ENGINEERING FEASIBILITY STUDY
FOR DISPOSAL MODULES 11.1 AND 11.2
B&J DROP BOX SANITARY LANDFILL
Solano County, California

Prepared for
B&J Drop Box Landfill and
Norcal Waste Systems, Inc.
for Submittal to the Regional Water Quality Control Board
Central Valley Region

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May 2001

Project No. BJD110

Conor Pacific

May 30, 2001
Project No. BJD 110

Mr. Greg Pryor
B & J Drop Box Sanitary Landfill
6426 Hay Road
Vacaville, CA 95687

Re: Engineering Feasibility Study for Disposal Modules 11.1 and 11.2, B&J Drop Box Sanitary Landfill, Solano County, California

Dear Mr. Pryor:

This document presents an Engineering Feasibility Study (EFS) prepared by Conor Pacific for Pan Lysimeters PL-11.1 and PL-11.2 at the B&J Drop Box Sanitary Landfill (Landfill). The location of the Landfill is shown on Figure 1. A revised Evaluation Monitoring Program (EMP) was submitted to the Regional Water Quality Control Board (RWQCB) on December 14, 2000, following a review by the RWQCB of previously submitted EMPs and an EFS for Pan Lysimeters PL-11.1 and PL-11.2.[1,2] This document provides the required EFS as defined in Title 27, California Code of Regulations (27 CCR) §20420(k)(6), and addresses comments provided by the RWQCB in a January 11, 2001 letter.[3]

INTRODUCTION TO PL-11.1 AND PL-11.2 INDICATIONS OF A RELEASE

Water first was detected in PL-11.1 (located beneath DM-11) during July 1999 routine quarterly monitoring. The water was sampled and one volatile organic compound (VOC) was detected. This detection was attributed to sample contamination because the detected VOC, methylene chloride, is a common sample contaminant. Then, during quarterly monitoring in October 1999, several VOCs were detected in a grab sample obtained from PL-11.1. These results were presented in the fourth quarter 1999 and annual monitoring report.[4] In compliance with 27 CCR §20420(j)(2), re-sampling of PL-11.1 was conducted in February 2000 to confirm the detection of these constituents. The presence of VOCs in PL-11.1 was confirmed and verbal notification was made to the RWQCB on February 18, 2000.[5] On February 28, 2000, written notification of the sampling results was sent to

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Calgary
Edmonton
Saskatoon
Mississauga
Toronto
Ottawa
Halifax
St. John's

U.S.
Richmond
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[1] Conor Pacific. *Proposed Revised Evaluation Monitoring Program, B&J Drop Box Sanitary Landfill, Solano County, California.* December 14, 2000.
[2] Central Valley RWQCB. Letter to Mr. Donald Gambelin of Norcal Waste Systems, Inc. re: "Evaluation Monitoring and Engineering Feasibility Study Reports; Disposal Modules 11.1 and 11.2; B&J Sanitary Landfill, Solano County". October 12, 2000.
[3] Central Valley RWQCB. Letter to Mr. Greg Pryor of B&J Sanitary Landfill re: "Evaluation Monitoring Program for Disposal Modules 11.1 and 11.2; B&J Sanitary Landfill, Solano County". January 11, 2001.
[4] Conor Pacific/EFW. *1999 Fourth Quarter and Annual Monitoring Report, B&J Drop Box Sanitary Landfill, Solano County, California.* January 28, 2000.
[5] Amy Dietz of Norcal Waste Systems, Inc. Verbal communication with Mr. John Moody of the RWQCB. February 18, 2000.

the RWQCB.[6] Subsequently, sampling for constituents of concern (COC) was conducted in April 2000 at an approved subset of monitoring points in the area of DM-11.1.[7] The COC results were included in an Amendment to the Report of Waste Discharge (ROWD) document submitted to the RWQCB in May 2000 establishing an evaluation monitoring program.[8]

In accordance with 27 CCR §20420(k)(6), an initial Engineering Feasibility Study (EFS) was submitted to the RWQCB in August 2000.[9] The EFS described actions taken to determine the source of VOCs in PL-11.1 and outlined corrective action to remediate the potential release. To begin, approximately 4,755 gallons of water was pumped out of PL-11.1 until no significant liquid was present. This volume is comparable to the calculated estimated capacity of the pan lysimeter under DM-11.1. Water levels within PL-11.1 were checked on a regular basis between April and August 2000 and no additional water appeared to be entering the pan lysimeter. It was proposed that PL-11.1 return to the detection monitoring program because no additional evidence of a release from DM-11.1 was evident and no evidence of VOC impacts were detected in nearby groundwater monitoring well G-13.

Several potential sources for the water and VOCs detected in PL-11.1 were evaluated for the EFS. These included (1) a leak in the landfill liner, (2) consolidation of the landfill soil liner, subgrade, and foundation layer due to the weight of the wastes placed within the landfill, (3) storm water runoff, and, (4) landfill gas migration. Of these potential sources, the most likely source of both the water and the VOCs detected in PL-11.1 is storm water runoff, given that once the water was removed from PL-11.1 no new water was detected in PL-11.1, indicating a one-time event. As corrective action, the EFS suggested that controls be constructed to limit surface water entering landfill modules prior to waste placement, that erosion controls be constructed to prevent the operations layer from being eroded, and that the landfill leachate extraction system be operated at optimum efficiency. No changes were proposed in the water quality monitoring systems in place at the landfill.

Water was first detected in PL-11.2 during routine quarterly monitoring in April 2000, while the VOC detection in PL-11.1 was being investigated for the EMP. Several VOCs were detected in a grab sample obtained from the pan lysimeter (PL-11.2) located beneath DM-11.2. These results were presented in the second quarter 2000 monitoring report.[10] Verbal notification of the April 2000 results was provided to the RWQCB on May 8, 2000 followed by a written notification on May 10, 2000.[11,12] In compliance with 27 CCR §20420(j)(2), re-sampling of PL-11.2 was

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[6] Conor Pacific/EFW. Letter to Mr. J. Moody of Central Valley RWQCB re: "B&J Drop Box Sanitary Landfill." February 28, 2000.

[7] Central Valley RWQCB. Letter to Mr. D. Gambelin of Norcal Waste Systems, Inc. re: "Response to Notification of Release and Request for an Amended Report of Waste Discharge, B&J Sanitary Landfill, Solano County." March 8, 2000.

[8] Conor Pacific/EFW. *Amendment to Report of Waste Discharge and Establishment of Evaluation Monitoring Program, B&J Drop Box Sanitary Landfill, Solano County, California.* May 17, 2000.

[9] Conor Pacific/EFW. *Engineering Feasibility Study for Pan Lysimeter PL-11.1, B&J Drop Box Sanitary Landfill, Solano County, California.* August 11, 2000.

[10] Conor Pacific/EFW. *Second Quarter 2000 Monitoring Report, B&J Drop Box Sanitary Landfill, Solano County, California.* July 28, 2000.

[11] Amy Dietz of Norcal Waste Systems, Inc. Verbal communication with Mr. John Moody of the RWQCB. May 8, 2000.

performed in May 2000. These results confirmed the VOC detections and were reported in the second quarter 2000 monitoring report.

In accordance with to 27 CCR §20420(k)(5) an amendment to the ROWD to establish an EMP was submitted in August 2000.[13] The EMP described actions taken after the water and VOCs were detected in PL-11.2. These included removing the water from PL-11.2 until no water could be measured and sampling for COC in the area of DM-11.2 in July 2000. Analytical results from the COC sampling confirmed the presence of VOCs in PL-11.2. In addition, two semi-volatile organic compounds (SVOCs) were detected in PL-11.2. No VOCs or other anthropogenic compounds indicative of a release were detected in nearby groundwater monitoring wells G-1, G-2, and G-13 during the July 2000 COC sampling. The April 2000 COC sampling of suction lysimeter VZ-2.1 underlying nearby DM-2.1 resulted in several VOC detections, all of which had been detected prior to the construction of DM-11.

Given that no evidence of COC impacts were detected in groundwater, no changes were proposed to the water quality monitoring systems in place at the Landfill, although PL-11.2 would be checked for liquid on a weekly basis during the 90-day EMP period. The data indicated that the impact was confined to the pan lysimeter. The EMP proposed that an investigation of the possible sources of water and VOCs in PL-11.2 be conducted, including a landfill gas survey along the DM-11.2 liner anchor trench and within the waste to determine whether landfill gas could be the source of VOCs in PL-11.2. The results of the EMP investigation would be presented in an initial EFS. Prior to implementation of the EMP, the RWQCB requested additional work be performed for both the PL-11.1 and PL-11.2 releases.[14]

PURPOSE OF THIS REPORT

The purpose of this report is to provide the Landfill and RWQCB with a concise EFS using the regulatory guidelines. More specifically, this EFS provides a description of (1) the regulatory requirements, (2) site specific hydrogeologic conditions and construction information for DM-11.1 and DM-11.2 that influence the EFS, (3) the history of water and VOCs detected in PL-11.1 and PL-11.2, (4) the investigation of the nature and extent of the release, (5) corrective actions taken, and, (6) the EFS for PL-11.1 and PL-11.2.

REGULATORY REQUIREMENTS

This EFS has been developed in accordance with Title 27 CCR. The regulations in 27 CCR §20420(k)(5) outline a specific course of action for owners of solid waste disposal sites upon confirmation of "measurably significant" evidence of a release from a waste management unit (WMU). For the PL-11.1 and PL-11.2 detection monitoring programs, these actions include:

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[12] Conor Pacific/EFW. Letter to Mr. J. Moody of Central Valley RWQCB re: "B&J Drop Box Sanitary Landfill." May 10, 2000.

[13] Conor Pacific/EFW. *Amendment to Report of Waste Discharge and Establishment of Evaluation Monitoring Program. Pan Lysimeter PL-11.2, B&J Drop Box Sanitary Landfill, Solano County, California.* August 8, 2000.

[14] Conor Pacific, October 12, 2000.

1. Providing verbal notification followed by written notification via certified mail to the RWQCB. (completed in February and May 2000 for PL-11.1 and PL-11.2, respectively)

2. Performing an optional retest of to verify that there is "measurably significant" evidence of a release. (completed in February and May 2000 for PL-11.1 and PL-11.2, respectively)

3. Sampling and analysis of an approved sub-set of monitoring points in the potentially affected media (vadose zone and groundwater) in the area of PL-11.1 and PL-11.2 for the Constituent of Concern (COC) monitoring list. (completed in April and July 2000 for PL-11.1 and PL-11.2, respectively)

4. Submittal of an amended report of waste discharge to the RWQCB, to establish an Evaluation Monitoring Program (EMP) within 90 days of the determination of "measurably significant" evidence of a release. (initially completed in May and August 2000 for PL-11.1 and PL-11.2, respectively, and a revised EMP for both PL-11.1 and PL-11.2 submitted in December 2000)

5. Within 180 days, submittal of a report describing the results of the EMP, and an EFS describing corrective action measures, if necessary. (initially completed in May 2000 for PL-11.1, revised and expanded to include PL-11.2 in this report)

This report addresses Item 5 above for DM-11.1 and DM-11.2 (Items 1 through 4 have been completed). The regulations in 27 CCR §20420(k)(6) specify that the EFS must include: "At a minimum, a detailed description of the corrective action measures that could be taken to achieve background concentrations for all Constituents of Concern".

The regulations in 27 CCR §20420(k)(6) also specify that the EFS must meet the requirements of 27 CCR §20430. These requirements include:

(b) **Standards** "The discharger shall take corrective action to remediate releases from the unit; to ensure that the discharger achieves compliance with the water standard" defined in the waste discharge requirements for the site;

(c) **Scope of Actions** "The discharger shall implement corrective action measures that ensure that COCs achieve their respective concentration limits at all monitoring points and throughout the zone affected by the release";

(d) **Monitoring** "In conjunction with the corrective action measures, the discharger shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program";

(f) **Termination Measures** "Corrective action measures taken…may be terminated when the discharger demonstrates…that the concentrations of all COCs are reduced to levels below their respective concentration limits";

(h) **Semi-Annual Progress Reports** "The discharger shall submit these reports [on the effectiveness of the corrective action program] at least semi-annually".

This report will address the above requirements, in addition to responding to specific comments and requests by the RWQCB following its review of the revised EMP.[15]

SITE BACKGROUND

Site Description

The Landfill consists of two Class III Landfills (Landfill 1 [LF-1] and Landfill 2 [LF-2]) and one Class II Landfill (Landfill 3 [LF-3]). LF-1 and LF-2 have one disposal module (DM) each (DM-1 and DM-2.1, respectively). LF-3 will have a total of 15 disposal modules when completed. Currently, DM-2.2, and DM-11 (comprised of DM-11.1 and DM-11.2) are the only active disposal modules in LF-3. DM-9 has been constructed and has been used for storage and stockpiling of sludge. Figure 2 shows the locations of these disposal modules.

Site Hydrogeology

The sediments beneath the site consist of sandy clay and silt, hundreds of feet thick, which locally contain zones of fine sand. Hydraulically, the sediments behave as one low-permeability groundwater body. The top of the groundwater body (i.e., the water table) occurs at a depth ranging from 5 to 15 feet beneath most of the site. Generally, groundwater flows slowly from the northwest to the southeast, following the regional direction of groundwater flow. Horizontal groundwater flow is more dominant than vertical flow, due to the clayey interbedded nature of the sediments, and is demonstrated by the similar water levels exhibited by wells that monitor different depth ranges.[16]

Operation of a groundwater drain and dewatering of the borrow pit have significantly altered the movement of shallow groundwater beneath most of the site. Extraction of groundwater has created a cone of depression nearly a quarter of a mile in diameter. Figure 2, a groundwater contour map based on first quarter 2001 groundwater elevations, shows the altered pattern of groundwater movement and the locations of select disposal modules, the groundwater extraction trench, and the borrow pit. Based on the first quarter 2001 water levels, the groundwater elevation beneath DM-11.1 and DM-11.2 is approximately 7 to 8 feet below the base of PL-11.1 and PL-11.2.

CONSTRUCTION OF DM-11.1 AND DM-11.2, PL-11.1 AND PL-11.2

Disposal Module 11.1 was constructed in Summer/Fall 1997, and approved by the RWQCB on December 17, 1997. Disposal Module 11.2 was constructed in Summer 1999, and approved by the RWQCB on July 27, 1999. The base of each disposal module is sloped toward the south, where the module's leachate sumps and pan lysimeters are located. Figure 3 presents the subgrade plan for DM-11.1 and DM-11.2.

DM-11.1 and DM-11.2 were constructed with an engineered alternative to the specified 5-foot separation between wastes and highest anticipated groundwater. A 6-inch thick capillary break was

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[15] Conor Pacific. *Proposed Revised Evaluation Monitoring Program, B&J Drop Box Sanitary Landfill, Solano County, California.* December 14, 2000.

[16] Einarson Geoscience, Inc. *Geology and Hydrogeology, B&J Drop Box Sanitary Landfill, Solano County.* February 1995.

constructed below the landfill base liner to provide this engineered alternative. Pan lysimeters PL-11.1 and PL-11.2 were constructed to provide monitoring access to the secondary drainage layer (capillary break) under the disposal module (Figure 3).

Each pan lysimeter is composed of a 2.5-feet thick layer of gravel, with a perforated high-density polyethylene (HDPE) pipe installed along the base. The lysimeters are lined with 60-mil HDPE, which overlies the subgrade (native or compacted fill) (Figure 3). Above the capillary break are 1.5 feet of compacted soil, which is overlain by a geosynthetic clay liner (GCL) and a 60-mil HDPE geomembrane liner. Above this is the LCRS perforated pipe and drainage gravel. On top of this lies the 1-foot thick operations layer.

During the winter of 1997/1998, no waste was placed in DM-11.1. Rainwater was collecting on the operations layer of the cell creating surface ponding. In an effort to minimize the surface water ponding, a diversion berm was constructed on the operations layer of DM-11.1, extending from the northwest corner to the southeast corner. An additional berm was constructed from the mid-point of the module to the middle of the eastern module boundary. Surface drainage from the adjacent active module DM-2.1 also accumulated on the DM-11.1 operations layer. The surface water drainage may have contacted leachate seeps on DM-2.1. At the southeastern corner and mid-way along the eastern boundary, no erosion protection was provided adjacent to the diversion berms. As the stormwater flowed out of the module at these points, the operations layer was eroded down to the HDPE liner, exposing the LCRS gravel and the gravel of the capillary break (Figure 3). This allowed water to enter the capillary break and LCRS. The operations layer was repaired in the spring of 1998, and the LCRS was pumped dry prior to placing waste in DM-11.1. The pan lysimeter was not checked at this time.

Leachate is extracted from DM-11.1 and DM-11.2 at leachate sumps S-11.1 and S-11.2. Each sump is equipped with an automatic pumping system so that leachate is pumped out of the when the height of leachate exceeds one foot (30 centimeters) above the leachate pump. Leachate extraction records for S-11.1 and S-11.2 are included in Appendix A.

MONITORING RESULTS OF PL-11.1 AND PL-11.2

Water first was detected in pan lysimeters PL-11.1 and PL-11.2 in July 1999 and April 2000, respectively. Figure 3 shows a schematic of each pan lysimeter on which are indicated the maximum water levels measured since water was first detected. Water was pumped out as much as possible from each pan lysimeter during February through April 2000 from PL-11.1 and during March through July 2000 from PL-11.2. The water level in the pan lysimeters has been measured on a weekly basis since March 2000 in PL-11.1 and since May 2000 in PL-11.2, and on a daily basis in both since December 2000. Water levels and volumes of liquid pumped are recorded by landfill staff, and copies of these records are included in Appendix A. Figures 4 and 5 show the water level fluctuations over time in pan lysimeters PL-11.1 and PL-11.2 and in leachate sumps S-11.1 and S-11.2.

Water was detected in PL-11.1 during routine quarterly sampling in July 1999. It is not known when water first entered the pan lysimeter. Water continued to be present through the end of 1999. Figure 4 shows a drop in the water elevation in PL-11.1 during February through April 2000 corresponding to the 4,755 gallons of water removed from PL-11.1 during the same time period.

The pan lysimeter remained dry until the beginning of February 2001 when the measured water level began to increase again.

A similar pattern emerges from the water elevation data for PL-11.2 shown in Figure 5. No water was detected the first time PL-11.2 was checked for water in February 2000. During routine monitoring in April 2000, a significant amount of water was measured in the riser. A total of 16,850 gallons of water were pumped from PL-11.2 during May through August 2000 resulting in a drop of the water level in the pan lysimeter. Then, the water level began to rise in February 2001, as water appears to be entering the pan lysimeter again. The presence of water in each of the two pan lysimeters corresponds to the seasonal rainy season experienced at the site during January through March. The water detected in each pan lysimeter likely is due to surface water entering the gravel capillary break layer during the rainy season.

Grab samples have been collected from each pan lysimeter at various times when water has been detected, as indicated in the text boxes on Figures 4 and 5. Pan lysimeter samples are analyzed for field parameters, selected inorganic parameters, and VOCs according to EPA method 8260. Tables 1 and 2 include analytical results summarized from certified analytical reports and field sampling data sheets (Appendices B and C). Pan lysimeter analytical results are discussed below.

PL-11.1 Analytical Results

Analytical results obtained from PL-11.1 since July 1999 are summarized in Table 1. Water was first detected in PL-11.1 during routine quarterly monitoring in July 1999, and a grab sample was collected. This was the first time PL-11.1 was sampled. Because of the conditions described in the previous section, it is likely that this water detected in PL-11.1 was present prior to this monitoring event. Only one VOC, methylene chloride (a common laboratory contaminant) was detected at a concentration of 5.58 µg/L. During the fourth quarter sampling event (October 1999), liquid again was detected in PL-11.1 and a grab sample was collected. Five VOCs (chloroethane, 1,1-dichloroethane (1,1-DCA), methylene chloride, 1,1,1-trichloroethane (1,1,1-TCA), and trichlorofluoromethane) were detected at concentrations ranging from 1.22 to 35.3 micrograms per liter (µg/L). These results were presented in the fourth quarter 1999 and annual monitoring report.[17]

In compliance with 27 CCR §20420(j)(2), re-sampling of PL-11.1 was conducted during February 2000 to confirm the detection of these constituents. The re-sampling results resembled the fourth quarter 1999 results, confirming the presence of VOCs in PL-11.1, and were reported to the RWQCB in February 2000.[18] During the second and third quarters of 2000 there was insufficient water to sample from PL-11.1. Water samples were later obtained in fourth quarter 2000, and then during the first and second quarters in 2001. Over the time period PL-11.1 has been sampled, the concentrations and number of VOCs detected has changed. The highest VOC concentrations were detected during first quarter 2000. Significantly fewer VOCs, and generally at lower concentrations, have been detected during the last three quarters. The latest sample collected in April 2000 resulted in one VOC detection, 1,1-DCA at 1.28 µg/L. In addition, the concentrations of certain inorganic constituents generally have increased over time, namely chloride, specific conductance, sulfate, and total dissolved solids.

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[17] Conor Pacific/EFW, January 28, 2000.
[18] Conor Pacific/EFW, February 28, 2000.

PL-11.2 Analytical Results

Analytical results obtained from PL-11.2 since April 2000 are summarized in Table 2. Prior to second quarter 2000, pan lysimeter PL-11.2 was dry and no water samples were obtained. During routine quarterly monitoring in April 2000, liquid was detected in PL-11.2 and a grab sample was collected. Three VOCs were detected in the water sample: acetone (585 μg/L), 2-butanone (638 μg/L), and methylene chloride (4.61 μg/L).

Re-sampling of PL-11.2 was conducted in May 2000. The May 2000 re-sample analytical results confirmed the presence of VOCs at similar concentrations to the second quarter 2000 results; although, the concentrations of acetone and 2-butanone were lower, and methylene chloride was not detected possibly due to a higher detection limit. Subsequent samples collected during fourth quarter 2000, and first and second quarters 2001 have been non-detect for VOCs. However, an additional sample collected in April 2001 resulted in the detection of one VOC, trichlorofluoromethane at 1.23 μg/L.

ACTIONS TAKEN TO DATE

The pan lysimeters are installed beneath the leachate sumps underlying landfill modules DM-11.1 and DM-11.2 as an early detection measure, monitoring the unsaturated zone directly beneath each disposal module. The presence of water and VOCs detected in pan lysimeters PL-11.1 and PL-11.2 indicated a potential release from these landfill modules. Because of the potential of a release from the disposal modules, the nature and extent of the potential release was investigated. In addition, because the presence of water and VOCs in the pan lysimeters were not necessarily the result of a leak from the disposal modules and/or leachate sumps, the source of water and VOCs was also investigated. The water in the pan lysimeters may have come from a leak from the leachate sumps, or from surface water run-off entering the gravel capillary break layer. The VOCs in the pan lysimeters may be due to leachate from a leaking sump, or from landfill gas migration and partitioning into the water in the pan lysimeters, or from the surface run-off containing VOCs from contact with the active landfill ground surface. The following sections describe the results of the investigations into both the extent of a potential release and the source of the water and VOCs detected in the pan lysimeters.

Investigation to Assess the Nature and Extent of the Release

To better understand the nature and extent of a potential release from PL-11.1 and PL-11.2, soil, soil gas, and groundwater were sampled in locations near and downgradient of DM-11.1 and DM-11.2.

<u>Soil and Soil Gas Sampling and Analytical Results</u>

Soil and soil gas samples were collected at eight locations along the perimeter of the Landfill as shown on Figure 2. Sample locations were chosen to the east and slightly upgradient of DM-11.1 and DM-11.2, to the south of DM-11.1, DM-11.2, and DM-2.1, and to the south and west of DM-2.2, which is downgradient of PL-11.1 and PL-11.2. Soil gas samples generally were collected at depths of 10-11 feet bgs and were analyzed for VOCs, methane, carbon dioxide, and oxygen content. Soil samples were collected approximately 5 feet above the water table at depths ranging

from 7 to 31 feet bgs. Target depths for soil samples were determined based on recent groundwater elevations. The soil borings were continuously logged and the soil samples were analyzed for VOCs. Drilling, soil and soil gas sampling procedures and soil boring logs are included in Appendix C while laboratory analytical reports are included in Appendix B.

Soil conditions encountered in the soil borings were dry and friable. Sediments consisted of interbedded sand and fine grained soil, generally including clays and sandy clays to depths of 10 to 15 feet bgs, and silty sand and sandy silt sediment to a maximum depth of 31 feet bgs with occasional intervals of fine sands. Evidence of organic root material occasionally was encountered at approximately 15 feet bgs. A significant thickness of surface fill material was encountered in boring B-01-7. Although no methane gas was detected using the field OVA, leachate odor was noted in borings B-01-4 and B-01-5 at depths of 11 to 17 feet bgs and at 6 feet bgs in B-01-6.

Analytical results from the soil and soil gas sampling are included in Tables 3 and 4. The soil gas samples do not indicate landfill gas impacts, with one exception. In seven of the eight sampling locations, oxygen content was 21-22 %, and methane and carbon dioxide content ranged from non detect to 0.098 % and from 0.038 to 0.1%, respectively. Only in soil boring B-01-5, located near the southwestern corner of DM-2.1, was the oxygen content low (1.2%) and the methane and carbon dioxide contents relatively high (7.6 and 8.9%, respectively). Several VOCs were detected in each of the soil gas samples. However, most of these VOC concentrations are low, generally below 50 ppbv, and seem ubiquitous in all soil gas samples. Also, many of these VOCs are known laboratory contaminants or present in fuel hydrocarbons, and therefore are considered a result of sample contamination by ambient air, sampling materials, or laboratory. In fact, the apparent decrease in several VOCs from B-01-8 (the first soil boring drilled) to B-01-1 (the last soil boring drilled) also suggest that sample contamination may have occurred. Possibly the only real VOC detections were from the B-01-5 gas sample, where significantly higher VOC concentrations were present, in particular hexane (750 ppbv), cyclohexane (440 ppbv), and heptane (350 ppbv), also, Freon 12, Freon 114, vinyl chloride, chloroethane, benzene, and toluene.

No VOCs were detected in any of the soil samples with the exception of acetone detected at 75 μg/Kg in boring B-01-8 located adjacent to groundwater monitoring well G-10. Acetone is a common laboratory contaminant and is not considered a real result.

In the previously submitted PL-11.2 EMP report, it was proposed that a landfill gas survey be conducted along the DM-11.2 liner anchor trench and within the overlying waste to determine whether landfill gas could be a source for the VOCs detected in PL-11.2. The sampling was attempted in August 2000 but was not successful. Instead, gas samples were collected from within the PL-11.1 and PL-11.2 risers and analyzed for methane and VOCs. Analytical results are summarized in Table 4. In the pan lysimeter gas samples, methane was detected at very low concentrations of 0.028 and 0.0015% in PL-11.1 and PL-11.2, respectively. Of the two pan lysimeter gas samples, VOC concentrations were higher in the PL-11.1 sample. Most VOCs were detected at similarly low concentrations in both pan lysimeters. The five significantly higher VOC concentrations for Freon 12, Freon 114, Freon 11, 1,1-DCA, and 1,1,1-TCA in the PL-11.1 gas sample are likely the only real VOC detections.

The soil gas and the pan lysimeter gas sample results presented in Table 4 were analyzed by two different laboratories therefore the list of reported VOCs varies. Of those results considered real VOC detections, Freon 12 and Freon 114 are the only ones common to the two sampling events. Based on the gas sampling results, in particular the methane concentration, it is apparent that landfill gas was detected positively only in soil boring B-01-5 near DM-2.1. The gas sample collected from PL-11.2 did contain significant VOC concentrations, but basically no methane, potentially indicating that landfill gas is not present in the pan lysimeters.

The presence of landfill gas in site soils adjacent to the Landfill may be controlled by the capillary break drainage layer, which underlies disposal modules 2.2, 11.1, and 11.2. If the capillary break layer is acting as a conduit for landfill gas migration, it is likely that once landfill gas enters the capillary break layer, it will leave the layer along the edge where the gravel is exposed at the ground surface. It is highly unlikely that the gas that gets into the capillary break layer would migrate into the surrounding subsurface soils. Therefore, the absence of landfill gas in the soils sampled adjacent to the landfill modules with capillary break layers, should not be taken as evidence that there is no landfill gas present in the capillary break layer. It is interesting that the only soil that contained obvious concentrations of landfill gas (B-01-05) is adjacent to the disposal module without the capillary break layer (DM-2.1).

Downgradient Groundwater Investigation

The extent of a potential impact from the VOCs detected in PL-11.1 and PL-11.2 was investigated in groundwater by sampling nearby monitoring wells G-1, G-2, and G-13, and newly installed replacement wells G-10R and G-11R. Samples were collected in July and October 2000, and in April 2001, and were analyzed for COC compounds.

Table 5 presents a summary of COC sampling results from groundwater monitoring wells based on field data sheets and certified analytical reports included in Appendices B and C. Also included are COC results for samples collected from the leachate sumps underlying DM-11.1 and DM-11.2, the upgradient surface water sampling locations SW-1, SW-2, and SW-3, and the suction lysimeter located under DM-2.1. For comparison, the COC analytical results for PL-11.1 and PL-11.2 samples collected in July and October 2000 are included in Table 5.

Groundwater monitoring wells G-10 and G-11 originally were installed west of landfill modules DM-1 and DM-2.2 to monitor groundwater quality downgradient of these modules (Figure 2). The wells became dry because of dewatering conducted in the borrow pit area, immediately west of these wells. Deeper wells were necessary to supplement G-10 and G-11 to monitor groundwater downgradient and to the west of the landfill, which, is also downgradient of disposal modules DM-11.1 and DM-11.2. Replacement wells G-10R and G-11R were drilled and installed on April 19-20, 2001 according to a January 2001 work plan.[19] As requested by the RWQCB, existing groundwater monitoring wells G-10 and G-11 were not abandoned in the event that the pumping from the borrow pit ceases, and the groundwater table rises to within the well screens of these wells. Wells G-10R and G-11R were developed and sampled for COC compounds on April 26, 2001. Drilling, well installation, development, and sampling procedures are included in Appendix D, and laboratory certified reports are included in Appendix B.

[19] Conor Pacific. *Workplan for Replacement Wells, B&J Sanitary Landfill, Solano County, California.* May 14, 2001.

No VOCs, SVOCs, organophosphorus pesticides, or chlorinated herbicides were detected in any of the nearby or downgradient monitoring wells. There is no evidence of downgradient impacts on groundwater from the VOCs detected in the pan lysimeters under DM-11.1 and DM-11.2.

Finally, the standing water in the borrow pit downgradient of DM-11.1 and DM-11.2 was sampled on May 14, 2001 and analyzed for VOCs. No VOCs were detected in the borrow pit sample. Field parameters are included in Table 5 and the certified analytical report is included in Appendix B.

Investigation to Determine the Source of Water and VOCs in the Pan Lysimeters

A comparison of analytical results for COC compounds in samples from the pan lysimeters, groundwater monitoring wells, surface water, and leachate sumps may help identify a potential source for the water and the VOCs detected in the pan lysimeters.

COC analytical results show that no VOCs, SVOCs, or organophosphorus pesticides were detected in S-11.1 in October 2000. One chlorinated herbicide was detected, dichlorprop at 4.94 µg/L. S-11.1 samples have contained VOCs in the past. The S-11.2 COC sampling resulted in several VOC detections ranging from 1.5 to 710 µg/L with the highest concentrations being acetone (690 µg/L), 2-butanone (710 µg/L), 4-methyl-2-pentanone (320 µg/L), and toluene (330 µg/L). Most of these compounds have been detected in S-11.2 in the past. Also, two SVOCs and two chlorinated herbicides were detected in S-11.2 during COC sampling.

In contrast, the October 2000 COC sampling of PL-11.1 and PL-11.2 resulted in no organic compounds detected except for one SVOC in PL-11.1, namely bis(2-ethylhexyl)phthalate. This compound was not detected in any other COC samples and is considered a common laboratory contaminant. The July 2000 COC sampling of PL-11.2 resulted in several organic compound detections including two VOCs, two SVOCs, and two chlorinated herbicides, at concentrations up to 1,500 µg/L. Concentrations of organic compounds have been detected regularly in both the sumps and pan lysimeters under DM-11.1 and DM-11.2. The lack of similarity in number and type of organic compounds detected in the pan lysimeters and in sumps suggests that the water and VOCs detected in PL-11.1 and PL-11.2 is not leachate from the sumps, but rather surface water and landfill gas, or more probably, surface water which contains VOCs from run-off over an active landfill. VOCs don't readily stay in open surface run-off.

When landfill gas comes into contact with groundwater, it can impact the quality of groundwater. Partitioning of VOCs between gas and groundwater is described by standard phase transfer models such as Henry's Law. Henry's Law relates the concentration of a compound in gas to that in water, using a Henry's Law constant particular to a compound and which is dependent on the solvent type (in this case water) and temperature. Using Henry's Law, the theoretical VOC concentration in water can be calculate based on its concentration in gas. This can be compared to the actual measured aqueous VOC concentrations.

Appendix E contains a discussion of Henry's Law governing the partitioning of VOCs between gas and water phases. Appendix E also contains two tables with calculated aqueous VOC concentrations for compounds detected in the gas samples collected from each pan lysimeter and in the soil gas sample collected from boring B-01-5. These theoretical aqueous VOC concentrations are compared to the maximum VOC concentrations detected in the water samples collected from

PL-11.1 and PL-11.2 over time. In general there was little correlation between the predicted and the observed VOC concentrations in the pan lysimeters. All predicted concentrations were much lower than the observed concentrations; in fact they were below laboratory reporting limits for water samples. The results presented in Appendix E suggest that the VOCs detected in the pan lysimeter water are partioning from the aqueous to the gaseous phase. This, in addition to the fact that methane (a landfill gas indicator) was not detected in the pan lysimeter gas samples indicates that landfill gas is not present in the pan lysimeters. Therefore, the water in the pan lysimeters may have already contained VOCs when it entered. Other evidence suggests that surface water run-off entered the pan lysimeters through the gravel capillary break layer. Surface water run-off in contact with the active landfill ground surface could collect VOCs from the waste and potentially carry them into the pan lysimeter.

To further identify the source of water detected in the pan lysimeters, a comparison of the general water chemistry of groundwater, surface water, and leachate with that of the pan lysimeters was made. The concentrations of chloride, sulfate, carbonate, and bicarbonate were plotted on a trilinear diagram as milli-equivalents per liter (meq/l) included as Figure 6. A complete Piper diagram could not be constructed because calcium, sodium, potassium, and magnesium have not been analyzed in relevant samples since 1996. The sample results shown in the trilinear diagram were collected during separate COC sampling events in April, July, and October 2000, and in April 2001. As seen in Figure 6, no obvious data groupings present themselves, most samples plot within the lower right corner of the diagram and concentration ranges overlap within sample types. However, the following statements can be made. The groundwater sample collected from well G-2 stands apart because of a higher sulfate concentration, the remaining groundwater samples plot along the 10% sulfate concentration line while the three surface water samples plot along the 30% bicarbonate and carbonate line. However, these patterns are not meaningful.

The spatial variability of inorganic constituents in groundwater at the landfill previously was investigated and results were summarized in a November 1995 report.[20] Current results presented in Figure 6 are similar to results presented in the 1995 trilinear plot (Figure 3, 1995). Particularly obvious is that well G-2 stands apart because of a higher sulfate concentration. The few differences between the 1995 and the 2000 results are that the surface water and the leachate samples contained relatively more chloride in 2000. In the 1995 report, groundwater samples were separated as having low and high TDS content. Similarly, the 2000 results indicate that well G-2 contains high TDS water while other wells contain low TDS water. In summary, the inorganic parameters plotted on the trilinear diagram in Figure 6 show comparable results to those obtained for the spatial variability study conducted in 1995, and, comparing the inorganic chemistry of liquids from the different samples collected in 2000 does not help define the source of the water detected in the pan lysimeters. The inorganic chemistry of the pan lysimeter samples is similar to that of nearby groundwater, surface water, and leachate.

In summary

Groundwater and soil near and downgradient of DM-11.1 and DM-11.2 have not been impacted by the VOCs detected in the pan lysimeters. Landfill gas was identified in one of the eight soil

[20] Einarson Geoscience, Inc. *Spatial Variability of Inorganic Constituents in Groundwater, B&J Drop Box Sanitary Landfill, Solano County, California.* November 29, 1995.

borings, namely B-01-5 located near DM-2.1, in which elevated methane gas and relatively higher VOC concentrations were detected.

The source of the water and VOCs detected in the pan lysimeters was investigated by comparison of inorganic and organic concentrations in the pan lysimeter water to samples from groundwater, surface water, and leachate. Comparing inorganic anion concentrations plotted on a trilinear plot did not identify the potential source of water. Comparing COC concentrations did not help identify the potential source of VOCs in the pan lysimeters. Organic compounds are present in the pan lysimeter water and the leachate samples, but not in the groundwater or surface water samples.

The theoretical aqueous VOC concentrations were calculated using VOC concentrations detected in gas samples. These indicated that the VOCs in the pan lysimeters probably are not from landfill gas, but rather that the VOCs detected in the pan lysimeter gas samples may be from the water in the pan lysimeters. Therefore, the water in the pan lysimeters probably already contained VOCs when it entered. However, these calculations assume that the sampled gas and water are in equilibrium. If this assumption is incorrect, the common VOC constituents detected in the soil at boring B-01-05 and in the pan lysimeters may be indicative of some landfill gas influence on the VOCs in the pan lysimeters.

The water levels measured over time in the pan lysimeters and in the leachate sumps, along with the COC concentrations in PL-11.1, PL-11.2, S-11.1 and S-11.2 indicate that the water in the pan lysimeters probably is not leachate. The most likely source of the water detected is from surface water infiltration through the exposed gravel capillary break layer during the rainy seasons. Surface water run-off could pick up VOCs from the active landfill surface, enter the gravel layer exposed at the ground surface, and collect in the pan lysimeter. Of course, it should be mentioned that the VOCs in the pan lysimeters could have come from a combination of sources (e.g., landfill gas and/or leachate). The exact source of VOCs in the pan lysimeter water could not be definitively determined and so, the most likely source is presented, based on the results of this investigation.

EFS FOR PAN LYSIMETERS PL-11.1 AND PL-11.2

The requirements specified in 27 CCR §20430 for an EFS are discussed in the following sections.

No impacts from PL-11.1 and PL-11.2 to groundwater have been detected. There have been no VOC detections in site groundwater monitoring wells, and no anthropogenic compounds detected during the COC sampling of nearby wells G-1 and G-2, and downgradient wells G-10R, G-11R, G-12, and G-13, and in the downgradient borrow pit. Remediation of groundwater is not considered necessary at this time.

The water and VOCs detected in the pan lysimeters have more than one potential source, including leachate, surface water, and/or landfill gas. Landfill gas was detected in a downgradient soil boring near the southwest corner of DM-2.1. Calculations of equilibrium gas/water VOC concentrations suggest that landfill gas is not the source of VOCs in the pan lysimeters. The investigation into the source of the water and VOCs detected in the pan lysimeters concluded that the water and VOCs likely are due primarily to surface water run-off occurring during the rainy season, flowing over the active landfill, coming into contact with VOCs, entering the gravel capillary break layer, and

collecting in the pan lysimeters. Corrective actions proposed below primarily are directed toward remediating the surface water run-off infiltration issues.

Corrective Action Measures

Regardless of the exact source of the VOCs in the pan lysimeter water, the following corrective actions should be effective in controlling the entrance of water into the capillary break layer and pan lysimeters, and reduce the likelihood of VOC impacts. Corrective measures can be implemented to limit the infiltration of surface water into new and existing landfill modules. Some of the following corrective actions were initially proposed in the PL-11.1 EFS report and include:

- Construction of run-off controls to limit surface water from entering the landfill module prior to waste placement.
- Construction of erosion controls to prevent the operations layer from being eroded and exposing the gravel drainage layers.
- Continue to operate the landfill leachate extraction system at optimum efficiency. The system is automated and maintains leachate levels in the DM-11.1 and DM-11.2 sumps at less than one foot.
- Isolate the drainage layer exposed along the northern and eastern portion of DM-11 to prevent future infiltration into the capillary break layer.
- When water is observed in the pan lysimeters, the water in the pan lysimeters will be removed as soon as possible following sampling to remove the potential source.

