21/00	11:35

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

\MISC\CUSTODY2.FRM

000065.06

BOE-C6-0066567

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification
(ELAP) No.: 1416 Expiration Date: 2001

Laboratory Director's Name (Print) : Mark Noorani

Client: Kennedy Jenks Consultants

Project No.: Boeing C-6

Project Name: 004016.00

Laboratory Reference: KJC 11589

Analytical Method: 8260, Metals

Date Sampled: 06-21/22-00
Date Received: 06/22/00
Date Reported: 06/30/00

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Mark Noorani

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11589

Sampled:	---	06/21/00	06/21/00	06/22/00
Received:	---	06/22/00	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00	06/27/00	06/27/00
Reported:	06/30/00	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	MB	00060137	00060138	00060139
Client Sample I.D.	---	TMW-14- -W062100	WCC-4S -W062100	TMW-15 -W062200

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		µg/l	***µg/l***	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5	<10	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0	<20	<1.0
Bromoform	75-25-2	0.5	<0.5	<0.5	<10	<0.5
Bromomethane	74-83-9	1.0	<1.0	<1.0	<20	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5	<10	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	1.8	<10	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<0.5	<10	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5	<10	<0.5
Chloroethane	75-00-3	0.5	<0.5	<0.5	<10	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5	<10	<0.5
Chloroform	67-66-3	0.5	<0.5	5.8	<10	11
Chloromethane	74-87-3	0.5	<0.5	<0.5	<10	<0.5
1,1-Dichloroethane	75-34-3	0.5	<0.5	<0.5	<10	<0.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5	<10	<0.5
1,1-Dichloroethene	75-35-4	0.5	<0.5	<0.5	1800	1.7
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5	<10	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5	<10	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5	<10	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5	<10	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	0.57	<10	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<2.5	<50	<2.5
Styrene	100-42-5	0.5	<0.5	<0.5	<10	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<10	<0.5
Tetrachloroethene	127-18-4	0.5	<0.5	1.0	<10	<0.5
Toluene	108-88-3	0.5	<0.5	1.3	<10	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<0.5	<10	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<0.5	<10	<0.5
Trichloroethene	79-01-6	0.5	<0.5	10	1300	35
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5	<10	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<1.0	<20	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<0.5	<10	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	1.8	<20	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5	<10	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	<0.5	<0.5	<10	<0.5
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5	<10	<0.5

INT-

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11589

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	---	06/21/00	06/21/00	06/22/00
Received:	---	06/22/00	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00	06/27/00	06/27/00
Reported:	06/30/00	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	MB	00060137	00060138	00060139
Client Sample I.D.	---	TMW-14- -W062100	WCC-4S -W062100	TMW-15 -W062200

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5	<10	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5	<10	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<0.5	<10	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5	<10	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5	<10	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5	<10	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<10	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5	<10	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<0.5	<10	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5	<10	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5	<10	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5	<10	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5	<10	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5	<10	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5	<10	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5	<10	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5	<10	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5	<10	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5	<10	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5	<10	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5	<10	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0	<20	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5	<10	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5	<10	<0.5
Naphthalene	91-20-3	0.5	<0.5	<0.5	<10	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5	<10	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	96	94	100	98
Toluene-d8	94	93	96	93
4-Bromofluorobenzene	111	111	120	116

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11589

Sampled:	06/22/00	06/22/00	06/22/00
Received:	06/22/00	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00	06/27/00
Reported:	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	00060140	00060141	00060142
Client Sample I.D.	WCC-7S -W062200	WCC5S -W062200	WCC-11S -W062200

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	0.5	<0.5	<0.5	<0.5
Bromomethane	74-83-9	1.0	<1.0	<1.0	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	<0.5	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5	<0.5
Chloroethane	75-00-3	0.5	<0.5	<0.5	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5	<0.5
Chloroform	67-66-3	0.5	0.67	<0.5	0.58
Chloromethane	74-87-3	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	1.1	<0.5	<0.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	190	8.5	25
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	<0.5	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<2.5	<2.5
Styrene	100-42-5	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	127-18-4	0.5	<0.5	<0.5	<0.5
Toluene	108-88-3	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	1.7	<0.5	<0.5
Trichloroethene	79-01-6	0.5	170	2.7	110
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<0.5	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	1.1	<0.5	12
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5	<0.5

INT M.n.

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11589

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/22/00	06/22/00	06/22/00
Received:	06/22/00	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00	06/27/00
Reported:	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	00060140	00060141	00060142
Client Sample I.D.	WCC-7S -W062200	WCC5S -W062200	WCC-11S -W062200

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT ug/l***	***SAMPLE RESULTS ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC
Dibromofluoromethane	95	100	100
Toluene-d8	94	94	92
4-Bromofluorobenzene	117	114	114

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11589

Sampled:	06/22/00	06/21/00
Received:	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00
Reported:	06/30/00	06/30/00
Lab Sample I.D.	00060143	00060144
Client Sample I.D.	WCC-11S -D062200	TMW-14 -B062100

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0
Bromoform	75-25-2	0.5	<0.5	<0.5
Bromomethane	74-83-9	1.0	<1.0	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5
Chloroethane	75-00-3	0.5	<0.5	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5
Chloroform	67-66-3	0.5	<0.5	<0.5
Chloromethane	74-87-3	0.5	<0.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	<0.5	<0.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	24	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<2.5
Styrene	100-42-5	0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5
Tetrachloroethene	127-18-4	0.5	<0.5	<0.5
Toluene	108-88-3	0.5	<0.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<0.5
Trichloroethene	79-01-6	0.5	110	<0.5
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	11	<0.5
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5

INT-

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11589

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/22/00	06/21/00
Received:	06/22/00	06/22/00
Analyzed:	06/27/00	06/27/00
Reported:	06/30/00	06/30/00
Lab Sample I.D.	00060143	00060144
Client Sample I.D.	WCC-11S -D062200	TMW-14 -B062100

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT ug/l***	***SAMPLE RESULTS ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5

SURROGATE RECOVERY	%RC	%RC
Dibromofluoromethane	101	96
Toluene-d8	94	95
4-Bromofluorobenzene	115	112

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11589

Sampled:	---	06/21/00	06/21/00	06/22/00
Received:	---	06/22/00	06/22/00	06/22/00
Reported:	06/30/00	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	MB	00060137	00060138	00060139
Client Sample I.D.	---	TMW-14- -W062100	WCC-4S -W062100	TMW-15 -W062200

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	06/28/00	6010	0.01	<0.01	0.19	0.33	0.076
Beryllium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/22/00	7196	0.01	<0.01	0.017	0.012	<0.01
Chromium (Total)	06/28/00	6010	0.01	<0.01	0.015	0.012	0.017
Cobalt	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/28/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	06/28/00	6010	0.01	<0.01	<0.01	<0.01	0.037

INT-

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11589

Sampled:	06/22/00	06/22/00	06/22/00	06/22/00
Received:	06/22/00	06/22/00	06/22/00	06/22/00
Reported:	06/30/00	06/30/00	06/30/00	06/30/00
Lab Sample I.D.	00060140	00060141	00060142	00060143
Client Sample I.D.	WCC-7S -W062200	WCC5S -W062200	WCC-11S -W062200	WCC-11S -D062200

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	06/28/00	6010	0.01	0.18	0.24	0.083	0.083
Beryllium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/22/00	7196	0.01	0.012	<0.01	<0.01	<0.01
Chromium (Total)	06/28/00	6010	0.01	0.013	<0.01	0.015	0.015
Cobalt	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/28/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	06/28/00	6010	0.01	0.011	0.024	0.020	<0.01

INT-

Orange Coast Analytical, Inc

QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 06/27/00
Laboratory Sample No : 00060173
Laboratory Reference No : KJC 11589

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
1,1-Dichloroethene	0.0	20	20	19	100	95	5
Benzene	0.0	20	20	20	100	100	0
Trichloroethene	0.0	20	21	21	105	105	0
Toluene	0.0	20	18	18	90	90	0
Chlorobenzene	0.0	20	20	20	100	100	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT m.n.

Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Metals

Laboratory Reference No : KJC 11589

Analyte	Date Tested	QC Sample	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	06/28/00	00060162	0.00	1.0	0.980	1.05	98	105	7
Arsenic	06/28/00	00060162	0.00	1.0	0.958	0.973	96	97	2
Barium	06/28/00	00060162	0.12	0.10	0.219	0.216	99	96	1
Beryllium	06/28/00	00060162	0.00	0.10	0.104	0.102	104	102	2
Cadmium	06/28/00	00060162	0.00	0.10	0.096	0.094	96	94	2
Chromium (Total)	06/28/00	00060162	0.025	0.10	0.125	0.120	100	95	4
Chromium (VI)	06/22/00	00060142	0.00	0.10	0.108	0.108	108	108	0
Cobalt	06/28/00	00060162	0.00	0.10	0.087	0.084	87	84	4
Copper	06/28/00	00060162	0.00	0.10	0.095	0.095	95	95	0
Lead	06/28/00	00060162	0.00	0.50	0.477	0.473	95	95	1
Mercury	06/28/00	00060162	0.00	0.010	0.0101	0.0103	101	103	2
Molybdenum	06/28/00	00060162	0.00	0.50	0.503	0.513	101	103	2
Nickel	06/28/00	00060162	0.00	0.50	0.407	0.400	81	80	2
Selenium	06/28/00	00060162	0.00	1.00	0.997	0.997	100	100	0
Silver	06/28/00	00060162	0.00	0.10	0.089	0.090	89	90	1
Thallium	06/28/00	00060162	0.00	1.00	0.921	0.918	92	92	0
Vanadium	06/28/00	00060162	0.00	0.50	0.516	0.513	103	103	1
Zinc	06/28/00	00060162	0.00	0.10	0.095	0.094	95	94	1

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT m.n.