Apart from the correcti ented for PL-11.1 and PL-11.2, the Landfill will plan the following prevent the migration of landfill gas:

- Installation of a ing point along the southern edge of DM-2.1.
- Implementation tem, in particular in disposal module DM-2.1 near which landi sample B-01-5.

They haven't figured Evaluation yet

Water Quality Monitoring Program

Under the current Landfill Waste Discharge Requirements (MRP 05-01-101), pan lysimeters PL-11.1 and PL-11.2 are checked weekly for liquid. If sufficient liquid is present samples should be collected twice per quarter for analysis of routine monitoring parameters, which include; field parameters, chloride, sulfate, nitrate, total dissolved solids, and VOCs.

It is recommended that PL-11.1 and PL-11.2 be moved to corrective action monitoring with weekly water level measurements and quarterly sampling and analysis if water is detected. Corrective action monitoring would continue until the corrective actions are implemented and for at least one year of monitoring. When it can be shown that water and VOCs are no longer entering the pan lysimeters, PL-11.1 and PL-11.2 would return to the detection monitoring program. Adjacent

groundwater monitoring wells G-12 and G-13, and newly installed downgradient replacement wells G-10R and G-11R remain in the detection monitoring program.

SUMMARY

The extent of impact from the water and VOCs detected in PL-11.1 and PL-11.2 was evaluated through an investigation, which included soil, soil gas, and groundwater sampling near and downgradient of the disposal modules. The borrow pit downgradient of the disposal modules in question also was sampled and no VOCs were detected. No measurable impact to the soil and groundwater quality was identified. The soil gas sampling showed that landfill gas was detected in one location along the southern edge of DM-2.1. In addition VOCs were detected in a gas sample collected from within the PL-11.1 riser.

The potential sources for the water and VOCs detected in PL-11.1 and PL-11.2 were evaluated. The water level elevation in each pan lysimeter has been monitored on a regular basis since water was first detected. Increases in measured water levels coincided with seasonal rain events. No water appears to be entering the pan lysimeters during relatively dry months. The most likely source for the water was determined to be storm water runoff entering the pan lysimeters along edges where erosion may have exposed the liner and the underlying capillary break gravel layer, including during the construction of DM-11.1. The VOCs detected in the pan lysimeter water likely are due to the surface water coming into contact with VOCs on the active landfill ground surface before entering the gravel capillary break layer.

The water and VOCs detected in PL-11.1 and PL-11.2 were likely confined to the pan lysimeters. There is no evidence of a release from a waste management unit to groundwater that would warrant additional investigations.

The corrective action measures which will be implemented include ensuring that the capillary break gravel layer remain covered during the rainy season, and preventing surface water runoff from entering the gravel layer using improved surface runoff controls. Also, the potential of constructing a landfill gas extraction system in DM-2.1 will be evaluated. A change to the water quality monitoring program is proposed, namely, making PL-11.1 and PL-11.2 part of the corrective action monitoring program. All other monitoring will continue as defined in the Waste Discharge Requirement MRP 05-01-101, when water is present.

Corrective Action Program Compliance with Title 27 CCR

The EFS corrective action requirements of Title 27 are presented below, with a short discussion of and how the proposed corrective actions will meet those requirements.

§20430(b) **Standards**

The releases from the disposal units will be and have been remediated by the removal of impacted water from the pan lysimeters, and, by preventing impacted water from entering the gravel capillary break layer and collecting in the pan lysimeters. In addition, landfill gas controls will be planned for DM-2.1.

Compliance with the Water Standard will be reached for the pan lysimeters through the

corrective actions above. The groundwater standards have not been impacted by the releases detected in the pan lysimeters.

§20430(c) **Scope of Actions**

The corrective actions will achieve compliance with respect to COC concentration limits. There is no indication that the release has affected other media or migrated beyond the facility boundary.

§20430(d) **Monitoring**

The proposed corrective action monitoring of the pan lysimeters will monitor the effectiveness of the corrective action program.

§20430(e) **Compliance Schedule**

The corrective actions have been partially implemented and the remainder will commence immediately.

§20430(f) **Terminating Measures** and (g) **Demonstrating Completion of CAP**

Demonstration of completion of the corrective actions will be achieved when the pan lysimeters have been shown to be free of water and VOCs for at least one year.

§20430(h) **Semi Annual Progress Reports**

Semi annual progress reports on the effectiveness of the corrective actions will be submitted.

§20430(i) **Discharger-Initiated CAP Changes** and (j) **RWQCB-Initiated CAP Changes**

If the corrective actions do not satisfy the requirements, an amended ROWD will be prepared, making appropriate changes to the program.

Please call us at 650-843-3828 if you have any questions regarding this report.

Sincerely,
Conor Pacific

Katrin Schliewen

Katrin M. Schliewen
Project Hydrogeologist

Kris H. Johnson

Kris H. Johnson, C.E.G. 1763
Senior Engineering Geologist

cc:

Tim Daleiden, Norcal Waste Systems, Inc.
David Cochrane, Norcal Waste Systems, Inc.
Amy Dietz, Norcal Waste Systems, Inc.
John Moody, Central Valley RWQCB

Attachments:

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Appendices

Appendix A – Landfill Data and Field Sampling Data Sheets
Appendix B – Laboratory Certified Analytical Reports
Appendix C – Soil, Soil Gas, and Pan Lysimeter Gas Sampling
Appendix D – Replacement Wells G-10R and G-11R Drilling and Well Installation
Appendix E – Partitioning of VOCs Between Gas and Groundwater

Table 1
Pan Lysimeter PL-11.1 Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		PL-11.1	PL-11.1	PL-11.1(a)	PL-11.1(b)		PL-11.1*	PL-11.1*	PL-11.1	PL-11.1	PL-11.1	PL-11.1
Sampling Date		7/26/99	10/22/99	2/2/00	2/2/00	Duplicate	4/24/00	7/6/00	10/16/00 (1)	1/31/01	3/28/01 (2)	4/19/01
General Water Quality Parame	*Unit*											
Chloride	mg/l	257	286	313	305	NA	-	-	443	370	512	458
Nitrate/Nitrite as N	mg/l	2.78	3.98	4.6	4.88	NA	-	-	3.37	113	<0.0500	<0.0500
pH	std. units	7.15	6.65	7.35	6.81	NA	-	-	7.86	7.39	7.16	7.38
Specific Conductance	µmhos/c	1,750	2,540	2,410	2,880	NA	-	-	3,140	3,620	4,440	3,710
Sulfate	mg/l	117	130	134	164	NA	-	-	356	562	437	363
Temperature	deg. C	22.8	21.7	19.4	19.2	NA	-	-	23.9	20.1	21.3	20.9
Total Dissolved Solids	mg/l	1,100	1,460	1,360	1,750	NA	-	-	1,890	2,310	2,860	2,460
Turbidity	NTU	697	335	245	205	NA	-	-	59	573	529	350
Ammonia as Nitrogen	mg/l	NA	NA	NA	NA	NA	-	-	NA	NA	5.33	NA
Total Kjeldahl Nitrogen	mg/l	NA	NA	NA	NA	NA	-	-	NA	NA	13.7	NA
Volatile Organic Compounds by EPA Method 8260												
Benzene	µg/l	<1.00	<1.00	<1.00	<1.00	<1.00	-	-	<1.0	<1.00	1.31	<1.00
Chloroethane	µg/l	<1.00	2.12	1.28	4.23	4.48	-	-	<2.0	<1.00	<1.00	<1.00
Chloromethane	µg/l	<1.00	<1.00	<1.00	<1.00	<1.00	-	-	<1.0	4.36	<1.00	<1.00
1,1-Dichloroethane	µg/l	<1.00	3.40	2.57	6.80	7.07	-	-	<1.0	<1.00	4.93	1.28
cis-1,2-Dichloroethene	µg/l	<1.00	<1.00	<1.00	<1.00	<1.00	-	-	<1.0	<1.00	4.32	<1.00
Methylene chloride	µg/l	5.58	35.3	16.1	60.1	62.5	-	-	<5.0	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	µg/l	<1.00	1.22	<1.00	2.58	2.69	-	-	<1.0	<1.00	<1.00	<1.00
Trichlorofluoromethane	µg/l	<1.00	3.56	<1.00	8.23	8.64	-	-	<1.0	<1.00	<1.00	<1.00
Dichlorodifluoromethane	µg/l	<1.00	<1.00	<1.00	2.60	2.71	-	-	<2.0	<1.00	<1.00	<1.00
Xylenes, total	µg/l	<1.00	<1.00	<1.00	<1.00	<1.00	-	-	<2.0	<1.00	2.96	<1.00

All other compounds below method reporting limits.

mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
µg/l - micrograms per liter (parts per billion)
NA - not analyzed
NTU - Nephelometric Turbidity Units

PL-11.1(a) sample obtained prior to pumping 500 gallons of water from PL-11.1
PL-11.1(b) sample obtained after pumping 500 gallons of water from PL-11.1
* Water removed from PL-11.1 prior to sampling. Where dashes are present, insufficient liquid was present to collect a sample.
(1) On 10/16/00 COC sampling was conducted. See Table 5 for additional results.
(2) PL-11.1 sampled on 3/28/01 after a change in water level was detected by Landfill staff.

Table 2
Pan Lysimeter PL-11.2 Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		PL-11.2	PL-11.2	PL-11.2 (Dup)	PL-11.2	PL-11.2	PL-11.2	PL-11.2	PL-11.2
Sampling Date		4/7/00	5/16/00 (1)	5/16/00	7/6/00 (2)	10/16/00 (3)	1/31/01	3/28/01 (4)	4/19/01
General Water Quality Parameter Unit									
Chloride	mg/l	166	NA	NA	514	518	543	302	189
Nitrate/Nitrite as N	mg/l	<0.05	NA	NA	<0.0500	0.161	0.431	0.596	0.0834
pH	std. units	7.69	7.65	NA	7.10	8.19	7.35	7.21	7.09
Specific Conductance	µmhos/cm	2,950	1,890	NA	3,470	2,860	2,910	3,080	2,230
Sulfate	mg/l	186	NA	NA	4.22	209	263	359	258
Temperature	deg. C	20.4	20.8	NA	20.9	24.6	19.2	21.4	20.1
Total Dissolved Solids	mg/l	2,440	NA	NA	2,020	1,780	1,690	1,790	1,400
Turbidity	NTU	40	44	NA	83	312	165	18	109
Ammonia as Nitrogen	mg/l	NA	NA	NA	NA	NA	NA	0.202	NA
Total Kjeldahl Nitrogen	mg/l	NA	NA	NA	NA	NA	NA	1.43	NA
Volatile Organic Compounds by EPA Method 8260									
Acetone	µg/l	585	314	338	<200	<10	<1.00	<1.00	<1.00
2-Butanone	µg/l	638	346	361	1,500	<10	<1.00	<1.00	<1.00
Methylene chloride	µg/l	4.61	<5.00	<5.00	<20.0	<5.0	<1.00	<1.00	<1.00
Toluene	µg/l	<1.00	<5.00	<5.00	29.0	<1.0	<1.00	<1.00	<1.00
Trichlorofluoromethane	µg/l	<1.00	<5.00	<5.00	<20.0	<1.0	<1.00	<1.00	1.23

All other compounds below method reporting limits.

mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
µg/l - micrograms per liter (parts per billion)
NA - not analyzed
NTU - Nephelometric Turbidity Units

(1) PL-11.2 resampled in duplicate on 5/16/00 for verification of VOC detection during initial monitoring on 4/7/00.
(2) On 7/6/00 COC sampling was conducted. See Table 5 for additional results.
(3) On 10/16/00 some COC sampling was conducted. See Table 5 for additional results.
(4) PL-11.2 sampled on 3/28/01 after a change in water level was detected by Landfill staff.

Table 3
Soil Sampling for PL-11 EFS Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		B-01-1	B-01-2	B-01-3	B-01-4	B-01-5	B-01-6	B-01-7	B-01-8
Sampling Date		3/23/01	3/23/01	3/23/01	3/23/01	3/22/01	3/22/01	3/22/01	3/22/01
Volatile Organic Compounds by EPA Method 8260									
Acetone	µg/K	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	75.0
All other compounds below method reporting limits.									

µg/Kg - micrograms per kilogram (parts per billion)

B-01-X represents soil boring from which a soil gas sample was collected. See Figure 2 for locations.

Table 4
Soil Gas and Pan Lysimeter Gas Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		B-01-1	B-01-2	B-01-3	B-01-4	B-01-4	B-01-5	B-01-6	B-01-7	B-01-8	B-01-8	PL-11.1	PL-11.2
Sampling Date		3/23/01	3/23/01	3/23/01	3/23/01	3/22/01	3/22/01	3/22/01	3/22/01	3/22/01	3/22/01	7/31/00	7/31/00
						lab duplicate					lab duplicate		
Natural Gases	*Units*												
Oxygen	%	21	21	21	21	21	1.2	22	22	21	-	NA	NA
Methane	%	<0.0014	<0.0014	0.0035	0.018	0.016	7.6	0.098	0.042	<0.0014	-	0.028	0.0015
Carbon dioxide	%	0.039	0.038	0.040	0.053	0.051	8.9	0.10	0.087	0.041	-	NA	NA
Volatile Organic Compounds by EPA Method TO-14													
Freon 12 (Dichlorodifluoromethane)	ppbv	1.6	<0.72	1.0	<0.74	-	22	3.3	2.2	<0.70	<0.70	191	1.1
Freon 114 (1,2-Cl-1,1,2,2-F ethane)	ppbv	<0.70	<0.72	<0.73	<0.74	-	23	<0.80	<0.70	<0.70	<0.70	25	<1.0
Vinyl chloride	ppbv	<0.70	<0.72	<0.73	<0.74	-	41	0.98	<0.70	<0.70	<0.70	7.4	1.2
Chloroethane	ppbv	<0.70	<0.72	<0.73	<0.74	-	9.8	<0.80	<0.70	<0.70	<0.70	<1.0	<1.0
Freon 11 (Trichlorofluoromethane)	ppbv	0.85	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	67	<1.0
Freon 113 (1,1,2-Cl 1,2,2-F ethane)	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	3.3	<1.0
Methylene chloride	ppbv	0.91	<0.72	0.80	0.81	-	<2.7	1.4	0.7	0.80	0.85	2.4	2.5
1,1-Dichloroethane	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	1.2	<0.70	<0.70	<0.70	95	1.7
Chloroform	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	4.4	<1.0
1,1,1-Trichloroethane	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	26	<1.0
Benzene	ppbv	<0.70	<0.72	<0.73	1.1	-	25	<0.80	1.4	1.7	1.7	1.0	1.1
Trichloroethene	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	9.9	<1.0
Toluene	ppbv	1.8	2.0	3.0	4.6	-	62	6.5	12	23	22	11	12
Tetrachloroethene	ppbv	<0.70	<0.72	<0.73	<0.74	-	<2.7	<0.80	<0.70	<0.70	<0.70	15	<1.0
Ethyl benzene	ppbv	1.1	1.4	1.5	1.4	-	<2.7	4.0	5.5	7.4	8.0	2.6	3.0
m,p-Xylene	ppbv	5.3	7.2	7.3	6.6	-	9.8	20	25	36	36	11	13
o-Xylene	ppbv	2.2	2.8	3.0	2.4	-	4.5	9.9	12	15	16	4.2	4.6
1,3,5-Trimethylbenzene	ppbv	1.2	1.3	1.3	0.92	-	<2.7	4.6	5.1	5.0	5.4	<2.0	<2.0
1,2,4-Trimethylbenzene	ppbv	4.9	4.8	4.9	2.1	-	7.2	17	19	17	19	4.1	4.2
Acetone	ppbv	100	49	68	56	-	<11	25	30	14	14	NA	NA
2-Butanone	ppbv	8.9	6.5	8.9	6.9	-	<11	9.4	8.9	6.3	6.4	NA	NA
Hexane	ppbv	<2.8	<2.9	6.0	11	-	750	3.3	<2.8	<2.8	<2.8	NA	NA
Cyclohexane	ppbv	<2.8	<2.9	<2.9	<3.0	-	440	<3.2	<2.8	<2.8	<2.8	NA	NA
Tetrahydrofuran	ppbv	<2.8	<2.9	<2.9	<3.0	-	<11	<3.2	<2.8	2.8	<2.8	NA	NA
4-Ethyltoluene	ppbv	<2.8	<2.9	3.1	<3.0	-	<11	12	13	13	15	NA	NA
Ethanol	ppbv	73	18	25	27	-	<11	14	9.2	11	14	NA	NA
Heptane	ppbv	<2.8	<2.9	<2.9	<3.0	-	350	<3.2	2.8	2.9	3.0	NA	NA

All other compounds below method reporting limits.

ppbv - parts per billion by volume
NA - analysis for this analyte not conducted

B-01-X represents soil boring from which a soil gas sample was collected. See Figure 2 for locations.
PL-11.X represents pan lysimeter from which a head space vapor sample was collected from the riser pipe.

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

		Vadose Zone					Groundwater	
Sample Designation		VZ-2.1	VZ-2.1	PL-11.1	PL-11.2	PL-11.2	G-1	G-1
Sampling Date		4/7/00	10/13/00	10/16/00	7/6/00	10/16/00	7/6/00	10/11/00
General Water Quality Parameters	*Unit*							
Chloride	mg/l	656	781	443	514	518	324	322
Nitrate/Nitrite as N	mg/l	NS	NS	3.37	<0.0500	0.161	15.3	12.9
pH	std. units	6.86	7.02	7.86	7.10	8.19	7.56	7.75
Specific Conductance	µmhos/cm	4,330	4,110	3,140	3,470	2,860	1,660	1,600
Sulfate	mg/l	463	513	356	4.22	209	37.6	39.6
Temperature	deg. C	22.5	22.4	23.9	20.9	24.6	18.1	17.6
Total Dissolved Solids	mg/l	3,080	3,130	1,890	2,020	1,780	842	862
Total Suspended Solids	mg/l	NR	NR	NR	NR	NR	NR	NR
Turbidity	NTU	NR	NR	59	83	312	37	104
Constituents of Concern								
Alkalinity, Bicarbonate	mg/l	NS	NS	732	1,200	NA	256	NA
Alkalinity, Carbonate	mg/l	NS	NS	<20.0	<20.0	NA	<20.0	NA
Alkalinity, Total	mg/l	NS	NS	732	1,200	NA	256	NA
Chemical Oxygen Demand	mg/l	NR	NR	NR	NR	NR	NR	NR
Cyanide, Total	mg/l	NS	NS	<0.0100	<0.0100	NA	<0.0100	NA
Dissolved Oxygen	mg/l	NR	NR	NR	NR	NR	NR	NR
Sulfide	mg/l	NS	NS	<0.100	<0.100	NA	<0.100	NA
Total Organic Carbon	mg/l	NS	NS	10.9	195	NA	22.2	NA
Metals								
Aluminum	mg/l	NS	NS	<0.500	<0.500	NA	<0.500	NA
Antimony	mg/l	NS	NS	<0.0600	<0.0600	NA	<0.0600	NA
Arsenic	mg/l	NS	NS	**0.00841**	**0.0104**	NA	<0.00500	NA
Barium	mg/l	NS	NS	**0.0776**	**0.912**	NA	**0.297**	NA
Beryllium	mg/l	NS	NS	<0.00100	<0.00100	NA	<0.00100	NA
Cadmium	mg/l	NS	NS	**0.0285**	<0.0100	NA	<0.0100	NA
Chromium, hexavalent	mg/l	NS	NS	<0.00500	<0.00500	NA	<0.00500	NA
Chromium	mg/l	NS	NS	<0.0100	<0.0100	NA	<0.0100	NA
Cobalt	mg/l	NS	NS	<0.00700	<0.00700	NA	<0.00700	NA
Copper	mg/l	NS	NS	**0.0262**	**0.0131**	NA	<0.0100	NA
Iron	mg/l	NS	NS	<0.500	**3.58**	NA	<0.500	NA
Lead	mg/l	NS	NS	<0.00500	<0.00500	NA	<0.00500	NA
Manganese	mg/l	NS	NS	**3.47**	**4.79**	NA	<0.0100	NA
Mercury	mg/l	NS	NS	<0.000200	<0.000200	NA	<0.000200	NA
Nickel	mg/l	NS	NS	<0.0300	**0.0414**	NA	<0.0300	NA
Selenium	mg/l	NS	NS	<0.00500	<0.00500	NA	<0.00500	NA
Silver	mg/l	NS	NS	<0.00700	<0.00700	NA	<0.00700	NA
Thallium	mg/l	NS	NS	<0.00500	<0.00500	NA	<0.00500	NA
Tin	mg/l	NS	NS	<0.250	<0.250	NA	<0.250	NA
Vanadium	mg/l	NS	NS	<0.0100	<0.0100	NA	<0.0100	NA
Zinc	mg/l	NS	NS	**0.0455**	**0.0425**	NA	<0.0200	NA

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

		Vadose Zone					Groundwater	
Sample Designation		VZ-2.1	VZ-2.1	PL-11.1	PL-11.2	PL-11.2	G-1	G-1
Sampling Date		4/7/00	10/13/00	10/16/00	7/6/00	10/16/00	7/6/00	10/11/00
Volatile Organic Compounds by EPA Method 8260, Appendix II								
Acetone	µg/l	**25.8**	<10	<10	<200	<10	<10.0	<10
Benzene	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
2-Butanone	µg/l	**21.8**	<10	<10	**1,500**	<10	<1.00	<10
Chloroethane	µg/l	<1.00	<2.0	<2.0	<20.0	<2.0	<1.00	<2.0
Chloromethane	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
1,4-Dichlorobenzene	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
1,1-Dichloroethane	µg/l	**1.49**	**1.5**	<1.0	<20.0	<1.0	<1.00	<1.0
cis-1,2-Dichloroethene	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
Dichlorodifluoromethane	µg/l	<1.00	<2.0	<2.0	<20.0	<2.0	<1.00	<2.0
Ethylbenzene	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
4-Methyl-2-pentanone	µg/l	<10.0	**24**	<10	<200	<10	<10.0	<10
Methylene chloride	µg/l	<1.00	<5.0	<5.0	<20.0	<5.0	<1.00	<5.0
Naphthalene	µg/l	<1.00	<2.0	<2.0	<20.0	<2.0	<1.00	<2.0
Toluene	µg/l	<1.00	<1.0	<1.0	**29.0**	<1.0	<1.00	<1.0
1,1,1-Trichloroethane	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
Trichlorofluoromethane	µg/l	<1.00	<1.0	<1.0	<20.0	<1.0	<1.00	<1.0
Xylenes, Total	µg/l	<1.00	<2.0	<2.0	<20.0	<2.0	<1.00	<2.0
All other compounds below method reporting limit.								
Semi-Volatile Compounds by EPA Method 8270, Appendix II								
bis(2-ethylhexyl)phthalate [1]	µg/l	NS	NS	**19.2**	<11.1	<13.8	<10.0	NA
4-Methylphenol	µg/l	NS	NS	<10.0	**353**	<10.0	<10.0	NA
Phenol	µg/l	NS	NS	<10.0	**213**	<10.0	<10.0	NA
All other compounds below method reporting limit.								
Organophosphorus Compounds by EPA Method 8141	µg/l	NS	NS	ND	ND	NA	ND	NA
All compounds below method reporting limit.								
Chlorinated Herbicides by EPA Method 8151								
Dicamba	µg/l	NS	NS	<1.00	<1.00	<1.00	<1.00	NA
Dichlorprop	µg/l	NS	NS	<1.00	**4.93**	<1.00	<1.00	NA
MCPP	µg/l	NS	NS	<500	**1,180**	<500	<500	NA
All other compounds below method reporting limit.								

µmhos/cm - micromhos per centimeter at 25^{0}C
mg/l - milligrams per liter (parts per million)
µg/l - micrograms per liter (parts per billion)
NTU - nephelometric turbidity units

NS - Not sampled; insufficient sample volume.
NA - Not analyzed; COC analyses conducted in previous quarter.
ND - Not detected; all compounds below method reporting limits.
NR - Not required in MRP
[1] Common laboratory contaminant
* Sample collected from the borrow pit was not analyzed for COC compounds, only for VOCs.

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

		Groundwater						
Sample Designation		G-2	G-2	G-10R	G-11R	G-12	G-13	G-13
Sampling Date		7/5/00	10/11/00	4/26/01	4/26/01	10/13/00	4/6/00	10/13/00
General Water Quality Parameters	*Unit*							
Chloride	mg/l	1,180	753	137	123	116	217	125
Nitrate/Nitrite as N	mg/l	<0.0500	<0.0500	1.03	1.04	0.559	1.64	0.552
pH	std. units	7.26	7.58	9.17	7.74	7.70	7.64	7.57
Specific Conductance	µmhos/cm	6,100	4,900	990	1,110	1,200	1,360	1,130
Sulfate	mg/l	2,320	1,440	39.8	36.3	56.4	46.4	54.7
Temperature	deg. C	16.7	16.8	18.8	19.9	19	18.1	19.0
Total Dissolved Solids	mg/l	4,430	3,340	390	546	680	820	634
Total Suspended Solids	mg/l	NR	NR	NR	NR	NR	NR	NR
Turbidity	NTU	49	114	>999	>999	116	376	195
Constituents of Concern								
Alkalinity, Bicarbonate	mg/l	458	NA	120	322	398	298	NA
Alkalinity, Carbonate	mg/l	<20.0	NA	60.0	<20.0	<20.0	<20.0	NA
Alkalinity, Total	mg/l	458	NA	180	326	398	298	NA
Chemical Oxygen Demand	mg/l	NR	NR	NR	NR	NR	NR	NR
Cyanide, Total	mg/l	<0.0100	NA	<0.0100	<0.0100	<0.01	<0.0100	NA
Dissolved Oxygen	mg/l	NR	NR	NR	NR	NR	NR	NR
Sulfide	mg/l	<0.100	NA	<0.100	<0.100	<0.100	<0.100	NA
Total Organic Carbon	mg/l	35.0	NA	1.02	<1.00	1.78	39.2	NA
Metals								
Aluminum	mg/l	<0.500	NA	<0.200	<0.200	<0.500	<0.500	NA
Antimony	mg/l	<0.0600	NA	<0.0600	<0.0600	<0.0600	<0.0600	NA
Arsenic	mg/l	<0.00500	NA	<0.00500	<0.00500	**0.0220**	<0.00500	NA
Barium	mg/l	**0.0259**	NA	**0.0992**	**0.0758**	**0.228**	**0.224**	NA
Beryllium	mg/l	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	NA
Cadmium	mg/l	<0.0100	NA	<0.0100	<0.0100	<0.0100	<0.0100	NA
Chromium, hexavalent	mg/l	<0.00500	NA	**0.0137**	<0.00500	<0.00500	<0.00500	NA
Chromium	mg/l	<0.0100	NA	**0.0140**	<0.0100	<0.0100	<0.0100	NA
Cobalt	mg/l	<0.00700	NA	<0.00700	<0.00700	<0.00700	<0.00700	NA
Copper	mg/l	**0.0153**	NA	<0.0100	<0.0100	<0.0100	<0.0100	NA
Iron	mg/l	<0.500	NA	<0.300	<0.300	<0.500	**0.568**	NA
Lead	mg/l	<0.00500	NA	<0.00500	<0.00500	<0.00500	<0.00500	NA
Manganese	mg/l	**0.316**	NA	<0.0100	**0.0974**	<0.0100	**0.0156**	NA
Mercury	mg/l	<0.000200	NA	<0.000200	<0.000200	<0.000200	<0.000200	NA
Nickel	mg/l	<0.0300	NA	<0.0300	<0.0300	<0.0300	<0.0300	NA
Selenium	mg/l	<0.00500	NA	<0.00500	<0.00500	<0.00500	**0.00768**	NA
Silver	mg/l	<0.00700	NA	<0.00700	<0.00700	<0.00700	<0.00700	NA
Thallium	mg/l	<0.00500	NA	<0.00500	<0.00500	<0.00500	<0.00500	NA
Tin	mg/l	<0.250	NA	<0.250	<0.250	<0.250	<0.250	NA
Vanadium	mg/l	<0.0100	NA	**0.0117**	<0.0100	<0.0100	<0.0100	NA
Zinc	mg/l	<0.0200	NA	<0.0313	<0.0250	<0.0200	<0.0200	NA

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		Groundwater						
Sampling Date		G-2 7/5/00	G-2 10/11/00	G-10R 4/26/01	G-11R 4/26/01	G-12 10/13/00	G-13 4/6/00	G-13 10/13/00
Volatile Organic Compounds by EPA Method 8260, Appendix II								
Acetone	µg/l	<10.0	<10	<10.0	<10.0	<10	<10.0	<10
Benzene	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
2-Butanone	µg/l	<1.00	<10	<10.0	<10.0	<10	<10.0	<10
Chloroethane	µg/l	<1.00	<2.0	<1.00	<1.00	<2.0	<1.00	<2.0
Chloromethane	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
1,4-Dichlorobenzene	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
1,1-Dichloroethane	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
cis-1,2-Dichloroethene	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
Dichlorodifluoromethane	µg/l	<1.00	<2.0	<1.00	<1.00	<2.0	<1.00	<2.0
Ethylbenzene	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
4-Methyl-2-pentanone	µg/l	<10.0	<10	<10.0	<10.0	<10	<10.0	<10
Methylene chloride	µg/l	<1.00	<5.0	<1.00	<1.00	<5.0	<1.00	<5.0
Naphthalene	µg/l	<1.00	<2.0	<1.00	<1.00	<2.0	<1.00	<2.0
Toluene	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
1,1,1-Trichloroethane	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
Trichlorofluoromethane	µg/l	<1.00	<1.0	<1.00	<1.00	<1.0	<1.00	<1.0
Xylenes, Total	µg/l	<1.00	<2.0	<1.00	<1.00	<2.0	<1.00	<2.0
All other compounds below method reporting limit.								
Semi-Volatile Compounds by EPA Method 8270, Appendix II								
bis(2-ethylhexyl)phthalate 1	µg/l	<10.0	NA	<10.0	<10.0	<13.8	<10.0	NA
4-Methylphenol	µg/l	<10.0	NA	<10.0	<10.0	<10.0	<10.0	NA
Phenol	µg/l	<10.0	NA	<10.0	<10.0	<10.0	<10.0	NA
All other compounds below method reporting limit.								
Organophosphorus Compounds by EPA Method 8141	µg/l	ND	NA	ND	ND	ND	ND	NA
All compounds below method reporting limit.								
Chlorinated Herbicides by EPA Method 8151								
Dicamba	µg/l	<1.00	NA	<0.500	<0.500	<1.00	<1.00	NA
Dichlorprop	µg/l	<1.00	NA	<0.500	<0.500	<1.00	<1.00	NA
MCPP	µg/l	<500	NA	<500	<500	<500	<500	NA
All other compounds below method reporting limit.								

µmhos/cm - micromhos per centimeter at 250C
mg/l - milligrams per liter (parts per million)
µg/l - micrograms per liter (parts per billion)
NTU - nephelometric turbidity units

NS - Not sampled; insufficient sample volume.
NA - Not analyzed; COC analyses conducted in previous quarter.
ND - Not detected; all compounds below method reporting limits.
NR - Not required in MRP
[1] Common laboratory contaminant
* Sample collected from the borrow pit was not analyzed for COC compounds, only for VOCs.

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

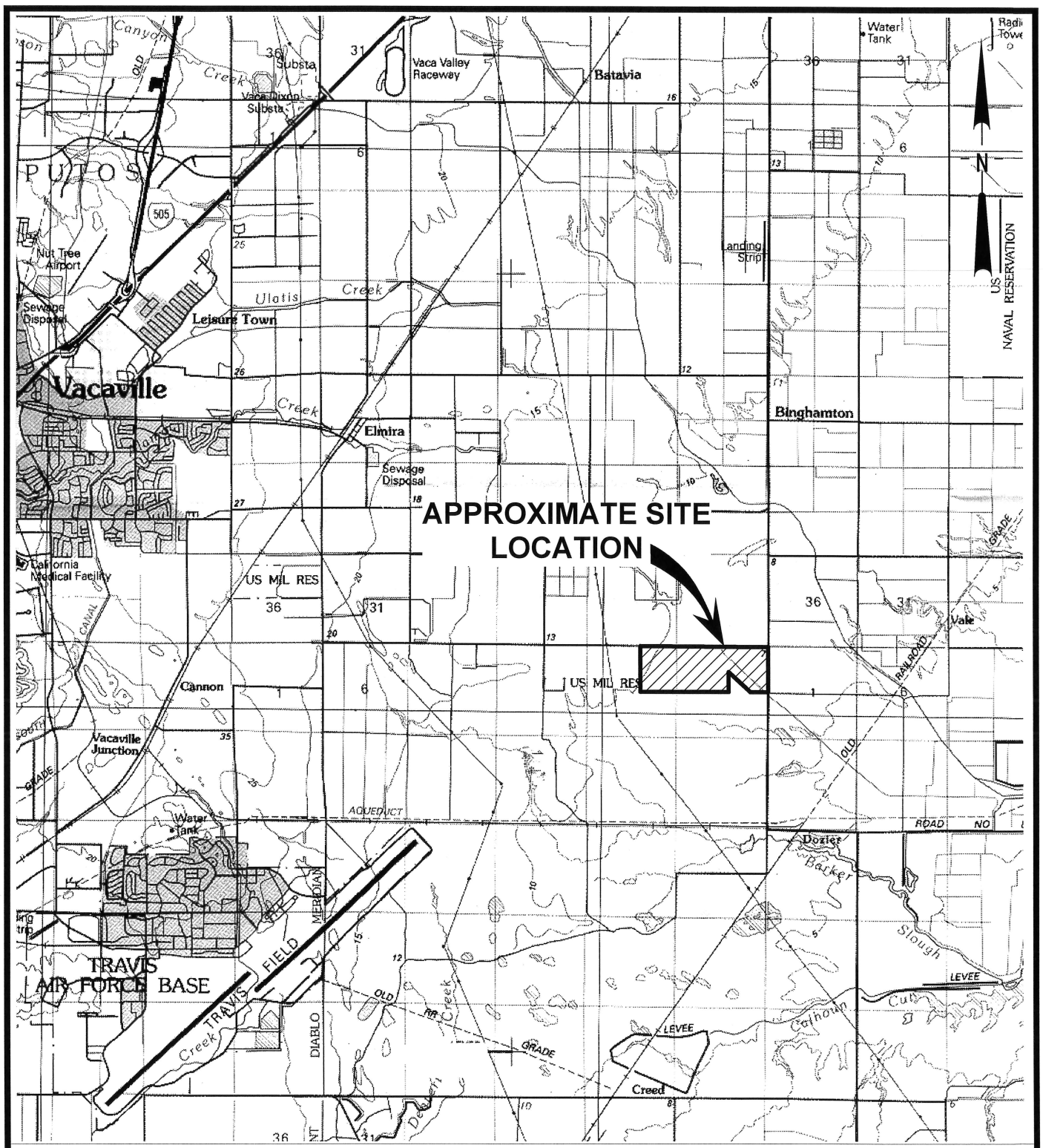
Sample Designation		Leachate		Surface Water			Borrow Pit
		S-11.1	S-11.2	SW-1	SW-2	SW-3	Borrow *
Sampling Date		10/12/00	10/13/00	10/30/00	10/30/00	10/30/00	5/14/01
General Water Quality Parameters	*Unit*						
Chloride	mg/l	341	887	257	225	340	NR
Nitrate/Nitrite as N	mg/l	0.0616	0.0622	<0.0500	0.809	0.219	NR
pH	std. units	8.27	7.06	8.17	8.32	8.46	8.87
Specific Conductance	µmhos/cm	2,760	5,190	1,410	1,480	2,050	1,020
Sulfate	mg/l	63.2	70.0	45.2	98.7	189	NR
Temperature	deg. C	20.7	20.4	12.7	13.7	13.5	21.7
Total Dissolved Solids	mg/l	1,570	3,620	866	880	1,200	NR
Total Suspended Solids	mg/l	NR	NR	45.0	49.0	17.0	NR
Turbidity	NTU	NR	NR	97	33	43	34
Constituents of Concern							
Alkalinity, Bicarbonate	mg/l	1,110	1,080	320	320	374	NR
Alkalinity, Carbonate	mg/l	<20.0	<20.0	<20.0	<20.0	36.0	NR
Alkalinity, Total	mg/l	1,110	1,080	320	328	410	NR
Chemical Oxygen Demand	mg/l	NR	NR	46.7	37.1	27.5	NR
Cyanide, Total	mg/l	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	NR
Dissolved Oxygen	mg/l	NR	NR	11.4	12.4	15.1	NR
Sulfide	mg/l	<0.100	<0.100	<0.100	<0.100	<0.100	NR
Total Organic Carbon	mg/l	28.7	176	19.7	14.6	10.1	NR
Metals							
Aluminum	mg/l	<0.500	<0.500	**0.695**	<0.500	<0.500	NR
Antimony	mg/l	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	NR
Arsenic	mg/l	<0.00500	**0.0247**	**0.00506**	<0.00500	**0.00537**	NR
Barium	mg/l	**2.910**	**2.030**	**0.181**	**0.120**	**0.0978**	NR
Beryllium	mg/l	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NR
Cadmium	mg/l	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	NR
Chromium, hexavalent	mg/l	<0.00500	**0.00682**	<0.00500	<0.00500	<0.00500	NR
Chromium	mg/l	**0.0101**	**0.0182**	<0.0100	<0.0100	<0.0100	NR
Cobalt	mg/l	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	NR
Copper	mg/l	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	NR
Iron	mg/l	**12.200**	**8.10**	**1.41**	**0.802**	**0.616**	NR
Lead	mg/l	**0.0703**	<0.00500	<0.00500	<0.00500	<0.00500	NR
Manganese	mg/l	**8.07**	**9.02**	**0.525**	**0.378**	**0.521**	NR
Mercury	mg/l	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	NR
Nickel	mg/l	**0.0587**	**0.0685**	<0.0300	<0.0300	<0.0300	NR
Selenium	mg/l	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	NR
Silver	mg/l	<0.00700	<0.00700	<0.00700	<0.00700	<0.00700	NR
Thallium	mg/l	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	NR
Tin	mg/l	<0.250	<0.250	<0.250	<0.250	<0.250	NR
Vanadium	mg/l	<0.0100	**0.0107**	<0.0100	<0.0100	<0.0100	NR
Zinc	mg/l	**0.0204**	**0.0252**	<0.0200	<0.0200	<0.0200	NR

Table 5
COC Analytical Results
B&J Drop Box Sanitary Landfill

Sample Designation		Leachate		Surface Water			Borrow Pit
		S-11.1	S-11.2	SW-1	SW-2	SW-3	Borrow *
Sampling Date		10/12/00	10/13/00	10/30/00	10/30/00	10/30/00	5/14/01
Volatile Organic Compounds by EPA Method 8260, Appendix II							
Acetone	µg/l	<10	**690**	NR	NR	NR	ND
Benzene	µg/l	<1.0	**1.6**	NR	NR	NR	ND
2-Butanone	µg/l	<10	**710**	NR	NR	NR	ND
Chloroethane	µg/l	<2.0	**6.5**	NR	NR	NR	ND
Chloromethane	µg/l	<1.0	<1.0	NR	NR	NR	ND
1,4-Dichlorobenzene	µg/l	<1.0	<1.0	NR	NR	NR	ND
1,1-Dichloroethane	µg/l	<1.0	<1.0	NR	NR	NR	ND
cis-1,2-Dichloroethene	µg/l	<1.0	**1.5**	NR	NR	NR	ND
Dichlorodifluoromethane	µg/l	<2.0	<2.0	NR	NR	NR	ND
Ethylbenzene	µg/l	<1.0	**4.1**	NR	NR	NR	ND
4-Methyl-2-pentanone	µg/l	<10	**320**	NR	NR	NR	ND
Methylene chloride	µg/l	<5.0	<5.0	NR	NR	NR	ND
Naphthalene	µg/l	<2.0	<2.0	NR	NR	NR	ND
Toluene	µg/l	<1.0	**330**	NR	NR	NR	ND
1,1,1-Trichloroethane	µg/l	<1.0	<1.0	NR	NR	NR	ND
Trichlorofluoromethane	µg/l	<1.0	<1.0	NR	NR	NR	ND
Xylenes, Total	µg/l	<2.0	**20**	NR	NR	NR	ND
All other compounds below method reporting limit.							
Semi-Volatile Compounds by EPA Method 8270, Appendix II							
bis(2-ethylhexyl)phthalate 1	µg/l	<13.8	<138	<13.8	<27.6	<13.8	NR
4-Methylphenol	µg/l	<10.0	**1,580**	<10.0	<20.0	<10.0	NR
Phenol	µg/l	<10.0	**200**	<10.0	<20.0	<10.0	NR
All other compounds below method reporting limit.							
Organophosphorus Compounds by EPA Method 8141	µg/l	ND	ND	NR	NR	NR	NR
All compounds below method reporting limit.							
Chlorinated Herbicides by EPA Method 8151							
Dicamba	µg/l	<1.00	**2.52**	NR	NR	NR	NR
Dichlorprop	µg/l	**4.94**	**3.36**	NR	NR	NR	NR
MCPP	µg/l	<50	<500	NR	NR	NR	NR
All other compounds below method reporting limit.							

µmhos/cm - micromhos per centimeter at 250C
mg/l - milligrams per liter (parts per million)
µg/l - micrograms per liter (parts per billion)
NTU - nephelometric turbidity units

NS - Not sampled; insufficient sample volume.
NA - Not analyzed; COC analyses conducted in previous quarter.
ND - Not detected; all compounds below method reporting limits.
NR - Not required in MRP
[1] Common laboratory contaminant
* Sample collected from the borrow pit was not analyzed for COC compounds, only for VOCs.

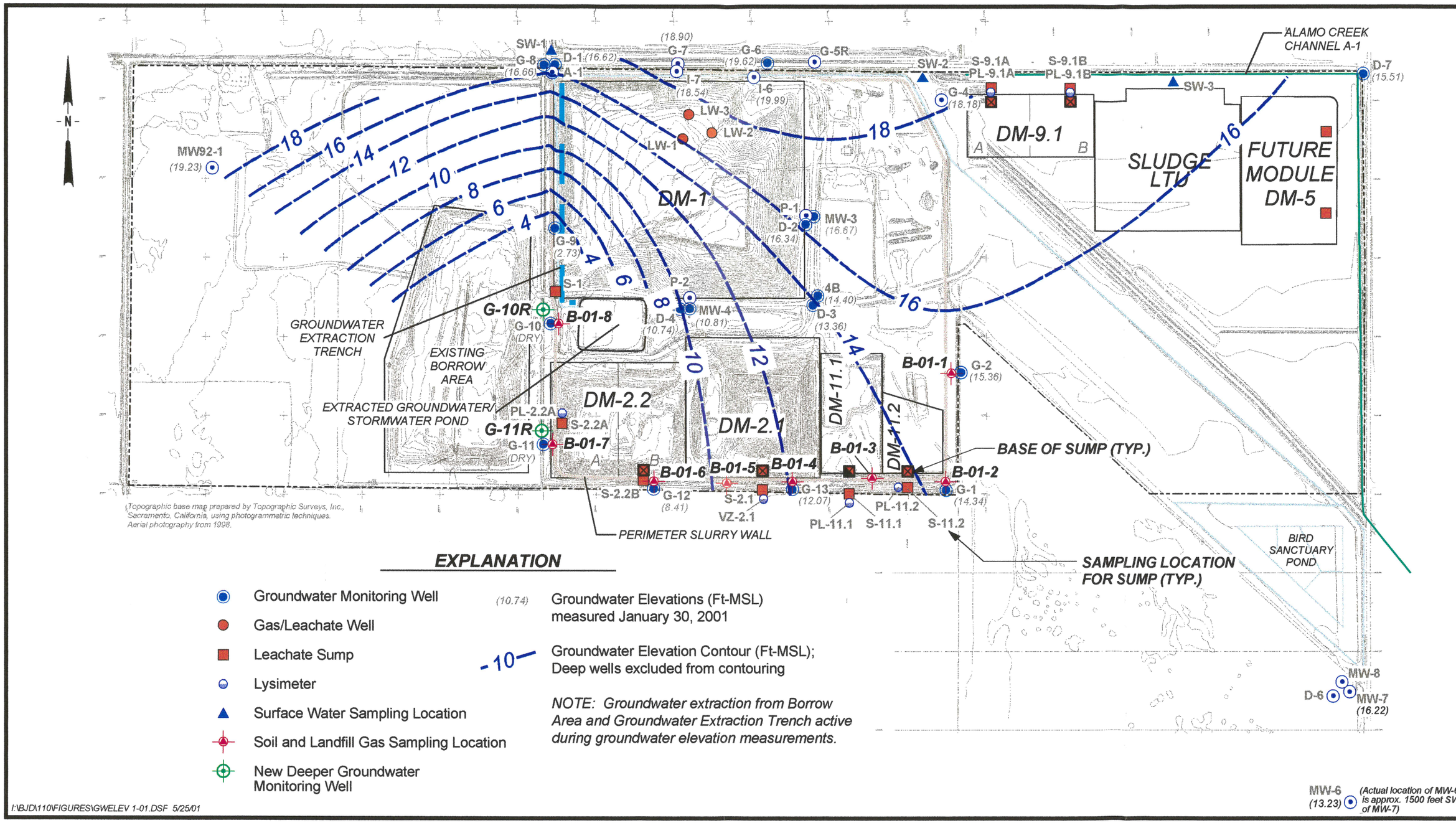


SCALE: 0 1 2 3 4 5 MILES

Base map from USGS 1:100,000 Metric Topographic Map: Lodi, Calif. (1993).

Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 1
	SITE LOCATION	PROJECT NO. BJD110

I:\BJD\110\FIGURES\SITELOC.DSF 5/29/01



Conor Pacific EFW

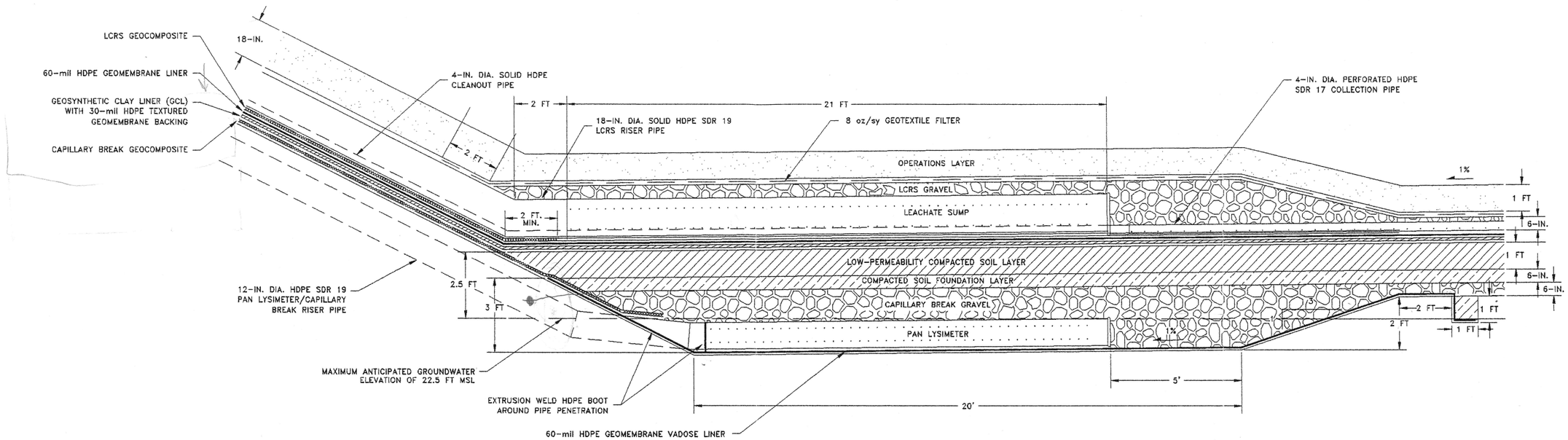
SCALE: 0 600 1,200 1,800 FEET

MONITORING AND REPORTING PROGRAM
B & J DROP BOX SANITARY LANDFILL
SOLANO COUNTY, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS, JANUARY 2001

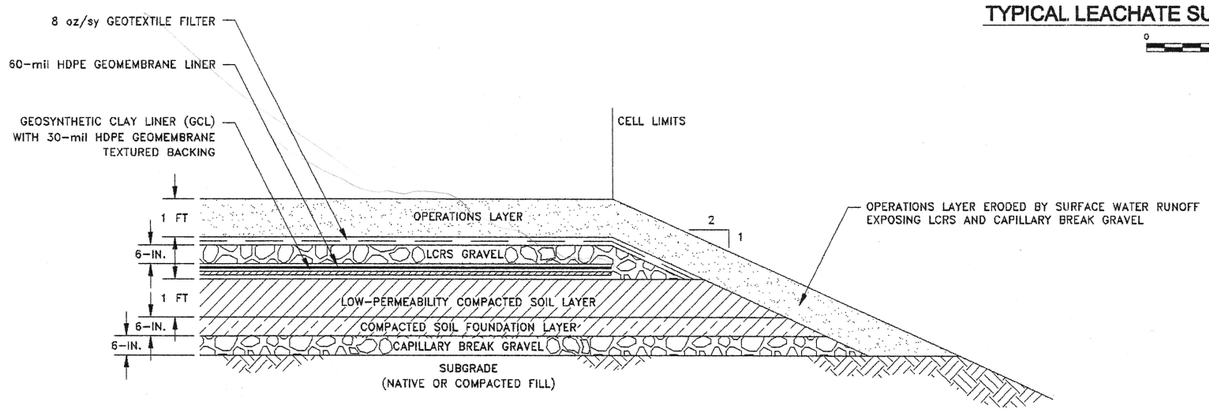
FIGURE 2

PROJECT NO. BJD110



TYPICAL LEACHATE SUMP AND PAN LYSIMETER

0 2 4
FEET



FLOOR CONTAINMENT SYSTEM TERMINATION

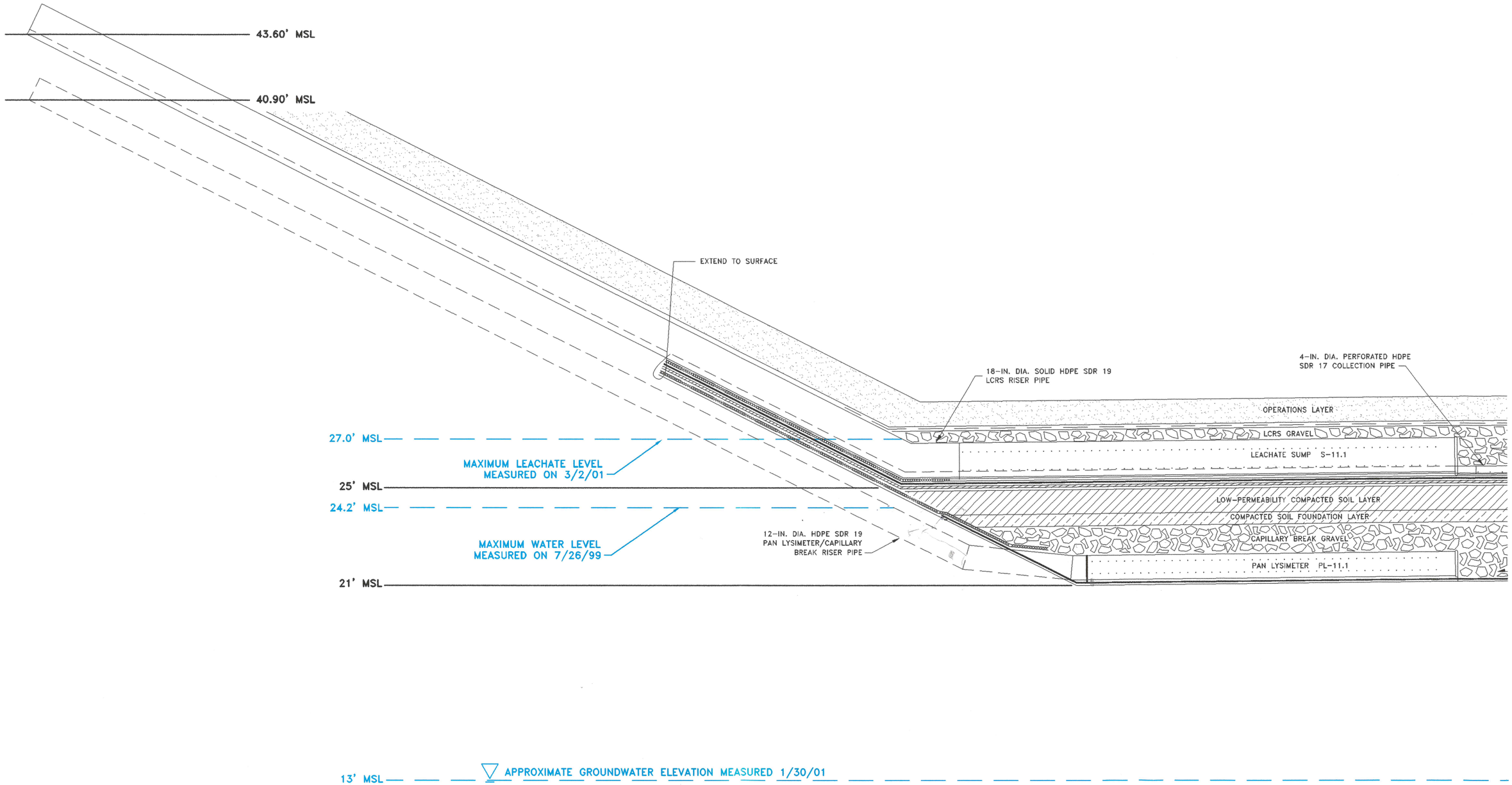
0 2 4
FEET

NOTE:

1) MODIFIED FROM GOLDER ASSOCIATES CONTAINMENT SYSTEM DETAILS AND SUMP PLANS AND DETAILS (7/97).
2) HEIGHT OF GEOSYNTHETICS EXAGGERATED FOR CLARITY.

Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 3a
	DISPOSAL MODULES 11.1 AND 11.2 SUBGRADE SECTIONS	PROJECT NO. BJD110

I:\BJD\110\FIGURES\SECTIONS_3A.DWG 5/29/01



DISPOSAL MODULE 11.1 LEACHATE SUMP AND PAN LYSIMETER

0 4 8 FEET

(HORIZONTAL AND VERTICAL)

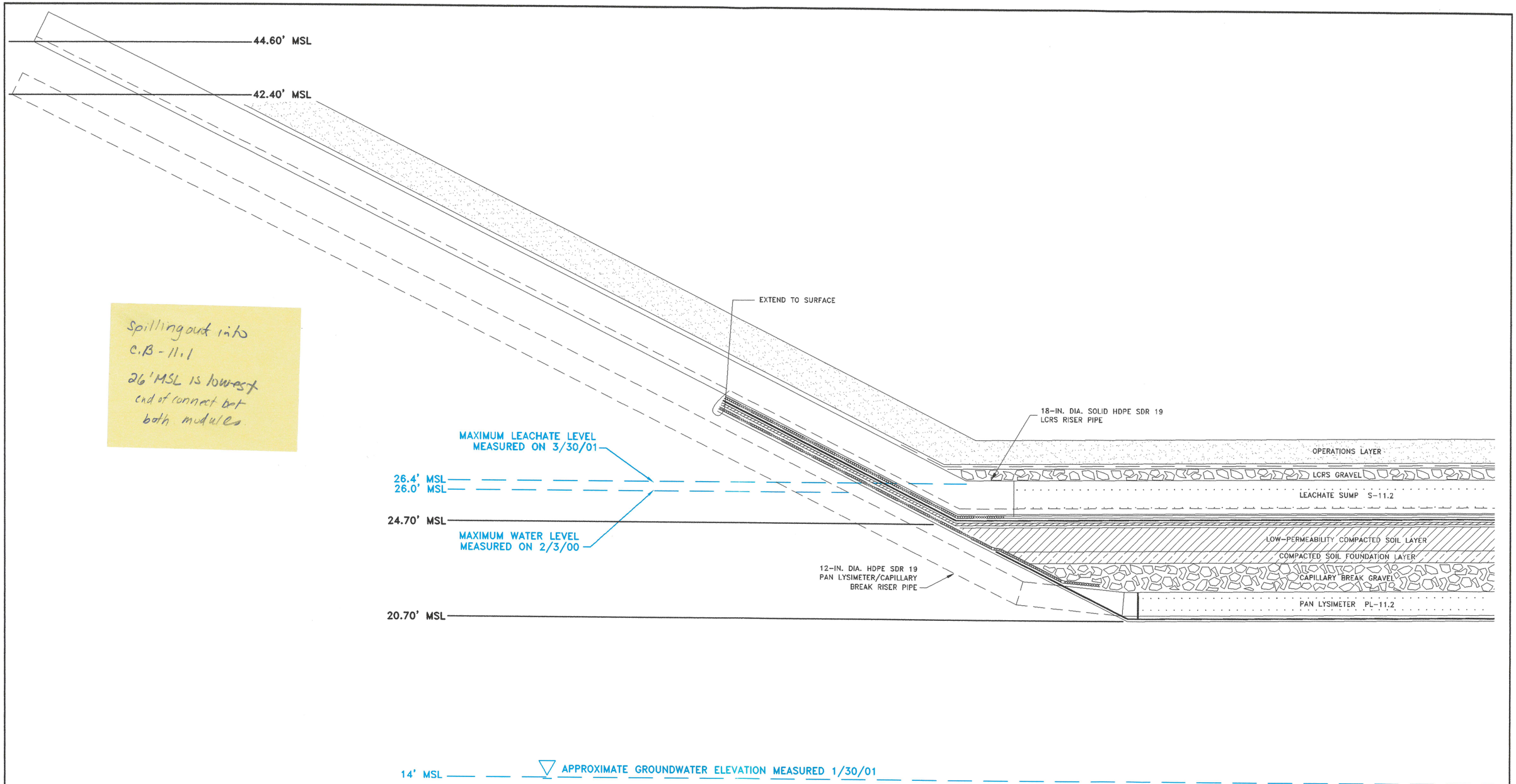
NOTE:

1) MODIFIED FROM GOLDER ASSOCIATES CONTAINMENT SYSTEM DETAILS AND SUMP PLANS AND DETAILS (7/97).

2) HEIGHT OF GEOSYNTHETICS EXAGGERATED FOR CLARITY.

Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 3b
	DISPOSAL MODULE 11.1 SECTION AND WATER ELEVATIONS	PROJECT NO. BJD110

I:\BJD\110\FIGURES\SECTIONS_3B.DWG 5/29/01



Spilling out into
C.B - 11.1
26' MSL is lowest
end of connect bet
both modules

DISPOSAL MODULE 11.2 LEACHATE SUMP AND PAN LYSIMETER

0 4 8 FEET
(HORIZONTAL AND VERTICAL)

NOTE:

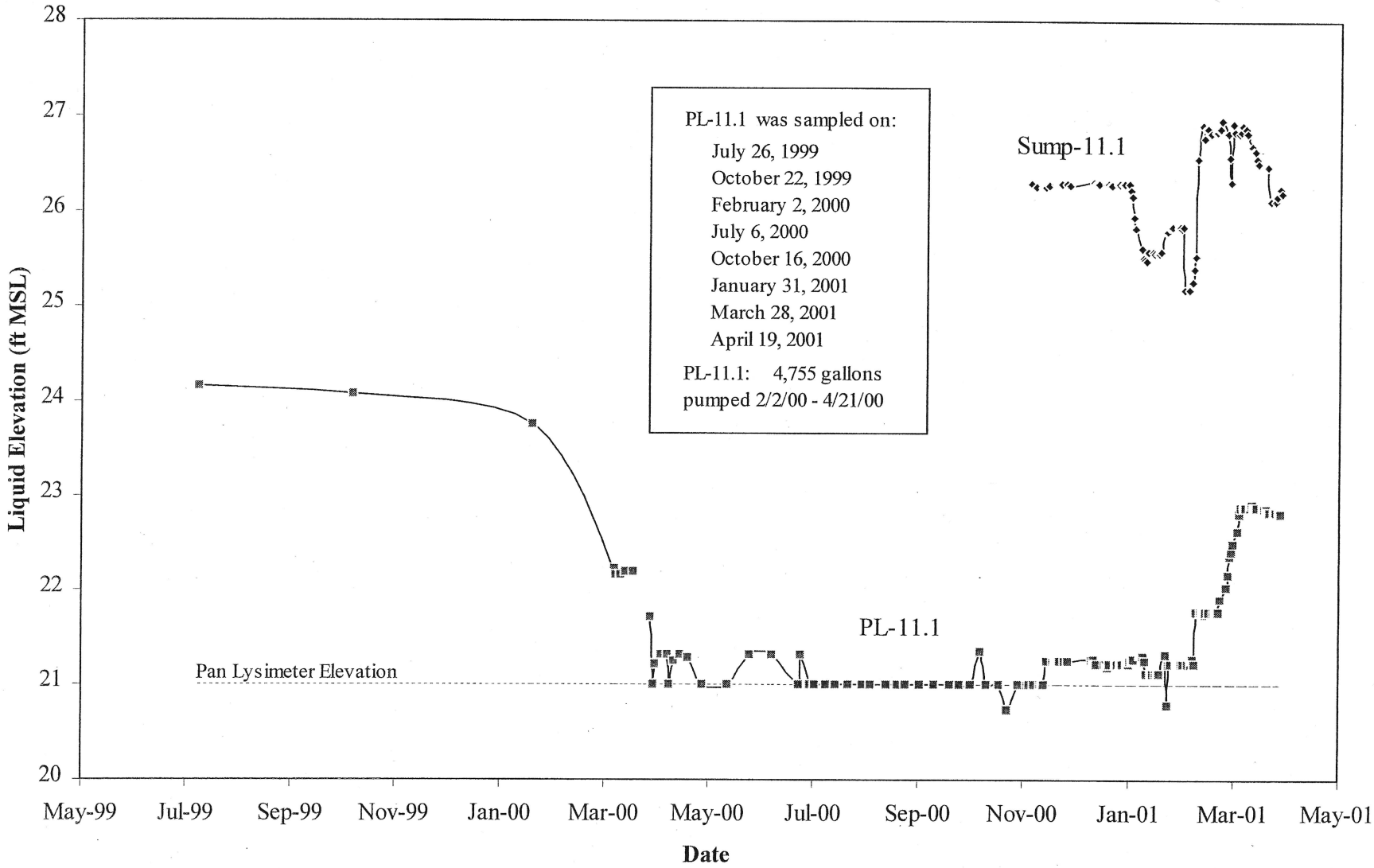
1) MODIFIED FROM GOLDER ASSOCIATES CONTAINMENT SYSTEM DETAILS AND SUMP PLANS AND DETAILS (7/97).

2) HEIGHT OF GEOSYNTHETICS EXAGGERATED FOR CLARITY.

Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 3c
	DISPOSAL MODULE 11.2 SECTION AND WATER ELEVATIONS	PROJECT NO. BJD110

I:\BJD\110\FIGURES\SECTIONS_3C.DWG 5/29/01

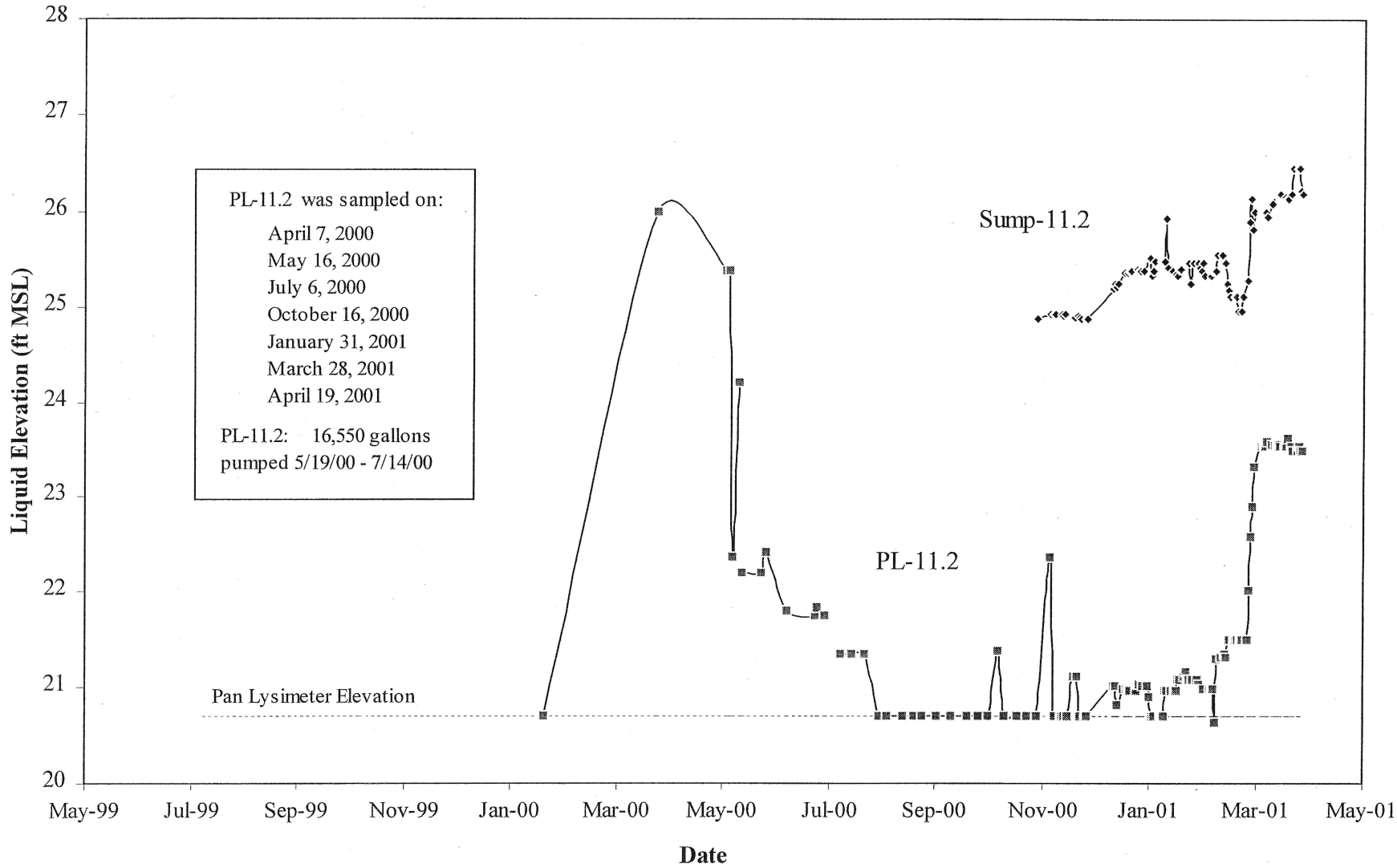
Figure 4 - Sump 11.1 and Pan Lysimeter 11.1 Liquid Levels



Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 4
	SUMP 11.1 AND PAN LYSIMETER 11.1 LIQUID LEVELS	PROJECT NO. BJD 110

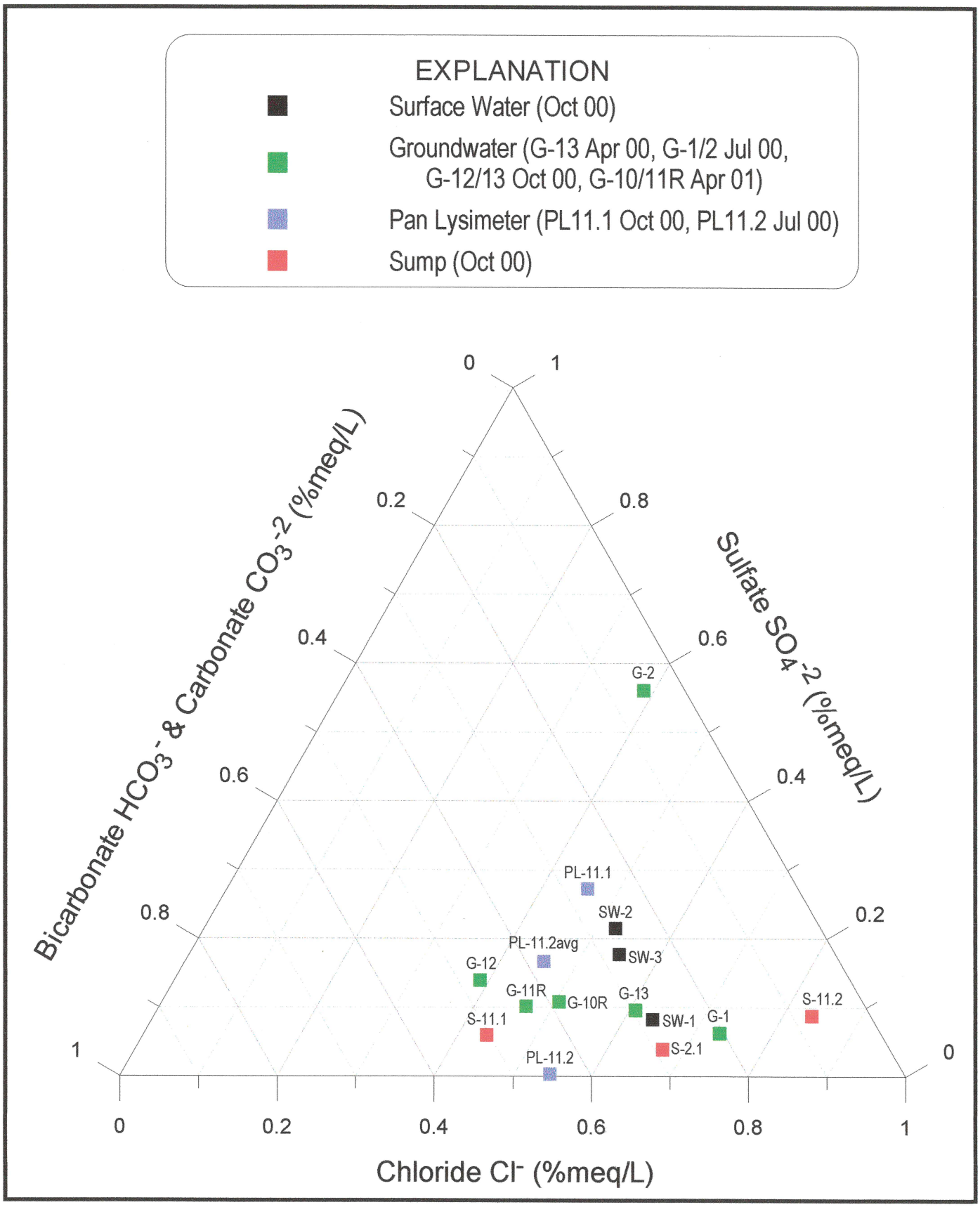
I:\BJD\110\FIGURES\LIQ LEVELS.DSF 5/25/01

Figure 5 - Sump 11.2 and Pan Lysimeter 11.2 Liquid Levels



Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 5
	SUMP 11.2 AND PAN LYSIMETER 11.2 LIQUID LEVELS	PROJECT NO. BJD 110

I:\BJD\110\FIGURES\LIQ LEVELS 11-2.DSF 5/25/01



Conor Pacific	MONITORING AND REPORTING PROGRAM B & J DROP BOX SANITARY LANDFILL SOLANO COUNTY, CALIFORNIA	FIGURE 6
	TERNARY DIAGRAM OF COC ANION PARAMETERS	PROJECT NO. BJD110

J:\BJD\110\FIGURES\TERNARY.DSF 5/25/01

APPENDIX A

Pan Lysimeter, Disposal Module 11.1

Date	Gallons Pumped	Depth to Water (feet)
3/20/2000	3000	45.25
3/21/2000	200	45.40
3/24/2000	0	45.40
3/27/2000	0	45.30
3/31/2000	0	45.30
4/07/2000	300	Not Measured
4/10/2000	200	46.40
4/12/2000	350	ND
4/13/2000	0	47.50
4/17/2000	0	47.30
4/20/2000	0	47.30
4/21/2000	175	ND
4/24/2000	0	ND
4/28/2000	0	47.30
5/02/2000	0	47.35
5/10/2000	0	48+
5/25/2000	0	48+
6/7/2000	0	47.30
6/19/2000	0	47.30
7/05/2000	0	ND
7/11/2000	0	ND
7/14/2000	0	ND
7/20/2000	0	ND
7/26/2000	0	ND
8/02/2000	0	ND
8/10/2000	0	ND
8/15/2000	0	ND
8/24/2000	0	ND
8/30/2000	0	ND
9/4/2000	0	ND
9/12/2000	0	ND
9/20/2000	0	ND
9/29/2000	0	ND
10/5/2000	0	ND
10/11/2000	0	ND
10/20/2000	0	ND
10/27/2000	0	ND
11/1/2000	0	48.60

Depth to water from flow line of HDPE riser at approximately 40 feet MSL.

11.1 Pumping Data

Leachate Sump		Lysimeter	
Top of Riser Elevation	43.3' MSL	Top of Riser Elevation	40.6 MSL
Sump Elevation	25.0' MSL	Lysimeter Elevation	21.0 MSL
Length of Riser	40.90' MSL	Length of Riser	48.0 ft.
Target Depth to Leachate	38.69 feet		

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
11/7/2000		0/171,062	11/7/2000	48.00	0
11/8/2000		533/171,595			
11/9/2000		54/171,649			
11/13/2000	38.01 feet	0/171,649	11/13/2000	48.00	0
11/14/2000	38.01	0/171,649	11/14/2000	48.00	0
11/15/2000		0/171,649			
11/16/2000	38.05	0/171,649	11/16/2000	ND	300 gallons
11/17/2000		0/171,649			
11/20/2000	38.05	0/171,649	11/20/2000	ND	0
11/21/2000	38.05	0/171,649	11/21/2000	ND	0
11/22/2000	38.05	0/171,649	11/22/2000	ND	
11/24/2000	38.02	0/171,649	11/24/2000	47.45 1	0
11/27/2000	38.01	0/171,649	11/27/2000	47.45 2	0
11/28/2000	37.98	0/171,649	11/28/2000	47.45 3	0
11/29/2000	38.00	0/171,649	11/29/2000	47.45 4	0
11/30/2000	38.00	0/171,649	11/30/2000	47.45 5	0
12/1/2000	38.00	0/171,649	12/1/2000	47.45 6	0
12/4/2000	38.00	0/171,649	12/4/2000	47.45 7	0
12/5/2000	38.02	0/171,649	12/5/2000	47.45 8	0

11.1 Pumping Data

Leachate Sump

Top of Riser Elevation	43.3' MSL
Sump Elevation	25.0' MSL
Length of Riser	40.90' MSL
Target Depth to Leachate	38.69 feet

Lysimeter

Top of Riser Elevation	40.6 MSL
Lysimeter Elevation	21.0 MSL
Length of Riser	48.0 ft.

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
12-19	37.55	0/171644	12-19	47.42	0
12-20	38.00	0	12-20	47.42	↓
12-21	38.00	0	12-21	47.50	
12-22	38.00	0	12-22	47.50	
12-26	38.00	0	12-26	47.52	
12-27	38.00	0	12-27	47.50	
12-28	38.03	0	12-28	47.60	
12-29	38.03	0	12-29	47.50	
1-2	38.00	0	1-2	47.52	
1-3	38.00	0	1-3	47.50	
1-4	38.00	0	1-4	47.50	
1-5	37.98	0	1-5	47.50	
1-8	38.00	451/171,800	1-8	47.50	
1-9	38.15	203/172,003	1-9	47.50	
1-10	38.30	509/172,512	1-10	47.45	
1-11	38.79	496/173,008	1-11	47.45	
1-12	39.02	1640/174,648	1-12	47.40	
1-15	39.51	117/174,571	1-15	47.30	
1-16	39.75	1884/176,455	1-16	47.30	
1-17	39.80	648/177,103	1-17	47.32	
1-18	39.83	392/177,495	1-18	47.45	
1-19	39.60	817/178,312	1-19	47.75	
1-22	39.60	638/178,950	1-22	47.75	
1-23	39.65	0/178,950	1-23	47.75	
1-24	39.62	1537/180,487	1-24	47.75	
1-25	39.62	7131/187,618	1-25	47.75	
1-26	39.58	7601/195,219	1-26	47.75	
1-29	39.10	5291/200,510	1-29	47.30	
1-30	39.10	2944/203,454	1-30	47.30	
1-31	39.00	4888/208,342	1-31	48.50	
2-1	39.00	4439/212,781	2-1	47.50	
2-2	39.00	2862/215,643	2-2	47.50	
2-5	39.00	841/216,484	2-5	47.50	
2-6	39.00	6011/222,495	2-6	47.50	
2-7	39.03	5120/227,615	2-7	47.50	
2-8	39.00	3165/230,780	2-8	47.50	
2-9	40.50	5173/235,653	2-9	47.50	
2-12	40.50	579/236,232	2-12	47.50	

11.1 Pumping Data

Leachate Sump

Top of Riser Elevation	43.~~3~~6' MSL
Sump Elevation	25.0' MSL
Length of Riser	40.90' MSL
Target Depth to Leachate	38.69 feet

Lysimeter

Top of Riser Elevation	40.~~6~~9 MSL
Lysimeter Elevation	21.0 MSL
Length of Riser	48.0 ft.

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
2-13	40.30	0 / 236232	2-13	47.50	
2-14	40.00	0 / 236232	2-14	47.40	
2-15	39.70	0 / 236232	2-15	47.50	
2-16	37.40	0 / 236258	2-16	46.30	
2-19	36.60	1748 238006	2-19	46.30	
2-20	36.70	2189 240195	2-20	46.30	
2-21	36.70	2448 242643	2-21	46.32	
2-22	36.70	7675 250,318	2-22	46.30	
2-23	36.80	3292 253,610	2-23	46.30	
2-26	36.75	11,808 265481	2-26	46.30	
2-27	36.75	4838 270,319	2-27	46.30	
2-28	36.70	6908 277227	2-28	46.30	
3-1	36.70	2191 279418	3-1	46.30	
3-2	36.50	3796 283214	3-2	46.00	
3-5	36.80	1792 285006	3-5	45.70	
3-6	37.35	1478 286484	3-6	45.40	
3-7	37.53	2430 288914	3-7	44.95	
3-8	36.58	1130 290044	3-8	44.85	
3-9	36.75	3637 293681	3-9	44.65	
3-12	36.80	2872 296553	3-12	44.33	
3-13	36.75	8929 305482	3-13	43.95	
3-14	36.60	3998 309480	3-14	43.80	
3-15	36.70	1000 310480	3-15	43.80	
3-16	36.80	1211 311691	3-16	43.80	
3-19	37.10	1130 312821	3-19	43.80	
3-20	37.20	38 312859	3-20	43.70	
3-21	37.20	984 313843	3-21	43.80	
3-22	37.38	2428 316271	3-22	43.80	
3-23	37.50	718 316989	3-23	43.80	
3-26	37.60	901 317890	3-26	43.80	
3-27	37.60	2725 320615	3-27	43.82	
3-28	37.60	2391 323006	3-28	43.81	
3-29	38.40	435 323441	3-29	43.90	
3-30	38.40	0 / 323441	3-30	43.90	
4-2	38.40	0 / 323441	4-2	43.90	
4-3	38.30	0 / 323441	4-3	43.90	
4-4	38.10	718 324159	4-4	43.90	
4-5	38.20	1041 325200	4-5	43.93	

Pan Lysimeter, Disposal Module 11.2

Date	Gallons Pumped	Depth to Water (feet)
5/18/2000	0	41.30
5/19/2000	12,250	48.00
5/23/2000	0	43.90
5/24/2000	3500	NA
5/25/2000	0	48.40
6/05/2000	0	48.40
6/07/2000	0	47.90
6/19/2000	500	49.30
7/05/2000	0	49.40
7/11/2000	0	49.40
7/14/2000	300	ND
7/20/2000	0	50.30
7/26/2000	0	50.30
8/02/2000	0	50.30
8/10/2000	300	ND
8/15/2000	0	ND
8/24/2000	0	ND
8/30/2000	0	ND
9/4/2000	0	ND
9/12/2000	0	ND
9/20/2000	0	ND
9/29/2000	0	ND
10/5/2000	0	ND
10/11/2000	0	ND
10/20/2000	0	ND
10/27/2000	0	ND
11/1/2000	0	ND

Depth to water from flow line of HDPE riser at approximately 40 feet MSL.
Riser runs at approximate 2:1 slope.