Orange Coast Analytical, Inc.

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #116, Bakersfield, CA 93309
☐ 630 South 336th St., Federal Way, WA 98003
☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
☐ 6180 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-23-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-835-9785

Project No. 004016.00

Report To RUS Purcell

Company Kennedy/Jenks

Address 2151 Michelson Dr. #100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. Chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	WCC-105-W062200	6/22/00	1417	W	—	—	HCL	Norm	X	X	X						
	WCC-105-B062200	↓	—	↓	—	—	↓	↓	X								
	TMW-6-W062200	↓	1528	↓	—	—	↓	↓	X	X	X						
	TMW-4-W062200	↓	1622	↓	—	—	↓	↓	X	X	X						
	TMW-3-W062200	↓	1715	↓	—	—	↓	↓	X	X	X						
	TMW-5-W062200	↓	1812	↓	—	—	↓	↓	X	X	X						

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/23/00	1212
ISAAC NWAMU	[signature]	OCA	6/23/00	12:1[illegible]

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

\MISC\CUSTODY2.FRM

000065.06

BOE-C6-0066579

2 of

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

[ ] 200 New Stine Rd., #115, Bakersfield, CA 93309
[ ] 630 South 336th St., Federal Way, WA 98003
[ ] 17310 Red Hill Ave., #220, Irvine, CA 92714
[ ] 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
[ ] 6190 Neil Road, #300, Reno, NV 89502
[ ] 3336 Bradshaw Rd., #140, Sacramento, CA 95827
[ ] 303 Second St., San Francisco, CA 94107
[ ] 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-23-00
Source of Samples Boeing C-6
Sampler Name Shane Scrimshire
Phone 661-835-9785
Project No. 004016.00

Report To Rus Purcell
Company Kennedy / Jenks
Address 2151 Michelson Dr. #100
Irvine CA. 92612
Phone 949-261-1577

Lab Destination Orange Coast
Address
Phone
Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. Chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	TMW-9-W062300	6/23/00	0728	W	—	—	HCL	Norm.	X	X	X						
	TMW-1-W062300		0815		—	—			X	X	X						
	TMW-7-W062300		0910		—	—			X	X	X						
	TMW-8-W062300		0955		—	—			X	X	X						
	BL-3-W062300		1058		—	—			X	X	X						
	BL-3-R062300		1130		—	—			X	X	X						

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/23/00	1212
Isaac Navarro	[signature]	OCA	6/23/00	12:12

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

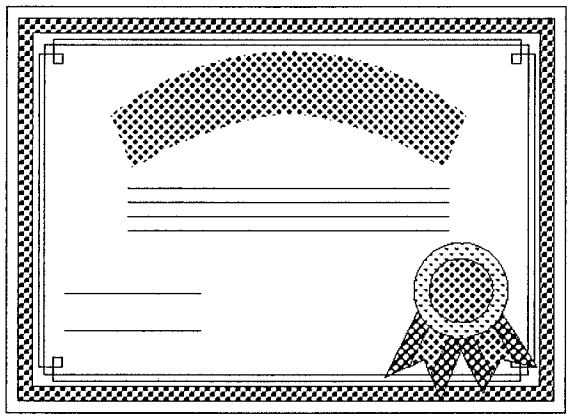
\MISC\CUSTODY2.FRM

000065.06

BOE-C6-0066580

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

RECEIVED
JUL 14 2000
KENNEDY/JENKS CONSULTANTS
IRVINE, CA



ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification
(ELAP) No.: 1416 Expiration Date: 2001

Laboratory Director's Name (Print) : Mark Noorani

Client: Kennedy Jenks Consultants

Project No.: Boeing C-6

Project Name: 004016.00

Laboratory Reference: KJC 11594

Analytical Method: 8260, Metals

Date Sampled: 06-22/23-00
Date Received: 06/23/00
Date Reported: 07/07/00

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Mark Noorani

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	---	06/22/00	06/22/00	06/22/00
Received:	---	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	MB	00060159	00060160	00060161
Client Sample I.D.	---	WCC-10S -W062200	WCC-10S -B062200	TMW-6 -W062200

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5	<0.5	<2.5
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0	<1.0	<5.0
Bromoform	75-25-2	0.5	<0.5	<0.5	<0.5	<2.5
Bromomethane	74-83-9	1.0	<1.0	<1.0	<1.0	<5.0
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5	<0.5	<2.5
Carbon tetrachloride	56-23-5	0.5	<0.5	1.3	<0.5	<2.5
Chlorobenzene	108-90-7	0.5	<0.5	<0.5	<0.5	<2.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5	<0.5	<2.5
Chloroethane	75-00-3	0.5	<0.5	<0.5	<0.5	<2.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5	<0.5	<2.5
Chloroform	67-66-3	0.5	<0.5	2.8	<0.5	100
Chloromethane	74-87-3	0.5	<0.5	<0.5	<0.5	<2.5
1,1-Dichloroethane	75-34-3	0.5	<0.5	0.94	<0.5	<2.5
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5	<0.5	<2.5
1,1-Dichloroethene	75-35-4	0.5	<0.5	34	<0.5	<2.5
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5	<0.5	<2.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5	<0.5	<2.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5	<0.5	<2.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5	<0.5	<2.5
Ethylbenzene	100-41-4	0.5	<0.5	<0.5	<0.5	<2.5
Methylene chloride	75-09-2	2.5	<2.5	<2.5	<2.5	<13
Styrene	100-42-5	0.5	<0.5	<0.5	<0.5	<2.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5	<2.5
Tetrachloroethene	127-18-4	0.5	<0.5	3.0	<0.5	<2.5
Toluene	108-88-3	0.5	<0.5	<0.5	<0.5	<2.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<0.5	<0.5	<2.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<0.5	<0.5	<2.5
Trichloroethene	79-01-6	0.5	<0.5	160	<0.5	540
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5	<0.5	<2.5
Vinyl acetate	108-05-4	1.0	<1.0	<1.0	<1.0	<5.0
Vinyl chloride	75-01-4	0.5	<0.5	<0.5	<0.5	<2.5
Total Xylenes	1330-20-7	1.0	<1.0	<1.0	<1.0	<5.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5	<0.5	<2.5
cis-1,2-Dichloroethene	156-59-2	0.5	<0.5	<0.5	<0.5	<2.5
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5	<0.5	<2.5

INT m.n.

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11594

Client Project ID: Boeing C-6

Client Project #: 004016.00

Sampled:	---	06/22/00	06/22/00	06/22/00
Received:	---	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	MB	00060159	00060160	00060161
Client Sample I.D.	---	WCC-10S -W062200	WCC-10S -B062200	TMW-6 -W062200

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***		***SAMPLE RESULTS***		
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5	<0.5	<2.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5	<0.5	<2.5
Dibromomethane	74-95-3	0.5	<0.5	<0.5	<0.5	<2.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5	<0.5	<2.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5	<0.5	<2.5
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5	<0.5	<2.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5	<2.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5	<0.5	<2.5
Bromobenzene	108-86-1	0.5	<0.5	<0.5	<0.5	<2.5
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5	<0.5	<2.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5	<0.5	<2.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5	<0.5	<2.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5	<0.5	<2.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5	<0.5	<2.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5	<0.5	<2.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5	<0.5	<2.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5	<0.5	<2.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5	<0.5	<2.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5	<0.5	<2.5
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5	<0.5	<2.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5	<0.5	<2.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0	<1.0	<5.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5	<0.5	<2.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5	<0.5	<2.5
Naphthalene	91-20-3	0.5	<0.5	<0.5	<0.5	<2.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5	<0.5	<2.5

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	96	105	101	105
Toluene-d8	86	90	91	87
4-Bromofluorobenzene	118	120	122	124

INT m.n.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	06/22/00	06/22/00	06/22/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060162	00060163	00060164
Client Sample I.D.	TMW-4 -W062200	TMW-3 -W062200	TMW-5 -W062200

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<5.0	<10	<13
Bromodichloromethane	75-27-4	1.0	<10	<20	<25
Bromoform	75-25-2	0.5	<5.0	<10	<13
Bromomethane	74-83-9	1.0	<10	<20	<25
Carbon Disulfide	75-15-0	0.5	<5.0	<10	<13
Carbon tetrachloride	56-23-5	0.5	<5.0	<10	<13
Chlorobenzene	108-90-7	0.5	<5.0	<10	<13
Chlorodibromomethane	124-48-1	0.5	<5.0	<10	<13
Chloroethane	75-00-3	0.5	<5.0	<10	<13
2-Chloroethyl vinyl ether	110-75-8	0.5	<5.0	<10	<13
Chloroform	67-66-3	0.5	17	<10	<13
Chloromethane	74-87-3	0.5	<5.0	<10	<13
1,1-Dichloroethane	75-34-3	0.5	22	<10	<13
1,2-Dichloroethane	107-06-2	0.5	15	<10	<13
1,1-Dichloroethene	75-35-4	0.5	890	96	650
trans-1,2-Dichloroethene	156-60-5	0.5	27	<10	<13
1,2-Dichloropropane	78-87-5	0.5	<5.0	<10	<13
cis-1,3-Dichloropropene	10061-01-5	0.5	<5.0	<10	<13
trans-1,3-Dichloropropene	10061-02-6	0.5	<5.0	<10	<13
Ethylbenzene	100-41-4	0.5	<5.0	<10	<13
Methylene chloride	75-09-2	2.5	<25	<50	<63
Styrene	100-42-5	0.5	<5.0	<10	<13
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<5.0	<10	<13
Tetrachloroethene	127-18-4	0.5	<5.0	<10	<13
Toluene	108-88-3	0.5	<5.0	<10	<13
1,1,1-Trichloroethane	71-55-6	0.5	<5.0	<10	<13
1,1,2-Trichloroethane	79-00-5	0.5	11	<10	<13
Trichloroethene	79-01-6	0.5	1,700	3,500	4,100
Trichlorofluoromethane	75-69-4	0.5	<5.0	<10	<13
Vinyl acetate	108-05-4	1.0	<10	<20	<25
Vinyl chloride	75-01-4	0.5	<5.0	<10	<13
Total Xylenes	1330-20-7	1.0	<10	<20	<25
Dichlorodifluoromethane	75-71-8	0.5	<5.0	<10	<13
cis-1,2-Dichloroethene	156-59-2	0.5	39	12	<13
2,2-Dichloropropane	594-20-7	0.5	<5.0	<10	<13

INT m.n.

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11594

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/22/00	06/22/00	06/22/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060162	00060163	00060164
Client Sample I.D.	TMW-4 -W062200	TMW-3 -W062200	TMW-5 -W062200

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***		
		ug/l	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<5.0	<10	<13
1,1-Dichloropropene	563-58-6	0.5	<5.0	<10	<13
Dibromomethane	74-95-3	0.5	<5.0	<10	<13
1,2-Dibromoethane	106-93-4	0.5	<5.0	<10	<13
1,3-Dichloropropane	142-28-9	0.5	<5.0	<10	<13
Isopropylbenzene	98-82-8	0.5	<5.0	<10	<13
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<5.0	<10	<13
1,2,3-Trichloropropane	96-18-4	0.5	<5.0	<10	<13
Bromobenzene	108-86-1	0.5	<5.0	<10	<13
n-Propylbenzene	103-65-1	0.5	<5.0	<10	<13
2-Chlorotoluene	95-49-8	0.5	<5.0	<10	<13
1,3,5-Trimethylbenzene	108-67-8	0.5	<5.0	<10	<13
4-Chlorotoluene	106-43-4	0.5	<5.0	<10	<13
tert-Butylbenzene	98-06-6	0.5	<5.0	<10	<13
1,2,4-Trimethylbenzene	95-63-6	0.5	<5.0	<10	<13
sec-Butylbenzene	135-98-8	0.5	<5.0	<10	<13
4-Isopropyltoluene	99-87-6	0.5	<5.0	<10	<13
1,3-Dichlorobenzene	541-73-1	0.5	<5.0	<10	<13
1,4-Dichlorobenzene	106-46-7	0.5	<5.0	<10	<13
n-Butylbenzene	104-51-8	0.5	<5.0	<10	<13
1,2-Dichlorobenzene	95-50-1	0.5	<5.0	<10	<13
1-2-Dibromo-3-CPA	96-12-8	1.0	<10	<20	<25
1,2,4-Trichlorobenzene	120-82-1	0.5	<5.0	<10	<13
Hexachlorobutadiene	87-68-3	0.5	<5.0	<10	<13
Naphthalene	91-20-3	0.5	<5.0	<10	<13
1,2,3-Trichlorobenzene	87-61-6	0.5	<5.0	<10	<13

SURROGATE RECOVERY	%RC	%RC	%RC
Dibromofluoromethane	100	99	103
Toluene-d8	104	102	103
4-Bromofluorobenzene	125	122	127

INT m.n.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	06/23/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060165	00060166	00060167
Client Sample I.D.	TMW-9 -W062300	TMW-1 -W062300	TMW-7 -W062300

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<5.0	<2.5	<10
Bromodichloromethane	75-27-4	1.0	<10	<5.0	<20
Bromoform	75-25-2	0.5	<5.0	<2.5	<10
Bromomethane	74-83-9	1.0	<10	<5.0	<20
Carbon Disulfide	75-15-0	0.5	<5.0	<2.5	<10
Carbon tetrachloride	56-23-5	0.5	<5.0	<2.5	<10
Chlorobenzene	108-90-7	0.5	<5.0	<2.5	<10
Chlorodibromomethane	124-48-1	0.5	<5.0	<2.5	<10
Chloroethane	75-00-3	0.5	<5.0	<2.5	<10
2-Chloroethyl vinyl ether	110-75-8	0.5	<5.0	<2.5	<10
Chloroform	67-66-3	0.5	<5.0	<2.5	<10
Chloromethane	74-87-3	0.5	<5.0	<2.5	<10
1,1-Dichloroethane	75-34-3	0.5	<5.0	<2.5	<10
1,2-Dichloroethane	107-06-2	0.5	<5.0	<2.5	<10
1,1-Dichloroethene	75-35-4	0.5	220	340	850
trans-1,2-Dichloroethene	156-60-5	0.5	<5.0	<2.5	24
1,2-Dichloropropane	78-87-5	0.5	<5.0	<2.5	<10
cis-1,3-Dichloropropene	10061-01-5	0.5	<5.0	<2.5	<10
trans-1,3-Dichloropropene	10061-02-6	0.5	<5.0	<2.5	<10
Ethylbenzene	100-41-4	0.5	<5.0	<2.5	<10
Methylene chloride	75-09-2	2.5	<25	<13	<50
Styrene	100-42-5	0.5	<5.0	<2.5	<10
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<5.0	<2.5	<10
Tetrachloroethene	127-18-4	0.5	<5.0	<2.5	<10
Toluene	108-88-3	0.5	<5.0	<2.5	<10
1,1,1-Trichloroethane	71-55-6	0.5	<5.0	<2.5	<10
1,1,2-Trichloroethane	79-00-5	0.5	<5.0	<2.5	<10
Trichloroethene	79-01-6	0.5	1,000	350	2,000
Trichlorofluoromethane	75-69-4	0.5	<5.0	19	<10
Vinyl acetate	108-05-4	1.0	<10	<5.0	<20
Vinyl chloride	75-01-4	0.5	<5.0	<2.5	<10
Total Xylenes	1330-20-7	1.0	<10	<5.0	<20
Dichlorodifluoromethane	75-71-8	0.5	<5.0	<2.5	<10
cis-1,2-Dichloroethene	156-59-2	0.5	<5.0	<2.5	34
2,2-Dichloropropane	594-20-7	0.5	<5.0	<2.5	<10

INT M.M.

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11594

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/23/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060165	00060166	00060167
Client Sample I.D.	TMW-9 -W062300	TMW-1 -W062300	TMW-7 -W062300

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT ug/l***	***SAMPLE RESULTS*** ***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<5.0	<2.5	<10
1,1-Dichloropropene	563-58-6	0.5	<5.0	<2.5	<10
Dibromomethane	74-95-3	0.5	<5.0	<2.5	<10
1,2-Dibromoethane	106-93-4	0.5	<5.0	<2.5	<10
1,3-Dichloropropane	142-28-9	0.5	<5.0	<2.5	<10
Isopropylbenzene	98-82-8	0.5	<5.0	<2.5	<10
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<5.0	<2.5	<10
1,2,3-Trichloropropane	96-18-4	0.5	<5.0	<2.5	<10
Bromobenzene	108-86-1	0.5	<5.0	<2.5	<10
n-Propylbenzene	103-65-1	0.5	<5.0	<2.5	<10
2-Chlorotoluene	95-49-8	0.5	<5.0	<2.5	<10
1,3,5-Trimethylbenzene	108-67-8	0.5	<5.0	<2.5	<10
4-Chlorotoluene	106-43-4	0.5	<5.0	<2.5	<10
tert-Butylbenzene	98-06-6	0.5	<5.0	<2.5	<10
1,2,4-Trimethylbenzene	95-63-6	0.5	<5.0	<2.5	<10
sec-Butylbenzene	135-98-8	0.5	<5.0	<2.5	<10
4-Isopropyltoluene	99-87-6	0.5	<5.0	<2.5	<10
1,3-Dichlorobenzene	541-73-1	0.5	<5.0	<2.5	<10
1,4-Dichlorobenzene	106-46-7	0.5	<5.0	<2.5	<10
n-Butylbenzene	104-51-8	0.5	<5.0	<2.5	<10
1,2-Dichlorobenzene	95-50-1	0.5	<5.0	<2.5	<10
1-2-Dibromo-3-CPA	96-12-8	1.0	<10	<5.0	<20
1,2,4-Trichlorobenzene	120-82-1	0.5	<5.0	<2.5	<10
Hexachlorobutadiene	87-68-3	0.5	<5.0	<2.5	<10
Naphthalene	91-20-3	0.5	<5.0	<2.5	<10
1,2,3-Trichlorobenzene	87-61-6	0.5	<5.0	<2.5	<10

SURROGATE RECOVERY	%RC	%RC	%RC
Dibromofluoromethane	105	105	98
Toluene-d8	100	103	100
4-Bromofluorobenzene	124	120	122