11.2 Pumping Data

Leachate Sump		Lysimeter	
Top of Riser Elevation	44.6' MSL	Top of Riser Elevation	42.4' MSL
Sump Elevation	24.7' MSL	Lysimeter Elevation	20.7' MSL
Length of Riser	47.2'	Length of Riser	48.52'

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
11-7-00	46.86	0/228,468	11-7-00	ND	0
11-14-00	46.70	0/228,468	11-14-00	48.00	0
11-16-00	46.70	0/228,468	11-16-00	ND	0
11-17-00	46.70	0/228,468	11-17-00	ND	0
11-20-00	46.70	0/228,468	11-20-00	ND	0
11-21-00	46.72	0" "	11-21-00	ND	0
11-22-00	46.70	0" "	11-22-00	ND	0
11-24-00		0" "	11-24-00	ND	0
11-27-00		0/228,468	11-27-00	50.8	0
11-28-00	46.75	1354/229,862	11-28-00	50.8	0
11-29-00	46.73	556/230,418	11-29-00	50.8	0
11-30-00	46.77	0/230,418	11-30-00	ND	0
12-1-00	46.80	0/230,418	12-1-00	ND	0
12-4-00	46.86	1356/231,774	12-4-00	ND	0
12-5-00	46.80	0/231,774	12-5-00	ND	0

11.2 Pumping Data

Leachate Sump		Lysimeter	
Top of Riser Elevation	44.6' MSL	Top of Riser Elevation	42.4' MSL
Sump Elevation	24.7' MSL	Lysimeter Elevation	20.7' MSL
Length of Riser	47.2'	Length of Riser	48.52'

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
12-19	46.11	0/231779	12-19	51.00	
12-20	46.00	0/231779	1220	51.05	
1221	46.05	0/231779	12-21	51.05	
12-22	46.00	0/231779	12-22	51.50	
12-26	45.72	0/231779	12-26	51.10	
12-27	45.72	0/231779	12-27	51.10	
12-28	45.70	0/231779	12-28	51.10	
12-29	45.70	0/231779	12-29	51.15	
1-2	45.65	0/231779	1-2	51.15	
1-3	45.70	0/231779	1-3	51.00	
1-4	45.70	0/231779	1-4	51.00	
1-5	45.70	0/231779	1-5	51.03	
1-8	45.40	0/231779	1-8	51.03	
1-9	45.40	0/231779	1-9	51.30	
1-10	45.80	0/231779	1-10	51.75	
1-11	45.70	4/231782	1-11	51.75	
1-12	45.45	0/231782	1-12	51.73	
1-15	45.45	0/231782	1-15	51.73	
1-16	45.45	0/231782	1-16	51.74	
1-17	45.45	0/231782	1-17	51.74	
1-18	44.45	0/231782	1-18	51.14	
1-19	45.60	883 232,615	1-19	51.14	
1-22	45.70	813 233,428	1-22	51.14	
1-23	45.75	573 234,001	1-23	51.14	
1-24	45.50	398 234399	1-24	51.14	
1-25	45.64	1/234400	1-25	50.90	
1-26	45.64	0/234400	1-26	50.90	
1-29	45.50	0/234400	1-29	50.50	
1-30	45.50	0/234400	1-30	50.70	
1-31	45.50	0/234400	1-31	50.90	
2-1	46.00	0/237,458	2-1	50.90	
2-2	45.50	0/237458	2-2	50.90	
2-5	45.50	0/237458	2-5	50.90	
2-6	45.60	0/237458	2-6	51.00	
2-7	45.70	0/237458	2-7	51.10	
2-8	45.80	0/237458	2-8	51.10	
2-9	45.80	1/237459	2-9	51.10	
2-12	45.80	0/237459	2-12	51.10	

11.2 Pumping Data

Leachate Sump
Top of Riser Elevation 44.6' MSL
Sump Elevation 24.7' MSL
Length of Riser 47.2'

Lysimeter
Top of Riser Elevation 42.4' MSL
Lysimeter Elevation 20.7' MSL
Length of Riser 48.52'

	Sump			Lysimeter	
Date	Depth to Leachate	Gallons Pumped/Reading	Date	Depth to Water (ft)	Gallons Pumped
2-13	45.70	0/237459	2-13	51.10	
2-14	45.70	0/237459	2-14	51.10	
2-15	45.70	0/237459	2-15	51.20	
2-16	45.30	1/237460	2-16	50.40	
2-19	45.30	0/237460	2-19	50.35	
2-20	45.50	0/237460	2-20	50.36	
2-21	46.00	0/237460	2-21	50.35	
2-22	46.15	0/237460	2-22	49.55	
2-23	46.30	0/237460	2-23	49.55	
2-26	46.30	0/237460	2-26	49.55	
2-27	46.30	0/237460	2-27	49.55	
2-28	46.60	15/237475	2-28	49.55	
3-1	46.60	0/237475	3-1	49.55	
3-2	46.30	0/237475	3-2	49.55	
3-5	45.90	0/237475	3-5	49.45	
3-6	44.53	0/237475	3-6	48.80	
3-7	44.01	237539	3-7	47.53	
3-8	44.70	0/237539	3-8	46.80	
3-9	44.30	0/237539	3-9	45.90	
3-12	44.30	0/237539	3-12	45.40	
3-13	44.30	0/237539	3-13	45.40	
3-14	44.30	0/237539	3-14	45.40	
3-15	44.30	238859	3-15	45.40	
3-16	44.40	240179	3-16	45.30	
3-19	44.10	0/240179	3-19	45.37	
3-20	43.90	0/240179	3-20	45.36	
3-21	43.90	0/240179	3-21	45.35	
3-22	43.90	0/240179	3-22	45.36	
3-23	43.90	0/240179	3-23	45.40	
3-26	43.95	0/240179	3-26	45.40	
3-27	44.00	2/240181	3-27	45.46	
3-28	44.00	0/240181	3-28	45.40	
3-29	43.90	0/240181	3-29	45.40	
3-30	43.30	0/240181	3-30	45.50	
4-2	43.30	0/240181	4-2	45.50	
4-3	43.30	0/240181	4-3	45.40	
4-4	43.80	0/240181	4-4	45.50	
4-5	43.90	0/240181	4-5	45.50	

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: BJ DropBox
SAMPLE ID: PL-11.1
PROJECT NO.: BJ Diole
SAMPLED BY: R Pane
CLIENT: Norcal
REGULATORY AGENCY:

SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate ____ Treatment System ____ Other panlysimetr

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other 12"
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): Nm	Volume in Casing (gal):
Depth to Water (ft): 46.95	Calculated Purge (volumes / gal.):
Height of Water Column (ft):	Actual Pre-Sampling Purge (gal):

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____
Purge Water Containment: ____
Field QC Samples Collected at this Well (Equipment or Field Blank): FB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer ✓
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1142	20.9	3710	7.38	3.40	lt. yellowish w/ trace particles	350	

Sheen: none Odor: light Sample Date: 4/19/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: Collected grab Sample.

SIGNATURE: [signature] **DATE:** 4/19/01

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30.532

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&J DropBox
SAMPLE ID: PL-11.2
PROJECT NO: BJDROP
SAMPLED BY: RPaine
CLIENT: NorCal
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate ____ Treatment System ____ Other Daily Smith
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other 12"
GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): NM	Volume in Casing (gal):
Depth to Water (ft): 50.31	Calculated Purge (volumes / gal.):
Height of Water Column (ft):	Actual Pre-Sampling Purge (gal):

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment:
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-____ FB-____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date:

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ✓ PVC Bailer ____ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1221	20.1	2230	7.09	3.04	lt. brown tint	109	

Sheen: none Odor: none Sample Date: 4/19/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: Collected grab sample.

SIGNATURE: [signature] **DATE:** 4/19/01

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Additional Monitoring

5/14/01
BJD110
N Marks

- 1345 onsite windy/overcast
  - signed in @ office. Met w/ Chris Taylor.
    sampled from borrow pit near pump inlet. collected 3 VOAs
    took field measurements

Horiba Cal: 1615/T. 21°C / pH 7.01 span 10.05 / EC 2060 / Turb 0 / DO auto

Time 1422

T	pH	EC	Turb	DO	color	
21.7	8.27	1020	34	14.40	colorless/pale yellow	No odor No sheen.

Collected @ 1405

- 1430 offsite

LTU soil boring/sampling

5/23/01
BJD106
N Marks

- 0700 onsite
- signed in at front office
  notified office that we would be here after drilling
  Chris Taylor is out, Greg Pryor is contact for today
- measured perimeter of LTU with wheel
- met w/ grading/construction foreman
  - They're still sp-ading/grading until about noon. Stay to south of scraper road until they're done
  - wear hard hats / orange vests
- met w/ Jose et al. from Precision @ 0755
  - briefly reviewed the nature of project, 11 boreholes to 5 ft, sample from 4' to 5'
  - travel to LTU again
  - grout holes
  - Conducted tailgate safety meeting
    - main hazards ⇒ scrapers, hard hats, ear protection, Dixon loads orange vests
- located first site
  UZ-1 0905
  Sampled from 4-5', grouted hole
- UZ-2 0920
  Sampled from 4-5', grouted hole

APPENDIX B

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

September 7, 2000

Kris Johnson
Conor Pacific / EFW
2650 East Bayshore Rd.
Palo Alto, CA 94303

RE: B&J Drop Box/P008013

Dear Kris Johnson

Enclosed are the results of analyses for sample(s) received by the laboratory on August 1, 2000. CH4 and TO-14 analyses performed by Advanced Technology Laboratories. Their analytical report is attached. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Portis

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

Conor Pacific / EFW	Project:	B&J Drop Box	Sampled:	7/31/00
2650 East Bayshore Rd.	Project Number:	BJD106	Received:	8/1/00
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported:	9/7/00

ANALYTICAL REPORT FOR P008013

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
PL-11.1	P008013-01	Air	7/31/00
PL-11.2	P008013-02	Air	7/31/00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AUG 17 2000

08/10/00

Sequoia Analytical - Petaluma
1455 N. McDowell Blvd.
Petaluma, CA 94954

Attn.: Michelle Portis

Client's Project: P008013
Lab No.: A0080201-01/02

Enclosed are results for sample(s) received on 08/02/00 by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Report Narrative:

Sample analyses were performed within method performance criteria. All results are reported without qualifications.

Results were faxed to Michelle Portis on 08/09 & 08/10/00.

Thank you for the opportunity to service the needs of your company. Please feel free to call me @ (626) 964-4032 if I can be of further assistance.

Sincerely,

Puri Romualdo for

Puri Romualdo
Air Toxics Project Manager
puri@atlglobal.com

Enclosures

The cover letter is an integral part of this analytical report.

Client: Sequoia Analytical
Attn: Michelle M. Portis

Client's Project: P008013
Date Received: 08/02/00
Matrix: Air
Units: ppbv

EPA Method TO14

Lab No:		A0080201-01		A0080201-02							
Client Sample I.D.:		P008013-01		P008013-02							
Date Sampled:		07/31/00		07/31/00							
Date Analyzed:		08/02/00		08/02/00							
QC Batch No:		000802MS2A1		000802MS2A1							
Analyst Initials:		SC		SC							
Dilution Factor:		1.0		1.0							
ANALYTE	MDL	Result	RL	Result	RL						
Dichlorodifluoromethane (12)	1.0	191	1.0	1.1	1.0						
Chloromethane	2.0	ND	2.0	ND	2.0						
1,2-Cl-1,1,2,2-F ethane (114)	1.0	25	1.0	ND	1.0						
Vinyl Chloride	1.0	7.4	1.0	1.2	1.0						
Bromomethane	1.0	ND	1.0	ND	1.0						
Chloroethane	1.0	ND	1.0	ND	1.0						
Trichlorofluoromethane	1.0	67	1.0	ND	1.0						
1,1-Dichloroethene	1.0	ND	1.0	ND	1.0						
1,1,2-Cl 1,2,2-F ethane (113)	1.0	3.3	1.0	ND	1.0						
Methylene Chloride	1.0	2.4	1.0	2.5	1.0						
1,1-Dichloroethane	1.0	95	1.0	1.7	1.0						
c-1,2-Dichloroethene	1.0	ND	1.0	ND	1.0						
Chloroform	1.0	4.4	1.0	ND	1.0						
1,1,1-Trichloroethane	1.0	26	1.0	ND	1.0						
Carbon Tetrachloride	1.0	ND	1.0	ND	1.0						
Benzene	1.0	1.0	1.0	1.1	1.0						
1,2-Dichloroethane	1.0	ND	1.0	ND	1.0						
Trichloroethene	1.0	9.9	1.0	ND	1.0						
1,2-Dichloropropane	1.0	ND	1.0	ND	1.0						
c-1,3-Dichloropropene	1.0	ND	1.0	ND	1.0						
Toluene	1.0	11	1.0	12	1.0						
t-1,3-Dichloropropene	1.0	ND	1.0	ND	1.0						
1,1,2-Trichloroethane	1.0	ND	1.0	ND	1.0						
Tetrachloroethene	1.0	15	1.0	ND	1.0						
1,2-Dibromoethane	1.0	ND	1.0	ND	1.0						
Chlorobenzene	1.0	ND	1.0	ND	1.0						
Ethylbenzene	1.0	2.6	1.0	3.0	1.0						
p,&m-Xylene	1.0	11	1.0	13	1.0						
o-Xylene	1.0	4.2	1.0	4.6	1.0						
Styrene	1.0	ND	1.0	ND	1.0						
1,1,2,2-Tetrachloroethane	2.0	ND	2.0	ND	2.0						
1,3,5-Trimethylbenzene	2.0	ND	2.0	ND	2.0						
1,2,4-Trimethylbenzene	2.0	4.1	2.0	4.2	2.0						
1,3-Dichlorobenzene	1.0	ND	1.0	ND	1.0						
1,4-Dichlorobenzene	1.0	ND	1.0	ND	1.0						
1,2-Dichlorobenzene	1.0	ND	1.0	ND	1.0						
1,2,4-Trichlorobenzene	2.0	ND	2.0	ND	2.0						
Hexachlorobutadiene	1.0	ND	1.0	ND	1.0						

MDL = Method Detection Limit
ND = Not Detected (below RL)
RL = MDL X Dilution Factor

Reviewed/Approved By: Mark Johnson
Mark Johnson
Air Toxics Operations Manager

Date 8-9-00

The cover letter is an integral part of this analytical report

Advanced Technology Laboratories
18501 E. Gale Avenue Suite 130 City of Industry, CA 91748 Tel: 626 964-4032 Fax: 626 964-583

Spike Recovery and RPD Summary Report - AIR (000802MS2A1)

Method : D:\GCMSB\METHODS\TO150522.M (RTE Integrator)
Title : EPA TO-15(05/22/00),GC Column:RTxVolatiles 0.32mm
Last Update : Wed Aug 02 15:43:44 2000
Response via : Initial Calibration

Non-Spiked Sample: 02AUG005.D

	Spike Sample	Spike Duplicate Sample
File ID :	02AUG003.D	02AUG004.D
Sample :	LCS	LCSD
Acq Time:	2 Aug 2000 10:59	2 Aug 2000 11:32

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
1,1-Dichloroethene	0.0	10	11.5	11.1	115	111	3	30	70-130
Methylene Chloride	0.0	10	12.3	12.4	123	124	0	30	70-130
Trichloroethene	0.0	10	11.4	11.1	114	111	3	30	70-130
Toluene	0.0	10	10.3	10.2	103	102	1	30	70-130
1,1,2,2-Tetrachloroe	0.0	10	9.5	9.1	95	91	4	30	70-130

- Fails Limit Check

TO150522.M Wed Aug 02 15:44:31 2000 GCMSB

Client: Sequoia Analytical - Petaluma
Attn: Michelle M. Portis

Client's Project: P098013
Date Received: 08/02/2000
Matrix: Air
Units: % v/v

ASTM D1946 Fixed Gases

Lab No.:		A0080201-001		A0080201-002								
Client Sample I.D.:		P008013-01		P008013-02								
Date Sampled:		07/31/2000		07/31/2000								
Date Analyzed:		08/02/2000		08/02/2000								
Analyst Initials:		DT		DT								
Data File:		02aug005		02aug006								
QC Batch:		000802GC8A1		000802GC8A1								
Dilution Factor:		1.0		1.0								
ANALYTE	**MDL**	**DLR**	**Results**	**DLR**	**Results**							
Methane	0.0010	0.0010	0.028	0.0010	0.0015							

MDL = Method Detection Limit
ND = Not Detected (Below DLR).
DLR = MDL X Dilution Factor

Reviewed/Approved By: Mark J. Johnson
Mark J. Johnson
Air Toxics Operations Manager

Date: 8-10-00

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories 18501 E. Gale Avenue Suite 130 City of Industry, CA 91748 Tel: 626 964-4032 Fax: 626 964-583

QC Batch No.: 000802GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946 Fixed Gases

Lab No.:		Method Blank		LCS		LCSD			
Date Analyzed:		08/02/00		08/02/00		08/02/00			
Analyst Initials:		DT		DT		DT			
Datafile:		02aug004		02aug002		02aug003			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	MDL	DLR	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	96	70-130%	96	70-130%	0.1	<30

MDL = Method Detection Limit
ND = Not Detected (Below DLR).
DLR = MDL X Dilution Factor

Reviewed/Approved By: Mark J. Johnson
Air Toxics Operations Manager

Date: 8-10-00

The cover letter is an integral part of this analytical report.

Sequoia Analytical - Petaluma Subcontract Order
P008013

A0080201

Sending Laboratory	Receiving Laboratory
Sequoia Analytical - Petaluma 1455 N. McDowell Blvd. Suite D Petaluma, CA 94954 Phone: 707/792-1865 Fax: 707/792-0342 Project Manager: Michelle M. Portis	ATL (Air Toxics) 18501 East Gale Avenue, Suite 130 City of Industry, CA 91748 Phone: 626-964-4032 Fax: 626-964-5832

Subcontract Order Comments

8/1/00 11:03

Sample/Analysis Information

Sample Name	Matrix	Sampled/ Expires	Analysis Requested	Due	Lab Number	Container	Comments
P008013-01	Air	7/31/00			-01	A	
		8/1/00	[Set up analysis]-1	8/15/00			TO-14 / Sub to ATL (Air Toxics)
		8/1/00	[Set up analysis]-2	8/15/00			CH4 / Sub to ATL (Air Toxics)
P008013-02	Air	7/31/00			-02	A, B	
		8/1/00	[Set up analysis]-1	8/15/00			TO-14 / Sub to ATL (Air Toxics)
		8/1/00	[Set up analysis]-2	8/15/00			CH4 / Sub to ATL (Air Toxics)

Released By [signature] Date 8/1/00 Received By _____ Date _____

Released By Cal Overnight Date _____ Received By [signature] Date 8-2-00 09:10

EINARSON FOWLER & WATSON

CHAIN OF CUSTODY P008013

PO # _____

CONTRACT LABORATORY:

TURN-AROUND TIME:

Project No. BJD106

Site Name B+J Landfill

Sampler(s): (printed) Dave Danks (signature)

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Type/Volume	Qnty	Filt	Prsrv.	CH4	TO-14								Remarks
PL-11.1		7/31/00		Gas	–	Tedlar-1L	1	–	–	X	X								P008013-01
PL-11.2		"		"	–	Tedlar-1L	2	–	–	X	X								-02

CUSTODY SEALS INTACT ☐ NOT INTACT ☐

COOLER TEMPERATURE _____ °C

Relinquished by: (signature)	Received by: (signature)	Date/Time:
[signature]	[signature]	8/1/00 11:03
[signature]	[signature]	8/1/00 11:50
[signature]	[signature]	7/11/00 8/1/00

Send Results To:
Attn:
EINARSON, FOWLER & WATSON
2650 East Bayshore Road
Palo Alto, CA 94303
Phone (650) 843-3828
Fax (650) 843-3815

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

April 16, 2001

Katrin Schliewen
Conor Pacific / EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043

RE: B&J Drop Box / P103589

Dear Katrin Schliewen:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 26, 2001. TO-14 and ASTM D-1946 analyses performed by Air Toxic Ltd. Their analytical report is attached. If you have any questions concerning this report, please feel free to contact me.

Sample ID	Laboratory ID	Matrix	Date Sampled
B-01-8	P103589-01	Air	3/22/01
B-01-7	P103589-02	Air	3/22/01
B-01-6	P103589-03	Air	3/22/01
B-01-5	P103589-04	Air	3/22/01
B-01-4	P103589-05	Air	3/23/01
B-01-3	P103589-06	Air	3/23/01
B-01-2	P103589-07	Air	3/23/01
B-01-1	P103589-08	Air	3/23/01

Sincerely,

Michelle M. Portis
Project Manager

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

RECEIVED
APR 16 2001

WORK ORDER #: 0103571A

Work Order Summary

CLIENT:	Ms. Michelle Portis Sequoia Analytical 1455 McDowell Boulevard North Suite D Petaluma, CA 94954	**BILL TO:**	Ms. Michelle Portis Sequoia Analytical 1455 McDowell Boulevard North Suite D Petaluma, CA 94954
PHONE:	707-792-1865	**P.O. #**	
FAX:	707-792-0342	**PROJECT #**	P103589
DATE RECEIVED:	3/28/01		
DATE COMPLETED:	4/11/01		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	P103589-01	TO-14	1.5 "Hg
01AA	P103589-01 Duplicate	TO-14	1.5 "Hg
02A	P103589-02	TO-14	1.0 "Hg
03A	P103589-03	TO-14	5.0 "Hg
04A	P103589-04	TO-14	0.0 "Hg
05A	P103589-05	TO-14	3.0 "Hg
06A	P103589-06	TO-14	2.5 "Hg
07A	P103589-07	TO-14	2.0 "Hg
08A	P103589-08	TO-14	1.0 "Hg
09A	Method Spike	TO-14	NA
10A	Lab Blank	TO-14	NA
10B	Lab Blank	TO-14	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 04/11/01

Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
TO-14
Sequoia Analytical
Workorder# 0103571A

Eight 6 Liter Summa Canister samples were received on March 28, 2001. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 2.0 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 2.0 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

Requirement	*TO-14*	*ATL Modifications*
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal standard recoveries.	Not specified.	Within 40% of the daily CCV internal standard area for blanks and samples.
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal calibration criteria.	Not specified.	RSD of 30% or less for standard compounds, 40% or less for non-standard and polar compounds
Continuing calibration verification criteria	Not specified.	70 - 130% for at least 90% of standard compounds, 60 - 140% for at least 80% of non-standard and polar compounds
Response factor for quantitation.	Average response factor (ICAL).	Average response factor (ICAL).

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The RPD of duplicate sample P103589-01 exceeded acceptance limits for Tetrahydrofuran due target compound concentrations present at less than 5X the reporting limit. There is no effect on data quality.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit(background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
N - The identification is based on presumptive evidence.

AIR TOXICS LTD.

SAMPLE NAME: P103589-01

ID#: 0103571A-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032916	Date of Collection:	3/22/01
Dil. Factor:	1.41	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.70	3.5	Not Detected	Not Detected
Freon 114	0.70	5.0	Not Detected	Not Detected
Chloromethane	0.70	1.5	Not Detected	Not Detected
Vinyl Chloride	0.70	1.8	Not Detected	Not Detected
Bromomethane	0.70	2.8	Not Detected	Not Detected
Chloroethane	0.70	1.9	Not Detected	Not Detected
Freon 11	0.70	4.0	Not Detected	Not Detected
1,1-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Freon 113	0.70	5.5	Not Detected	Not Detected
Methylene Chloride	0.70	2.5	0.80	2.8
1,1-Dichloroethane	0.70	2.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Chloroform	0.70	3.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.70	3.9	Not Detected	Not Detected
Carbon Tetrachloride	0.70	4.5	Not Detected	Not Detected
Benzene	0.70	2.3	1.7	5.5
1,2-Dichloroethane	0.70	2.9	Not Detected	Not Detected
Trichloroethene	0.70	3.8	Not Detected	Not Detected
1,2-Dichloropropane	0.70	3.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
Toluene	0.70	2.7	23	89
trans-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.70	3.9	Not Detected	Not Detected
Tetrachloroethene	0.70	4.9	Not Detected	Not Detected
Ethylene Dibromide	0.70	5.5	Not Detected	Not Detected
Chlorobenzene	0.70	3.3	Not Detected	Not Detected
Ethyl Benzene	0.70	3.1	7.4	32
m,p-Xylene	0.70	3.1	36	160
o-Xylene	0.70	3.1	15	68
Styrene	0.70	3.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.70	4.9	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.70	3.5	5.0	25
1,2,4-Trimethylbenzene	0.70	3.5	17	84
1,3-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
1,4-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
Chlorotoluene	0.70	3.7	Not Detected	Not Detected
1,2-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.70	5.3	Not Detected	Not Detected
Hexachlorobutadiene	0.70	7.6	Not Detected	Not Detected
Propylene	2.8	4.9	Not Detected	Not Detected
1,3-Butadiene	2.8	6.3	Not Detected	Not Detected
Acetone	2.8	6.8	14	34

AIR TOXICS LTD.

SAMPLE NAME: P103589-01

ID#: 0103571A-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032916	Date of Collection:	3/22/01
Dil. Factor:	1.41	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.8	8.9	Not Detected	Not Detected
2-Propanol	2.8	7.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.8	11	Not Detected	Not Detected
Vinyl Acetate	2.8	10	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	8.4	6.3	19
Hexane	2.8	10	Not Detected	Not Detected
Tetrahydrofuran	2.8	8.4	2.8	8.5
Cyclohexane	2.8	9.9	Not Detected	Not Detected
1,4-Dioxane	2.8	10	Not Detected	Not Detected
Bromodichloromethane	2.8	19	Not Detected	Not Detected
4-Methyl-2-pentanone	2.8	12	Not Detected	Not Detected
2-Hexanone	2.8	12	Not Detected	Not Detected
Dibromochloromethane	2.8	24	Not Detected	Not Detected
Bromoform	2.8	30	Not Detected	Not Detected
4-Ethyltoluene	2.8	14	13	66
Ethanol	2.8	5.4	14	26
Methyl tert-Butyl Ether	2.8	10	Not Detected	Not Detected
Heptane	2.8	12	2.9	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	106	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-01 Duplicate

ID#: 0103571A-01AA

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032917	Date of Collection:	3/22/01
Dil. Factor:	1.41	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.70	3.5	Not Detected	Not Detected
Freon 114	0.70	5.0	Not Detected	Not Detected
Chloromethane	0.70	1.5	Not Detected	Not Detected
Vinyl Chloride	0.70	1.8	Not Detected	Not Detected
Bromomethane	0.70	2.8	Not Detected	Not Detected
Chloroethane	0.70	1.9	Not Detected	Not Detected
Freon 11	0.70	4.0	Not Detected	Not Detected
1,1-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Freon 113	0.70	5.5	Not Detected	Not Detected
Methylene Chloride	0.70	2.5	0.85	3.0
1,1-Dichloroethane	0.70	2.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Chloroform	0.70	3.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.70	3.9	Not Detected	Not Detected
Carbon Tetrachloride	0.70	4.5	Not Detected	Not Detected
Benzene	0.70	2.3	1.7	5.4
1,2-Dichloroethane	0.70	2.9	Not Detected	Not Detected
Trichloroethene	0.70	3.8	Not Detected	Not Detected
1,2-Dichloropropane	0.70	3.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
Toluene	0.70	2.7	22	83
trans-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.70	3.9	Not Detected	Not Detected
Tetrachloroethene	0.70	4.9	Not Detected	Not Detected
Ethylene Dibromide	0.70	5.5	Not Detected	Not Detected
Chlorobenzene	0.70	3.3	Not Detected	Not Detected
Ethyl Benzene	0.70	3.1	8.0	35
m,p-Xylene	0.70	3.1	36	160
o-Xylene	0.70	3.1	16	69
Styrene	0.70	3.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.70	4.9	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.70	3.5	5.4	27
1,2,4-Trimethylbenzene	0.70	3.5	19	95
1,3-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
1,4-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
Chlorotoluene	0.70	3.7	Not Detected	Not Detected
1,2-Dichlorobenzene	0.70	4.3	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.70	5.3	Not Detected	Not Detected
Hexachlorobutadiene	0.70	7.6	Not Detected	Not Detected
Propylene	2.8	4.9	Not Detected	Not Detected
1,3-Butadiene	2.8	6.3	Not Detected	Not Detected
Acetone	2.8	6.8	14	35

AIR TOXICS LTD.

SAMPLE NAME: P103589-01 Duplicate

ID#: 0103571A-01AA

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032917	Date of Collection:	3/22/01
Dil. Factor:	1.41	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.8	8.9	Not Detected	Not Detected
2-Propanol	2.8	7.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.8	11	Not Detected	Not Detected
Vinyl Acetate	2.8	10	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	8.4	6.4	19
Hexane	2.8	10	Not Detected	Not Detected
Tetrahydrofuran	2.8	8.4	Not Detected	Not Detected
Cyclohexane	2.8	9.9	Not Detected	Not Detected
1,4-Dioxane	2.8	10	Not Detected	Not Detected
Bromodichloromethane	2.8	19	Not Detected	Not Detected
4-Methyl-2-pentanone	2.8	12	Not Detected	Not Detected
2-Hexanone	2.8	12	Not Detected	Not Detected
Dibromochloromethane	2.8	24	Not Detected	Not Detected
Bromoform	2.8	30	Not Detected	Not Detected
4-Ethyltoluene	2.8	14	15	76
Ethanol	2.8	5.4	14	26
Methyl tert-Butyl Ether	2.8	10	Not Detected	Not Detected
Heptane	2.8	12	3.0	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	107	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-02

ID#: 0103571A-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032918	Date of Collection:	3/22/01
Dil. Factor:	1.39	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.70	3.5	2.2	11
Freon 114	0.70	4.9	Not Detected	Not Detected
Chloromethane	0.70	1.4	Not Detected	Not Detected
Vinyl Chloride	0.70	1.8	Not Detected	Not Detected
Bromomethane	0.70	2.7	Not Detected	Not Detected
Chloroethane	0.70	1.9	Not Detected	Not Detected
Freon 11	0.70	4.0	Not Detected	Not Detected
1,1-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Freon 113	0.70	5.4	Not Detected	Not Detected
Methylene Chloride	0.70	2.4	0.70	2.5
1,1-Dichloroethane	0.70	2.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Chloroform	0.70	3.4	Not Detected	Not Detected
1,1,1-Trichloroethane	0.70	3.8	Not Detected	Not Detected
Carbon Tetrachloride	0.70	4.4	Not Detected	Not Detected
Benzene	0.70	2.2	1.4	4.5
1,2-Dichloroethane	0.70	2.8	Not Detected	Not Detected
Trichloroethene	0.70	3.8	Not Detected	Not Detected
1,2-Dichloropropane	0.70	3.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
Toluene	0.70	2.7	12	48
trans-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.70	3.8	Not Detected	Not Detected
Tetrachloroethene	0.70	4.8	Not Detected	Not Detected
Ethylene Dibromide	0.70	5.4	Not Detected	Not Detected
Chlorobenzene	0.70	3.2	Not Detected	Not Detected
Ethyl Benzene	0.70	3.1	5.5	24
m,p-Xylene	0.70	3.1	25	110
o-Xylene	0.70	3.1	12	52
Styrene	0.70	3.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.70	4.8	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.70	3.5	5.1	25
1,2,4-Trimethylbenzene	0.70	3.5	19	93
1,3-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
Chlorotoluene	0.70	3.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.70	5.2	Not Detected	Not Detected
Hexachlorobutadiene	0.70	7.5	Not Detected	Not Detected
Propylene	2.8	4.9	Not Detected	Not Detected
1,3-Butadiene	2.8	6.2	Not Detected	Not Detected
Acetone	2.8	6.7	30	73

AIR TOXICS LTD.

SAMPLE NAME: P103589-02

ID#: 0103571A-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032918	Date of Collection:	3/22/01
Dil. Factor:	1.39	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.8	8.8	Not Detected	Not Detected
2-Propanol	2.8	6.9	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.8	11	Not Detected	Not Detected
Vinyl Acetate	2.8	9.9	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	8.3	8.9	27
Hexane	2.8	10	Not Detected	Not Detected
Tetrahydrofuran	2.8	8.3	Not Detected	Not Detected
Cyclohexane	2.8	9.7	Not Detected	Not Detected
1,4-Dioxane	2.8	10	Not Detected	Not Detected
Bromodichloromethane	2.8	19	Not Detected	Not Detected
4-Methyl-2-pentanone	2.8	12	Not Detected	Not Detected
2-Hexanone	2.8	12	Not Detected	Not Detected
Dibromochloromethane	2.8	24	Not Detected	Not Detected
Bromoform	2.8	29	Not Detected	Not Detected
4-Ethyltoluene	2.8	14	13	67
Ethanol	2.8	5.3	9.2	18
Methyl tert-Butyl Ether	2.8	10	Not Detected	Not Detected
Heptane	2.8	12	2.8	12

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	105	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-03

ID#: 0103571A-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032919	Date of Collection:	3/22/01
Dil. Factor:	1.61	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.80	4.0	3.3	16
Freon 114	0.80	5.7	Not Detected	Not Detected
Chloromethane	0.80	1.7	Not Detected	Not Detected
Vinyl Chloride	0.80	2.1	0.98	2.6
Bromomethane	0.80	3.2	Not Detected	Not Detected
Chloroethane	0.80	2.2	Not Detected	Not Detected
Freon 11	0.80	4.6	Not Detected	Not Detected
1,1-Dichloroethene	0.80	3.2	Not Detected	Not Detected
Freon 113	0.80	6.3	Not Detected	Not Detected
Methylene Chloride	0.80	2.8	1.4	5.0
1,1-Dichloroethane	0.80	3.3	1.2	5.0
cis-1,2-Dichloroethene	0.80	3.2	Not Detected	Not Detected
Chloroform	0.80	4.0	Not Detected	Not Detected
1,1,1-Trichloroethane	0.80	4.5	Not Detected	Not Detected
Carbon Tetrachloride	0.80	5.1	Not Detected	Not Detected
Benzene	0.80	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.80	3.3	Not Detected	Not Detected
Trichloroethene	0.80	4.4	Not Detected	Not Detected
1,2-Dichloropropane	0.80	3.8	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.80	3.7	Not Detected	Not Detected
Toluene	0.80	3.1	6.5	25
trans-1,3-Dichloropropene	0.80	3.7	Not Detected	Not Detected
1,1,2-Trichloroethane	0.80	4.5	Not Detected	Not Detected
Tetrachloroethene	0.80	5.6	Not Detected	Not Detected
Ethylene Dibromide	0.80	6.3	Not Detected	Not Detected
Chlorobenzene	0.80	3.8	Not Detected	Not Detected
Ethyl Benzene	0.80	3.6	4.0	17
m,p-Xylene	0.80	3.6	20	91
o-Xylene	0.80	3.6	9.9	44
Styrene	0.80	3.5	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.80	5.6	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.80	4.0	4.6	23
1,2,4-Trimethylbenzene	0.80	4.0	17	83
1,3-Dichlorobenzene	0.80	4.9	Not Detected	Not Detected
1,4-Dichlorobenzene	0.80	4.9	Not Detected	Not Detected
Chlorotoluene	0.80	4.2	Not Detected	Not Detected
1,2-Dichlorobenzene	0.80	4.9	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.80	6.1	Not Detected	Not Detected
Hexachlorobutadiene	0.80	8.7	Not Detected	Not Detected
Propylene	3.2	5.6	Not Detected	Not Detected
1,3-Butadiene	3.2	7.2	Not Detected	Not Detected
Acetone	3.2	7.8	25	60

AIR TOXICS LTD.

SAMPLE NAME: P103589-03

ID#: 0103571A-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032919	Date of Collection:	3/22/01
Dil. Factor:	1.61	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.2	10	Not Detected	Not Detected
2-Propanol	3.2	8.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.2	13	Not Detected	Not Detected
Vinyl Acetate	3.2	12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.2	9.6	9.4	28
Hexane	3.2	12	3.3	12
Tetrahydrofuran	3.2	9.6	Not Detected	Not Detected
Cyclohexane	3.2	11	Not Detected	Not Detected
1,4-Dioxane	3.2	12	Not Detected	Not Detected
Bromodichloromethane	3.2	22	Not Detected	Not Detected
4-Methyl-2-pentanone	3.2	13	Not Detected	Not Detected
2-Hexanone	3.2	13	Not Detected	Not Detected
Dibromochloromethane	3.2	28	Not Detected	Not Detected
Bromoform	3.2	34	Not Detected	Not Detected
4-Ethyltoluene	3.2	16	12	58
Ethanol	3.2	6.2	14	27
Methyl tert-Butyl Ether	3.2	12	Not Detected	Not Detected
Heptane	3.2	13	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	103	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-04

ID#: 0103571A-04A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033016	Date of Collection:	3/22/01
Dil. Factor:	5.36	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	2.7	13	22	110
Freon 114	2.7	19	23	170
Chloromethane	2.7	5.6	Not Detected	Not Detected
Vinyl Chloride	2.7	7.0	41	100
Bromomethane	2.7	10	Not Detected	Not Detected
Chloroethane	2.7	7.2	9.8	26
Freon 11	2.7	15	Not Detected	Not Detected
1,1-Dichloroethene	2.7	11	Not Detected	Not Detected
Freon 113	2.7	21	Not Detected	Not Detected
Methylene Chloride	2.7	9.5	Not Detected	Not Detected
1,1-Dichloroethane	2.7	11	Not Detected	Not Detected
cis-1,2-Dichloroethene	2.7	11	Not Detected	Not Detected
Chloroform	2.7	13	Not Detected	Not Detected
1,1,1-Trichloroethane	2.7	15	Not Detected	Not Detected
Carbon Tetrachloride	2.7	17	Not Detected	Not Detected
Benzene	2.7	8.7	25	81
1,2-Dichloroethane	2.7	11	Not Detected	Not Detected
Trichloroethene	2.7	15	Not Detected	Not Detected
1,2-Dichloropropane	2.7	12	Not Detected	Not Detected
cis-1,3-Dichloropropene	2.7	12	Not Detected	Not Detected
Toluene	2.7	10	62	240
trans-1,3-Dichloropropene	2.7	12	Not Detected	Not Detected
1,1,2-Trichloroethane	2.7	15	Not Detected	Not Detected
Tetrachloroethene	2.7	18	Not Detected	Not Detected
Ethylene Dibromide	2.7	21	Not Detected	Not Detected
Chlorobenzene	2.7	12	Not Detected	Not Detected
Ethyl Benzene	2.7	12	Not Detected	Not Detected
m,p-Xylene	2.7	12	9.8	43
o-Xylene	2.7	12	4.5	20
Styrene	2.7	12	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	2.7	19	Not Detected	Not Detected
1,3,5-Trimethylbenzene	2.7	13	Not Detected	Not Detected
1,2,4-Trimethylbenzene	2.7	13	7.2	36
1,3-Dichlorobenzene	2.7	16	Not Detected	Not Detected
1,4-Dichlorobenzene	2.7	16	Not Detected	Not Detected
Chlorotoluene	2.7	14	Not Detected	Not Detected
1,2-Dichlorobenzene	2.7	16	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.7	20	Not Detected	Not Detected
Hexachlorobutadiene	2.7	29	Not Detected	Not Detected
Propylene	11	19	Not Detected	Not Detected
1,3-Butadiene	11	24	Not Detected	Not Detected
Acetone	11	26	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: P103589-04

ID#: 0103571A-04A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033016	Date of Collection:	3/22/01
Dil. Factor:	5.36	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	11	34	Not Detected	Not Detected
2-Propanol	11	27	Not Detected	Not Detected
trans-1,2-Dichloroethene	11	43	Not Detected	Not Detected
Vinyl Acetate	11	38	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	11	32	Not Detected	Not Detected
Hexane	11	38	750	2700
Tetrahydrofuran	11	32	Not Detected	Not Detected
Cyclohexane	11	38	440	1500
1,4-Dioxane	11	39	Not Detected	Not Detected
Bromodichloromethane	11	73	Not Detected	Not Detected
4-Methyl-2-pentanone	11	45	Not Detected	Not Detected
2-Hexanone	11	45	Not Detected	Not Detected
Dibromochloromethane	11	93	Not Detected	Not Detected
Bromoform	11	110	Not Detected	Not Detected
4-Ethyltoluene	11	54	Not Detected	Not Detected
Ethanol	11	20	Not Detected	Not Detected
Methyl tert-Butyl Ether	11	39	Not Detected	Not Detected
Heptane	11	45	350	1500

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-05

ID#: 0103571A-05A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033017	Date of Collection:	3/23/01
Dil. Factor:	1.49	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.74	3.7	Not Detected	Not Detected
Freon 114	0.74	5.3	Not Detected	Not Detected
Chloromethane	0.74	1.6	Not Detected	Not Detected
Vinyl Chloride	0.74	1.9	Not Detected	Not Detected
Bromomethane	0.74	2.9	Not Detected	Not Detected
Chloroethane	0.74	2.0	Not Detected	Not Detected
Freon 11	0.74	4.2	Not Detected	Not Detected
1,1-Dichloroethene	0.74	3.0	Not Detected	Not Detected
Freon 113	0.74	5.8	Not Detected	Not Detected
Methylene Chloride	0.74	2.6	0.81	2.8
1,1-Dichloroethane	0.74	3.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.74	3.0	Not Detected	Not Detected
Chloroform	0.74	3.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.74	4.1	Not Detected	Not Detected
Carbon Tetrachloride	0.74	4.8	Not Detected	Not Detected
Benzene	0.74	2.4	1.1	3.5
1,2-Dichloroethane	0.74	3.1	Not Detected	Not Detected
Trichloroethene	0.74	4.1	Not Detected	Not Detected
1,2-Dichloropropane	0.74	3.5	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.74	3.4	Not Detected	Not Detected
Toluene	0.74	2.8	4.6	17
trans-1,3-Dichloropropene	0.74	3.4	Not Detected	Not Detected
1,1,2-Trichloroethane	0.74	4.1	Not Detected	Not Detected
Tetrachloroethene	0.74	5.1	Not Detected	Not Detected
Ethylene Dibromide	0.74	5.8	Not Detected	Not Detected
Chlorobenzene	0.74	3.5	Not Detected	Not Detected
Ethyl Benzene	0.74	3.3	1.4	6.4
m,p-Xylene	0.74	3.3	6.6	29
o-Xylene	0.74	3.3	2.4	11
Styrene	0.74	3.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.74	5.2	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.74	3.7	0.92	4.6
1,2,4-Trimethylbenzene	0.74	3.7	2.1	10
1,3-Dichlorobenzene	0.74	4.6	Not Detected	Not Detected
1,4-Dichlorobenzene	0.74	4.6	Not Detected	Not Detected
Chlorotoluene	0.74	3.9	Not Detected	Not Detected
1,2-Dichlorobenzene	0.74	4.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.74	5.6	Not Detected	Not Detected
Hexachlorobutadiene	0.74	8.1	Not Detected	Not Detected
Propylene	3.0	5.2	Not Detected	Not Detected
1,3-Butadiene	3.0	6.7	Not Detected	Not Detected
Acetone	3.0	7.2	56	130

AIR TOXICS LTD.

SAMPLE NAME: P103589-05

ID#: 0103571A-05A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033017	Date of Collection:	3/23/01
Dil. Factor:	1.49	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.0	9.4	Not Detected	Not Detected
2-Propanol	3.0	7.4	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.0	12	Not Detected	Not Detected
Vinyl Acetate	3.0	11	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.0	8.9	6.9	21
Hexane	3.0	11	11	40
Tetrahydrofuran	3.0	8.9	Not Detected	Not Detected
Cyclohexane	3.0	10	Not Detected	Not Detected
1,4-Dioxane	3.0	11	Not Detected	Not Detected
Bromodichloromethane	3.0	20	Not Detected	Not Detected
4-Methyl-2-pentanone	3.0	12	Not Detected	Not Detected
2-Hexanone	3.0	12	Not Detected	Not Detected
Dibromochloromethane	3.0	26	Not Detected	Not Detected
Bromoform	3.0	31	Not Detected	Not Detected
4-Ethyltoluene	3.0	15	Not Detected	Not Detected
Ethanol	3.0	5.7	27	52
Methyl tert-Butyl Ether	3.0	11	Not Detected	Not Detected
Heptane	3.0	12	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-06

ID#: 0103571A-06A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033018	Date of Collection: 3/23/01
Dil. Factor:	1.46	Date of Analysis: 3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.73	3.7	1.0	5.1
Freon 114	0.73	5.2	Not Detected	Not Detected
Chloromethane	0.73	1.5	Not Detected	Not Detected
Vinyl Chloride	0.73	1.9	Not Detected	Not Detected
Bromomethane	0.73	2.9	Not Detected	Not Detected
Chloroethane	0.73	2.0	Not Detected	Not Detected
Freon 11	0.73	4.2	Not Detected	Not Detected
1,1-Dichloroethene	0.73	2.9	Not Detected	Not Detected
Freon 113	0.73	5.7	Not Detected	Not Detected
Methylene Chloride	0.73	2.6	0.80	2.8
1,1-Dichloroethane	0.73	3.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.73	2.9	Not Detected	Not Detected
Chloroform	0.73	3.6	Not Detected	Not Detected
1,1,1-Trichloroethane	0.73	4.0	Not Detected	Not Detected
Carbon Tetrachloride	0.73	4.7	Not Detected	Not Detected
Benzene	0.73	2.4	Not Detected	Not Detected
1,2-Dichloroethane	0.73	3.0	Not Detected	Not Detected
Trichloroethene	0.73	4.0	Not Detected	Not Detected
1,2-Dichloropropane	0.73	3.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.73	3.4	Not Detected	Not Detected
Toluene	0.73	2.8	3.0	11
trans-1,3-Dichloropropene	0.73	3.4	Not Detected	Not Detected
1,1,2-Trichloroethane	0.73	4.0	Not Detected	Not Detected
Tetrachloroethene	0.73	5.0	Not Detected	Not Detected
Ethylene Dibromide	0.73	5.7	Not Detected	Not Detected
Chlorobenzene	0.73	3.4	Not Detected	Not Detected
Ethyl Benzene	0.73	3.2	1.5	6.6
m,p-Xylene	0.73	3.2	7.3	32
o-Xylene	0.73	3.2	3.0	13
Styrene	0.73	3.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.73	5.1	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.73	3.6	1.3	6.4
1,2,4-Trimethylbenzene	0.73	3.6	4.9	24
1,3-Dichlorobenzene	0.73	4.5	Not Detected	Not Detected
1,4-Dichlorobenzene	0.73	4.5	Not Detected	Not Detected
Chlorotoluene	0.73	3.8	Not Detected	Not Detected
1,2-Dichlorobenzene	0.73	4.5	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.73	5.5	Not Detected	Not Detected
Hexachlorobutadiene	0.73	7.9	Not Detected	Not Detected
Propylene	2.9	5.1	Not Detected	Not Detected
1,3-Butadiene	2.9	6.6	Not Detected	Not Detected
Acetone	2.9	7.0	68	160

AIR TOXICS LTD.

SAMPLE NAME: P103589-06

ID#: 0103571A-06A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033018	Date of Collection: 3/23/01
Dil. Factor:	1.46	Date of Analysis: 3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.9	9.2	Not Detected	Not Detected
2-Propanol	2.9	7.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.9	12	Not Detected	Not Detected
Vinyl Acetate	2.9	10	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.9	8.8	8.9	27
Hexane	2.9	10	6.0	21
Tetrahydrofuran	2.9	8.8	Not Detected	Not Detected
Cyclohexane	2.9	10	Not Detected	Not Detected
1,4-Dioxane	2.9	11	Not Detected	Not Detected
Bromodichloromethane	2.9	20	Not Detected	Not Detected
4-Methyl-2-pentanone	2.9	12	Not Detected	Not Detected
2-Hexanone	2.9	12	Not Detected	Not Detected
Dibromochloromethane	2.9	25	Not Detected	Not Detected
Bromoform	2.9	31	Not Detected	Not Detected
4-Ethyltoluene	2.9	14	3.1	16
Ethanol	2.9	5.6	25	48
Methyl tert-Butyl Ether	2.9	11	Not Detected	Not Detected
Heptane	2.9	12	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	108	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-07

ID#: 0103571A-07A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033019	Date of Collection:	3/23/01
Dil. Factor:	1.44	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.72	3.6	Not Detected	Not Detected
Freon 114	0.72	5.1	Not Detected	Not Detected
Chloromethane	0.72	1.5	Not Detected	Not Detected
Vinyl Chloride	0.72	1.9	Not Detected	Not Detected
Bromomethane	0.72	2.8	Not Detected	Not Detected
Chloroethane	0.72	1.9	Not Detected	Not Detected
Freon 11	0.72	4.1	Not Detected	Not Detected
1,1-Dichloroethene	0.72	2.9	Not Detected	Not Detected
Freon 113	0.72	5.6	Not Detected	Not Detected
Methylene Chloride	0.72	2.5	Not Detected	Not Detected
1,1-Dichloroethane	0.72	3.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.72	2.9	Not Detected	Not Detected
Chloroform	0.72	3.6	Not Detected	Not Detected
1,1,1-Trichloroethane	0.72	4.0	Not Detected	Not Detected
Carbon Tetrachloride	0.72	4.6	Not Detected	Not Detected
Benzene	0.72	2.3	Not Detected	Not Detected
1,2-Dichloroethane	0.72	3.0	Not Detected	Not Detected
Trichloroethene	0.72	3.9	Not Detected	Not Detected
1,2-Dichloropropane	0.72	3.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.72	3.3	Not Detected	Not Detected
Toluene	0.72	2.8	2.0	7.8
trans-1,3-Dichloropropene	0.72	3.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.72	4.0	Not Detected	Not Detected
Tetrachloroethene	0.72	5.0	Not Detected	Not Detected
Ethylene Dibromide	0.72	5.6	Not Detected	Not Detected
Chlorobenzene	0.72	3.4	Not Detected	Not Detected
Ethyl Benzene	0.72	3.2	1.4	6.2
m,p-Xylene	0.72	3.2	7.2	32
o-Xylene	0.72	3.2	2.8	12
Styrene	0.72	3.1	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.72	5.0	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.72	3.6	1.3	6.5
1,2,4-Trimethylbenzene	0.72	3.6	4.8	24
1,3-Dichlorobenzene	0.72	4.4	Not Detected	Not Detected
1,4-Dichlorobenzene	0.72	4.4	Not Detected	Not Detected
Chlorotoluene	0.72	3.8	Not Detected	Not Detected
1,2-Dichlorobenzene	0.72	4.4	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.72	5.4	Not Detected	Not Detected
Hexachlorobutadiene	0.72	7.8	Not Detected	Not Detected
Propylene	2.9	5.0	Not Detected	Not Detected
1,3-Butadiene	2.9	6.5	Not Detected	Not Detected
Acetone	2.9	7.0	49	120

AIR TOXICS LTD.

SAMPLE NAME: P103589-07

ID#: 0103571A-07A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033019	Date of Collection:	3/23/01
Dil. Factor:	1:44	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.9	9.1	Not Detected	Not Detected
2-Propanol	2.9	7.2	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.9	12	Not Detected	Not Detected
Vinyl Acetate	2.9	10	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.9	8.6	6.5	19
Hexane	2.9	10	Not Detected	Not Detected
Tetrahydrofuran	2.9	8.6	Not Detected	Not Detected
Cyclohexane	2.9	10	Not Detected	Not Detected
1,4-Dioxane	2.9	10	Not Detected	Not Detected
Bromodichloromethane	2.9	20	Not Detected	Not Detected
4-Methyl-2-pentanone	2.9	12	Not Detected	Not Detected
2-Hexanone	2.9	12	Not Detected	Not Detected
Dibromochloromethane	2.9	25	Not Detected	Not Detected
Bromoform	2.9	30	Not Detected	Not Detected
4-Ethyltoluene	2.9	14	Not Detected	Not Detected
Ethanol	2.9	5.5	18	34
Methyl tert-Butyl Ether	2.9	10	Not Detected	Not Detected
Heptane	2.9	12	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	104	70-130

AIR TOXICS LTD.

SAMPLE NAME: P103589-08

ID#: 0103571A-08A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033020	Date of Collection:	3/23/01
Dil. Factor:	1.39	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.70	3.5	1.6	7.9
Freon 114	0.70	4.9	Not Detected	Not Detected
Chloromethane	0.70	1.4	Not Detected	Not Detected
Vinyl Chloride	0.70	1.8	Not Detected	Not Detected
Bromomethane	0.70	2.7	Not Detected	Not Detected
Chloroethane	0.70	1.9	Not Detected	Not Detected
Freon 11	0.70	4.0	0.85	4.8
1,1-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Freon 113	0.70	5.4	Not Detected	Not Detected
Methylene Chloride	0.70	2.4	0.91	3.2
1,1-Dichloroethane	0.70	2.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.70	2.8	Not Detected	Not Detected
Chloroform	0.70	3.4	Not Detected	Not Detected
1,1,1-Trichloroethane	0.70	3.8	Not Detected	Not Detected
Carbon Tetrachloride	0.70	4.4	Not Detected	Not Detected
Benzene	0.70	2.2	Not Detected	Not Detected
1,2-Dichloroethane	0.70	2.8	Not Detected	Not Detected
Trichloroethene	0.70	3.8	Not Detected	Not Detected
1,2-Dichloropropane	0.70	3.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
Toluene	0.70	2.7	1.8	7.0
trans-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.70	3.8	Not Detected	Not Detected
Tetrachloroethene	0.70	4.8	Not Detected	Not Detected
Ethylene Dibromide	0.70	5.4	Not Detected	Not Detected
Chlorobenzene	0.70	3.2	Not Detected	Not Detected
Ethyl Benzene	0.70	3.1	1.1	4.9
m,p-Xylene	0.70	3.1	5.3	24
o-Xylene	0.70	3.1	2.2	9.5
Styrene	0.70	3.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.70	4.8	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.70	3.5	1.2	6.0
1,2,4-Trimethylbenzene	0.70	3.5	4.9	25
1,3-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
Chlorotoluene	0.70	3.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.70	4.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.70	5.2	Not Detected	Not Detected
Hexachlorobutadiene	0.70	7.5	Not Detected	Not Detected
Propylene	2.8	4.9	Not Detected	Not Detected
1,3-Butadiene	2.8	6.2	Not Detected	Not Detected
Acetone	2.8	6.7	100	260

AIR TOXICS LTD.

SAMPLE NAME: P103589-08

ID#: 0103571A-08A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033020	Date of Collection:	3/23/01
Dil. Factor:	1.39	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.8	8.8	Not Detected	Not Detected
2-Propanol	2.8	6.9	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.8	11	Not Detected	Not Detected
Vinyl Acetate	2.8	9.9	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	8.3	8.9	26
Hexane	2.8	10	Not Detected	Not Detected
Tetrahydrofuran	2.8	8.3	Not Detected	Not Detected
Cyclohexane	2.8	9.7	Not Detected	Not Detected
1,4-Dioxane	2.8	10	Not Detected	Not Detected
Bromodichloromethane	2.8	19	Not Detected	Not Detected
4-Methyl-2-pentanone	2.8	12	Not Detected	Not Detected
2-Hexanone	2.8	12	Not Detected	Not Detected
Dibromochloromethane	2.8	24	Not Detected	Not Detected
Bromoform	2.8	29	Not Detected	Not Detected
4-Ethyltoluene	2.8	14	Not Detected	Not Detected
Ethanol	2.8	5.3	73	140
Methyl tert-Butyl Ether	2.8	10	Not Detected	Not Detected
Heptane	2.8	12	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	103	70-130

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0103571A-09A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032902	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Freon 12	0.50	2.5	114
Freon 114	0.50	3.6	103
Chloromethane	0.50	1.0	107
Vinyl Chloride	0.50	1.3	103
Bromomethane	0.50	2.0	95
Chloroethane	0.50	1.3	93
Freon 11	0.50	2.8	109
1,1-Dichloroethene	0.50	2.0	104
Freon 113	0.50	3.9	96
Methylene Chloride	0.50	1.8	100
1,1-Dichloroethane	0.50	2.0	102
cis-1,2-Dichloroethene	0.50	2.0	103
Chloroform	0.50	2.5	106
1,1,1-Trichloroethane	0.50	2.8	111
Carbon Tetrachloride	0.50	3.2	112
Benzene	0.50	1.6	94
1,2-Dichloroethane	0.50	2.0	99
Trichloroethene	0.50	2.7	93
1,2-Dichloropropane	0.50	2.3	89
cis-1,3-Dichloropropene	0.50	2.3	91
Toluene	0.50	1.9	108
trans-1,3-Dichloropropene	0.50	2.3	86
1,1,2-Trichloroethane	0.50	2.8	83
Tetrachloroethene	0.50	3.4	94
Ethylene Dibromide	0.50	3.9	85
Chlorobenzene	0.50	2.3	98
Ethyl Benzene	0.50	2.2	102
m,p-Xylene	0.50	2.2	106
o-Xylene	0.50	2.2	107
Styrene	0.50	2.2	109
1,1,2,2-Tetrachloroethane	0.50	3.5	93
1,3,5-Trimethylbenzene	0.50	2.5	97
1,2,4-Trimethylbenzene	0.50	2.5	101
1,3-Dichlorobenzene	0.50	3.0	96
1,4-Dichlorobenzene	0.50	3.0	95
Chlorotoluene	0.50	2.6	101
1,2-Dichlorobenzene	0.50	3.0	96
1,2,4-Trichlorobenzene	0.50	3.8	82
Hexachlorobutadiene	0.50	5.4	86
Propylene	2.0	3.5	104
1,3-Butadiene	2.0	4.5	100
Acetone	2.0	4.8	108

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0103571A-09A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032902	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Carbon Disulfide	2.0	6.3	92
2-Propanol	2.0	5.0	102
trans-1,2-Dichloroethene	2.0	8.0	94
Vinyl Acetate	2.0	7.2	106
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	106
Hexane	2.0	7.2	110
Tetrahydrofuran	2.0	6.0	102
Cyclohexane	2.0	7.0	100
1,4-Dioxane	2.0	7.3	86
Bromodichloromethane	2.0	14	92
4-Methyl-2-pentanone	2.0	8.3	108
2-Hexanone	2.0	8.3	103
Dibromochloromethane	2.0	17	86
Bromoform	2.0	21	91
4-Ethyltoluene	2.0	10	102
Ethanol	2.0	3.8	82
Methyl tert-Butyl Ether	2.0	7.3	102
Heptane	2.0	8.3	111

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	109	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0103571A-10A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032906	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Ethylene Dibromide	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.50	3.8	Not Detected	Not Detected
Hexachlorobutadiene	0.50	5.4	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0103571A-10A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c032906	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/29/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0103571A-10B

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Ethylene Dibromide	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.50	3.8	Not Detected	Not Detected
Hexachlorobutadiene	0.50	5.4	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0103571A-10B

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	c033005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/30/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	95	70-130

SUBCONTRACT ORDER

Sequoia Analytical - Petaluma

P103589

0103571A

SENDING LABORATORY:

Sequoia Analytical - Petaluma
1455 N. McDowell Blvd. Suite D
Petaluma, CA 94954
Phone: (707) 792-1865
Fax: (707) 792-0342
Project Manager: Michelle M. Portis

RECEIVING LABORATORY:

Air Toxics
180 Blue Ravine Rd., Suite B
Folsom, CA 95630
Phone :916-985-1000
Fax: 916-985-1020

Sending lab received date: 03/26/01 14:35
Comments: DELETE MTBE

for soils: Organic Matter - request LOI method from ETS.

Analysis	SLD Date	Expires	Laboratory ID	Comments
Sample ID: P103589-01 (Air sampled on 03/22/01 09:30)				
Misc. Subcontract	04/09/01 15:00	09/18/01 09:30		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 09:30		I.P. 1.5"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-02 (Air sampled on 03/22/01 11:00)				
Misc. Subcontract	04/09/01 15:00	09/18/01 11:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 11:00		1.0"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-03 (Air sampled on 03/22/01 13:50)				
Misc. Subcontract	04/09/01 15:00	09/18/01 13:50		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 13:50		5.0"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-04 (Air sampled on 03/22/01 15:40)				
Misc. Subcontract	04/09/01 15:00	09/18/01 15:40		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 15:40		0.0"Hg
Containers Supplied: Other (A)				

Released By	Date	Received By	Date
[illegible]	3/27/01	[illegible] ATL	3/28/01 0949

CUSTODY SEAL INTACT?
Y N NONE TEMP

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SUBCONTRACT ORDER

Sequoia Analytical - Petaluma

P103589

0103571A

Analysis	SLD Date	Expires	Laboratory ID	Comments
Sample ID: P103589-05 (Air sampled on 03/23/01 08:10)				
Misc. Subcontract	04/09/01 15:00	09/19/01 08:10		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 08:10		I.P. = 3.0"Hg
Containers Supplied:				
Other (A)				
Sample ID: P103589-06 (Air sampled on 03/23/01 09:30)				
Misc. Subcontract	04/09/01 15:00	09/19/01 09:30		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 09:30		2.5"Hg
Containers Supplied:				
Other (A)				
Sample ID: P103589-07 (Air sampled on 03/23/01 11:00)				
Misc. Subcontract	04/09/01 15:00	09/19/01 11:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 11:00		2.0"Hg
Containers Supplied:				
Other (A)				
Sample ID: P103589-08 (Air sampled on 03/23/01 12:00)				
Misc. Subcontract	04/09/01 15:00	09/19/01 12:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 12:00		1.0"Hg
Containers Supplied:				
Other (A)				

Standard TAT is requested unless an alternate TAT is circled -> 10 7 5 3 2 1

Released By	Date	Received By	Date
Paul Hetzmann	3/27/01	Anita Stojic AR	3/28/01 0950

CUSTODY SEAL INTACT?
Y N NONE TEMP

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0103571B

Work Order Summary

CLIENT:	Ms. Michelle Portis Sequoia Analytical 1455 McDowell Boulevard North Suite D Petaluma, CA 94954	**BILL TO:**	Ms. Michelle Portis Sequoia Analytical 1455 McDowell Boulevard North Suite D Petaluma, CA 94954
PHONE:	707-792-1865	**P.O. #**	
FAX:	707-792-0342	**PROJECT #**	P103589
DATE RECEIVED:	3/28/01		
DATE COMPLETED:	4/7/01		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	P103589-01	ASTM D-1946	1.5 "Hg
02A	P103589-02	ASTM D-1946	1.0 "Hg
03A	P103589-03	ASTM D-1946	5.0 "Hg
04A	P103589-04	ASTM D-1946	0.0 "Hg
05A	P103589-05	ASTM D-1946	3.0 "Hg
05AA	P103589-05 Duplicate	ASTM D-1946	3.0 "Hg
06A	P103589-06	ASTM D-1946	2.5 "Hg
07A	P103589-07	ASTM D-1946	2.0 "Hg
08A	P103589-08	ASTM D-1946	1.0 "Hg
09A	Method Spike	ASTM D-1946	NA
10A	Lab Blank	ASTM D-1946	NA

CERTIFIED BY: Beatrice Soohoo for Laboratory Director

DATE: 4-9-01

Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
ASTM D-1946
Sequoia Analytical
Workorder# 0103571B

Eight 6 Liter Summa Canister samples were received on March 28, 2001. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of up to 1.0 mL of air. See the data sheets for the reporting limits for each compound.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME: P103589-01

ID#: 0103571B-01A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033010	Date of Collection:	3/22/01
Dil. Factor:	1.41	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.14	21
Methane	0.0014	Not Detected
Carbon Dioxide	0.0014	0.041

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-02

ID#: 0103571B-02A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033011	Date of Collection:	3/22/01
Dil Factor:	1.39	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.14	22
Methane	0.0014	0.042
Carbon Dioxide	0.0014	0.087

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-03

ID#: 0103571B-03A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033012	Date of Collection:	3/22/01
Dil. Factor:	1.61	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.16	22
Methane	0.0016	0.098
Carbon Dioxide	0.0016	0.10

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-04

ID#: 0103571B-04A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033013	Date of Collection:	3/22/01
Dil Factor:	1.34	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.13	1.2
Methane	0.0013	7.6
Carbon Dioxide	0.0013	8.9

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-05

ID#: 0103571B-05A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033014	Date of Collection:	3/23/01
Dil. Factor:	1.49	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.15	21
Methane	0.0015	0.018
Carbon Dioxide	0.0015	0.053

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-05 Duplicate

ID#: 0103571B-05AA

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033015	Date of Collection:	3/23/01
Dil Factor:	1.49	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.15	21
Methane	0.0015	0.016
Carbon Dioxide	0.0015	0.051

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-06

ID#: 0103571B-06A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033016	Date of Collection:	3/23/01
Dil. Factor:	1.46	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.15	21
Methane	0.0015	0.0035
Carbon Dioxide	0.0015	0.040

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-07

ID#: 0103571B-07A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033017	Date of Collection:	3/23/01
Dil. Factor:	1.44	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.14	21
Methane	0.0014	Not Detected
Carbon Dioxide	0.0014	0.038

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: P103589-08

ID#: 0103571B-08A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033018	Date of Collection:	3/23/01
Dil. Factor:	1.39	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.14	21
Methane	0.0014	Not Detected
Carbon Dioxide	0.0014	0.039

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0103571B-09A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033001	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	%Recovery
Oxygen	0.10	104
Methane	0.0010	100
Carbon Dioxide	0.0010	90

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0103571B-10A

NATURAL GAS ANALYSIS BY ASTM D-1946 GC/TCD/FID

File Name:	3033003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	3/30/01

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.0010	Not Detected
Carbon Dioxide	0.0010	Not Detected

Container Type: NA - Not Applicable

SUBCONTRACT ORDER

Sequoia Analytical - Petaluma

P103589

0103571B

SENDING LABORATORY:

Sequoia Analytical - Petaluma
1455 N. McDowell Blvd. Suite D
Petaluma, CA 94954
Phone: (707) 792-1865
Fax: (707) 792-0342
Project Manager: Michelle M. Portis

RECEIVING LABORATORY:

Air Toxics
180 Blue Ravine Rd., Suite B
Folsom, CA 95630
Phone :916-985-1000
Fax: 916-985-1020

Sending lab received date: 03/26/01 14:35
Comments: DELETE MTBE for soils: Organic Matter - request LOI method from ETS.

Analysis	SLD Date	Expires	Laboratory ID	Comments
Sample ID: P103589-01 (Air sampled on 03/22/01 09:30)				
Misc. Subcontract	04/09/01 15:00	09/18/01 09:30		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 09:30		I.P. 1.5"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-02 (Air sampled on 03/22/01 11:00)				
Misc. Subcontract	04/09/01 15:00	09/18/01 11:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 11:00		1.0 "Hg
Containers Supplied: Other (A)				
Sample ID: P103589-03 (Air sampled on 03/22/01 13:50)				
Misc. Subcontract	04/09/01 15:00	09/18/01 13:50		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 13:50		5.0"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-04 (Air sampled on 03/22/01 15:40)				
Misc. Subcontract	04/09/01 15:00	09/18/01 15:40		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/05/01 15:40		0.0"Hg
Containers Supplied: Other (A)				

Released By	Date	Received By	Date
Rae Hermann	3/27/01	Aisha Singh	ATL 3/29/01 0949

CUSTODY SEAL INTACT?
Y N NONE TEMP

SUBCONTRACT ORDER

Sequoia Analytical - Petaluma

P103589

0103571B

Analysis	SLD Date	Expires	Laboratory ID	Comments
Sample ID: P103589-05 (Air sampled on 03/23/01 08:10)				
Misc. Subcontract	04/09/01 15:00	09/19/01 08:10		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 08:10		I.P. 3.0"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-06 (Air sampled on 03/23/01 09:30)				
Misc. Subcontract	04/09/01 15:00	09/19/01 09:30		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 09:30		2.5"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-07 (Air sampled on 03/23/01 11:00)				
Misc. Subcontract	04/09/01 15:00	09/19/01 11:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 11:00		2.0"Hg
Containers Supplied: Other (A)				
Sample ID: P103589-08 (Air sampled on 03/23/01 12:00)				
Misc. Subcontract	04/09/01 15:00	09/19/01 12:00		ASTM D1946 for O2,CO2,Methane - Sub to Air Toxics
TO-14 SUB	04/09/01 15:00	04/06/01 12:00		1.0"Hg
Containers Supplied: Other (A)				

Standard TAT is requested unless an alternate TAT is circled -> 10 7 5 3 2 1

Released By	Date	Received By	Date
Paul Hellmann	3/27/01	Anita Singh ATL	3/28/01 1050
Released By	Date	Received By	Date

CUSTODY SEAL INTACT? Y N NONE TEMP

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

№ 021638

Contact Person: KATRIN SCHLIEWEN
Company: Conor Pacific
Address: 2580 Wyandotte St, Suite G City: Mountain View State: CA Zip: 94043
Phone: 650-386-3828 FAX: 650-386-3815
Collected By: Signature: Katrin Schliewen

Project info:
P.O. #: B
Project #: BJD 110
Project Name: B+J DropBox

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
P103589-1	B-01-8	3/22/01 0930	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-28	-3.5	
-2	B-01-7	3/22/01 1100	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-28	-3	
-3	B-01-6	3/22/01 1350	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-30	-5.5	
-4	B-01-5	3/22/01 1540	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-28	0	
-5	B-01-4	3/23/01 0810	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-30	-5	
-6	B-01-3	3/23/01 0930	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-30	-4	
-7	B-01-2	3/23/01 1100	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-30	-2.5	
-8	B-01-1	3/23/01 1200	TO-14, ASTM D-1946 (O_2, CO_2, methane)	-30	-1	

COOLER CUSTODY SEALS INTACT ☐
NOT INTACT ☐
COOLER TEMPERATURE 22 °C

Notes:

Relinquished By: (Signature)	Date/Time	Print Name	Received By: (Signature)	Date/Time
Katrin Schliewen	3-26-01	1000	KATRIN SCHLIEWEN	
Noel Lane	3/26/01		[illegible]	3/26/01 1000
[illegible]	3/26/01	405	Noel Lane	3/26/01

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
							Yes No None N/A	

rec'd Sarah Jay 3/26/01 @ 1435

Form 1293 rev. 06

Sequoia Analytical

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April 04 , 2001

Katrin Schliewen
Conor Pacific / EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
RE: B&J Drop Box / P103573

Enclosed are the results of analyses for samples received by the laboratory on 03/26/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

Sequoia Analytical

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-01-8	P103573-01	Soil	03/22/01 10:00	03/26/01 14:25
B-01-7	P103573-02	Soil	03/22/01 12:25	03/26/01 14:25
B-01-6	P103573-03	Soil	03/22/01 14:45	03/26/01 14:25
B-01-5	P103573-04	Soil	03/22/01 16:30	03/26/01 14:25
B-01-4	P103573-05	Soil	03/23/01 09:55	03/26/01 14:25
B-01-3	P103573-06	Soil	03/23/01 10:15	03/26/01 14:25
B-01-2	P103573-07	Soil	03/23/01 11:35	03/26/01 14:25
B-01-1	P103573-08	Soil	03/23/01 12:10	03/26/01 14:25

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sequoia Analytical

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-8 (P103573-01) Soil Sampled: 03/22/01 10:00 Received: 03/26/01 14:25									
Acetone	**75.0**	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-8 (P103573-01) Soil Sampled: 03/22/01 10:00 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.3 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-7 (P103573-02) Soil Sampled: 03/22/01 12:25 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-7 (P103573-02) Soil Sampled: 03/22/01 12:25 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.6 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.1 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-6 (P103573-03) Soil Sampled: 03/22/01 14:45 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-6 (P103573-03) Soil Sampled: 03/22/01 14:45 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.6 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-5 (P103573-04) Soil Sampled: 03/22/01 16:30 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-5 (P103573-04) Soil Sampled: 03/22/01 16:30 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*114 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-4 (P103573-05) Soil Sampled: 03/23/01 09:55 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-4 (P103573-05) Soil Sampled: 03/23/01 09:55 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-3 (P103573-06) Soil Sampled: 03/23/01 10:15 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-3 (P103573-06) Soil Sampled: 03/23/01 10:15 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*113 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-2 (P103573-07) Soil Sampled: 03/23/01 11:35 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-2 (P103573-07) Soil Sampled: 03/23/01 11:35 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*110 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-1 (P103573-08) Soil Sampled: 03/23/01 12:10 Received: 03/26/01 14:25									
Acetone	ND	50.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Benzene	ND	5.00	"	"	"	"	"	"	
Bromobenzene	ND	5.00	"	"	"	"	"	"	
Bromochloromethane	ND	5.00	"	"	"	"	"	"	
Bromodichloromethane	ND	5.00	"	"	"	"	"	"	
Bromoform	ND	5.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.00	"	"	"	"	"	"	
Chlorobenzene	ND	5.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	5.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.00	"	"	"	"	"	"	
Dibromomethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-01-1 (P103573-08) Soil Sampled: 03/23/01 12:10 Received: 03/26/01 14:25									
2-Hexanone	ND	10.0	ug/kg	1	1030651	03/28/01	03/28/01	EPA 8260B	
Isopropylbenzene	ND	5.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
n-Propylbenzene	ND	5.00	"	"	"	"	"	"	
Styrene	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.00	"	"	"	"	"	"	
Tetrachloroethene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.00	"	"	"	"	"	"	
Trichloroethene	ND	5.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.00	"	"	"	"	"	"	
Vinyl acetate	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.00	"	"	"	"	"	"	
m,p-Xylene	ND	5.00	"	"	"	"	"	"	
o-Xylene	ND	5.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*80-120*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*80-120*		"	"	"	"	
Surrogate: Toluene-d8		*109 %*	*81-117*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*74-121*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030651 - EPA 5030 soils MeOH										
Blank (1030651-BLK1)				Prepared & Analyzed: 03/28/01						
Acetone	ND	50.0	ug/kg							
Benzene	ND	5.00	"							
Bromobenzene	ND	5.00	"							
Bromochloromethane	ND	5.00	"							
Bromodichloromethane	ND	5.00	"							
Bromoform	ND	5.00	"							
Bromomethane	ND	5.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	5.00	"							
sec-Butylbenzene	ND	5.00	"							
tert-Butylbenzene	ND	5.00	"							
Carbon disulfide	ND	10.0	"							
Carbon tetrachloride	ND	5.00	"							
Chlorobenzene	ND	5.00	"							
Chloroethane	ND	5.00	"							
2-Chloroethylvinyl ether	ND	5.00	"							
Chloroform	ND	5.00	"							
Chloromethane	ND	5.00	"							
2-Chlorotoluene	ND	5.00	"							
4-Chlorotoluene	ND	5.00	"							
Dibromochloromethane	ND	5.00	"							
1,2-Dibromo-3-chloropropane	ND	5.00	"							
1,2-Dibromoethane (EDB)	ND	5.00	"							
Dibromomethane	ND	5.00	"							
1,2-Dichlorobenzene	ND	5.00	"							
1,3-Dichlorobenzene	ND	5.00	"							
1,4-Dichlorobenzene	ND	5.00	"							
Dichlorodifluoromethane	ND	5.00	"							
1,1-Dichloroethane	ND	5.00	"							
1,2-Dichloroethane	ND	5.00	"							
1,1-Dichloroethene	ND	5.00	"							
cis-1,2-Dichloroethene	ND	5.00	"							
trans-1,2-Dichloroethene	ND	5.00	"							
1,2-Dichloropropane	ND	5.00	"							
1,3-Dichloropropane	ND	5.00	"							

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030651 - EPA 5030 soils MeOH										
Blank (1030651-BLK1)				Prepared & Analyzed: 03/28/01						
2,2-Dichloropropane	ND	5.00	ug/kg							
1,1-Dichloropropene	ND	5.00	"							
cis-1,3-Dichloropropene	ND	5.00	"							
trans-1,3-Dichloropropene	ND	5.00	"							
Ethylbenzene	ND	5.00	"							
Freon 113	ND	5.00	"							
Hexachlorobutadiene	ND	5.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	5.00	"							
p-Isopropyltoluene	ND	5.00	"							
Methylene chloride	ND	5.00	"							
4-Methyl-2-pentanone	ND	10.0	"							
Methyl tert-butyl ether	ND	5.00	"							
Naphthalene	ND	5.00	"							
n-Propylbenzene	ND	5.00	"							
Styrene	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	5.00	"							
1,1,1,2-Tetrachloroethane	ND	5.00	"							
Tetrachloroethene	ND	5.00	"							
Toluene	ND	5.00	"							
1,2,3-Trichlorobenzene	ND	5.00	"							
1,2,4-Trichlorobenzene	ND	5.00	"							
1,1,2-Trichloroethane	ND	5.00	"							
1,1,1-Trichloroethane	ND	5.00	"							
Trichloroethene	ND	5.00	"							
Trichlorofluoromethane	ND	5.00	"							
1,2,3-Trichloropropane	ND	5.00	"							
1,3,5-Trimethylbenzene	ND	5.00	"							
1,2,4-Trimethylbenzene	ND	5.00	"							
Vinyl acetate	ND	10.0	"							
Vinyl chloride	ND	5.00	"							
m,p-Xylene	ND	5.00	"							
o-Xylene	ND	5.00	"							
Surrogate: Dibromofluoromethane	*46.6*		"	*45.0*		*104*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*43.0*		"	*45.0*		*95.6*	*80-120*			

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030651 - EPA 5030 soils MeOH										
Blank (1030651-BLK1)				Prepared & Analyzed: 03/28/01						
Surrogate: Toluene-d8	*48.2*		*ug/kg*	*45.0*		*107*	*81-117*			
Surrogate: 4-Bromofluorobenzene	*44.4*		*"*	*45.0*		*98.7*	*74-121*			
LCS (1030651-BS1)				Prepared & Analyzed: 03/28/01						
Benzene	55.5	5.00	ug/kg	50.0		111	75.3-123			
Chlorobenzene	56.3	5.00	"	50.0		113	79.2-123			
1,1-Dichloroethene	56.2	5.00	"	50.0		112	77.4-128			
Toluene	56.4	5.00	"	50.0		113	75.8-123			
Trichloroethene	55.1	5.00	"	50.0		110	71.9-119			
Surrogate: Dibromofluoromethane	*46.2*		*"*	*45.0*		*103*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*43.0*		*"*	*45.0*		*95.6*	*80-120*			
Surrogate: Toluene-d8	*47.8*		*"*	*45.0*		*106*	*81-117*			
Surrogate: 4-Bromofluorobenzene	*43.6*		*"*	*45.0*		*96.9*	*74-121*			
Matrix Spike (1030651-MS1)		**Source: P103573-03**		Prepared & Analyzed: 03/28/01						
Benzene	131	5.00	ug/kg	125	ND	105	75.3-123			
Chlorobenzene	132	5.00	"	125	ND	106	79.2-123			
1,1-Dichloroethene	136	5.00	"	125	ND	109	77.4-128			
Toluene	133	5.00	"	125	ND	106	75.8-123			
Trichloroethene	130	5.00	"	125	ND	104	71.9-119			
Surrogate: Dibromofluoromethane	*117*		*"*	*112*		*104*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*107*		*"*	*112*		*95.5*	*80-120*			
Surrogate: Toluene-d8	*122*		*"*	*112*		*109*	*81-117*			
Surrogate: 4-Bromofluorobenzene	*110*		*"*	*112*		*98.2*	*74-121*			
Matrix Spike Dup (1030651-MSD1)		**Source: P103573-03**		Prepared & Analyzed: 03/28/01						
Benzene	133	5.00	ug/kg	125	ND	106	75.3-123	1.52	35	
Chlorobenzene	131	5.00	"	125	ND	105	79.2-123	0.760	35	
1,1-Dichloroethene	134	5.00	"	125	ND	107	77.4-128	1.48	35	
Toluene	134	5.00	"	125	ND	107	75.8-123	0.749	35	
Trichloroethene	131	5.00	"	125	ND	105	71.9-119	0.766	35	
Surrogate: Dibromofluoromethane	*115*		*"*	*112*		*103*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*105*		*"*	*112*		*93.8*	*80-120*			
Surrogate: Toluene-d8	*121*		*"*	*112*		*108*	*81-117*			
Surrogate: 4-Bromofluorobenzene	*109*		*"*	*112*		*97.3*	*74-121*			

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	04/04/01 13:43

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Conor Pacific EFW

CHAIN OF CUSTODY

Page 1 of ___

Quotation No. _____

PROJECT NO.: BJD110

SITE NAME: B&J Drop Box

SAMPLER(S): Katrin Schliewen (printed) (signature)