INT m.n.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	06/23/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060168	00060169	00060170
Client Sample I.D.	TMW-8 -W062300	BL-3 -W062300	BL-3 -R062300

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	23	<13	<0.5
Bromodichloromethane	75-27-4	1.0	<25	<25	<1.0
Bromoform	75-25-2	0.5	<13	<13	<0.5
Bromomethane	74-83-9	1.0	<25	<25	<1.0
Carbon Disulfide	75-15-0	0.5	<13	<13	<0.5
Carbon tetrachloride	56-23-5	0.5	<13	<13	<0.5
Chlorobenzene	108-90-7	0.5	<13	<13	<0.5
Chlorodibromomethane	124-48-1	0.5	<13	<13	<0.5
Chloroethane	75-00-3	0.5	<13	<13	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<13	<13	<0.5
Chloroform	67-66-3	0.5	<13	<13	<0.5
Chloromethane	74-87-3	0.5	<13	<13	<0.5
1,1-Dichloroethane	75-34-3	0.5	45	<13	<0.5
1,2-Dichloroethane	107-06-2	0.5	22	<13	<0.5
1,1-Dichloroethene	75-35-4	0.5	2,300	<13	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	56	<13	<0.5
1,2-Dichloropropane	78-87-5	0.5	<13	<13	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<13	<13	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<13	<13	<0.5
Ethylbenzene	100-41-4	0.5	<13	<13	<0.5
Methylene chloride	75-09-2	2.5	<63	<63	<2.5
Styrene	100-42-5	0.5	<13	<13	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<13	<13	<0.5
Tetrachloroethene	127-18-4	0.5	<13	59	<0.5
Toluene	108-88-3	0.5	<13	<13	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<13	<13	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	13	<13	<0.5
Trichloroethene	79-01-6	0.5	2,900	1,300	<0.5
Trichlorofluoromethane	75-69-4	0.5	<13	<13	<0.5
Vinyl acetate	108-05-4	1.0	<25	<25	<1.0
Vinyl chloride	75-01-4	0.5	<13	<13	<0.5
Total Xylenes	1330-20-7	1.0	<25	<25	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<13	<13	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	81	<13	<0.5
2,2-Dichloropropane	594-20-7	0.5	<13	<13	<0.5

INT m.n.

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11594

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/23/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00
Analyzed:	06/29/00	06/29/00	06/29/00
Reported:	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060168	00060169	00060170
Client Sample I.D.	TMW-8 -W062300	BL-3 -W062300	BL-3 -R062300

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT ug/l***	***SAMPLE RESULTS ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<13	<13	<0.5
1,1-Dichloropropene	563-58-6	0.5	<13	<13	<0.5
Dibromomethane	74-95-3	0.5	<13	<13	<0.5
1,2-Dibromoethane	106-93-4	0.5	<13	<13	<0.5
1,3-Dichloropropane	142-28-9	0.5	<13	<13	<0.5
Isopropylbenzene	98-82-8	0.5	<13	<13	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<13	<13	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<13	<13	<0.5
Bromobenzene	108-86-1	0.5	<13	<13	<0.5
n-Propylbenzene	103-65-1	0.5	<13	<13	<0.5
2-Chlorotoluene	95-49-8	0.5	<13	<13	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<13	<13	<0.5
4-Chlorotoluene	106-43-4	0.5	<13	<13	<0.5
tert-Butylbenzene	98-06-6	0.5	<13	<13	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<13	<13	<0.5
sec-Butylbenzene	135-98-8	0.5	<13	<13	<0.5
4-Isopropyltoluene	99-87-6	0.5	<13	<13	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<13	<13	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<13	<13	<0.5
n-Butylbenzene	104-51-8	0.5	<13	<13	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<13	<13	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<25	<25	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<13	<13	<0.5
Hexachlorobutadiene	87-68-3	0.5	<13	<13	<0.5
Naphthalene	91-20-3	0.5	<13	<13	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<13	<13	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC
Dibromofluoromethane	101	97	103
Toluene-d8	100	104	99
4-Bromofluorobenzene	126	125	120

INT m.n.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	---	06/22/00	06/22/00	06/22/00
Received:	---	06/23/00	06/23/00	06/23/00
Reported:	07/07/00	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	MB	00060159	00060161	00060162
Client Sample I.D.	---	WCC-10S -W062200	TMW-6 -W062200	TMW-4 -W062200

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	06/28/00	6010	0.01	<0.01	0.029	0.20	0.12
Beryllium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/23/00	7196	0.01	<0.01	<0.01	<0.01	0.020
Chromium (Total)	06/28/00	6010	0.01	<0.01	0.012	0.021	0.025
Cobalt	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Lead	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/28/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	06/28/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	06/28/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	06/28/00	6010	0.01	<0.01	<0.01	<0.01	<0.01

INT m.n.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	06/22/00	06/22/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00	06/23/00
Reported:	07/07/00	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060163	00060164	00060165	00060166
Client Sample I.D.	TMW-3 -W062200	TMW-5 -W062200	TMW-9 -W062300	TMW-1 -W062300

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	07/06/00	6010	0.01	0.11	0.067	0.14	0.28
Beryllium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/23/00	7196	0.01	0.012	<0.01	<0.01	<0.01
Chromium (Total)	07/06/00	6010	0.01	0.036	0.021	0.033	0.056
Cobalt	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Lead	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/28/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	0.010
Zinc	07/06/00	6010	0.01	0.031	0.013	0.028	0.033

INT M.P.

Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11594

Sampled:	06/23/00	06/23/00	06/23/00	06/23/00
Received:	06/23/00	06/23/00	06/23/00	06/23/00
Reported:	07/07/00	07/07/00	07/07/00	07/07/00
Lab Sample I.D.	00060167	00060168	00060169	00060170
Client Sample I.D.	TMW-7 -W062300	TMW-8 -W062300	BL-3 -W062300	BL-3 -R062300

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	07/06/00	6010	0.01	0.19	0.10	0.41	<0.01
Beryllium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/23/00	7196	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Total)	07/06/00	6010	0.01	0.047	<0.01	0.029	<0.01
Cobalt	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	07/06/00	6010	0.01	0.017	<0.01	0.018	<0.01
Lead	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/28/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	07/06/00	6010	0.01	0.015	<0.01	<0.01	<0.01
Selenium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	07/06/00	6010	0.01	0.027	<0.01	<0.01	<0.01
Zinc	07/06/00	6010	0.01	0.12	0.035	0.030	0.029

INT m.n.

Orange Coast Analytical, Inc

QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 06/29/00
Laboratory Sample No : 00060161
Laboratory Reference No : KJC 11594

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
1,1-Dichloroethene	0	20	19	20	95	100	5
Benzene	0.0	20	20	20	100	100	0
Trichloroethene	21	20	36	35	75	71	2
Toluene	0.0	20	19	19	95	95	0
Chlorobenzene	0.0	20	22	22	110	110	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT m.n.

Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Metals

Laboratory Reference No : KJC 11594

Analyte	Date Tested	QC Sample	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
*Antimony	07/06/00	00060169	0.00	1.00	0.757	0.798	76	80	5
Antimony	07/06/00	OCA 100	0.00	0.50	0.560	0.500	112	100	11
Arsenic	07/06/00	00060169	0.00	1.00	1.13	1.14	113	114	1
Barium	07/06/00	00060169	0.41	0.100	0.507	0.506	97	96	0
Beryllium	07/06/00	00060169	0.00	0.100	0.117	0.119	117	119	2
Cadmium	07/06/00	00060169	0.00	0.100	0.116	0.117	116	117	1
Chromium (Total)	07/06/00	00060169	0.029	0.100	0.138	0.138	109	109	0
Chromium (VI)	06/23/00	00060170	0.00	0.10	0.090	0.086	90	86	4
Cobalt	07/06/00	00060169	0.00	0.100	0.098	0.100	98	100	2
Copper	07/06/00	00060169	0.00	0.100	0.120	0.120	120	120	0
Lead	07/06/00	00060169	0.00	0.50	0.473	0.500	95	100	6
Mercury	06/28/00	00060162	0.00	0.010	0.0101	0.0103	101	103	2
Molybdenum	07/06/00	00060169	0.00	0.50	0.506	0.516	101	103.2	2
Nickel	07/06/00	00060169	0.00	0.500	0.455	0.458	91	92	1
*Selenium	07/06/00	00060169	0.00	1.00	1.26	1.29	126	129	2
Selenium	07/06/00	OCA 100	0.00	0.50	0.516	0.518	103	104	0
Silver	07/06/00	00060169	0.00	0.100	0.112	0.113	112	113	1
Thallium	07/06/00	00060169	0.00	1.00	0.966	0.973	97	97	1
Vanadium	07/06/00	00060169	0.00	0.500	0.566	0.571	113	114	1
Zinc	07/06/00	00060169	0.030	0.100	0.119	0.118	89	88	1

*Matrix Interference

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT m.n.

Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Metals

Laboratory Reference No : KJC 11594

Analyte	Date Tested	QC Sample	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
*Antimony	07/06/00	00060184	0.00	0.50	0.272	0.336	54	67	21
Antimony	07/06/00	OCA 100	0.00	0.50	0.455	0.504	91	101	10
Arsenic	07/06/00	00060184	0.00	1.00	1.03	1.03	103	103	0
Barium	07/06/00	00060184	0.00	0.100	0.117	0.116	117	116	1
Beryllium	07/06/00	00060184	0.00	0.100	0.120	0.120	120	120	0
Cadmium	07/06/00	00060184	0.00	0.100	0.120	0.120	120	120	0
*Chromium (Total)	07/06/00	00060184	0.029	0.100	0.078	0.077	49	48	2
Chromium (Total)	07/06/00	OCA 100	0.000	0.100	0.115	0.115	115	115	0
Chromium (VI)	06/23/00	00060170	0.00	0.10	0.090	0.086	90	86	4
Cobalt	07/06/00	00060184	0.00	0.100	0.106	0.105	106	105	1
Copper	07/06/00	00060184	0.017	0.100	0.130	0.130	113	113	0
Lead	07/06/00	00060184	0.00	0.50	0.507	0.506	101	101	0
Mercury	06/28/00	00060162	0.00	0.010	0.0101	0.0103	101	103	2
Molybdenum	07/06/00	00060184	0.00	0.50	0.500	0.504	100	100.8	1
Nickel	07/06/00	00060184	0.00	0.500	0.497	0.494	99	99	1
*Selenium	07/06/00	00060184	0.00	0.50	0.612	0.595	122	119	3
Selenium	07/06/00	OCA 100	0.00	0.50	0.497	0.497	99	99	0
Silver	07/06/00	00060184	0.00	0.100	0.110	0.111	110	111	1
Thallium	07/06/00	00060184	0.00	1.00	1.02	1.02	102	102	0
Vanadium	07/06/00	00060184	0.00	0.500	0.563	0.561	113	112	0
Zinc	07/06/00	00060184	0.021	0.100	0.129	0.129	108	108	0

*Matrix Interference

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT m.n.

Orange Coast Analytical, Inc.

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

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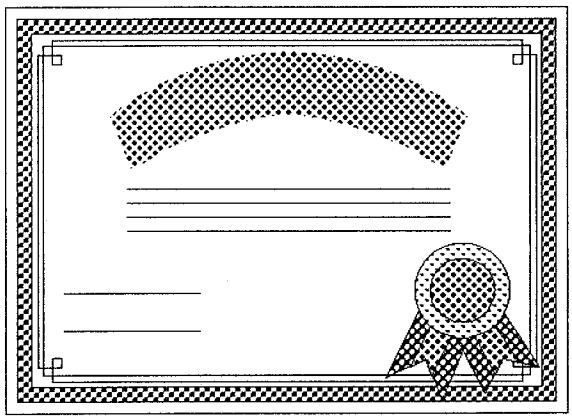
IRVINE, CA



ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification
(ELAP) No.: 1416 Expiration Date: 2001

Laboratory Director's Name (Print) : Mark Noorani

Client: Kennedy Jenks Consultants

Project No.: Boeing C-6

Project Name: 004016.00

Laboratory Reference: KJC 11598

Analytical Method: 8260, Metals

Date Sampled: 06/26/00
Date Received: 06/27/00
Date Reported: 07/10/00

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Mark Noorani

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	---	06/26/00	06/26/00	06/26/00
Received:	---	06/27/00	06/27/00	06/27/00
Analyzed:		06/30/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	MB	00060175	00060176	00060177
Client Sample I.D.	---	BL-2 -W062600	BL-2 -B062600	BL-1 -W062600

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***		***SAMPLE RESULTS***		
			µg/l	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<5.0	<0.5	<0.5
Bromodichloromethane	75-27-4	1.0	<1.0	<10	<1.0	<1.0
Bromoform	75-25-2	0.5	<0.5	<5.0	<0.5	<0.5
Bromomethane	74-83-9	1.0	<1.0	<10	<1.0	<1.0
Carbon Disulfide	75-15-0	0.5	<0.5	<5.0	<0.5	<0.5
Carbon tetrachloride	56-23-5	0.5	<0.5	<5.0	<0.5	<0.5
Chlorobenzene	108-90-7	0.5	<0.5	<5.0	<0.5	<0.5
Chlorodibromomethane	124-48-1	0.5	<0.5	<5.0	<0.5	<0.5
Chloroethane	75-00-3	0.5	<0.5	<5.0	<0.5	<0.5
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<5.0	<0.5	<0.5
Chloroform	67-66-3	0.5	<0.5	<5.0	<0.5	<0.5
Chloromethane	74-87-3	0.5	<0.5	<5.0	<0.5	<0.5
1,1-Dichloroethane	75-34-3	0.5	<0.5	<5.0	<0.5	0.85
1,2-Dichloroethane	107-06-2	0.5	<0.5	<5.0	<0.5	<0.5
1,1-Dichloroethene	75-35-4	0.5	<0.5	<5.0	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<5.0	<0.5	<0.5
1,2-Dichloropropane	78-87-5	0.5	<0.5	<5.0	<0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<5.0	<0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<5.0	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	<0.5	<5.0	<0.5	<0.5
Methylene chloride	75-09-2	2.5	<2.5	<25	<2.5	<2.5
Styrene	100-42-5	0.5	<0.5	<5.0	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<5.0	<0.5	<0.5
Tetrachloroethene	127-18-4	0.5	<0.5	<5.0	<0.5	<0.5
Toluene	108-88-3	0.5	<0.5	<5.0	<0.5	<0.5
1,1,1-Trichloroethane	71-55-6	0.5	<0.5	<5.0	<0.5	<0.5
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<5.0	<0.5	<0.5
Trichloroethene	79-01-6	0.5	<0.5	940	<0.5	3.1
Trichlorofluoromethane	75-69-4	0.5	<0.5	<5.0	<0.5	<0.5
Vinyl acetate	108-05-4	1.0	<1.0	<10	<1.0	<1.0
Vinyl chloride	75-01-4	0.5	<0.5	<5.0	<0.5	<0.5
Total Xylenes	1330-20-7	1.0	<1.0	<10	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<5.0	<0.5	<0.5
cis-1,2-Dichloroethene	156-59-2	0.5	<0.5	<5.0	<0.5	20
2,2-Dichloropropane	594-20-7	0.5	<0.5	<5.0	<0.5	<0.5

INT-

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11598

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	---	06/26/00	06/26/00	06/26/00
Received:	---	06/27/00	06/27/00	06/27/00
Analyzed:	01/00/00	06/30/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	MB	00060175	00060176	00060177
Client Sample I.D.	---	BL-2 -W062600	BL-2 -B062600	BL-1 -W062600

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***		***SAMPLE RESULTS***		
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<5.0	<0.5	<0.5
1,1-Dichloropropene	563-58-6	0.5	<0.5	<5.0	<0.5	<0.5
Dibromomethane	74-95-3	0.5	<0.5	<5.0	<0.5	<0.5
1,2-Dibromoethane	106-93-4	0.5	<0.5	<5.0	<0.5	<0.5
1,3-Dichloropropane	142-28-9	0.5	<0.5	<5.0	<0.5	<0.5
Isopropylbenzene	98-82-8	0.5	<0.5	<5.0	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<5.0	<0.5	<0.5
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<5.0	<0.5	<0.5
Bromobenzene	108-86-1	0.5	<0.5	<5.0	<0.5	<0.5
n-Propylbenzene	103-65-1	0.5	<0.5	<5.0	<0.5	<0.5
2-Chlorotoluene	95-49-8	0.5	<0.5	<5.0	<0.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<5.0	<0.5	<0.5
4-Chlorotoluene	106-43-4	0.5	<0.5	<5.0	<0.5	<0.5
tert-Butylbenzene	98-06-6	0.5	<0.5	<5.0	<0.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<5.0	<0.5	<0.5
sec-Butylbenzene	135-98-8	0.5	<0.5	<5.0	<0.5	<0.5
4-Isopropyltoluene	99-87-6	0.5	<0.5	<5.0	<0.5	<0.5
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<5.0	<0.5	<0.5
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<5.0	<0.5	<0.5
n-Butylbenzene	104-51-8	0.5	<0.5	<5.0	<0.5	<0.5
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<5.0	<0.5	<0.5
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<10	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<5.0	<0.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	<0.5	<5.0	<0.5	<0.5
Naphthalene	91-20-3	0.5	<0.5	<5.0	<0.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<5.0	<0.5	<0.5

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	100	99	101	104
Toluene-d8	100	100	102	94
4-Bromofluorobenzene	121	122	123	115

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Analyzed:	07/05/00	06/30/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	00060178	00060179	00060180	00060181
Client Sample I.D.	WCC-3D -W062600	WCC-3D -D062600	TMW-16 -W062600	TMW-2 -W062600