CONTRACT LABORATORY: Petaluma

TURN-AROUND TIME: standard

ANALYSES: VOCs by 8260

EDD required? ☒ Yes ☐ No

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Type/Vol.	Filter	Preserv.	VOCs by 8260	Cont. Qty.	Remarks
B-01-8	P103573-1	3-22-01	1000	Soil	13.5-19	Liner	—	—	✓	1	P103573-1
B-01-7	-2	3-22-01	1225	Soil	30.5-31				✓	1	-2
B-01-6	-3	3-22-01	1445	Soil	24.5-25				✓	1	-3
B-01-5	-4	3-22-01	1630	Soil	24.5-25				✓	1	-4
B-01-4	-5	3-23-01	0955	Soil	21.5-22				✓	1	-5
B-01-3	-6	3-23-01	1015	Soil	20.5-21				✓	1	-6
B-01-2	-7	3-23-01	1135	Soil	18-18.5				✓	1	-7
B-01-1	-8	3-23-01	1210	Soil	6.5-7				✓	1	-8

COOLER CUSTODY SEALS INTACT ☐

NOT INTACT ☐

COOLER TEMPERATURE 6.0 °C

Relinquished by: (signature)	Received by: (signature)	Date/Time:
		3/26/01 1000
		3/26/01 1045
3/26/01		3/26/01 @1425

SEND RESULTS TO:
Attn: Katrin Schliewen
Conor Pacific/EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
Phone (650) 386-3828
Fax (650) 386-3815

Sequoia Analytical

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May 18 , 2001

Jennifer Panders
Conor Pacific / EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
RE: B&J Drop Box / P104583

Enclosed are the results of analyses for samples received by the laboratory on 04/27/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

Sequoia Analytical

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G-10R	P104583-01	Water	04/26/01 17:10	04/27/01 15:15
G-11R	P104583-02	Water	04/26/01 13:50	04/27/01 15:15

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Silver	ND	7.00	ug/l	1	1040696	05/02/01	05/03/01	EPA 6010B	
Aluminum	ND	200	"	"	"	"	"	"	
Arsenic	ND	5.00	"	"	1040692	05/01/01	05/02/01	EPA 7060A	
Barium	**99.2**	10.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Beryllium	ND	1.00	"	"	"	"	"	"	
Cadmium	ND	10.0	"	"	"	"	"	"	
Cobalt	ND	7.00	"	"	"	"	"	"	
Chromium	**14.0**	10.0	"	"	"	"	"	"	
Copper	ND	10.0	"	"	"	"	"	"	
Iron	ND	300	"	"	"	"	"	"	
Mercury	ND	0.200	"	"	1040694	04/30/01	05/02/01	EPA 7470A	
Manganese	ND	10.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Nickel	ND	30.0	"	"	"	"	"	"	
Lead	ND	5.00	"	"	1040692	05/01/01	05/03/01	EPA 7421	
Antimony	ND	60.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Selenium	ND	5.00	"	"	1040692	05/01/01	05/04/01	EPA 7740	
Tin	ND	250	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Thallium	ND	5.00	"	"	1040692	05/01/01	05/09/01	EPA 7841	
Vanadium	**11.7**	10.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Zinc	ND	31.3	"	"	1050101	05/04/01	05/08/01	"	
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Silver	ND	7.00	ug/l	1	1040696	05/02/01	05/03/01	EPA 6010B	
Aluminum	ND	200	"	"	"	"	"	"	
Arsenic	ND	5.00	"	"	1040692	05/01/01	05/02/01	EPA 7060A	
Barium	**75.8**	10.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Beryllium	ND	1.00	"	"	"	"	"	"	
Cadmium	ND	10.0	"	"	"	"	"	"	
Cobalt	ND	7.00	"	"	"	"	"	"	
Chromium	ND	10.0	"	"	"	"	"	"	
Copper	ND	10.0	"	"	"	"	"	"	
Iron	ND	300	"	"	"	"	"	"	
Mercury	ND	0.200	"	"	1040694	04/30/01	05/02/01	EPA 7470A	
Manganese	**97.4**	10.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Nickel	ND	30.0	"	"	"	"	"	"	
Lead	ND	5.00	"	"	1040692	05/01/01	05/03/01	EPA 7421	
Antimony	ND	60.0	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Selenium	ND	5.00	"	"	1040692	05/01/01	05/04/01	EPA 7740	
Tin	ND	250	"	"	1040696	05/02/01	05/03/01	EPA 6010B	
Thallium	ND	5.00	"	"	1040692	05/01/01	05/09/01	EPA 7841	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Vanadium	ND	10.0	ug/l	1	1040696	05/02/01	05/03/01	EPA 6010B	
Zinc	ND	25.0	"	"	1050101	05/04/01	05/08/01	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Chlorinated Herbicides by EPA Method 8151A

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
2,4-D	ND	0.500	ug/l	1	1050014	05/01/01	05/09/01	EPA 8151A	
2,4,5-T	ND	0.500	"	"	"	"	"	"	
2,4,5-TP (Silvex)	ND	0.500	"	"	"	"	"	"	
Dicamba	ND	0.500	"	"	"	"	"	"	
Dichloroprop	ND	0.500	"	"	"	"	"	"	
Dinoseb	ND	0.500	"	"	"	"	"	"	
MCPP	ND	500	"	"	"	"	"	"	
Surrogate: 2,4-DCAA		*87.0 %*	*53.1-122*		"	"	"	"	
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
2,4-D	ND	0.500	ug/l	1	1050014	05/01/01	05/09/01	EPA 8151A	
2,4,5-T	ND	0.500	"	"	"	"	"	"	
2,4,5-TP (Silvex)	ND	0.500	"	"	"	"	"	"	
Dicamba	ND	0.500	"	"	"	"	"	"	
Dichloroprop	ND	0.500	"	"	"	"	"	"	
Dinoseb	ND	0.500	"	"	"	"	"	"	
MCPP	ND	500	"	"	"	"	"	"	
Surrogate: 2,4-DCAA		*90.0 %*	*53.1-122*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Acetone	ND	10.0	ug/l	1	1050095	05/04/01	05/04/01	EPA 8260B	
Acetonitrile	ND	100	"	"	"	"	"	"	
Acrylonitrile	ND	20.0	"	"	"	"	"	"	
Allyl chloride	ND	10.0	"	"	"	"	"	"	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
Chloroprene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	

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Sequoia Analytical

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Iodomethane	ND	10.0	ug/l	1	1050095	05/04/01	05/04/01	EPA 8260B	
Isobutanol	ND	500	"	"	"	"	"	"	
Methacrylonitrile	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	1.00	"	"	"	"	"	"	
Methyl methacrylate	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
Propionitrile	ND	100	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
Vinyl acetate	ND	20.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*115 %*	*88-118*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*118 %*	*81-130*		"	"	"	"	
Surrogate: Toluene-d8		*115 %*	*84-115*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*111 %*	*78-124*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Acetone	ND	10.0	ug/l	1	1050095	05/04/01	05/04/01	EPA 8260B	
Acetonitrile	ND	100	"	"	"	"	"	"	
Acrylonitrile	ND	20.0	"	"	"	"	"	"	
Allyl chloride	ND	10.0	"	"	"	"	"	"	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
Chloroprene	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Iodomethane	ND	10.0	ug/l	1	1050095	05/04/01	05/04/01	EPA 8260B	
Isobutanol	ND	500	"	"	"	"	"	"	
Methacrylonitrile	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	1.00	"	"	"	"	"	"	
Methyl methacrylate	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
Propionitrile	ND	100	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
Vinyl acetate	ND	20.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*117 %*	*88-118*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*	*81-130*		"	"	"	"	
Surrogate: Toluene-d8		*115 %*	*84-115*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*78-124*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Endrin	ND	20.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Endrin aldehyde	ND	20.0	"	"	"	"	"	"	
Acenaphthene	ND	10.0	"	"	"	"	"	"	
Acenaphthylene	ND	10.0	"	"	"	"	"	"	
Acetophenone	ND	10.0	"	"	"	"	"	"	
2-Acetylaminofluorene	ND	20.0	"	"	"	"	"	"	
Aldrin	ND	10.0	"	"	"	"	"	"	
4-Aminobiphenyl	ND	20.0	"	"	"	"	"	"	
Anthracene	ND	10.0	"	"	"	"	"	"	
Aramite	ND	200	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10.0	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	10.0	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10.0	"	"	"	"	"	"	
Benzyl alcohol	ND	20.0	"	"	"	"	"	"	
alpha-BHC	ND	10.0	"	"	"	"	"	"	
beta-BHC	ND	20.0	"	"	"	"	"	"	
delta-BHC	ND	20.0	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10.0	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	10.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10.0	"	"	"	"	"	"	
Chlordane (tech)	ND	50.0	"	"	"	"	"	"	
4-Chloroaniline	ND	20.0	"	"	"	"	"	"	
Chlorobenzilate	ND	10.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	20.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10.0	"	"	"	"	"	"	
2-Chlorophenol	ND	10.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	10.0	"	"	"	"	"	"	
Chrysene	ND	10.0	"	"	"	"	"	"	
4,4'-DDD	ND	10.0	"	"	"	"	"	"	
4,4'-DDE	ND	10.0	"	"	"	"	"	"	
4,4'-DDT	ND	10.0	"	"	"	"	"	"	
Diallate (cis or trans)	ND	10.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10.0	"	"	"	"	"	"	
Dibenzofuran	ND	10.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10.0	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
1,2-Dichlorobenzene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
1,3-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	20.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10.0	"	"	"	"	"	"	
2,6-Dichlorophenol	ND	10.0	"	"	"	"	"	"	
Dieldrin	ND	10.0	"	"	"	"	"	"	
Diethyl phthalate	ND	10.0	"	"	"	"	"	"	
Dimethylaminoazobenzene	ND	10.0	"	"	"	"	"	"	
Dimethoate	ND	20.0	"	"	"	"	"	"	
7,12-Dimethylbenz (a) anthracene	ND	10.0	"	"	"	"	"	"	
3,3'-Dimethylbenzidine	ND	10.0	"	"	"	"	"	"	
a,a-Dimethylphenethylamine	ND	10.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10.0	"	"	"	"	"	"	
1,3-Dinitrobenzene	ND	20.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	50.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	50.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10.0	"	"	"	"	"	"	
Dinoseb	ND	20.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10.0	"	"	"	"	"	"	
Diphenylamine	ND	10.0	"	"	"	"	"	"	
Disulfoton	ND	10.0	"	"	"	"	"	"	
Endosulfan I	ND	20.0	"	"	"	"	"	"	
Endosulfan II	ND	20.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	10.0	"	"	"	"	"	"	
Ethyl methacrylate	ND	10.0	"	"	"	"	"	"	
Ethyl methanesulfonate	ND	20.0	"	"	"	"	"	"	
Famphur	ND	200	"	"	"	"	"	"	
Fluoranthene	ND	10.0	"	"	"	"	"	"	
Fluorene	ND	10.0	"	"	"	"	"	"	
Heptachlor	ND	10.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	10.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	10.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10.0	"	"	"	"	"	"	
Hexachloroethane	ND	10.0	"	"	"	"	"	"	
Hexachlorophene	ND	200	"	"	"	"	"	"	
Hexachloropropene	ND	10.0	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Indeno (1,2,3-cd) pyrene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Isodrin	ND	20.0	"	"	"	"	"	"	
Isophorone	ND	10.0	"	"	"	"	"	"	
Isosafrole	ND	10.0	"	"	"	"	"	"	
Kepone	ND	200	"	"	"	"	"	"	
Methapyrilene	ND	100	"	"	"	"	"	"	
Methoxychlor	ND	10.0	"	"	"	"	"	"	
3-Methylcholanthrene	ND	10.0	"	"	"	"	"	"	
Methyl methanesulfonate	ND	10.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10.0	"	"	"	"	"	"	
Methyl parathion	ND	10.0	"	"	"	"	"	"	
2-Methylphenol	ND	10.0	"	"	"	"	"	"	
3-Methylphenol	ND	10.0	"	"	"	"	"	"	
4-Methylphenol	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	10.0	"	"	"	"	"	"	
1,4-Naphthoquinone	ND	20.0	"	"	"	"	"	"	
1-Naphthylamine	ND	10.0	"	"	"	"	"	"	
2-Naphthylamine	ND	10.0	"	"	"	"	"	"	
2-Nitroaniline	ND	50.0	"	"	"	"	"	"	
3-Nitroaniline	ND	50.0	"	"	"	"	"	"	
4-Nitroaniline	ND	50.0	"	"	"	"	"	"	
Nitrobenzene	ND	10.0	"	"	"	"	"	"	
2-Nitrophenol	ND	10.0	"	"	"	"	"	"	
4-Nitrophenol	ND	50.0	"	"	"	"	"	"	
N-Nitrosodi-n-butylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodiethylamine	ND	20.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	20.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosomethylethylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosomorpholine	ND	10.0	"	"	"	"	"	"	
N-Nitrosopiperidine	ND	20.0	"	"	"	"	"	"	
N-Nitrosopyrrolidine	ND	40.0	"	"	"	"	"	"	
5-Nitro-o-toluidine	ND	10.0	"	"	"	"	"	"	
4-Nitroquinoline-n-oxide	ND	50.0	"	"	"	"	"	"	
Parathion	ND	10.0	"	"	"	"	"	"	
Pentachlorobenzene	ND	10.0	"	"	"	"	"	"	
Pentachloronitrobenzene	ND	20.0	"	"	"	"	"	"	
Pentachlorophenol	ND	50.0	"	"	"	"	"	"	
Phenacetin	ND	20.0	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Phenanthrene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Phenol	ND	10.0	"	"	"	"	"	"	
1,4-Phenylenediamine	ND	50.0	"	"	"	"	"	"	
Phorate	ND	10.0	"	"	"	"	"	"	
2-Picoline	ND	10.0	"	"	"	"	"	"	
PCB-1016	ND	200	"	"	"	"	"	"	
PCB-1221	ND	200	"	"	"	"	"	"	
PCB-1232	ND	200	"	"	"	"	"	"	
PCB-1242	ND	200	"	"	"	"	"	"	
PCB-1248	ND	200	"	"	"	"	"	"	
PCB-1254	ND	200	"	"	"	"	"	"	
PCB-1260	ND	200	"	"	"	"	"	"	
Pronamide	ND	10.0	"	"	"	"	"	"	
Pyrene	ND	10.0	"	"	"	"	"	"	
Safrole	ND	10.0	"	"	"	"	"	"	
Sulfotep	ND	50.0	"	"	"	"	"	"	
1,2,4,5-Tetrachlorobenzene	ND	10.0	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10.0	"	"	"	"	"	"	
Thionazin	ND	20.0	"	"	"	"	"	"	
o-Toluidine	ND	10.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10.0	"	"	"	"	"	"	
O,O,O-Triethyl phosphorothioate	ND	10.0	"	"	"	"	"	"	
1,3,5-Trinitrobenzene	ND	10.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*62.0 %*	*15-103*		"	"	"	"	
Surrogate: Phenol-d6		*74.7 %*	*18-115*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*78.7 %*	*39-103*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*92.8 %*	*40-124*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*82.7 %*	*11-142*		"	"	"	"	
Surrogate: Terphenyl-d14		*79.3 %*	*56-139*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Endrin	ND	20.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Endrin aldehyde	ND	20.0	"	"	"	"	"	"	
Acenaphthene	ND	10.0	"	"	"	"	"	"	
Acenaphthylene	ND	10.0	"	"	"	"	"	"	
Acetophenone	ND	10.0	"	"	"	"	"	"	
2-Acetylaminofluorene	ND	20.0	"	"	"	"	"	"	
Aldrin	ND	10.0	"	"	"	"	"	"	
4-Aminobiphenyl	ND	20.0	"	"	"	"	"	"	
Anthracene	ND	10.0	"	"	"	"	"	"	
Aramite	ND	200	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10.0	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	10.0	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10.0	"	"	"	"	"	"	
Benzyl alcohol	ND	20.0	"	"	"	"	"	"	
alpha-BHC	ND	10.0	"	"	"	"	"	"	
beta-BHC	ND	20.0	"	"	"	"	"	"	
delta-BHC	ND	20.0	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10.0	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	10.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10.0	"	"	"	"	"	"	
Chlordane (tech)	ND	50.0	"	"	"	"	"	"	
4-Chloroaniline	ND	20.0	"	"	"	"	"	"	
Chlorobenzilate	ND	10.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	20.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10.0	"	"	"	"	"	"	
2-Chlorophenol	ND	10.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	10.0	"	"	"	"	"	"	
Chrysene	ND	10.0	"	"	"	"	"	"	
4,4'-DDD	ND	10.0	"	"	"	"	"	"	
4,4'-DDE	ND	10.0	"	"	"	"	"	"	
4,4'-DDT	ND	10.0	"	"	"	"	"	"	
Diallate (cis or trans)	ND	10.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10.0	"	"	"	"	"	"	
Dibenzofuran	ND	10.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10.0	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
1,2-Dichlorobenzene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
1,3-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	20.0	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10.0	"	"	"	"	"	"	
2,6-Dichlorophenol	ND	10.0	"	"	"	"	"	"	
Dieldrin	ND	10.0	"	"	"	"	"	"	
Diethyl phthalate	ND	10.0	"	"	"	"	"	"	
Dimethylaminoazobenzene	ND	10.0	"	"	"	"	"	"	
Dimethoate	ND	20.0	"	"	"	"	"	"	
7,12-Dimethylbenz (a) anthracene	ND	10.0	"	"	"	"	"	"	
3,3'-Dimethylbenzidine	ND	10.0	"	"	"	"	"	"	
a,a-Dimethylphenethylamine	ND	10.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	10.0	"	"	"	"	"	"	
1,3-Dinitrobenzene	ND	20.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	50.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	50.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10.0	"	"	"	"	"	"	
Dinoseb	ND	20.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10.0	"	"	"	"	"	"	
Diphenylamine	ND	10.0	"	"	"	"	"	"	
Disulfoton	ND	10.0	"	"	"	"	"	"	
Endosulfan I	ND	20.0	"	"	"	"	"	"	
Endosulfan II	ND	20.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	10.0	"	"	"	"	"	"	
Ethyl methacrylate	ND	10.0	"	"	"	"	"	"	
Ethyl methanesulfonate	ND	20.0	"	"	"	"	"	"	
Famphur	ND	200	"	"	"	"	"	"	
Fluoranthene	ND	10.0	"	"	"	"	"	"	
Fluorene	ND	10.0	"	"	"	"	"	"	
Heptachlor	ND	10.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	10.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	10.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10.0	"	"	"	"	"	"	
Hexachloroethane	ND	10.0	"	"	"	"	"	"	
Hexachlorophene	ND	200	"	"	"	"	"	"	
Hexachloropropene	ND	10.0	"	"	"	"	"	"	

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Indeno (1,2,3-cd) pyrene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Isodrin	ND	20.0	"	"	"	"	"	"	
Isophorone	ND	10.0	"	"	"	"	"	"	
Isosafrole	ND	10.0	"	"	"	"	"	"	
Kepone	ND	200	"	"	"	"	"	"	
Methapyrilene	ND	100	"	"	"	"	"	"	
Methoxychlor	ND	10.0	"	"	"	"	"	"	
3-Methylcholanthrene	ND	10.0	"	"	"	"	"	"	
Methyl methanesulfonate	ND	10.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10.0	"	"	"	"	"	"	
Methyl parathion	ND	10.0	"	"	"	"	"	"	
2-Methylphenol	ND	10.0	"	"	"	"	"	"	
3-Methylphenol	ND	10.0	"	"	"	"	"	"	
4-Methylphenol	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	10.0	"	"	"	"	"	"	
1,4-Naphthoquinone	ND	20.0	"	"	"	"	"	"	
1-Naphthylamine	ND	10.0	"	"	"	"	"	"	
2-Naphthylamine	ND	10.0	"	"	"	"	"	"	
2-Nitroaniline	ND	50.0	"	"	"	"	"	"	
3-Nitroaniline	ND	50.0	"	"	"	"	"	"	
4-Nitroaniline	ND	50.0	"	"	"	"	"	"	
Nitrobenzene	ND	10.0	"	"	"	"	"	"	
2-Nitrophenol	ND	10.0	"	"	"	"	"	"	
4-Nitrophenol	ND	50.0	"	"	"	"	"	"	
N-Nitrosodi-n-butylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodiethylamine	ND	20.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	20.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosomethylethylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosomorpholine	ND	10.0	"	"	"	"	"	"	
N-Nitrosopiperidine	ND	20.0	"	"	"	"	"	"	
N-Nitrosopyrrolidine	ND	40.0	"	"	"	"	"	"	
5-Nitro-o-toluidine	ND	10.0	"	"	"	"	"	"	
4-Nitroquinoline-n-oxide	ND	50.0	"	"	"	"	"	"	
Parathion	ND	10.0	"	"	"	"	"	"	
Pentachlorobenzene	ND	10.0	"	"	"	"	"	"	
Pentachloronitrobenzene	ND	20.0	"	"	"	"	"	"	
Pentachlorophenol	ND	50.0	"	"	"	"	"	"	
Phenacetin	ND	20.0	"	"	"	"	"	"	

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Phenanthrene	ND	10.0	ug/l	1	1040658	04/30/01	05/10/01	EPA 8270C	
Phenol	ND	10.0	"	"	"	"	"	"	
1,4-Phenylenediamine	ND	50.0	"	"	"	"	"	"	
Phorate	ND	10.0	"	"	"	"	"	"	
2-Picoline	ND	10.0	"	"	"	"	"	"	
PCB-1016	ND	200	"	"	"	"	"	"	
PCB-1221	ND	200	"	"	"	"	"	"	
PCB-1232	ND	200	"	"	"	"	"	"	
PCB-1242	ND	200	"	"	"	"	"	"	
PCB-1248	ND	200	"	"	"	"	"	"	
PCB-1254	ND	200	"	"	"	"	"	"	
PCB-1260	ND	200	"	"	"	"	"	"	
Pronamide	ND	10.0	"	"	"	"	"	"	
Pyrene	ND	10.0	"	"	"	"	"	"	
Safrole	ND	10.0	"	"	"	"	"	"	
Sulfotep	ND	50.0	"	"	"	"	"	"	
1,2,4,5-Tetrachlorobenzene	ND	10.0	"	"	"	"	"	"	
2,3,4,6-Tetrachlorophenol	ND	10.0	"	"	"	"	"	"	
Thionazin	ND	20.0	"	"	"	"	"	"	
o-Toluidine	ND	10.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10.0	"	"	"	"	"	"	
O,O,O-Triethyl phosphorothioate	ND	10.0	"	"	"	"	"	"	
1,3,5-Trinitrobenzene	ND	10.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*45.3 %*		*15-103*	"	"	"	"	
Surrogate: Phenol-d6		*57.4 %*		*18-115*	"	"	"	"	
Surrogate: Nitrobenzene-d5		*61.5 %*		*39-103*	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*66.6 %*		*40-124*	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*53.7 %*		*11-142*	"	"	"	"	
Surrogate: Terphenyl-d14		*80.7 %*		*56-139*	"	"	"	"	

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Total Alkalinity	**180**	20.0	mg/l	1	1050108	05/04/01	05/04/01	EPA 310.1	
Carbonate Alkalinity	**60.0**	20.0	"	"	"	"	"	"	
Bicarbonate Alkalinity	**120**	20.0	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	20.0	"	"	"	"	"	"	
Cyanide (total)	ND	0.0100	"	"	1050042	05/02/01	05/02/01	EPA 335.2	
Nitrate/Nitrite as N	**1.03**	0.0500	"	"	1050022	05/01/01	05/02/01	EPA 353.2	
Sulfide	ND	0.100	"	"	1050076	05/03/01	05/03/01	EPA 376.2	
Total Organic Carbon	**1.02**	1.00	"	"	1050221	05/09/01	05/09/01	EPA 415.1	
G-10R (P104583-01RE1) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Total Dissolved Solids	**390**	10.0	mg/l	1	1050360	05/15/01	05/15/01	EPA 160.1	A-01
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Total Alkalinity	**326**	20.0	mg/l	1	1050108	05/04/01	05/04/01	EPA 310.1	
Carbonate Alkalinity	ND	20.0	"	"	"	"	"	"	
Bicarbonate Alkalinity	**322**	20.0	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	20.0	"	"	"	"	"	"	
Cyanide (total)	ND	0.0100	"	"	1050042	05/02/01	05/02/01	EPA 335.2	
Nitrate/Nitrite as N	**1.04**	0.0500	"	"	1050022	05/01/01	05/02/01	EPA 353.2	
Sulfide	ND	0.100	"	"	1050076	05/03/01	05/03/01	EPA 376.2	
Total Organic Carbon	ND	1.00	"	"	1050221	05/09/01	05/09/01	EPA 415.1	
G-11R (P104583-02RE1) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Total Dissolved Solids	**546**	10.0	mg/l	1	1050360	05/15/01	05/15/01	EPA 160.1	A-01

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Anions by EPA Method 300.0

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Chloride	**137**	5.00	mg/l	5	1050129	05/07/01	05/07/01	EPA 300.0	
Sulfate as SO4	**39.8**	1.00	"	1	"	"	05/07/01	"	
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Chloride	**123**	5.00	mg/l	5	1050129	05/07/01	05/07/01	EPA 300.0	
Sulfate as SO4	**36.3**	1.00	"	1	"	"	05/07/01	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Organophosphorus Pesticides by EPA Method 8141A

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water Sampled: 04/26/01 17:10 Received: 04/27/01 15:15									
Dimethoate	ND	5.00	ug/l	1	1E02027	05/02/01	05/03/01	EPA 8141A	
Thionazin	ND	1.00	"	"	"	"	"	"	
Diazinon	ND	0.500	"	"	"	"	"	"	
Disulfoton	ND	0.500	"	"	"	"	"	"	
Fenthion	ND	0.500	"	"	"	"	"	"	
Merphos	ND	0.500	"	"	"	"	"	"	
Mevinphos	ND	0.500	"	"	"	"	"	"	
Parathion-ethyl	ND	0.500	"	"	"	"	"	"	
Parathion-methyl	ND	0.500	"	"	"	"	"	"	
Phorate	ND	0.500	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*93.2 %*	*50-150*		"	"	"	"	
G-11R (P104583-02) Water Sampled: 04/26/01 13:50 Received: 04/27/01 15:15									
Dimethoate	ND	5.00	ug/l	1	1E02027	05/02/01	05/03/01	EPA 8141A	
Thionazin	ND	1.00	"	"	"	"	"	"	
Diazinon	ND	0.500	"	"	"	"	"	"	
Disulfoton	ND	0.500	"	"	"	"	"	"	
Fenthion	ND	0.500	"	"	"	"	"	"	
Merphos	ND	0.500	"	"	"	"	"	"	
Mevinphos	ND	0.500	"	"	"	"	"	"	
Parathion-ethyl	ND	0.500	"	"	"	"	"	"	
Parathion-methyl	ND	0.500	"	"	"	"	"	"	
Phorate	ND	0.500	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96.4 %*	*50-150*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-10R (P104583-01) Water	**Sampled: 04/26/01 17:10**	**Received: 04/27/01 15:15**							
Hexavalent Chromium	**0.0137**	0.00500	mg/l	1	1050023	04/27/01	04/27/01	EPA 7196A	
G-11R (P104583-02) Water	**Sampled: 04/26/01 13:50**	**Received: 04/27/01 15:15**							
Hexavalent Chromium	ND	0.00500	mg/l	1	1050023	04/27/01	04/27/01	EPA 7196A	

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040692 - EPA 3020A										
Blank (1040692-BLK1)				Prepared: 05/01/01	Analyzed: 05/02/01					
Arsenic	ND	5.00	ug/l							
Lead	ND	5.00	"							
Selenium	ND	5.00	"							
Thallium	ND	5.00	"							
LCS (1040692-BS1)				Prepared: 05/01/01	Analyzed: 05/03/01					
Arsenic	45.0	5.00	ug/l	40.0		113	80-120			
Lead	42.7	5.00	"	40.0		107	80-120			
Selenium	48.1	5.00	"	40.0		120	80-120			
Thallium	18.5	5.00	"	20.0		92.5	80-120			
Matrix Spike (1040692-MS1)		Source: P104589-01		Prepared: 05/01/01	Analyzed: 05/02/01					
Arsenic	45.4	5.00	ug/l	40.0	ND	102	75-125			
Lead	44.3	5.00	"	40.0	ND	111	75-125			
Selenium	43.0	5.00	"	40.0	ND	108	75-125			
Thallium	18.3	5.00	"	20.0	ND	91.5	75-125			
Matrix Spike Dup (1040692-MSD1)		Source: P104589-01		Prepared: 05/01/01	Analyzed: 05/02/01					
Arsenic	42.0	5.00	ug/l	40.0	ND	93.1	75-125	7.78	20	
Lead	41.9	5.00	"	40.0	ND	105	75-125	5.57	20	
Selenium	40.4	5.00	"	40.0	ND	101	75-125	6.24	20	
Thallium	19.0	5.00	"	20.0	ND	95.0	75-125	3.75	20	
Batch 1040694 - EPA 7470A										
Blank (1040694-BLK1)				Prepared: 04/30/01	Analyzed: 05/02/01					
Mercury	ND	0.200	ug/l							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040694 - EPA 7470A										
LCS (1040694-BS1)				Prepared: 04/30/01	Analyzed: 05/02/01					
Mercury	1.53	0.200	ug/l	1.60		95.6	80-120			
Matrix Spike (1040694-MS1)		Source: P104525-01		Prepared: 04/30/01	Analyzed: 05/02/01					
Mercury	1.57	0.200	ug/l	1.60	ND	97.3	75-125			
Matrix Spike Dup (1040694-MSD1)		Source: P104525-01		Prepared: 04/30/01	Analyzed: 05/02/01					
Mercury	1.57	0.200	ug/l	1.60	ND	97.3	75-125	0	20	
Batch 1040696 - EPA 3005A										
Blank (1040696-BLK1)				Prepared: 05/02/01	Analyzed: 05/03/01					
Aluminum	ND	200	ug/l							
Antimony	ND	60.0	"							
Barium	ND	10.0	"							
Beryllium	ND	1.00	"							
Cadmium	ND	10.0	"							
Chromium	ND	10.0	"							
Cobalt	ND	7.00	"							
Copper	ND	10.0	"							
Iron	ND	300	"							
Manganese	ND	10.0	"							
Nickel	ND	30.0	"							
Silver	ND	7.00	"							
Tin	ND	250	"							
Vanadium	ND	10.0	"							
LCS (1040696-BS1)				Prepared: 05/02/01	Analyzed: 05/03/01					
Aluminum	5020	200	ug/l	5000		100	80-120			
Antimony	511	60.0	"	500		102	80-120			
Barium	520	10.0	"	500		104	80-120			
Beryllium	54.0	1.00	"	50.0		108	80-120			
Cadmium	52.6	10.0	"	50.0		105	80-120			
Chromium	522	10.0	"	500		104	80-120			
Cobalt	511	7.00	"	500		102	80-120			
Copper	526	10.0	"	500		105	80-120			
Iron	5450	300	"	5000		109	80-120			
Manganese	533	10.0	"	500		107	80-120			
Nickel	534	30.0	"	500		107	80-120			

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040696 - EPA 3005A										
LCS (1040696-BS1)				Prepared: 05/02/01	Analyzed: 05/03/01					
Silver	49.6	7.00	ug/l	50.0		99.2	80-120			
Tin	2650	250	"	2500		106	80-120			
Vanadium	526	10.0	"	500		105	80-120			
Matrix Spike (1040696-MS1)		Source: P104583-01		Prepared: 05/02/01	Analyzed: 05/03/01					
Aluminum	5220	200	ug/l	5000	ND	104	75-125			
Antimony	537	60.0	"	500	ND	107	75-125			
Barium	632	10.0	"	500	99.2	107	75-125			
Beryllium	55.8	1.00	"	50.0	ND	112	75-125			
Cadmium	53.8	10.0	"	50.0	ND	108	75-125			
Chromium	548	10.0	"	500	14.0	107	75-125			
Cobalt	518	7.00	"	500	ND	104	75-125			
Copper	535	10.0	"	500	ND	107	75-125			
Iron	5560	300	"	5000	ND	111	75-125			
Manganese	546	10.0	"	500	ND	109	75-125			
Nickel	527	30.0	"	500	ND	105	75-125			
Silver	51.9	7.00	"	50.0	ND	104	75-125			
Tin	2650	250	"	2500	ND	106	75-125			
Vanadium	553	10.0	"	500	11.7	108	75-125			
Matrix Spike Dup (1040696-MSD1)		Source: P104583-01		Prepared: 05/02/01	Analyzed: 05/03/01					
Aluminum	4510	200	ug/l	5000	ND	90.2	75-125	14.6	20	
Antimony	467	60.0	"	500	ND	93.4	75-125	13.9	20	
Barium	549	10.0	"	500	99.2	90.0	75-125	14.1	20	
Beryllium	48.3	1.00	"	50.0	ND	96.6	75-125	14.4	20	
Cadmium	43.5	10.0	"	50.0	ND	87.0	75-125	21.2	20	zQR02
Chromium	478	10.0	"	500	14.0	92.8	75-125	13.6	20	
Cobalt	449	7.00	"	500	ND	89.8	75-125	14.3	20	
Copper	462	10.0	"	500	ND	92.4	75-125	14.6	20	
Iron	4820	300	"	5000	ND	96.4	75-125	14.3	20	
Manganese	473	10.0	"	500	ND	94.2	75-125	14.3	20	
Nickel	444	30.0	"	500	ND	88.8	75-125	17.1	20	
Silver	44.5	7.00	"	50.0	ND	89.0	75-125	15.4	20	
Tin	2370	250	"	2500	ND	94.8	75-125	11.2	20	
Vanadium	479	10.0	"	500	11.7	93.5	75-125	14.3	20	

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Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Dissolved Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050101 - EPA 3005A										
Blank (1050101-BLK1)				Prepared: 05/04/01	Analyzed: 05/08/01					
Zinc	ND	25.0	ug/l							
LCS (1050101-BS1)				Prepared: 05/04/01	Analyzed: 05/08/01					
Zinc	560	25.0	ug/l	500		112	80-120			
Matrix Spike (1050101-MS1)		Source: P104583-02		Prepared: 05/04/01	Analyzed: 05/08/01					
Zinc	547	25.0	ug/l	500	ND	109	75-125			
Matrix Spike Dup (1050101-MSD1)		Source: P104583-02		Prepared: 05/04/01	Analyzed: 05/08/01					
Zinc	570	25.0	ug/l	500	ND	114	75-125	4.12	20	

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Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Chlorinated Herbicides by EPA Method 8151A - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050014 - EPA 3510B										
Blank (1050014-BLK1)				Prepared: 05/01/01 Analyzed: 05/08/01						
2,4-D	ND	0.500	ug/l							
2,4,5-T	ND	0.500	"							
2,4,5-TP (Silvex)	ND	0.500	"							
Dicamba	ND	0.500	"							
Dichloroprop	ND	0.500	"							
Dinoseb	ND	0.500	"							
MCPP	ND	500	"							
Surrogate: 2,4-DCAA	*2.78*		"	*4.00*		*69.5*	*53.1-122*			
LCS (1050014-BS1)				Prepared: 05/01/01 Analyzed: 05/08/01						
2,4-D	3.87	0.500	ug/l	4.00		96.7	30-150			
2,4,5-T	3.79	0.500	"	4.00		94.7	30-150			
2,4,5-TP (Silvex)	3.71	0.500	"	4.00		92.8	30-150			
Dicamba	3.72	0.500	"	4.00		93.0	30-150			
Dichloroprop	4.15	0.500	"	4.00		104	30-150			
Dinoseb	1.81	0.500	"	4.00		45.2	30-150			
Surrogate: 2,4-DCAA	*3.55*		"	*4.00*		*88.7*	*53.1-122*			
LCS Dup (1050014-BSD1)				Prepared: 05/01/01 Analyzed: 05/08/01						
2,4-D	3.95	0.500	ug/l	4.00		98.8	30-150	2.05	20	
2,4,5-T	3.82	0.500	"	4.00		95.5	30-150	0.788	20	
2,4,5-TP (Silvex)	3.82	0.500	"	4.00		95.5	30-150	2.92	20	
Dicamba	3.70	0.500	"	4.00		92.5	30-150	0.539	20	
Dichloroprop	4.12	0.500	"	4.00		103	30-150	0.726	20	
Dinoseb	1.81	0.500	"	4.00		45.2	30-150	0	20	
Surrogate: 2,4-DCAA	*3.52*		"	*4.00*		*88.0*	*53.1-122*			

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050095 - EPA 5030 waters										
Blank (1050095-BLK1)				Prepared & Analyzed: 05/04/01						
Acetone	ND	10.0	ug/l							
Acetonitrile	ND	100	"							
Acrylonitrile	ND	20.0	"							
Allyl chloride	ND	10.0	"							
Benzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	1.00	"							
2-Butanone	ND	10.0	"							
Carbon disulfide	ND	10.0	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	1.00	"							
Chloroprene	ND	5.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	1.00	"							
1,2-Dibromoethane (EDB)	ND	1.00	"							
Dibromomethane	ND	1.00	"							
trans-1,4-Dichloro-2-butene	ND	20.0	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	1.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							
1,3-Dichloropropane	ND	1.00	"							
2,2-Dichloropropane	ND	1.00	"							
1,1-Dichloropropene	ND	1.00	"							
cis-1,3-Dichloropropene	ND	1.00	"							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050095 - EPA 5030 waters										
Blank (1050095-BLK1)				Prepared & Analyzed: 05/04/01						
trans-1,3-Dichloropropene	ND	1.00	ug/l							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	1.00	"							
2-Hexanone	ND	10.0	"							
Iodomethane	ND	10.0	"							
Isobutanol	ND	500	"							
Methacrylonitrile	ND	10.0	"							
Methylene chloride	ND	1.00	"							
Methyl methacrylate	ND	5.00	"							
4-Methyl-2-pentanone	ND	10.0	"							
Naphthalene	ND	1.00	"							
Propionitrile	ND	100	"							
Styrene	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
Vinyl acetate	ND	20.0	"							
Vinyl chloride	ND	1.00	"							
Xylenes (total)	ND	1.00	"							
Surrogate: Dibromofluoromethane	*5.53*		"	*5.00*		*111*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.63*		"	*5.00*		*113*	*81-130*			
Surrogate: Toluene-d8	*5.70*		"	*5.00*		*114*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.53*		"	*5.00*		*111*	*78-124*			

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050095 - EPA 5030 waters										
LCS (1050095-BS1)				Prepared & Analyzed: 05/04/01						
Benzene	4.20	1.00	ug/l	5.00		84.0	80-119			
Chlorobenzene	4.78	1.00	"	5.00		95.6	86-117			
1,1-Dichloroethene	4.22	1.00	"	5.00		84.4	74-114			
Toluene	4.52	1.00	"	5.00		90.4	86-115			
Trichloroethene	4.44	1.00	"	5.00		88.8	84-120			
Surrogate: Dibromofluoromethane	*5.60*		"	*5.00*		*112*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.38*		"	*5.00*		*108*	*81-130*			
Surrogate: Toluene-d8	*5.59*		"	*5.00*		*112*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.20*		"	*5.00*		*104*	*78-124*			
Matrix Spike (1050095-MS1)		**Source: P104584-02**		Prepared & Analyzed: 05/04/01						
Benzene	4.26	1.00	ug/l	5.00	ND	85.2	80-119			
Chlorobenzene	4.74	1.00	"	5.00	ND	94.8	86-117			
1,1-Dichloroethene	4.32	1.00	"	5.00	ND	86.4	74-114			
Toluene	4.70	1.00	"	5.00	ND	94.0	86-115			
Trichloroethene	4.30	1.00	"	5.00	ND	86.0	84-120			
Surrogate: Dibromofluoromethane	*5.67*		"	*5.00*		*113*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.85*		"	*5.00*		*117*	*81-130*			
Surrogate: Toluene-d8	*5.72*		"	*5.00*		*114*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.45*		"	*5.00*		*109*	*78-124*			
Matrix Spike Dup (1050095-MSD1)		**Source: P104584-02**		Prepared & Analyzed: 05/04/01						
Benzene	4.36	1.00	ug/l	5.00	ND	87.2	80-119	2.32	20	
Chlorobenzene	4.73	1.00	"	5.00	ND	94.6	86-117	0.211	20	
1,1-Dichloroethene	4.31	1.00	"	5.00	ND	86.2	74-114	0.232	20	
Toluene	4.64	1.00	"	5.00	ND	92.8	86-115	1.28	20	
Trichloroethene	4.40	1.00	"	5.00	ND	88.0	84-120	2.30	20	
Surrogate: Dibromofluoromethane	*5.76*		"	*5.00*		*115*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.94*		"	*5.00*		*119*	*81-130*			
Surrogate: Toluene-d8	*5.78*		"	*5.00*		*116*	*84-115*			*S-LIM*
Surrogate: 4-Bromofluorobenzene	*5.40*		"	*5.00*		*108*	*78-124*			