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	<0.5	<0.5	<0.5	<100
Bromodichloromethane	75-27-4	1.0	<1.0	<1.0	<1.0	<200
Bromoform	75-25-2	0.5	<0.5	<0.5	<0.5	<100
Bromomethane	74-83-9	1.0	<1.0	<1.0	<1.0	<200
Carbon Disulfide	75-15-0	0.5	<0.5	<0.5	<0.5	<100
Carbon tetrachloride	56-23-5	0.5	<0.5	<0.5	<0.5	<100
Chlorobenzene	108-90-7	0.5	<0.5	<0.5	<0.5	<100
Chlorodibromomethane	124-48-1	0.5	<0.5	<0.5	<0.5	<100
Chloroethane	75-00-3	0.5	<0.5	<0.5	<0.5	<100
2-Chloroethyl vinyl ether	110-75-8	0.5	<0.5	<0.5	<0.5	<100
Chloroform	67-66-3	0.5	<0.5	<0.5	<0.5	230
Chloromethane	74-87-3	0.5	<0.5	<0.5	<0.5	<100
1,1-Dichloroethane	75-34-3	0.5	<0.5	<0.5	<0.5	1,400
1,2-Dichloroethane	107-06-2	0.5	<0.5	<0.5	<0.5	<100
1,1-Dichloroethene	75-35-4	0.5	54	68	2.7	28,000
trans-1,2-Dichloroethene	156-60-5	0.5	<0.5	<0.5	<0.5	580
1,2-Dichloropropane	78-87-5	0.5	<0.5	<0.5	<0.5	<100
cis-1,3-Dichloropropene	10061-01-5	0.5	<0.5	<0.5	<0.5	<100
trans-1,3-Dichloropropene	10061-02-6	0.5	<0.5	<0.5	<0.5	<100
Ethylbenzene	100-41-4	0.5	<0.5	<0.5	<0.5	<100
Methylene chloride	75-09-2	2.5	<2.5	<2.5	<2.5	<500
Styrene	100-42-5	0.5	<0.5	<0.5	<0.5	<100
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5	<100
Tetrachloroethene	127-18-4	0.5	<0.5	<0.5	2.1	<100
Toluene	108-88-3	0.5	37	42	6.2	480
1,1,1-Trichloroethane	71-55-6	0.5	50	54	<0.5	1,900
1,1,2-Trichloroethane	79-00-5	0.5	<0.5	<0.5	<0.5	<100
Trichloroethene	79-01-6	0.5	9.9	11	2.9	<100
Trichlorofluoromethane	75-69-4	0.5	<0.5	<0.5	<0.5	28,000
Vinyl acetate	108-05-4	1.0	<1.0	<1.0	<1.0	<200
Vinyl chloride	75-01-4	0.5	<0.5	<0.5	<0.5	<100
Total Xylenes	1330-20-7	1.0	<1.0	<1.0	<1.0	<200
Dichlorodifluoromethane	75-71-8	0.5	<0.5	<0.5	<0.5	<100
cis-1,2-Dichloroethene	156-59-2	0.5	2.1	2.1	<0.5	850
2,2-Dichloropropane	594-20-7	0.5	<0.5	<0.5	<0.5	<100

INT-

Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11598

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Analyzed:	07/05/00	06/30/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	00060178	00060179	00060180	00060181
Client Sample I.D.	WCC-3D -W062600	WCC-3D -D062600	TMW-16 -W062600	TMW-2 -W062600

ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<0.5	<0.5	<0.5	<100
1,1-Dichloropropene	563-58-6	0.5	<0.5	<0.5	<0.5	<100
Dibromomethane	74-95-3	0.5	<0.5	<0.5	<0.5	<100
1,2-Dibromoethane	106-93-4	0.5	<0.5	<0.5	<0.5	<100
1,3-Dichloropropane	142-28-9	0.5	<0.5	<0.5	<0.5	<100
Isopropylbenzene	98-82-8	0.5	<0.5	<0.5	<0.5	<100
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<0.5	<0.5	<0.5	<100
1,2,3-Trichloropropane	96-18-4	0.5	<0.5	<0.5	<0.5	<100
Bromobenzene	108-86-1	0.5	<0.5	<0.5	<0.5	<100
n-Propylbenzene	103-65-1	0.5	<0.5	<0.5	<0.5	<100
2-Chlorotoluene	95-49-8	0.5	<0.5	<0.5	<0.5	<100
1,3,5-Trimethylbenzene	108-67-8	0.5	<0.5	<0.5	<0.5	<100
4-Chlorotoluene	106-43-4	0.5	<0.5	<0.5	<0.5	<100
tert-Butylbenzene	98-06-6	0.5	<0.5	<0.5	<0.5	<100
1,2,4-Trimethylbenzene	95-63-6	0.5	<0.5	<0.5	<0.5	<100
sec-Butylbenzene	135-98-8	0.5	<0.5	<0.5	<0.5	<100
4-Isopropyltoluene	99-87-6	0.5	<0.5	<0.5	<0.5	<100
1,3-Dichlorobenzene	541-73-1	0.5	<0.5	<0.5	<0.5	<100
1,4-Dichlorobenzene	106-46-7	0.5	<0.5	<0.5	<0.5	<100
n-Butylbenzene	104-51-8	0.5	<0.5	<0.5	<0.5	<100
1,2-Dichlorobenzene	95-50-1	0.5	<0.5	<0.5	<0.5	<100
1-2-Dibromo-3-CPA	96-12-8	1.0	<1.0	<1.0	<1.0	<200
1,2,4-Trichlorobenzene	120-82-1	0.5	<0.5	<0.5	<0.5	<100
Hexachlorobutadiene	87-68-3	0.5	<0.5	<0.5	<0.5	<100
Naphthalene	91-20-3	0.5	<0.5	<0.5	<0.5	<100
1,2,3-Trichlorobenzene	87-61-6	0.5	<0.5	<0.5	<0.5	<100

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	101	98	99	102
Toluene-d8	92	104	102	95
4-Bromofluorobenzene	122	124	121	122

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Analyzed:	07/05/00	07/05/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	00060182	00060183	00060184	00060185
Client Sample I.D.	WCC-3S -W062600	WCC-6S -W062600	WCC-6S -R062600	DAC-P1 -W062600

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT µg/l***	***SAMPLE RESULTS µg/l***	***µg/l***	***µg/l***	***µg/l***
Benzene	71-43-2	0.5	380	43	<0.5	<50
Bromodichloromethane	75-27-4	1.0	<250	<50	<1.0	<100
Bromoform	75-25-2	0.5	<125	<25	<0.5	<50
Bromomethane	74-83-9	1.0	<250	<50	<1.0	<100
Carbon Disulfide	75-15-0	0.5	<125	<25	<0.5	<50
Carbon tetrachloride	56-23-5	0.5	<125	<25	<0.5	<50
Chlorobenzene	108-90-7	0.5	<125	<25	<0.5	<50
Chlorodibromomethane	124-48-1	0.5	<125	<25	<0.5	<50
Chloroethane	75-00-3	0.5	<125	<25	<0.5	<50
2-Chloroethyl vinyl ether	110-75-8	0.5	<125	<25	<0.5	<50
Chloroform	67-66-3	0.5	<125	<25	<0.5	<50
Chloromethane	74-87-3	0.5	<125	<25	<0.5	<50
1,1-Dichloroethane	75-34-3	0.5	630	76	<0.5	<50
1,2-Dichloroethane	107-06-2	0.5	<125	<25	<0.5	<50
1,1-Dichloroethene	75-35-4	0.5	25,000	5,300	<0.5	<50
trans-1,2-Dichloroethene	156-60-5	0.5	840	91	<0.5	<50
1,2-Dichloropropane	78-87-5	0.5	<125	<25	<0.5	<50
cis-1,3-Dichloropropene	10061-01-5	0.5	<125	<25	<0.5	<50
trans-1,3-Dichloropropene	10061-02-6	0.5	<125	<25	<0.5	<50
Ethylbenzene	100-41-4	0.5	<125	<25	<0.5	<50
Methylene chloride	75-09-2	2.5	<625	<125	<2.5	<250
Styrene	100-42-5	0.5	<125	<25	<0.5	<50
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<125	<25	<0.5	<50
Tetrachloroethene	127-18-4	0.5	<125	<25	<0.5	<50
Toluene	108-88-3	0.5	48,000	4,700	<0.5	<50
1,1,1-Trichloroethane	71-55-6	0.5	2,400	1600	<0.5	<50
1,1,2-Trichloroethane	79-00-5	0.5	<125	<25	<0.5	<50
Trichloroethene	79-01-6	0.5	770	1,500	<0.5	14,000
Trichlorofluoromethane	75-69-4	0.5	<125	<25	<0.5	<50
Vinyl acetate	108-05-4	1.0	<250	<50	<1.0	<100
Vinyl chloride	75-01-4	0.5	<125	<25	<0.5	<50
Total Xylenes	1330-20-7	1.0	<250	<50	<1.0	<100
Dichlorodifluoromethane	75-71-8	0.5	<125	<25	<0.5	<50
cis-1,2-Dichloroethene	156-59-2	0.5	7,600	2,000	<0.5	79
2,2-Dichloropropane	594-20-7	0.5	<125	<25	<0.5	<50

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Orange Coast Analytical, Inc

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: KJC 11598

Client Project ID: Boeing C-6
Client Project #: 004016.00

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Analyzed:	07/05/00	07/05/00	06/30/00	07/05/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00