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
Blank (1040658-BLK1)				Prepared: 04/30/01 Analyzed: 05/10/01						
Endrin	ND	20.0	ug/l							
Endrin aldehyde	ND	20.0	"							
Acenaphthene	ND	10.0	"							
Acenaphthylene	ND	10.0	"							
Acetophenone	ND	10.0	"							
2-Acetylaminofluorene	ND	20.0	"							
Aldrin	ND	10.0	"							
4-Aminobiphenyl	ND	20.0	"							
Anthracene	ND	10.0	"							
Aramite	ND	200	"							
Benzo (a) anthracene	ND	10.0	"							
Benzo (b+k) fluoranthene (total)	ND	10.0	"							
Benzo (g,h,i) perylene	ND	10.0	"							
Benzo (a) pyrene	ND	10.0	"							
Benzyl alcohol	ND	20.0	"							
alpha-BHC	ND	10.0	"							
beta-BHC	ND	20.0	"							
delta-BHC	ND	20.0	"							
gamma-BHC (Lindane)	ND	20.0	"							
Bis(2-chloroethoxy)methane	ND	10.0	"							
Bis(2-chloroethyl)ether	ND	10.0	"							
Bis(2-chloroisopropyl)ether	ND	10.0	"							
Bis(2-ethylhexyl)phthalate	ND	10.0	"							
4-Bromophenyl phenyl ether	ND	10.0	"							
Butyl benzyl phthalate	ND	10.0	"							
Chlordane (tech)	ND	50.0	"							
4-Chloroaniline	ND	20.0	"							
Chlorobenzilate	ND	10.0	"							
4-Chloro-3-methylphenol	ND	20.0	"							
2-Chloronaphthalene	ND	10.0	"							
2-Chlorophenol	ND	10.0	"							
4-Chlorophenyl phenyl ether	ND	10.0	"							
Chrysene	ND	10.0	"							
4,4'-DDD	ND	10.0	"							
4,4'-DDE	ND	10.0	"							
4,4'-DDT	ND	10.0	"							

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Jennifer Panders	**Reported:** 05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
Blank (1040658-BLK1)				Prepared: 04/30/01 Analyzed: 05/10/01						
Diallate (cis or trans)	ND	10.0	ug/l							
Dibenz (a,h) anthracene	ND	10.0	"							
Dibenzofuran	ND	10.0	"							
Di-n-butyl phthalate	ND	10.0	"							
1,2-Dichlorobenzene	ND	10.0	"							
1,3-Dichlorobenzene	ND	10.0	"							
1,4-Dichlorobenzene	ND	10.0	"							
3,3'-Dichlorobenzidine	ND	20.0	"							
2,4-Dichlorophenol	ND	10.0	"							
2,6-Dichlorophenol	ND	10.0	"							
Dieldrin	ND	10.0	"							
Diethyl phthalate	ND	10.0	"							
Dimethylaminoazobenzene	ND	10.0	"							
Dimethoate	ND	20.0	"							
7,12-Dimethylbenz (a) anthracene	ND	10.0	"							
3,3'-Dimethylbenzidine	ND	10.0	"							
a,a-Dimethylphenethylamine	ND	10.0	"							
2,4-Dimethylphenol	ND	10.0	"							
Dimethyl phthalate	ND	10.0	"							
1,3-Dinitrobenzene	ND	20.0	"							
4,6-Dinitro-2-methylphenol	ND	50.0	"							
2,4-Dinitrophenol	ND	50.0	"							
2,4-Dinitrotoluene	ND	10.0	"							
2,6-Dinitrotoluene	ND	10.0	"							
Dinoseb	ND	20.0	"							
Di-n-octyl phthalate	ND	10.0	"							
Diphenylamine	ND	10.0	"							
Disulfoton	ND	10.0	"							
Endosulfan I	ND	20.0	"							
Endosulfan II	ND	20.0	"							
Endosulfan sulfate	ND	10.0	"							
Ethyl methacrylate	ND	10.0	"							
Ethyl methanesulfonate	ND	20.0	"							
Famphur	ND	200	"							
Fluoranthene	ND	10.0	"							
Fluorene	ND	10.0	"							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
Blank (1040658-BLK1)				Prepared: 04/30/01 Analyzed: 05/10/01						
Heptachlor	ND	10.0	ug/l							
Heptachlor epoxide	ND	10.0	"							
Hexachlorobenzene	ND	10.0	"							
Hexachlorobutadiene	ND	10.0	"							
Hexachlorocyclopentadiene	ND	10.0	"							
Hexachloroethane	ND	10.0	"							
Hexachlorophene	ND	200	"							
Hexachloropropene	ND	10.0	"							
Indeno (1,2,3-cd) pyrene	ND	10.0	"							
Isodrin	ND	20.0	"							
Isophorone	ND	10.0	"							
Isosafrole	ND	10.0	"							
Kepone	ND	200	"							
Methapyrilene	ND	100	"							
Methoxychlor	ND	10.0	"							
3-Methylcholanthrene	ND	10.0	"							
Methyl methanesulfonate	ND	10.0	"							
2-Methylnaphthalene	ND	10.0	"							
Methyl parathion	ND	10.0	"							
2-Methylphenol	ND	10.0	"							
3-Methylphenol	ND	10.0	"							
4-Methylphenol	ND	10.0	"							
Naphthalene	ND	10.0	"							
1,4-Naphthoquinone	ND	20.0	"							
1-Naphthylamine	ND	10.0	"							
2-Naphthylamine	ND	10.0	"							
2-Nitroaniline	ND	50.0	"							
3-Nitroaniline	ND	50.0	"							
4-Nitroaniline	ND	50.0	"							
Nitrobenzene	ND	10.0	"							
2-Nitrophenol	ND	10.0	"							
4-Nitrophenol	ND	50.0	"							
N-Nitrosodi-n-butylamine	ND	10.0	"							
N-Nitrosodiethylamine	ND	20.0	"							
N-Nitrosodimethylamine	ND	20.0	"							
N-Nitrosodiphenylamine	ND	10.0	"							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
Blank (1040658-BLK1)				Prepared: 04/30/01 Analyzed: 05/10/01						
N-Nitrosodi-n-propylamine	ND	10.0	ug/l							
N-Nitrosomethylethylamine	ND	10.0	"							
N-Nitrosomorpholine	ND	10.0	"							
N-Nitrosopiperidine	ND	20.0	"							
N-Nitrosopyrrolidine	ND	40.0	"							
5-Nitro-o-toluidine	ND	10.0	"							
4-Nitroquinoline-n-oxide	ND	50.0	"							
Parathion	ND	10.0	"							
Pentachlorobenzene	ND	10.0	"							
Pentachloronitrobenzene	ND	20.0	"							
Pentachlorophenol	ND	50.0	"							
Phenacetin	ND	20.0	"							
Phenanthrene	ND	10.0	"							
Phenol	ND	10.0	"							
1,4-Phenylenediamine	ND	50.0	"							
Phorate	ND	10.0	"							
2-Picoline	ND	10.0	"							
PCB-1016	ND	200	"							
PCB-1221	ND	200	"							
PCB-1232	ND	200	"							
PCB-1242	ND	200	"							
PCB-1248	ND	200	"							
PCB-1254	ND	200	"							
PCB-1260	ND	200	"							
Pronamide	ND	10.0	"							
Pyrene	ND	10.0	"							
Safrole	ND	10.0	"							
Sulfotep	ND	50.0	"							
1,2,4,5-Tetrachlorobenzene	ND	10.0	"							
2,3,4,6-Tetrachlorophenol	ND	10.0	"							
Thionazin	ND	20.0	"							
o-Toluidine	ND	10.0	"							
Toxaphene	ND	200	"							
1,2,4-Trichlorobenzene	ND	10.0	"							
2,4,5-Trichlorophenol	ND	10.0	"							
2,4,6-Trichlorophenol	ND	10.0	"							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
Blank (1040658-BLK1)				Prepared: 04/30/01 Analyzed: 05/10/01						
O,O,O-Triethyl phosphorothioate	ND	10.0	ug/l							
1,3,5-Trinitrobenzene	ND	10.0	"							
Surrogate: 2-Fluorophenol	*89.4*		"	*150*		*59.6*	*15-103*			
Surrogate: Phenol-d6	*108*		"	*150*		*72.0*	*18-115*			
Surrogate: Nitrobenzene-d5	*64.9*		"	*100*		*64.9*	*39-103*			
Surrogate: 2-Fluorobiphenyl	*75.3*		"	*100*		*75.3*	*40-124*			
Surrogate: 2,4,6-Tribromophenol	*90.9*		"	*150*		*60.6*	*11-142*			
Surrogate: Terphenyl-d14	*82.9*		"	*100*		*82.9*	*56-139*			
LCS (1040658-BS1)				Prepared: 04/30/01 Analyzed: 05/07/01						
Acenaphthene	84.7	10.0	ug/l	100		84.7	57.7-120			
4-Chloro-3-methylphenol	124	20.0	"	150		82.7	50.6-116			
2-Chlorophenol	142	10.0	"	150		94.7	28-111			
1,4-Dichlorobenzene	54.3	10.0	"	100		54.3	28.8-108			
2,4-Dinitrotoluene	99.2	10.0	"	100		99.2	60.2-114			
4-Nitrophenol	159	50.0	"	150		106	24.6-148			
N-Nitrosodi-n-propylamine	67.7	10.0	"	100		67.7	29-119			
Pentachlorophenol	172	50.0	"	150		115	39.9-131			
Phenol	130	10.0	"	150		86.7	21.8-117			
Pyrene	93.6	10.0	"	100		93.6	52.3-127			
1,2,4-Trichlorobenzene	67.9	10.0	"	100		67.9	23.6-131			
Surrogate: 2-Fluorophenol	*114*		"	*150*		*76.0*	*15-103*			
Surrogate: Phenol-d6	*115*		"	*150*		*76.7*	*18-115*			
Surrogate: Nitrobenzene-d5	*86.6*		"	*100*		*86.6*	*39-103*			
Surrogate: 2-Fluorobiphenyl	*84.3*		"	*100*		*84.3*	*40-124*			
Surrogate: 2,4,6-Tribromophenol	*140*		"	*150*		*93.3*	*11-142*			
Surrogate: Terphenyl-d14	*89.5*		"	*100*		*89.5*	*56-139*			

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Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040658 - EPA 3520B LiqLiquid										
LCS Dup (1040658-BSD1)				Prepared: 04/30/01 Analyzed: 05/07/01						
Acenaphthene	85.7	10.0	ug/l	100		85.7	57.7-120	1.17	26.7	
4-Chloro-3-methylphenol	123	20.0	"	150		82.0	50.6-116	0.810	30.3	
2-Chlorophenol	141	10.0	"	150		94.0	28-111	0.707	38.8	
1,4-Dichlorobenzene	56.8	10.0	"	100		56.8	28.8-108	4.50	40.7	
2,4-Dinitrotoluene	100	10.0	"	100		100	60.2-114	0.803	22.1	
4-Nitrophenol	162	50.0	"	150		108	24.6-148	1.87	43.7	
N-Nitrosodi-n-propylamine	67.6	10.0	"	100		67.6	29-119	0.148	43.9	
Pentachlorophenol	180	50.0	"	150		120	39.9-131	4.55	32.9	
Phenol	131	10.0	"	150		87.3	21.8-117	0.766	32.6	
Pyrene	95.5	10.0	"	100		95.5	52.3-127	2.01	24.6	
1,2,4-Trichlorobenzene	71.6	10.0	"	100		71.6	23.6-131	5.30	48	
Surrogate: 2-Fluorophenol	*115*		*"*	*150*		*76.7*	*15-103*			
Surrogate: Phenol-d6	*115*		*"*	*150*		*76.7*	*18-115*			
Surrogate: Nitrobenzene-d5	*87.7*		*"*	*100*		*87.7*	*39-103*			
Surrogate: 2-Fluorobiphenyl	*84.0*		*"*	*100*		*84.0*	*40-124*			
Surrogate: 2,4,6-Tribromophenol	*142*		*"*	*150*		*94.7*	*11-142*			
Surrogate: Terphenyl-d14	*91.9*		*"*	*100*		*91.9*	*56-139*			

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050022 - General Preparation										
Blank (1050022-BLK1)				Prepared: 05/01/01 Analyzed: 05/02/01						
Nitrate/Nitrite as N	ND	0.0500	mg/l							
Blank (1050022-BLK2)				Prepared & Analyzed: 05/03/01						
Nitrate/Nitrite as N	ND	0.0500	mg/l							
LCS (1050022-BS1)				Prepared: 05/01/01 Analyzed: 05/02/01						
Nitrate/Nitrite as N	3.88	0.0500	mg/l	4.00		97.0	80-120			
LCS (1050022-BS2)				Prepared & Analyzed: 05/03/01						
Nitrate/Nitrite as N	3.99	0.0500	mg/l	4.00		99.8	80-120			
Matrix Spike (1050022-MS1)		Source: P104606-01		Prepared & Analyzed: 05/03/01						
Nitrate/Nitrite as N	3.96	0.0500	mg/l	4.00	ND	99.0	75-125			
Matrix Spike Dup (1050022-MSD1)		Source: P104606-01		Prepared & Analyzed: 05/03/01						
Nitrate/Nitrite as N	3.99	0.0500	mg/l	4.00	ND	99.8	75-125	0.755	20	
Batch 1050042 - General Preparation										
Blank (1050042-BLK1)				Prepared & Analyzed: 05/02/01						
Cyanide (total)	ND	0.0100	mg/l							
LCS (1050042-BS1)				Prepared & Analyzed: 05/02/01						
Cyanide (total)	0.193	0.0100	mg/l	0.200		96.5	80-120			
Matrix Spike (1050042-MS1)		Source: P104578-01		Prepared & Analyzed: 05/02/01						
Cyanide (total)	0.182	0.0100	mg/l	0.200	ND	89.8	75-125			

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050042 - General Preparation										
Matrix Spike Dup (1050042-MSD1)		**Source: P104578-01**		Prepared & Analyzed: 05/02/01						
Cyanide (total)	0.139	0.0100	mg/l	0.200	ND	68.3	75-125	26.8	20	QR-07,zQM07
Batch 1050076 - General Preparation										
Blank (1050076-BLK1)				Prepared & Analyzed: 05/03/01						
Sulfide	ND	0.100	mg/l							
LCS (1050076-BS1)				Prepared & Analyzed: 05/03/01						
Sulfide	1.10	0.100	mg/l	0.989		111	80-120			
Batch 1050108 - General Preparation										
Blank (1050108-BLK1)				Prepared & Analyzed: 05/04/01						
Total Alkalinity	ND	20.0	mg/l							
Carbonate Alkalinity	ND	20.0	"							
Bicarbonate Alkalinity	ND	20.0	"							
Hydroxide Alkalinity	ND	20.0	"							
LCS (1050108-BS1)				Prepared & Analyzed: 05/04/01						
Total Alkalinity	248	20.0	mg/l	263		94.3	80-120			
Duplicate (1050108-DUP1)		**Source: P104578-01**		Prepared & Analyzed: 05/04/01						
Total Alkalinity	260	20.0	mg/l		258			0.772	20	
Batch 1050221 - General Preparation										
Blank (1050221-BLK1)				Prepared & Analyzed: 05/09/01						
Total Organic Carbon	ND	1.00	mg/l							

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2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050221 - General Preparation										
LCS (1050221-BS1)				Prepared & Analyzed: 05/09/01						
Total Organic Carbon	42.7	2.00	mg/l	40.0		107	80-120			
Matrix Spike (1050221-MS1)		Source: P104575-01		Prepared & Analyzed: 05/09/01						
Total Organic Carbon	41.7	4.00	mg/l	40.0	ND	104	75-125			
Matrix Spike Dup (1050221-MSD1)		Source: P104575-01		Prepared & Analyzed: 05/09/01						
Total Organic Carbon	38.9	4.00	mg/l	40.0	ND	97.3	75-125	6.95	20	
Batch 1050360 - General Preparation										
Blank (1050360-BLK1)				Prepared & Analyzed: 05/15/01						
Total Dissolved Solids	ND	10.0	mg/l							
Duplicate (1050360-DUP1)		Source: P104583-01RE1		Prepared & Analyzed: 05/15/01						
Total Dissolved Solids	396	10.0	mg/l		390			1.53	20	

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Jennifer Panders	**Reported:** 05/18/01 16:26

Anions by EPA Method 300.0 - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050129 - General Preparation										
Blank (1050129-BLK1)				Prepared & Analyzed: 05/07/01						
Chloride	ND	1.00	mg/l							
Sulfate as SO4	ND	1.00	"							
LCS (1050129-BS1)				Prepared & Analyzed: 05/07/01						
Chloride	10.2	1.00	mg/l	10.0		102	90-110			
Sulfate as SO4	10.7	1.00	"	10.0		107	90-110			
Matrix Spike (1050129-MS1)		Source: P104578-01		Prepared & Analyzed: 05/07/01						
Chloride	48.9	5.00	mg/l	25.0	25.8	92.4	80-120			
Sulfate as SO4	41.8	5.00	"	25.0	15.2	106	80-120			
Matrix Spike Dup (1050129-MSD1)		Source: P104578-01		Prepared & Analyzed: 05/07/01						
Chloride	47.4	5.00	mg/l	25.0	25.8	86.4	80-120	3.12	20	
Sulfate as SO4	38.5	5.00	"	25.0	15.2	93.2	80-120	8.22	20	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E02027 - EPA 3510B										
Blank (1E02027-BLK1)				Prepared: 05/02/01 Analyzed: 05/03/01						
Dimethoate	ND	5.00	ug/l							
Thionazin	ND	1.00	"							
Azinphos methyl	ND	1.00	"							
Bolstar	ND	0.500	"							
Chlorpyrifos	ND	0.500	"							
Coumaphos	ND	1.00	"							
Demeton	ND	0.500	"							
Diazinon	ND	0.500	"							
Dichlorvos	ND	0.500	"							
Disulfoton	ND	0.500	"							
Ethion	ND	0.500	"							
Ethoprop	ND	0.500	"							
EPN	ND	0.500	"							
Fensulfothion	ND	0.500	"							
Fenthion	ND	0.500	"							
Malathion	ND	0.500	"							
Merphos	ND	0.500	"							
Mevinphos	ND	0.500	"							
Monocrotophos	ND	1.00	"							
Naled	ND	1.00	"							
Parathion-ethyl	ND	0.500	"							
Parathion-methyl	ND	0.500	"							
Phorate	ND	0.500	"							
Ronnel	ND	0.500	"							
Stirophos	ND	1.00	"							
Sulfotep	ND	0.500	"							
Tokuthion (Prothiofos)	ND	0.500	"							
Trichloronate	ND	0.500	"							
Surrogate: Triphenyl phosphate	*1.68*		"	*2.50*		*67.2*	*50-150*			

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E02027 - EPA 3510B										
LCS (1E02027-BS1)				Prepared: 05/02/01		Analyzed: 05/03/01				
Diazinon	1.29	0.500	ug/l	2.50		51.6	50-150			
Disulfoton	2.03	0.500	"	2.50		81.2	50-150			
Parathion-methyl	2.26	0.500	"	2.50		90.4	50-150			
Surrogate: Triphenyl phosphate	*1.73*		"	*2.50*		*69.2*	*50-150*			
Matrix Spike (1E02027-MS1)		**Source: P104583-01**		Prepared: 05/02/01		Analyzed: 05/03/01				
Diazinon	2.09	0.500	ug/l	2.50	ND	83.6	50-150			
Disulfoton	2.26	0.500	"	2.50	ND	90.4	50-150			
Parathion-methyl	2.37	0.500	"	2.50	ND	94.8	50-150			
Surrogate: Triphenyl phosphate	*2.31*		"	*2.50*		*92.4*	*50-150*			
Matrix Spike Dup (1E02027-MSD1)		**Source: P104583-01**		Prepared: 05/02/01		Analyzed: 05/03/01				
Diazinon	2.01	0.500	ug/l	2.50	ND	80.4	50-150	3.90	50	
Disulfoton	2.24	0.500	"	2.50	ND	89.6	50-150	0.889	50	
Parathion-methyl	2.36	0.500	"	2.50	ND	94.4	50-150	0.423	50	
Surrogate: Triphenyl phosphate	*2.37*		"	*2.50*		*94.8*	*50-150*			

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050023 - General Preparation										
Blank (1050023-BLK1)				Prepared & Analyzed: 04/27/01						
Hexavalent Chromium	ND	0.00500	mg/l							
LCS (1050023-BS1)				Prepared & Analyzed: 04/27/01						
Hexavalent Chromium	0.0478	0.00500	mg/l	0.0500		95.6	85-115			
Matrix Spike (1050023-MS1)		Source: P104583-02		Prepared & Analyzed: 04/27/01						
Hexavalent Chromium	0.0467	0.00500	mg/l	0.0500	ND	93.4	85-115			
Matrix Spike Dup (1050023-MSD1)		Source: P104583-02		Prepared & Analyzed: 04/27/01						
Hexavalent Chromium	0.0478	0.00500	mg/l	0.0500	ND	95.6	85-115	2.33	20	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	**Reported:**
Mountain View CA, 94043	Project Manager: Jennifer Panders	05/18/01 16:26

Notes and Definitions

A-01	This sample was re-analyzed beyond the EPA recommended holding time.
QR-07	The RPD was outside QC acceptance limits. The results may still be useful for their intended purpose.
S-LIM	The surrogate recovery was outside of acceptable QC limits. The result may still be useful for its intended purpose.
zQM07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
zQR02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Conor Pacific EFW

CHAIN OF CUSTODY

Page 1 of 1

Quotation No.

PROJECT NO.: BJD110

SITE NAME: BJ Drop Box

SAMPLER(S): R Paul (printed) / M Mann (signature)

CONTRACT LABORATORY: Sequoia-Petaluma

TURN-AROUND TIME: Standard

EDD required? ☑ Yes ☐ No

ANALYSES

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Info: Type/Vol.	Filter	Preserv.	EPA 8260 VOA App II	TDS, Cl, SO_4, Alk. (Carb, Bicarb, Total)	NO_3+NO_2-N	TOC	EPA 8270, App II	EPA 8141	EPA 8151	Sulfides	Cyanide	metals (see list)	Cr VI	Cont. Qty.	Remarks
G-10R		4/26/01	1710	water	–	P/O 45830	B	HCl	1	1	1	2	1	2	1	1	1	1		15	metals: Sb, Al, Ba, Be,
G-11R		↓	1350	↓			23		1	1	1	2	1	2	1	1	1	1		15	Cd, Cr (tot), Co, Cu, Fe, Pb, Mn, Ag, Sn, V, Zn, As, Hg, Ni, Se, Tl
						Type/Vol.			VOA 40	PE 500	PE 125	VOA 40	PGS 1000	PGS 1000	SVGS 1000	PE 500	PE 250	PE 500	PE 250		
						Filter			N	N	N	N	N	N	N	N	N	Y	Y		
						Preserv.			HCl	none	H_2SO_4	H_2SO_4	none	none	none	ZnAc NaOH	NaOH	HNO_3	none		

COOLER CUSTODY SEALS INTACT ☐

NOT INTACT ☐

COOLER TEMPERATURE 2-8 °C

Relinquished by: (signature)	Received by: (signature)	Date/Time:
M Mann	[signature]	4/26/01 6:30 PM
Monica Gregden	Rolf [signature]	4/27/01
[signature] 4/27/01	[signature]	4/27/01 1515

SEND RESULTS TO:
Attn: Jennifer Pardes
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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD106	**Reported:**
Mountain View CA, 94043	Project Manager: Kris Johnson	05/04/01 16:21

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.1 (P104453-24) Water Sampled: 04/19/01 11:42 Received: 04/20/01 16:00									
Acetone	ND	10.0	ug/l	1	1040517	04/24/01	04/24/01	EPA 8260B	
Acrylonitrile	ND	20.0	"	"	"	"	"	"	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	**1.28**	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD106	Reported:
Mountain View CA, 94043	Project Manager: Kris Johnson	05/04/01 16:21

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.1 (P104453-24) Water Sampled: 04/19/01 11:42 Received: 04/20/01 16:00									
Ethylbenzene	ND	1.00	ug/l	1	1040517	04/24/01	04/24/01	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Iodomethane	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl acetate	ND	20.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*	*88-118*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*81-130*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*84-115*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*78-124*		"	"	"	"	

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD106 Project Manager: Kris Johnson	**Reported:** 05/04/01 16:21

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.2 (P104453-25) Water Sampled: 04/19/01 12:21 Received: 04/20/01 16:00									
Acetone	ND	10.0	ug/l	1	1040517	04/24/01	04/24/01	EPA 8260B	
Acrylonitrile	ND	20.0	"	"	"	"	"	"	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD106	Reported:
Mountain View CA, 94043	Project Manager: Kris Johnson	05/04/01 16:21

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.2 (P104453-25) Water Sampled: 04/19/01 12:21 Received: 04/20/01 16:00									
Ethylbenzene	ND	1.00	ug/l	1	1040517	04/24/01	04/24/01	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Iodomethane	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	**1.23**	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl acetate	ND	20.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*99.0 %*	*88-118*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.4 %*	*81-130*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84-115*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*78-124*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD106	**Reported:**
Mountain View CA, 94043	Project Manager: Kris Johnson	05/04/01 16:21

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.1 (P104453-24) Water Sampled: 04/19/01 11:42 Received: 04/20/01 16:00									
Nitrate/Nitrite as N	ND	0.0500	mg/l	1	1040527	04/23/01	04/23/01	EPA 353.2	
Total Dissolved Solids	**2460**	10.0	"	"	1040565	04/24/01	04/24/01	EPA 160.1	
PL-11.2 (P104453-25) Water Sampled: 04/19/01 12:21 Received: 04/20/01 16:00									
Nitrate/Nitrite as N	**0.0834**	0.0500	mg/l	1	1040527	04/23/01	04/23/01	EPA 353.2	
Total Dissolved Solids	**1400**	10.0	"	"	1040576	04/24/01	04/24/01	EPA 160.1	
SW-2 (P104453-26) Water Sampled: 04/19/01 13:08 Received: 04/20/01 16:00									
Nitrate/Nitrite as N	ND	0.0500	mg/l	1	1040527	04/23/01	04/23/01	EPA 353.2	
Total Dissolved Solids	**1370**	10.0	"	"	1040576	04/24/01	04/24/01	EPA 160.1	
Total Suspended Solids	**30.0**	10.0	"	"	1040577	04/24/01	04/24/01	EPA 160.2	
SW-3 (P104453-27) Water Sampled: 04/19/01 13:25 Received: 04/20/01 16:00									
Nitrate/Nitrite as N	**0.751**	0.0500	mg/l	1	1040527	04/23/01	04/23/01	EPA 353.2	
Total Dissolved Solids	**1370**	10.0	"	"	1040576	04/24/01	04/24/01	EPA 160.1	
Total Suspended Solids	**26.0**	10.0	"	"	1040577	04/24/01	04/24/01	EPA 160.2	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD106	Reported:
Mountain View CA, 94043	Project Manager: Kris Johnson	05/04/01 16:21

Anions by EPA Method 300.0

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PL-11.1 (P104453-24) Water Sampled: 04/19/01 11:42 Received: 04/20/01 16:00									
Chloride	**458**	50.0	mg/l	50	1040645	04/27/01	04/27/01	EPA 300.0	
Sulfate as SO4	**363**	10.0	"	10	1050008	05/01/01	05/01/01	"	
PL-11.2 (P104453-25) Water Sampled: 04/19/01 12:21 Received: 04/20/01 16:00									
Chloride	**189**	10.0	mg/l	10	1040645	04/27/01	04/27/01	EPA 300.0	
Sulfate as SO4	**258**	10.0	"	"	1050008	05/01/01	05/01/01	"	
SW-2 (P104453-26) Water Sampled: 04/19/01 13:08 Received: 04/20/01 16:00									
Chloride	**337**	10.0	mg/l	10	1040645	04/27/01	04/27/01	EPA 300.0	
Sulfate as SO4	**135**	10.0	"	"	1050008	05/01/01	05/01/01	"	
SW-3 (P104453-27) Water Sampled: 04/19/01 13:25 Received: 04/20/01 16:00									
Chloride	**522**	50.0	mg/l	50	1040645	04/27/01	04/27/01	EPA 300.0	
Sulfate as SO4	**247**	10.0	"	10	1050008	05/01/01	05/01/01	"	

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The laboratory Quality Control and Quality Assurance information for the PL-11.1 and PL-11.2 samples collected on April 19, 2001 will be included in the Second Quarter 2001 Monitoring Report.

Conor Pacific EFW

CHAIN OF CUSTODY

Page 1 of 1

Quotation No.

PROJECT NO.: BJD106

SITE NAME: BJ Drop Box

SAMPLER(S): N Marks (printed) (signature)

CONTRACT LABORATORY: Sequoia-Petaluma

TURN-AROUND TIME: Standard

EDD required? ☑ Yes ☐ No

ANALYSES: TDS, Cl, SO4 | NO3+NO2-N | EPA 8260, 1,1,1,2 App II | EPA 8270, App II | TSS, TDS, Cl, SO4

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Info	TDS, Cl, SO4	NO3+NO2-N	EPA 8260, App II	EPA 8270, App II	TSS, TDS, Cl, SO4						Cont. Qty.	Remarks
						Type/Vol.	PE 250/500	PE 125	VOA 40	glass 1000	PE 500							
						Filter	N	N	N	N	N							
						Preserv.	none	H_2SO_4	HCl	none	none							
S-1		4/19/01	1003	water			1	1		P104453-14							2	
S-2.1			1114				1	1				-15					2	
S-2.2A			1031				1	1				-16					2	
S-2.2B			1059				1	1				-17					2	
S-9.1A			815				1	1				-18					2	
S-9.1B			835				1	1				-19					2	
S-11.1			1120				1	1				-20					2	
S-11.2			1240				1	1				-21					2	
VZ-2.1			1349						3			-22					3	
PL-9.1A			910				1	1	3			-23					5	
PL-11.1			1142				1	1	3			-24					5	Note: PL-2.2A,
PL-11.2			1221				1	1	3			-25					5	PL-2.2B, PL-9.1B
SW-1		no sample																
SW-2		4/19/01	1300					1		2	1	-26					4	
SW-3			1325					1		2	1	-27					4	

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐

COOLER TEMPERATURE 3.0 °C

Relinquished by: (signature)	Received by: (signature)	Date/Time:
[signature]	Monica Gibben	4/19/01 1550
Monica Gibben	[signature]	4/20/01 1455
	[signature]	4-20-01 1509

SEND RESULTS TO:
Attn: Jennifer Pardes
Conor Pacific/EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
Phone (650) 386-3828
Fax (650) 386-3815

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May 25 , 2001

Katrin Schliewen
Conor Pacific / EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
RE: B&J Drop Box / P105295

Enclosed are the results of analyses for samples received by the laboratory on 05/16/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angela Cari for

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Katrin Schliewen	Reported: 05/25/01 17:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Borrow	P105295-01	Water	05/14/01 14:05	05/16/01 14:25

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	05/25/01 17:11

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Borrow (P105295-01) Water Sampled: 05/14/01 14:05 Received: 05/16/01 14:25									
Acetone	ND	10.0	ug/l	1	1050526	05/22/01	05/22/01	EPA 8260B	
Acrylonitrile	ND	20.0	"	"	"	"	"	"	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Katrin Schliewen	Reported: 05/25/01 17:11

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Borrow (P105295-01) Water Sampled: 05/14/01 14:05 Received: 05/16/01 14:25									
Ethylbenzene	ND	1.00	ug/l	1	1050526	05/22/01	05/22/01	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Iodomethane	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
Methylene chloride	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl acetate	ND	20.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*88-118*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*81-130*		"	"	"	"	
Surrogate: Toluene-d8		*110 %*	*84-115*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*78-124*		"	"	"	"	

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Conor Pacific / EFW	Project: B&J Drop Box	
2580 Wyandotte St., Suite G	Project Number: BJD110	Reported:
Mountain View CA, 94043	Project Manager: Katrin Schliewen	05/25/01 17:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050526 - EPA 5030 waters										
Blank (1050526-BLK1)				Prepared & Analyzed: 05/22/01						
Acetone	ND	10.0	ug/l							
Acrylonitrile	ND	20.0	"							
Benzene	ND	1.00	"							
Bromobenzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	1.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	1.00	"							
sec-Butylbenzene	ND	1.00	"							
tert-Butylbenzene	ND	1.00	"							
Carbon disulfide	ND	10.0	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	1.00	"							
2-Chlorotoluene	ND	1.00	"							
4-Chlorotoluene	ND	1.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	1.00	"							
1,2-Dibromoethane (EDB)	ND	1.00	"							
Dibromomethane	ND	1.00	"							
trans-1,4-Dichloro-2-butene	ND	20.0	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	1.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							

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Conor Pacific / BFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Katrin Schliewen	Reported: 05/25/01 17:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050526 - EPA 5030 waters										
Blank (1050526-BLK1)				Prepared & Analyzed: 05/22/01						
1,3-Dichloropropane	ND	1.00	ug/l							
2,2-Dichloropropane	ND	1.00	"							
1,1-Dichloropropene	ND	1.00	"							
cis-1,3-Dichloropropene	ND	1.00	"							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	1.00	"							
2-Hexanone	ND	10.0	"							
Iodomethane	ND	10.0	"							
Isopropylbenzene	ND	1.00	"							
p-Isopropyltoluene	ND	1.00	"							
Methylene chloride	ND	1.00	"							
4-Methyl-2-pentanone	ND	10.0	"							
Methyl tert-butyl ether	ND	1.00	"							
Naphthalene	ND	1.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
Vinyl acetate	ND	20.0	"							
Vinyl chloride	ND	1.00	"							
Xylenes (total)	ND	1.00	"							
Surrogate: Dibromofluoromethane	*5.44*		"	*5.00*		*109*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.09*		"	*5.00*		*102*	*81-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Katrin Schliewen	Reported: 05/25/01 17:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050526 - EPA 5030 waters										
Blank (1050526-BLK1)				Prepared & Analyzed: 05/22/01						
Surrogate: Toluene-d8	*5.38*		*ug/l*	*5.00*		*108*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.40*		*"*	*5.00*		*108*	*78-124*			
LCS (1050526-BS1)				Prepared & Analyzed: 05/22/01						
Benzene	5.26	1.00	ug/l	5.00		105	80-119			
Chlorobenzene	5.36	1.00	"	5.00		107	86-117			
1,1-Dichloroethene	5.26	1.00	"	5.00		105	74-114			
Toluene	5.52	1.00	"	5.00		110	86-115			
Trichloroethene	5.29	1.00	"	5.00		106	84-120			
Surrogate: Dibromofluoromethane	*5.54*		*"*	*5.00*		*111*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.20*		*"*	*5.00*		*104*	*81-130*			
Surrogate: Toluene-d8	*5.42*		*"*	*5.00*		*108*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.38*		*"*	*5.00*		*108*	*78-124*			
Matrix Spike (1050526-MS1)		**Source: P105199-05**		Prepared & Analyzed: 05/22/01						
Benzene	1130	100	ug/l	500	598	106	80-119			
Chlorobenzene	526	100	"	500	ND	105	86-117			
1,1-Dichloroethene	532	100	"	500	ND	106	74-114			
Toluene	1370	100	"	500	845	105	86-115			
Trichloroethene	519	100	"	500	ND	104	84-120			
Surrogate: Dibromofluoromethane	*5.59*		*"*	*5.00*		*112*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.43*		*"*	*5.00*		*109*	*81-130*			
Surrogate: Toluene-d8	*5.39*		*"*	*5.00*		*108*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.25*		*"*	*5.00*		*105*	*78-124*			
Matrix Spike Dup (1050526-MSD1)		**Source: P105199-05**		Prepared & Analyzed: 05/22/01						
Benzene	1110	100	ug/l	500	598	102	80-119	1.79	20	
Chlorobenzene	507	100	"	500	ND	101	86-117	3.68	20	
1,1-Dichloroethene	531	100	"	500	ND	106	74-114	0.188	20	
Toluene	1380	100	"	500	845	107	86-115	0.727	20	
Trichloroethene	509	100	"	500	ND	102	84-120	1.95	20	
Surrogate: Dibromofluoromethane	*5.72*		*"*	*5.00*		*114*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*5.58*		*"*	*5.00*		*112*	*81-130*			
Surrogate: Toluene-d8	*5.45*		*"*	*5.00*		*109*	*84-115*			
Surrogate: 4-Bromofluorobenzene	*5.24*		*"*	*5.00*		*105*	*78-124*			

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Conor Pacific / EFW 2580 Wyandotte St., Suite G Mountain View CA, 94043	Project: B&J Drop Box Project Number: BJD110 Project Manager: Katrin Schliewen	Reported: 05/25/01 17:11

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Conor Pacific EFW

CHAIN OF CUSTODY

Quotation No. 1

PROJECT NO.: BJD110

SITE NAME: BJ DropBOX

SAMPLER(S): N Marks (printed) (signature)

CONTRACT LABORATORY: Sequoia-Petaluma

TURN-AROUND TIME: 7 day RUSH

ANALYSES: EPA 8260, 4 ppt

EDD required? ☑ Yes ☐ No

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Info: Type/Vol.	Filter	Preserv.	EPA 8260, 4 ppt	Cont. Qty.	Remarks
Borrow		5/14/01	1405	Water	/	VOA 40	N	HCl	3	3	P105295-01

COOLER CUSTODY SEALS INTACT ☐

NOT INTACT ☐

COOLER TEMPERATURE 6 °C

Relinquished by: (signature)	Received by: (signature)	Date/Time:
[signature]	[signature]	5-15-01 1400
Relinquished by: (signature)	Received by: (signature)	Date/Time:
	Mollelane	5/16/01 0835
Relinquished by: (signature)	Received by: (signature)	Date/Time:
Mollelane 5/16/01	[signature]	5/16/01 @ 1425

SEND RESULTS TO:
Attn: Katrin Schlieven
Conor Pacific/EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
Phone (650) 386-3828
Fax (650) 386-3815

MAY.25.2001 5:16PM SEQUOIA ANALYTICAL NO.588 P.10/10

APPENDIX C

APPENDIX C – SOIL AND SOIL GAS SAMPLING

Pre-Field Activities

As proposed in the revised EMP, to better delineate the nature and extent of a possible VOC release from pan lysimeters PL-11.1 and PL-11.2, soil and soil gas samples were collected near and downgradient of disposal modules DM-11.1 and DM-11.2.[1] A soil boring permit was obtained from the Solano County Department of Environmental Management (SCDEM), a copy of which is included in this appendix.

Soil Borings and Soil Sampling

Soil and soil gas samples were collected at eight locations during March 22-23, 2001. Soil samples were collected using an Enviro-Core drill rig and direct push technology. The Enviro-Core system pushes and vibrates a 2.4-inch diameter steel drive casing and an inner 1.8-inch diameter steel sample barrel simultaneously into the ground. A butyrate liner and core catcher are placed inside the sample barrel to collect the soil cores. After driving the rods into the ground for three feet, the sample barrel is retrieved and the butyrate liner containing the soil core is removed. This is repeated until the desired sampling depth is reached. The clear liner can be cut lengthwise to log the soil, or a section can be cut out and the ends properly capped, to collect a soil sample for laboratory analysis. Soils were logged according to the Unified Soil Classification System (USCS) under the direction of a California State Registered Geologist. Soil logs for each boring are included. Soil samples approximately 6-inches in length were collected from depths ranging from approximately 7 feet below ground surface (bgs) to 31 feet bgs depending on the depth to the water table. Soil samples were collected from approximately 5 feet above the estimated water table elevation, anticipated prior to drilling based on January 2001 water levels. Groundwater was not encountered in any of the soil borings. Soil samples were analyzed for VOCs according to EPA method 8260.