		Lab Sample I.D.	00060182	00060183	00060184	00060185
		Client Sample I.D.	WCC-3S -W062600	WCC-6S -W062600	WCC-6S -R062600	DAC-P1 -W062600
ANALYTE (CONT)	***CAS NUMBER***	***DETECTION LIMIT***	***SAMPLE RESULTS***			
		ug/l	***ug/l***	***ug/l***	***ug/l***	***ug/l***
Bromochloromethane	74-97-5	0.5	<125	<25	<0.5	<50
1,1-Dichloropropene	563-58-6	0.5	<125	<25	<0.5	<50
Dibromomethane	74-95-3	0.5	<125	<25	<0.5	<50
1,2-Dibromoethane	106-93-4	0.5	<125	<25	<0.5	<50
1,3-Dichloropropane	142-28-9	0.5	<125	<25	<0.5	<50
Isopropylbenzene	98-82-8	0.5	<125	<25	<0.5	<50
1,1,2,2-Tetrachloroethane	79-34-5	0.5	<125	<25	<0.5	<50
1,2,3-Trichloropropane	96-18-4	0.5	<125	<25	<0.5	<50
Bromobenzene	108-86-1	0.5	<125	<25	<0.5	<50
n-Propylbenzene	103-65-1	0.5	<125	<25	<0.5	<50
2-Chlorotoluene	95-49-8	0.5	<125	<25	<0.5	<50
1,3,5-Trimethylbenzene	108-67-8	0.5	<125	<25	<0.5	<50
4-Chlorotoluene	106-43-4	0.5	<125	<25	<0.5	<50
tert-Butylbenzene	98-06-6	0.5	<125	<25	<0.5	<50
1,2,4-Trimethylbenzene	95-63-6	0.5	<125	<25	<0.5	<50
sec-Butylbenzene	135-98-8	0.5	<125	<25	<0.5	<50
4-Isopropyltoluene	99-87-6	0.5	<125	<25	<0.5	<50
1,3-Dichlorobenzene	541-73-1	0.5	<125	<25	<0.5	<50
1,4-Dichlorobenzene	106-46-7	0.5	<125	<25	<0.5	<50
n-Butylbenzene	104-51-8	0.5	<125	<25	<0.5	<50
1,2-Dichlorobenzene	95-50-1	0.5	<125	<25	<0.5	<50
1-2-Dibromo-3-CPA	96-12-8	1.0	<250	<50	<1.0	<100
1,2,4-Trichlorobenzene	120-82-1	0.5	<125	<25	<0.5	<50
Hexachlorobutadiene	87-68-3	0.5	<125	<25	<0.5	<50
Naphthalene	91-20-3	0.5	<125	<25	<0.5	<50
1,2,3-Trichlorobenzene	87-61-6	0.5	<125	<25	<0.5	<50

SURROGATE RECOVERY	%RC	%RC	%RC	%RC
Dibromofluoromethane	104	105	98	106
Toluene-d8	95	97	87	94
4-Bromofluorobenzene	121	123	118	123

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	---	06/26/00	06/26/00
Received:	---	06/27/00	06/27/00
Reported:	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	MB	00060175	00060177
Client Sample I.D.	---	BL-2 -W062600	BL-1 -W062600

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***		
				mg/l	***mg/l***	***mg/l***
Antimony	07/06/00	6010	0.1	<0.1	<0.1	<0.1
Arsenic	07/06/00	6010	0.1	<0.1	<0.1	<0.1
Barium	07/06/00	6010	0.01	<0.01	0.13	0.10
Beryllium	07/06/00	6010	0.01	<0.01	<0.01	<0.01
Cadmium	07/06/00	6010	0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/26/00	7196	0.01	<0.01	0.012	<0.01
Chromium (Total)	07/06/00	6010	0.01	<0.01	0.028	0.016
Cobalt	07/06/00	6010	0.01	<0.01	<0.01	<0.01
Copper	07/06/00	6010	0.01	<0.01	<0.01	0.011
Lead	07/06/00	6010	0.05	<0.05	<0.05	<0.05
Mercury	06/30/00	7471	0.001	<0.001	<0.001	<0.001
Molybdenum	07/06/00	6010	0.05	<0.05	<0.05	<0.05
Nickel	07/06/00	6010	0.01	<0.01	<0.01	<0.01
Selenium	07/06/00	6010	0.1	<0.1	<0.1	<0.1
Silver	07/06/00	6010	0.01	<0.01	<0.01	<0.01
Thallium	07/06/00	6010	0.1	<0.1	<0.1	<0.1
Vanadium	07/06/00	6010	0.01	<0.01	0.011	0.018
Zinc	07/06/00	6010	0.01	<0.01	0.023	0.039

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Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	00060178	00060179	00060180	00060181
Client Sample I.D.	WCC-3D -W062600	WCC-3D -D062600	TMW-16 -W062600	TMW-2 -W062600

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	07/06/00	6010	0.01	0.082	0.082	0.10	0.39
Beryllium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/26/00	7196	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Total)	07/06/00	6010	0.01	<0.01	<0.01	0.058	0.35
Cobalt	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	07/06/00	6010	0.01	<0.01	<0.01	0.012	<0.01
Lead	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/30/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	07/06/00	6010	0.01	<0.01	<0.01	0.016	<0.01
Selenium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	07/06/00	6010	0.01	<0.01	<0.01	0.025	<0.01
Zinc	07/06/00	6010	0.01	0.027	0.013	0.066	0.031

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Orange Coast Analytical, Inc

Kennedy Jenks Consultants
ATTN: Mr. Rus Purcell
2151 Michelson Dr., Suite 100
Irvine, CA 92612

Client Project ID: Boeing C-6
Client Project #: 004016.00

SAMPLE DESCRIPTION (Water)

Laboratory Reference #: KJC 11598

Sampled:	06/26/00	06/26/00	06/26/00	06/26/00
Received:	06/27/00	06/27/00	06/27/00	06/27/00
Reported:	07/10/00	07/10/00	07/10/00	07/10/00
Lab Sample I.D.	00060182	00060183	00060184	00060185
Client Sample I.D.	WCC-3S -W062600	WCC-6S -W062600	WCC-6S -R062600	DAC-P1 -W062600

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***DETECTION LIMIT mg/l***	***SAMPLE RESULTS***			
				mg/l	***mg/l***	***mg/l***	***mg/l***
Antimony	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Barium	07/06/00	6010	0.01	0.32	0.19	<0.01	0.12
Beryllium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Chromium (VI)	06/26/00	7196	0.01	<0.01	<0.01	<0.01	0.28
Chromium (Total)	07/06/00	6010	0.01	<0.01	<0.01	<0.01	0.35
Cobalt	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Copper	07/06/00	6010	0.01	<0.01	<0.01	0.017	<0.01
Lead	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Mercury	06/30/00	7471	0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum	07/06/00	6010	0.05	<0.05	<0.05	<0.05	<0.05
Nickel	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Silver	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Thallium	07/06/00	6010	0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	07/06/00	6010	0.01	<0.01	<0.01	<0.01	<0.01
Zinc	07/06/00	6010	0.01	0.024	0.012	0.021	<0.01

QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 06/30/00
Laboratory Sample No : 00060169
Laboratory Reference No : KJC 11598

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
1,1-Dichloroethene	0.0	20	18	18	90	90	0
Benzene	0.0	20	20	20	100	100	0
Trichloroethene	50	20	71	70	105	100	1
Toluene	0.0	20	20	20	100	100	0
Chlorobenzene	0.0	20	23	23	115	115	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 07/05/00
Laboratory Sample No : 00060178
Laboratory Reference No : KJC 11598

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
1,1-Dichloroethene	0.0	20	19	18	95	90	5
Benzene	0.0	20	21	21	105	105	0
Trichloroethene	3.1	20	25	25	110	110	0
Toluene	0.0	20	20	20	100	100	0
Chlorobenzene	0.0	20	22	22	110	110	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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Orange Coast Analytical, Inc.

QC DATA REPORT

Analysis : Metals

Laboratory Reference No : KJC 11598

Analyte	Date Tested	QC Sample	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
*Antimony	07/06/00	00060184	0.00	0.50	0.272	0.336	54	67	21
Antimony	07/06/00	OCA 200	0.00	0.50	0.455	0.504	91	101	10
Arsenic	07/06/00	00060184	0.00	1.00	1.04	1.03	104	103	1
Barium	07/06/00	00060184	0.00	0.100	0.117	0.116	117	116	1
Beryllium	07/06/00	00060184	0.00	0.100	0.120	0.120	120	120	0
Cadmium	07/06/00	00060184	0.00	0.100	0.120	0.120	120	120	0
*Chromium (Total)	07/06/00	00060184	0.00	0.100	0.078	0.077	78	77	1
Chromium (Total)	07/06/00	OCA 200	0.00	0.100	0.115	0.115	115	115	0
Chromium (VI)	06/26/00	00060185	0.28	0.10	0.384	0.378	102	96	2
Cobalt	07/06/00	00060184	0.00	0.100	0.106	0.105	106	105	1
Copper	07/06/00	00060184	0.017	0.100	0.130	0.129	113	112	1
Lead	07/06/00	00060184	0.00	0.50	0.507	0.506	101	101	0
Mercury	06/30/00	00060185	0.00	0.010	0.0098	0.010	98	100	2
Molybdenum	07/06/00	00060184	0.00	0.50	0.500	0.504	100	100.8	1
Nickel	07/06/00	00060184	0.00	0.500	0.497	0.494	99	99	1
*Selenium	07/06/00	00060184	0.00	0.50	0.612	0.595	122	119	3
Selenium	07/06/00	OCA 200	0.00	0.50	0.497	0.497	99	99	0
Silver	07/06/00	00060184	0.00	0.100	0.110	0.111	110	111	1
Thallium	07/06/00	00060184	0.00	1.00	1.02	1.02	102	102	0
Vanadium	07/06/00	00060184	0.00	0.500	0.563	0.561	113	112	0
Zinc	07/06/00	00060184	0.021	0.100	0.129	0.129	108	108	0

*Matrix Interference

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

INT_____

Orange Coast Analytical, Inc.

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

- ☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
- ☐ 530 South 336th St., Federal Way, WA 98003
- ☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
- ☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
- ☐ 5190 Neil Road, #300, Reno, NV 89502
- ☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
- ☐ 303 Second St., San Francisco, CA 94107
- ☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-26-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-873-1114

Project No. 004016.00

Report To Rus Purcell

Company Kennedy/Jenks

Address 2151 Michelson Dr. #100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs -	T-22 metals -	Hex Chrom. -						Comment/Conditions (Container type, container number, etc.)
	BL-2-W062600	6/26/00	1008	W	—	—	HNO3 + HCL	Na-m	X	X	X						
	BL-2-B062600		—		—	—			X								
	BL-1-W062600		1110		—	—			X	X	X						
	WCC-1D-W062600		1303		—	—			X	X	X						
	WCC-1D-D062600		1308		—	—			X	X	X						
	THW-16-W062600		1412		—	—			X	X	X						
	THW-2-W062600		1453		—	—			X	X	X						
	WCC-3S-W062600		1556		—	—			X	X	X						
	WCC-6S-W062600		1650		—	—			X	X	X						
	WCC-6S-R062600		1710		—	—			X	X	X						
	DAC-P1-W062600		1817		—	—			X	X	X						

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/27/00	

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time
M. Van Kanvaly	M. Van Kanvaly	OCA	6-27-00	7:50 am

MISC\CUSTODY2.FRM

000065 06

BOE-C6-0066611

ORANGE COAST ANALYTICAL, INC.
PHONE MESSAGE

Initials: MVC Date: 6-27-00

CLIENT: Kennedy Jenks CONTACT: Shane S.

PROJECT: Boeing C-6

Status: ✓ In Progress ___ Completed ___ Upcoming/Future

Date Received: 6-27-00

Samples: Action Item: Turnaround:

Samples labeled WCC-1D-W062600
and WCC-1D-D062600
should read WCC 3D-W062600
and WCC 3D-D062600 respectively

Containers Requested:
___ voa vials
___ glass jars
___ 500 ml plastic
___ 1 liter plastic
___ 1 liter glass
___ trip blank
___ Other_____

Method Shipment:
___ cooler ___ Fed-Ex ASAP
___ box ___ UPS
___ Deliver by_____
___ Will Call on_____
Include:
___ Chain of Custody
___ Blue Ice

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

- ☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
- ☐ 530 South 336th St., Federal Way, WA 98003
- ☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
- ☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
- ☐ 5190 Neil Road, #300, Reno, NV 89502
- ☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
- ☐ 303 Second St., San Francisco, CA 94107
- ☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-21-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-835-9785

Project No. 004016.00

Report To Rus Purcell

Company Kennedy / Jenks

Address 2151 Michelson Dr. Ste 100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	WCC-95-W062000	6/20/00	1410	W	75'	—	HCL	Norm	X	X	X						
	THW-11-W062000	"	1510	W	75'	—	"	"	X	X	X						
	THW-10-W062000	"	1600	W	75'	—	"	"	X	X	X						
	WCC-125-W062100	6/21/00	0915	W	75'	—	"	"	X	X	X						
	THW-12-W062100	"	1000	W	75'	—	"	"	X	X	X						
	THW-13-W062100	"	1056	W	75'	—	"	"	X	X	X						
	WCC-95-B062000	6/20/00	—	W	—	—	"	"	X								

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/21/00	1150
Isaac Navarro	[signature]	OCA	6/21/00	11:35

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

BOE-C6-0066613

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000065.06

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
☐ 530 South 336th St., Federal Way, WA 98003
☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
☐ 6190 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS: _____

Date 6-22-00
Source of Samples Boeing C-6
Sampler Name Shane Scrimshire
Phone 661-835-9785
Project No. 004016.00

Report To RVS Purcell
Company Kennedy/Jenks
Address 2151 Michelson Dr. #100
Irvine CA 92612
Phone 949.261.1577

Lab Destination Orange Coast
Address _____
Phone _____
Carrier/Way Bill No. _____

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. Chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	TMW-14-W062100	6/21/00	1505	W	—	—	HCL	Norm	X	X	X						
	WCC-45-W062100	"	1658	"	—	—	"	"	X	X	X						
	TMW-15-W062200	6/22/00	0805	"	—	—	"	"	X	X	X						
	WCC-75-W062200	"	0900	"	—	—	"	"	X	X	X						
	WCC-55-W062200	"	1006	"	—	—	"	"	X	X	X						
	WCC-115-W062200	"	1130	"	—	—	"	"	X	X	X						
	WCC-115-D062200	"	1135	"	—	—	"	"	X	X	X						
	TMW-14-B062100	6/21/00	—	"	—	—	"	"	X								

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(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/22/00	1200
Isaac Nguyen	[signature]	OCA	6/22/00	12:00

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

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BOE-C6-0066614

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
☐ 530 South 336th St., Federal Way, WA 98003
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☐ 5190 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-23-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-835-9785

Project No. 004016.00

Report To Rus Purcell

Company Kennedy/Jenks

Address 2151 Michelson Dr. #100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. Chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	WCC-10S-W062200	6/22/00	1417	W	—	—	HCL	Norm	X	X	X						
	WCC-10S-B062200	↓	—	↓	—	—	↓	↓	X								
	TMW-6-W062200	↓	1528	↓	—	—	↓	↓	X	X	X						
	TMW-4-W062200	↓	1622	↓	—	—	↓	↓	X	X	X						
	TMW-3-W062200	↓	1715	↓	—	—	↓	↓	X	X	X						
	TMW-5-W062200	↓	1812	↓	—	—	↓	↓	X	X	X						

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SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/23/00	4212
Isaac Navarro	[signature]	OCA	6/23/00	12:4[illegible]

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

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BOE-C6-0066615

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
☐ 530 South 336th St., Federal Way, WA 98003
☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
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☐ 5190 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS: _____

Date 6-23-00 | Report To Rus Purcell | Lab Destination Orange Coast

Source of Samples Boeing C-6 | Company Kennedy / Jenks | Address _____

Sampler Name Shane Scrimshire | Address 2151 Michelson Dr. #100 Irvine CA. 92612 | Phone _____

Phone 661-835-9785 | Carrier/Way Bill No. _____

Project No. 004016.00 | Phone 949-261-1577

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs - 8260	T-22 metals - 6010	Hex. Chrom. - 7196						Comment/Conditions (Container type, container number, etc.)
	TMW-9-W062300	6/23/00	0728	W	—	—	HCL	Norm.	X	X	X						
	TMW-1-W062300	↓	0815	↓	—	—	↓	↓	X	X	X						
	TMW-7-W062300	↓	0910	↓	—	—	↓	↓	X	X	X						
	TMW-8-W062300	↓	0955	↓	—	—	↓	↓	X	X	X						
	BL-3-W062300	↓	1058	↓	—	—	↓	↓	X	X	X						
	BL-3-R062300	↓	1130	↓	—	—	↓	↓	X	X	X						

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(4) Preservation of sample.
(5) Write each analyses requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/23/00	1212
Isaac Navarro	[signature]	OCA	6/23/00	12:2

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time

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BOE-C6-0066616

KENNEDY/JENKS CONSULTANTS

SAMPLE CHAIN-OF-CUSTODY ANALYSIS REQUEST

☐ 200 New Stine Rd., #115, Bakersfield, CA 93309
☐ 530 South 336th St., Federal Way, WA 98003
☐ 17310 Red Hill Ave., #220, Irvine, CA 92714
☐ 2191 East Bayshore Rd., #200, Palo Alto, CA 94303
☐ 5190 Neil Road, #300, Reno, NV 89502
☐ 3336 Bradshaw Rd., #140, Sacramento, CA 95827
☐ 303 Second St., San Francisco, CA 94107
☐ 1000 Hill Rd., #200, Ventura, CA 93003

POSSIBLE HAZARDS:

Date 6-26-00

Source of Samples Boeing C-6

Sampler Name Shane Scrimshire

Phone 661-873-1114

Project No. 004016.00

Report To Rus Purcell

Company Kennedy/Jenks

Address 2151 Michelson Dr. #100
Irvine CA. 92612

Phone 949-261-1577

Lab Destination Orange Coast

Address

Phone

Carrier/Way Bill No.

(1) Lab ID No.	(1) Client ID No.	COLLECTION Date	COLLECTION Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) ANALYSES REQUESTED: VOCs –	T-22 metals –	Hex Chrom. –						Comment/Conditions (Container type, container number, etc.)
	BL-2-W062600	6/26/00	1008	W	—	—	4°C + HCL	Norm	X	X	X						
	BL-2-B062600		—		—	—			X								
	BL-1-W062600 changed at lab		1110		—	—			X	X	X						
	WCC-3D-W062600		1303		—	—			X	X	X						
	WCC-3D-D062600		1308		—	—			X	X	X						
	THW-16-W062600		1412		—	—			X	X	X						
	THW-2-W062600		1453		—	—			X	X	X						
	WCC-3S-W062600		1556		—	—			X	X	X						
	WCC-6S-W062600		1650		—	—			X	X	X						
	WCC-6S-R062600		1710		—	—			X	X	X						
	DAC-P1-W062600		1817		—	—			X	X	X						

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SAMPLE RELINQUISHED BY:

Print Name	Signature	Company	Date	Time
Shane Scrimshire	[signature]	K/J	6/27/00	

SAMPLE RECEIVED BY:

Print Name	Signature	Company	Date	Time
M. Van Kavaly	M. Van Kavaly	OCA	6-27-00	7:50

BOE-C6-006617

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