Soil Gas Sampling

Soil gas samples were collected from each of the eight soil boring locations described above. Each soil gas sample was collected from depths of 10 to 11 feet bgs, except for the shallowest soil boring where the soil gas sample was collected at 5 to 5.5 feet bgs. The presence of methane gas was screened for in and around each soil boring during drilling using a portable organic vapor analyzer (OVA) capable of detecting lack of oxygen and the presence of combustibles such as methane. No methane gas was detected during field screening of the soil borings and soil cores. Gas samples were collected in 6-liter stainless-steel Summa canisters provided by Air Toxics Ltd. Once the appropriate depth was reached in each soil boring, a temporary sampling probe with a covered stainless steel screen was driven 12 inches into the bottom of the soil boring, and pulled back 6 inches to expose the probe screen. A new section of polyethylene tubing (PE) was attached to the top of the sampling probe, the Summa canister was attached to the tubing, and a soil gas sample was collected through the PE tubing under the vacuum pressure inside the Summa canister. Soil gas samples were analyzed by Air Toxics Ltd. for VOCs according to EPA method TO-14 and for oxygen, carbon dioxide, and methane content according to EPA method 1946.

---

[1] Conor Pacific, December 14, 2000.

Once the soil and soil gas samples were collected, each soil boring was filled with cement grout poured directly into the boring, which remained open. The grout consistency was inspected by the SCDEM and each boring was filled to grade.

Pan Lysimeter Gas Sampling

On July 31, 2000, a gas sample was collected from the pan lysimeter riser pipes for PL-11.1 and PL-11.2. The gas samples were collected as follows. A length of clean PE tubing was lowered into the riser to approximately 30 feet below the top of the riser, a battery powered diaphragm pump was used to evacuate an airtight Plexiglas box containing a 1-liter Tedlar® bag connected to the sample tubing. The Tedlar® bag filled with the gas sample, was labeled, and stored for analysis. The pan lysimeter gas samples were analyzed by Advanced Technology Laboratories in the City of Industry, California, for methane according to method ASTM D-1946 and for VOCs according to EPA method TO-14.

Soil, soil gas, and the pan lysimeter gas samples analytical results are summarized in Tables 3 and 4 based on certified analytical reports included in Appendix B.

SOLANO COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH SERVICES DIVISION

W001127

WELL PERMIT

Owner: B & J Sanitary Landfill
Site Address: 6426 Hay Rd.
APN: 42-020-28, 02, 06
Application No.: B-01-23

Applicant: B & J Sanitary Landfill
Mailing Address: 6426 Hay Rd., Vacaville, CA 95687

NOT TRANSFERABLE

- [x] Boring
- [ ] Water
- [ ] Monitoring
- [ ] Cathodic
- [ ] Destruction

Expires 3/21, 2002 By Ricardo M. Serrano
Environmental Health Specialist

THIS PERMIT IS ISSUED SUBJECT TO ALL STATE LAWS AND ORDINANCES IN THE COUNTY, STATE OF CALIFORNIA, AND IS REVOCABLE FOR VIOLATION AT ANY TIME.

Department of
Environmental Management
601 Texas Street
Fairfield, California • 94533-6301
Environmental Health Division ● (707) 421-6765

Site Address 6426 Hay Road Vacaville, CA

APN 42-020-28, 02, 06

Application No. _____

WELL / BORING PERMIT APPLICATION

Property Owner B & J Sanitary Landfill Phone 707-678-4718

Mailing Address 6426 Hay Road, Vacaville, CA 95687

Drilling Contractor Precision Sampling Phone 800-671-4744

License Number C-57 #636387 Expires 1/31/2002

Consultant Name/Address Conor Pacific, 2580 Wyandotte St Suite G, Mountain View, CA 94043 Phone # 650-386-3828

WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.)
X Certified copy is hereby furnished (will fax) ___Certified copy is filed with the County of Solano Environmental Health Division.

Date 3/20/01 Applicant K. Schlüer for Conor Pacific

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if the permit is for work valued at three hundred dollars ($300) or less.)
I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date_____ Applicant_____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

PERMIT TYPE: __New Well __Repair/Modification __Destruction Proposed No. of Wells/Borings 8

USE: __Domestic ___Agriculture ___Commercial ___Cathodic ___Monitoring X Boring

DRILLING METHOD: __Rotary __Cable __Hollow Stem Auger __Other Direct Push

CASING INFORMATION: Material: __Steel __PVC __Other_____ Proposed Depth 15 feet bgs
Wall/Gauge_____in. Casing Diameter_____in. Well Bore Diameter 2 3/8 in.

ANNULAR SEAL: Depth_____ft. Width of Annular Space _____in.
Sealing Material: X Neat Cement __Sand Cement __Concrete __Bentonite_____

Additional Work Description: Direct push to 10 feet while collecting continuous core for soil logging, push soil gas probe to 12 feet bgs to collect soil gas sample. Direct push to ~15 feet bgs to collect soil sample at approx 15 feet bgs. Seal boring w cement grout.

I hereby agree to comply with all regulations of the Solano County Code pertaining to well construction, repair, modification, destruction and abandonment. The well driller shall furnish Environmental Health with a complete well log upon completion of well construction.

Applicant Katrin Schlüer for Conor Pacific Date 3/20/01
Approved_____ Date_____

FOR OFFICE USE ONLY - ENVIRONMENTAL HEALTH

$____Fee paid on_____ Receipt No._____ Permit expires_____ R:\eh\tech\water\well-boring permit

Conor Pacific

BORING LOG

BORING NO. B-01-1
WELL NO. NA
SHEET 1 OF 1

SITE: B+J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-23-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling.

GROUND ELEVATION: ~23ft MSL
T.O.C. ELEVATION: NA
COORDINATES: NA
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 7' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 4' bgs. Push sampling probe to 5.5' bgs. Collect soil gas sample at 5-5.5' bgs. Continuous core to 7' bgs. Collect soil sample at 6.5-7' bgs in butyrate liner. Grout hole.

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
								surface soil
						1		CL lean clay 85% fine 15% fine sand slow to slow toughness soft consistency. dark grayish brown 2.5Y 4/2
						2		
						3		
						4		ML sandy silt 70% fines 30% fine sand firm to hard consistency olive brown 2.5Y 4/4
						5		
B-01-1	soil gas					6		SP-SM poorly graded sand w/ silt 90% fine and med sand, 10% fines olive brown 2.5Y 4/3 mottled w/ slight sand rust colors. dry to moist.
B-01-1	soil					7	TD	
						8		
						9		
						10		

Conor Pacific

PROJECT NO:
CLIENT:
SITE:

BORING NO.
WELL NO.
SHEET ____ OF ____

	Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS

Logged by: K. Schlieuer

Checked by: KT

Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-2
WELL NO. NA
SHEET 1 OF 1

SITE: B+J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-23-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling

GROUND ELEVATION: ~37' MSL
T.O.C. ELEVATION: NA
COORDINATES: NA
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 19' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Drive soil gas probe to 11' bgs. Collect soil gas sample at 10.5-11' bgs. Continuous core to 19' bgs. Collect soil sample from 18-18.5' bgs in butyrate liner. Grout hole

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
								Surface soil to 1' bgs, fill
						1		CL: lean clay c. gravel 70% fines 15% med sand 15% fine gravel, friable
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		CL Varm clayey sand 80% fines 20% fine sand, med toughness, firm to hard consistency, yellowish brown 10 YR 5/6
						10		
B-01-2	soil gas					11		LCL lean clay 95% fines <5% fine sand med toughness hard consistency. mottled colors light olive brown 2.5Y 5/4 and dark olive brown 2.5Y 3/3
						12		
						13		
						14		organic matter and roots
						15		
						16		ML sandy silt 70% fines 30% fine sand
						17		
B-01-2	Soil					18		SP poorly graded sand 95% fine - med sand <5% fines, roots dark grayish brown, v. dry
						19	TD	
						20		

Conor Pacific

PROJECT NO:
CLIENT:
SITE:

BORING NO.
WELL NO.
SHEET ____ OF ____

		Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS

Logged by: K. Schlieve

Checked by: KJ

Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-3
WELL NO. NA
SHEET 1 OF 2

SITE: B+J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJDK0
DATE(S) DRILLED: 3-23-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling

GROUND ELEVATION: ~40
T.O.C. ELEVATION: NA
COORDINATES: NA
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 22' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Drive sampling tool to 11' bgs. Collect soil gas sample 10.5-11' bgs. Continuous core to 22' bgs. Collect soil sample 20.5-21' bgs in butyrate liner.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									Surface soils
							1		CL lean clay w/ gravel 70% fines, 15% fine sand, 15% fine gravel (v. friable white) (coarse sand to fine gravel dark yellowish brown 10YR 4/4 hard consistency
							2		
							3		
							4		
							5		
							6		
							7		
							8		
							9		
							10		
	B-01-3	soil gas					11		CL lean clay w/ sand 80% fines 20% fine sand med tough dry firm to hard consistency, dark grayish brown 10YR 4/2 at 12' bgs
							12		
							13		
							14		CL lean clay 90% fines, 10% fine sand hard consistency
							15		
							16		CL lean clay 95% fines 5% fine sand soft consist, dry to med tough olive brown 2.5Y 2/2
							17		
							18		trace friable gravel at 18.5 bgs
							19		dry, friable
							20		ML Sandy silt 80% fines 10% fine sand

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Waste
SITE: B & J Drop Box

BORING NO. B-01-3
WELL NO. NA
SHEET 2 OF 2

		Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		B-01-3	Soil		X	X				ML pieces of coarse friable gravel
								21		
								22		
									TD	

Logged by: K. Schlieser
Checked by: KJ
Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-4
WELL NO. NA
SHEET 1 OF 2

SITE: B+T Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-23-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling

GROUND ELEVATION: ~40 ft MSL
T.O.C. ELEVATION: NA
COORDINATES: NA
DRILLING METHOD: Direct Push
BOREHOLE TOTAL DEPTH: 22' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Push in the soil sample probe to 11' bgs. Collect soil gas sample 10.5-11' bgs. Continuous core to 22' bgs. Collect soil sample at 21.5-22' bgs. Grout hole up.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		Surface roots to ~1' bgs
									CL lean clay to sand, 75% fines 25% fine - med sand trace coarse sand - fill
							2		soft to firm to hard in parts.
							3		Hark yellowish brown 10YR 4/4
									(cont fill matl)
							4		mostly firm to hard consist.
							5		
							6		
							7		
							8		CL sandy lean clay to gravel 70% fines 25% fine - med sand 5% fine to coarse gravel hard consistency.
							9		
							10		
	B-01-4	Soil gas					11		
							12		
							13		mottled & very compacted
							14		(red, brown, black, white).
							15		
							16		
leachate odor							17		SM-SC poorly graded sand w/ 20% fines with gravel 10% fines, dry friable leachate odor (dark grayish brown 10YR 4/2
							18		
							19		
							20		

Conor Pacific

PROJECT NO: BOD 110
CLIENT: Norcal waste
SITE: B & J Drop Box

BORING NO. B-01-4
WELL NO. NA
SHEET 2 OF 2

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									SP-SM poorly graded sand w/ silt
							21		dry, friable mottled w/ brown
	B-01-4	Soil					22		
								TD	

Logged by: K. Sullivan
Checked by: KT
Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-5
WELL NO. NA
SHEET 1 OF 2

SITE: B+J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-22-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Samplers

GROUND ELEVATION: ~40 MSL
T.O.C. ELEVATION: NA
COORDINATES: NA
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 25' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Push soil gas sampler to 11' bgs, pullback 0.5'. Collect soil gas sample B-01-5 @ 10.5-11 ft bgs. Continuous core to 25' bgs. Collect soil sample B-01-5 @ 24.5-25' bgs. Grout hole w/ neat cement grout.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		roots to 1.5' bgs
							2		CL sandy lean clay w/ gravel 70% fines, 25% fine-med sand, 5% fine gravel, firm to hard except soft to firm @ 1.5-2.5 bgs dark yellowish brown 10YR 4/4
							3		
							4		
							5		
							6		CL sand lean clay 75% fines, 25% fine sand, firm to hard consistency
							7		
							8		
							9		
							10		
	B-01-5	soil gas					11		ML sandy silt w/ gravel 70% fines 20% fine sand 10% fine gravel friable, hard consist, not sticky, brown 10YR 4/2
leachate odor							12		leachate odor
							13		CL lean clay 90% fines 10% fine sand hard consistency, roots, yellowish brown 10YR 5/6
							14		
leachate odor							15		CL lean clay w/ sand 60% fines 40% fine sand soft consistance, high organic matter (roots, dark color, "odor") v dark brown 10YR 2/2
							16		
leachate odor							17		CL lean clay w/ sand 90% fines 10% fine sand hard consist, trace roots yellowish brown 10YR 5/6
							18		
							19		ML sandy silt w/ gravel 70% fines 15% fine sand, 15% fine gravel friable
							20		

Conor Pacific

PROJECT NO: BUD 110
CLIENT: Norcal Waste
SITE: B & J Drop Box

BORING NO. B-01-5
WELL NO. NA
SHEET 2 OF 2

	Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									ML (continued)
							21		
							22		CL lean clay w sand 70% fines 30% fine sand / soft to firm consistency
							23		
							24		
	B-01-5	Soil					25		
								TD	

Logged by: K. Schlieve
Checked by: KJ
Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-6
WELL NO. NA
SHEET 1 OF 2

SITE: B+J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-22-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling

GROUND ELEVATION: ~140' MSL
T.O.C. ELEVATION: NA
COORDINATES: NA near A-12
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 25' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Push soil gas sampler to 11' bgs, pull back 0.5 ft. Collect soil gas sample B-01-6 @ 10.5-11' bgs. Continuous core to 25' bgs. Collect soil sample B-01-6 @ 24.5-25' bgs. Grout hole in neat cement slurry.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									grass + roots
							1		
							2		ML silt low toughness
							3		
							4		
							5		CL lean clay w/ sand 70% fines, 30% fine sand, hard consist.
Leachate odor							6		leachate gas odor
							7		
							8		
							9		ML silt w/ sand 70% fines, 30% fine sand yellowish brown 10YR5/4
							10		
7% CO_2	B-01-6	soil gas					11		SP-SM poorly graded sand w/ silt 90% fine sand 10% fines dry, dark brown 10YR3/2
							12		SP-SM poorly graded sand w/ silt and gravel 70% fine sand 20% fine-coarse gravel 10% fines dry. Gravel is friable.
							13		
							14		ML sandy silt ~~55%~~ fines 45% fine sand. firm to hard consist
							15		ML Sandy silt w/ gravel 60% fines 20% fine sand 20% gravel (friable, white)
							16		
							17		
							18		SM silty sand 70% fine sand 30% fines dry, soft. brown 10YR5/3
							19		ML sandy silt w/ gravel 60% fines, 25% fine-med-coarse sand 15% fine gravel
							20		

Conor Pacific

PROJECT NO: BTD 110
CLIENT: Norcal Waste
SITE: B & J Drop Box

BORING NO. B-01-6
WELL NO. NA
SHEET 2 OF 2

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
								ML cont'd.
						21		
						22		
						23		
						24		ML sandy silt. 60% fines 40% fine sand, soft consist.
B-01-6	soil					25		
							TD	

Date Checked:

Checked by: KT

Logged by: K. Sahlieve

Conor Pacific

BORING LOG

BORING NO. B-01-7
WELL NO. NA
SHEET 1 OF 2

SITE: B&J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 3-22-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision

GROUND ELEVATION: ~40 Ft MSL
T.O.C. ELEVATION: NA
COORDINATES: NA near G-11
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 31' bgs
FINAL BOREHOLE DIAMETER: 2 3/8"

DRILLING SUMMARY: Continuous core to 10' bgs. push soil gas probe to 11' bgs pull back. Collect soil gas sample B-01-7@10.5-11' bgs. Continuous core to 31' bgs Collect soil sample B-01-7 @ 30.5-31' bgs. Grout up borehole w/ neat cement grout.

	Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		roots to ~2 ft bgs fill, sandy dry mottled
							2		
							3		CL sandy lean clay 70% fines 30% fine sand yellowish brown 10YR 5/4 hard consistency
							4		
							5		SC clayey sand 60% fine to med sand. 40% fines yellowish brown mottled w/ white. dry fill material.
							6		
							7		
							8		
							9		
							10		
	B-01-7	Soil gas					11		
							12		
							13		
							14		
							15		SP poorly graded sand, dry light brown 2.5Y 4/2
							16		
							17		
							18		
							19		
							20		SP-SM over native mat'l begins

Conor Pacific

PROJECT NO: BTD110
CLIENT: Naval Weapons
SITE: B & J Drop Bomb

BORING NO. B-01-7
WELL NO. NA
SHEET 2 OF 2

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						21		SP-SM poorly graded sand w silt olive brown 2.5Y 4/3 to v dark grayish brown 2.5Y 3/2 dry 90% fine sand 10% fines (silt)
						22		at 22 mottled colors w brown, rust, black, light gray
						23		
						24		CL sandy loam dry 60% fines 40% fine sand med tough med plastic
						25		SP-SM cont'd 90% fine - med sand 10% fines dry
						26		
						27		
						28		SP poorly graded sand 90% med-sand, 10% fines dry mottled colors yellowish brown 10YR 5/8 and light olive brown 2.5Y 5/4
						29		
B-01-7	Soil					30		
						31	TD	

Logged by: K. Schlieuer
Checked by: [illegible]
Date Checked:

Conor Pacific

BORING LOG

BORING NO. B-01-8
WELL NO. NA
SHEET 1 OF 1

SITE: B&J Drop Box
CLIENT: Norcal Waste
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 9-22-01
DATE(S) WELL INSTALLED: NA
DRILLING CO./DRILLER: Precision Sampling

GROUND ELEVATION: ~30' MSL
T.O.C. ELEVATION: NA
COORDINATES: NA near G-10
DRILLING METHOD: Direct push
BOREHOLE TOTAL DEPTH: 19' bgs
FINAL BOREHOLE DIAMETER: 2 7/8"

DRILLING SUMMARY: Continuous core to 10' bgs. Drive soil gas sampling probe to 11' bgs, pull up to expose screen 10.5-11' bgs. Collect soil gas sample in Summa canister. Continuous core to 19' bgs. Collect soil sample 18.5-19' bgs. Grout hole up.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		NR
							2		
							3		
							4		Fill
							5		CL lean clay 90% fines 10% fine sand med plasticity, med toughness brown 10YR 4/3 firm to hard con. silt
							6		
							7		SM silty sand 75% fine-med sand 25% fines
							8		CL lean clay dry light brownish as above grdy 10YR 6/2
							9		SM silty sand w gravel 70% fine-med sand, 20% fines 10% fine gravel
							10		CL lean clay w sand 80% fines, 20% fine sand dark-yellowish brown 10YR 4/6 mottled w very pale brown 10YR 7/4.
	B-01-1	Soil gas					11		
							12		ML Sandy silt
							13		SP poorly graded sand 95% fine to med sand <5% fines, dry
							14		
							15		CL Sandy lean clay 60% fines 40% fine-med sand
							16		CL Sandy lean clay w gravel 60% fines 20% fine sand 20% gravel white/dry mottles
							17		
							18		
	B-01-1S	Soil					19		TD
							20		

Conor Pacific

PROJECT NO:
CLIENT:
SITE:

BORING NO.
WELL NO.
SHEET ____ OF ____

		Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS

Logged by: K. Schlieve

Checked by: KG

Date Checked:

APPENDIX D

APPENDIX D – DRILLING AND INSTALLATION OF REPLACEMENT WELLS G-10R AND G-11R

Pre-Field Activities

A workplan outlining the drilling and installation of replacement wells G-10R and G-11R was submitted in May 2001 and approved, with comments, in an April 2001 letter from the RWQCB.[2,3] A permit to drill and install G-10R and G-11R to approximately 75 feet bgs was obtained from the Solano County Department of Environmental Management (SCDEM), a copy of which is included in this appendix.

Drilling and Well Installation

Conor Pacific subcontracted Spectrum Exploration, Inc. of Stockton, California (Spectrum), to drill the borings and construct replacement groundwater monitoring wells G-10R and G-11R. Drilling and well installed was conducted on April 19-20, 2001. Spectrum drilled the borings using 8-inch-diameter hollow stem augers. Soil samples for soil logging were collected at 5 feet intervals, from ground surface to 35 feet below ground surface (bgs) using a split spoon sampler, and continuously from 35 to 75 feet bgs using a CME 5-foot continuous barrel. Water was encountered at approximately 40 and 38 feet bgs in G-10R and G-11R, respectively. Soils were logged according to the Unified Soil Classification System (USCS) under the direction of a California State Registered Geologist. Soil logs are included herein. The soil borings for G-10R and G-11R were advanced to 75 feet bgs, allowing the well screens to be approximately 5 feet deeper than the proposed deepest portion of the nearby borrow pit to ensure that the wells will not become dry with on-going groundwater extraction from the borrow pit.

Well installation procedures followed State and SCDEM guidelines. The wells were constructed within the augers using Schedule 40, 2-inch-diameter flush-threaded polyvinyl chloride (PVC) casing to 55 feet bgs. The well screens consist of 2-inch-diameter flush-treaded 0.02-inch machine-slotted PVC. Number 12 silica sand was poured through the augers to bring the filter sand to two feet above the top of the well screen. A two to three foot thick bentonite plug was placed above the filter sand. The augers were removed, the borings remained open and a sanitary seal of neat cement and approximately 4% bentonite was pumped through a 1-inch tremie pipe and placed around the well casing to ground surface. The top of the well casing was cut to approximately 2.5 feet above ground surface and capped with a watertight locking expansion well cap. A locking steel well vault was installed at surface to complete each well. Well completion details are included.

Well Development

Conor Pacific developed wells G-10R and G-11R on April 26, 2001. Prior to well development, the water levels in wells G-10R and G-11R was measured at approximately 33 and 35 feet below top of casing (TOC), respectively, and the total depth of each well inside the casing was measured at approximately 68 and 75 feet below TOC, respectively. The wells were bailed and surged, then

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[2] Conor Pacific. *Workplan for Replacement Wells, B&J Sanitary Landfill, Solano County, California.* May 14, 2001.
[3] Central Valley RWQCB. Letter to Mr. Greg Pryor of B&J Sanitary Landfill re: "Work Plan for Replacement Wells; B&J Sanitary Landfill, Solano County". April 11, 2001.

pumped using a hand piston pump to remove a total of 74 and 121 gallons of water from G-10R and G-11R, respectively. Fine sand and silt sediments were removed from each well during development and the total depth after well development was measured at 73.6 and 76 feet below TOC. The water level measured in G-10R and G-11R after development was 33.9 and 36.7 feet below TOC, respectively. Well development data sheets are included in herein. Although the total depth measurements indicate that sediments were not completely removed from the wells during development, hard bottoms were tagged, field parameters stabilized, and because most wells at the landfill produce silty water even after years of sampling, wells G-10R and G-11R are considered sufficiently developed. The top of casing elevations of these wells have not been surveyed yet and will be surveyed along with other wells to be drilled at the landfill during the next few months.

Initial well sampling

Groundwater monitoring wells G-10R and G-11R were sampled for the first time on April 26, 2001. Samples were analyzed by Sequoia Analytical for the full list of COC compounds as described in this report.

Note: Geologic cross section which includes replacement wells G-10R and G-11R will be submitted separately.

SOLANO COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH SERVICES DIVISION

W001147

WELL PERMIT

Owner: B & J Sanitary Landfill
Site Address: 6426 Hay Road
APN: 42-020-28,02,06
Application No.: MW-01-16

Applicant: B & J Sanitary Landfill
Mailing Address: 6426 Hay Rd., Vacaville, Ca. 95687

- ☐ Boring
- ☐ Water
- ☒ Monitoring
- ☐ Cathodic
- ☐ Destruction

NOT TRANSFERABLE

Expires 04/11/, 20 02 By Ricardo M. Serrano
Environmental Health Specialist

THIS PERMIT IS ISSUED SUBJECT TO ALL STATE LAWS AND ORDINANCES IN THE COUNTY, STATE OF CALIFORNIA, AND IS REVOCABLE FOR VIOLATION AT ANY TIME.

6426 Hay Rd, Vacaville
Site Address

42-020-28, 02, 06
Assessor's Parcel Number

MW-01-16
Application/Permit Number

Department of Environmental Management

601 TEXAS STREET
FAIRFIELD, CALIFORNIA • 94533

(707) 421-6770

WELL PERMIT APPLICATION

Property Owner B & J Sanitary Landfill Phone 707-678-4718

Mailing Address 6426 Hay Road, Vacaville, CA 95687

Drilling Contractor Spectrum Exploration Phone 209-465-8712

License Number C57 #512268 Expires April 31, 2003

WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.)
__Certified copy is hereby furnished. ✓ Certified copy is filed with the County of Solano Environmental Health Division.

Date 4-10-01 Applicant K. Schlien for Conor Pacific

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if the permit is for work valued at three hundred dollars ($300) or less.)
I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

PERMIT TYPE: ✓ New Well __Repair/Modification __Destruction

WELL USE: __Domestic __Agriculture __Commercial __Cathodic ✓ Monitoring (Describe Groundwater)

DRILLING METHOD: __Rotary __Cable ✓ Hollow Stem Auger __Other _____

CASING INFORMATION: Material: __Steel ✓ PVC __Other _____ Proposed Depth 75' bgs
Wall/Gauge SCH 40 Casing Diameter 2 in. Well Bore Diameter 8 in

ANNULAR SEAL: Depth _____ ft. Width of Annular Space _____ in.
Sealing Material: __Neat Cement __Sand Cement __Concrete __Bentonite _____

Additional Work Description: Install 2 groundwater monitoring wells to estimated depth of 75 feet bgs. Anticipate 20 foot well screens and 55 feet blank casing for each well. Sand filterpack, bentonite transition seal, neat cement sanitary seal.

I hereby agree to comply with all regulations of the Solano County Code pertaining to well construction, repair, modification, destruction and abandonment. The well driller shall furnish Environmental Health with a complete well log upon completion of well construction.

Applicant Kathy Schlien for Conor Pacific Date April 10, 2001
Site Approved _____ Date _____

FOR OFFICE USE ONLY - ENVIRONMENTAL HEALTH

$265.00 Fee paid on 4-11-01 Receipt No. 808355 Permit expires 4/02 G:WELLAPP.RV1

Conor Pacific

BORING LOG

BORING NO. G-10R
WELL NO. G-10R
SHEET 1 OF 4

SITE: B&J Drum Box
CLIENT: Norcal Waste Systems
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 4/19/01
DATE(S) WELL INSTALLED: 4/20/01
DRILLING CO./DRILLER: Spectrum Exploration

GROUND ELEVATION: approx 30' MSL
T.O.C. ELEVATION: approx 32.5' MSL
COORDINATES: NA
DRILLING METHOD: hollow stem auger
BOREHOLE TOTAL DEPTH: 75' bgs
FINAL BOREHOLE DIAMETER: 8"

DRILLING SUMMARY: Drill boring to 75' bgs using 8" HSA. Sample every 5' to 35' bgs, continuous sample from 35' to 75' bgs. Install 2" diam SCH 40 PVC well to 75 bgs, w/ 0.02-slot well screen (55-75' bgs). Filter sand (#2/12) 52.6-75' bgs bentonite seal 50-52.6' bgs. Cement-bentonite grout 2-50' bgs. Steel well vault box at surface.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		
							2		
							3		
							4		
							5		
			8	X	X				CL lean clay 80% fines, 20% fine sand
			14	X	X				firm to hard, moist
			21		X		6		yellowish brown 10YR 5/6
							7		
							8		
							9		
			14	X	X		10		CL sandy lean clay 60% fines 40% fine sand
			25	X	X				v. hard, moist
			30		X		11		
							12		
							13		
							14		
							15		
			11	X	X				SM silty sand 60% fine sand 40% fines
			15	X	X		16		planes of weathering, mainly vertical - white
			20	X	X				dry
							17		
							18		
							19		
							20		

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 2 OF 4

Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						20		ML sandy silt 60% fines 40% v. fine sand, brand, dark yellowish brown 10YR 4/6
						21		
						22		
						23		
						24		
						25		
		3						ML silt 90% fines 10% fine sand low touch / soft to firm consist
		5				26		CL gravelly lean clay 60% fines 30% fine gravel 10% fine-med sand
		6				27		firm consist / light olive brown 2.5Y 5/6 mottled w white, black, mot
						28		
						29		
						30		SP-SM poorly graded sand w silt 90% fine sand 10% fines yellowish brown 10YR 5/6 mottled w light yellowish brown 2.5Y 6/3 moist
						31		
						32		
						33		
						34		
						35		ML sandy silt 70% fines 30% fine sand yellowish brown mottled w orange, some weathering patched of white firm consist / low plastic
						36		
						37		
						38		
						39		
					▽	40		ML silt w sand 85% fines 15% fine sand
						41		
						42		CL lean clay w gravel 70% fines 10% fine sand 20% coarse sand-fine gravel dark yellowish brown 10YR 4/6 trace gray mottles
						43		
						44		
						45		

Logged by: K. Schlieper
Checked by:
Date Checked:

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 3 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						46		SM silty sand w gravel 70% fines, 20% fine sand, 10% fine gravel (black rounded) moist
						47		SP-SM well graded sand w silt 90% fine sand 10% fines dark yellowish brown mottled w gray, yellow, wet moist
						48		
						49		
						50		SM silty sand 85% fines 15% fine sand moist
						51		
						52		SP poorly graded sand 95% fine sand 5% fines moist
						53		SM silty sand 80% fine sand 20% fines interbedded w 60% fines 40% fine sand lots of gray white weathering patterns moist
						54		
						55		
						56		
						57		
						58		ML sandy silt 60% fines 40% fine sand soft to firm moist
						59		
						60		
						61		SP-SM poorly graded sand w silt 90% fine sand 10% fines yellowish brown heavily mottled w wet gray black in irregular patterns
						62		
						63		
						64		
						65		
						66		CL sandy lean clay 70% fines 20% fine sand 10% fine gravel mottled w white
						67		SM silty sand 70% fine sand 30% fines moist dark yellowish brown w black sand grains
						68		ML sandy silt 60% fines 40% vf fine sand
						69		
						70		

Logged by: K. Cahlleuer
Checked by: KJ
Date Checked:

Conor Pacific

PROJECT NO: BRD 110
CLIENT: Norcal Wastes
SITE: BFT Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 4 OF 4

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									ML cont'd
							71		
							72		
							73		CL sandy lean clay, 80% fines, 40% fine sand, sticky, firm to hard consist, mottled.
							74		
							75		
								TD	

Logged by: K. Schlieuse
Checked by: KS
Date Checked:

EINARSON FOWLER & WATSON

WELL CONSTRUCTION DETAILS

BORING DESIGNATION: G-10R

INSTALLATION

DATE: 4/19 - 4/20/01 BY: K. Schlienger

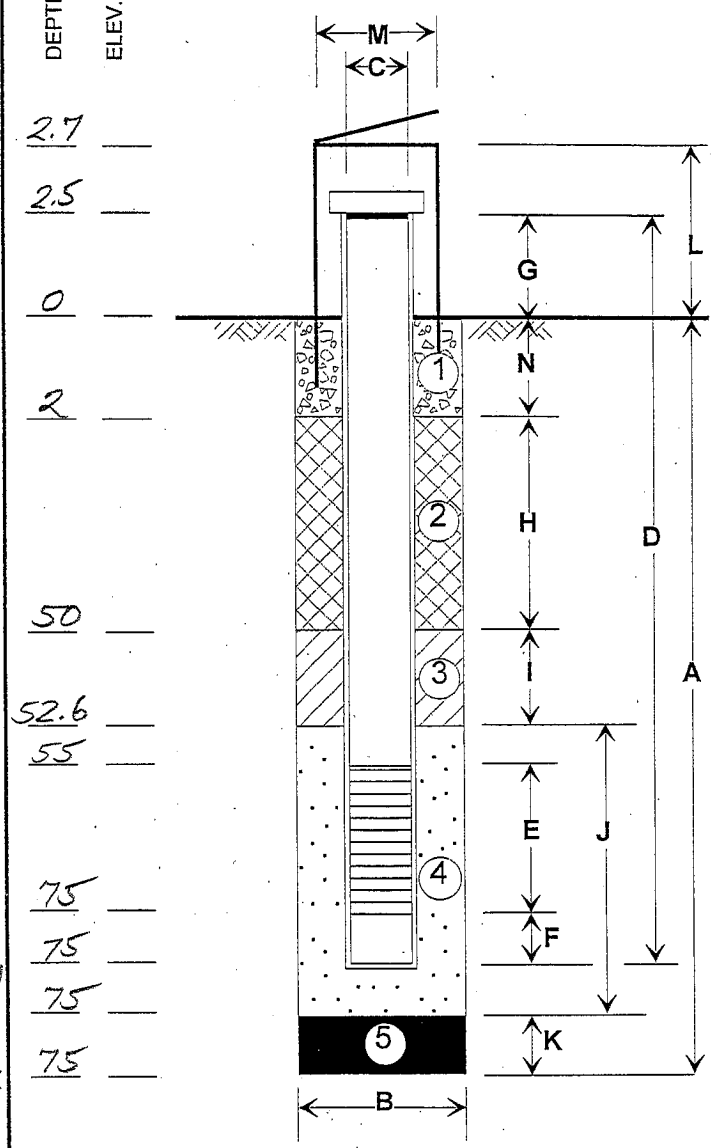
DIMENSIONS

A	Total Depth of Boring (ft.)	75
B	Borehole Diameter (in.)	8
C	Well Casing Diameter (in.)	2
D	Well Casing Length (ft.)	77.5
E	Well Casing Slotted Interval (ft.)	20
F	Well Casing End Cap or Sump (ft.)	0.1
G	Well Casing Height (ft.)	2.5
H	Annular Seal Interval (ft.)	48
I	Annular Seal Interval (ft.)	2.6
J	Sand Pack Interval (ft.)	22.4
K	Bottom Material Interval (ft.)	NA
L	Protective Cover Height (ft.)	2.7
M	Protective Cover Diameter (in.)	4
N	Annular Seal Interval (ft.)	2
	Well Centralizer Depth(s) (ft.)	NA

MATERIALS DATA

Monument Footing	1	concrete
Annular Seal	2	cement grout
Annular Seal	3	bentonite
Sand Pack	4	#2/12 filter sand
Bottom Material	5	NA
Slotted Casing		0.02 slot SCH40 PVC
Well Casing		SCH40 PVC
Well Centralizers		NA
Protective Cover		steel well vault

WELL DESIGNATION
G-10R



SECTION VIEW *(not to scale)*

NOTES:

SITE: B & J Drop Box Sanitary Landfill
PROJ. NO: BJD110
N. **E.**
WELL PERMIT NO: Solano County MW-01-16

m:\tmp\welldetails\riser.dsf

Conor Pacific

BORING LOG

BORING NO. G-11R
WELL NO. G-11R
SHEET 1 OF ____

SITE: B & J Drop Box
CLIENT: Norcal Waste Systems
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 4/19/01
DATE(S) WELL INSTALLED: 4/19-20/01
DRILLING CO./DRILLER: Spectrum Exploration

GROUND ELEVATION: approx 32' MSL
T.O.C. ELEVATION: approx 34.5' MSL
COORDINATES: NA
DRILLING METHOD: hollow stem auger
BOREHOLE TOTAL DEPTH: 75' bgs
FINAL BOREHOLE DIAMETER: 8"

DRILLING SUMMARY: Drill boring to 75' bgs using 8" HSA. Sample every 5' to 35' bgs. Continuous sample from 35' to 75' bgs. Install 2" diam SCH40 PVC well to 75' bgs, w 0.02-slot well screen (55-75' bgs). Filter sand (#2/12) 53-75' bgs, bentonite seal 50-53' bgs, cement-bentonite grout 2-50' bgs. Steel well vault box at surface.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		
							2		
							3		
							4		
							5		
			8	X	X				CL sandy lean clay 70% fines 20% fine sand 10% fine gravel light olive brown 2.5Y5/4
			15				6		
			23						
							7		
							8		
							9		
							10		SP-SM poorly graded sand w silt 90% fine-med sand 10% fines mottled light olive brown 2.5Y5/4 w yellowish brown 10YR5/6, gray and black moist
			8	X	X				
			11				11		
			15						
							12		
							13		
							14		
							15		SP poorly graded sand 95% fine-med sand <5% fines
			7	X	X				
			11				16		SP-SC poorly graded sand w clay 90% fine-med sand 10% fines
			15						
							17		
							18		
							19		
							20		

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Waste
SITE: B & J Landfill

BORING NO. G-11R
WELL NO. G-11R
SHEET 2 OF 4

Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		7						CL sandy lean clay 70% fines 30% fine sand
		12						firm consist med touch
		15				21		SP poorly graded sand 95% med sand
						22		<5% fines
								yellowish brown 10YR 5/6 mottled
						23		w black gray white brown yellow
								moist
						24		
						25		
		9						CL sandy lean clay 70% fines 30% fine
		13				26		sand firm to hard consist
		21						med-high touch low to med plastic
						27		yellowish brown 10YR 5/8 mottled
								w gray, black, brown
						28		
						29		
						30		
		7						CL lean clay with sand 70% fines
		8				31		20% fine sand 10% fine gravel
		12						med plastic, firm touch
						32		mottled yellowish brown 10YR 5/4
								w gray, black, red
						33		
						34		
						35		
						36		ML sandy silt 70% fines 30% fine sand
						37		soft to firm consist med touch
					▽	38		med plastic dark yellowish brown 10YR 4/6
								mottled w gray
						39		ML sandy silt 60% fines 40% fine sand
								trace gravel wet
						40		CL sandy lean clay 60% fines 40% fine-
						41		med sand low to med touch soft consist
								dark yellowish brown 10YR 3/6
						42		
						43		CL lean clay w sand 80% fines 20% fine
						44		sand
						45		

Logged by: K. Sahlinas
Checked by: KJ
Date Checked:

Conor Pacific

PROJECT NO: BOD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-11R
WELL NO. G-11R
SHEET 3 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						46		SC clayey sand w/ gravel 60% fine - med-coarse sand 20% fines, 20% fine - coarse gravel sticky, soft consist dark yellowish brown 10YR 3/4 moist to wet
						47		
						48		
						49		
						50		
						51		SP-SC poorly graded sand w/ clay 70% fine - med sand 20% fine - coarse gravel 10% fines moist - wet
						52		
						53		← mottled w/ gray
						54		ML sandy silt 70% fines 30% fine - med sand firm to hard consist stratified colors
						55		
						56		
						57		SM Silty sand 70% fine sand, 20% fines 20% coarse sand mostly black rounded Friable
						58		
						59		@ 57 - 58.5 thin black lined patterns old root structures
						60		@ 58.5 - 58.75 white irregular layers w/ thin vert and horizontal patterns
						61		@ 57 - 58.75 increasing size of black rounded grains, soft friable/smeared at cuts.
						62		SP-SM poorly graded sand w/ silt 90% fine - med sand, 10% fines dark yellowish brown 10YR 4/6 mottled w/ gray and w/ black specks, moist
						63		
						64		SM silty sand 80% fines - coarse sand, 20% fines light yellowish brown 2.5Y 6/3 mottled w/ rust colors, moist
						65		SP-SM poorly graded sand w/ silt 10YR 5/8 90% med sand 10% fines yellowish brown and black rounded med sand, moist
						66		
						67		ML sandy silt 60% fines 40% fine sand mottled light olive br 2.5Y 5/4 w/ white
						68		SM silty sand 80% fines 20% fine - med sand
						69		ML sandy silt 60% fines 40% fine sand
						70		

Date Checked:

Checked by: KJ

Logged by: K. Schlieven

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-11R
WELL NO. G-11R
SHEET 4 OF 4

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									ML cont'd
							71		
							72		SM- Silty sand, 80% fine - med sand 20% fines, moist
							73		SP-SM poorly graded sand w silt 90% fine-med sand, 10% fines, moist
							74		
							75		
								TD	

Logged by: K. Schlieven
Checked by: KJ
Date Checked:

EINARSON FOWLER & WATSON

WELL CONSTRUCTION DETAILS

BORING DESIGNATION: G-11R

INSTALLATION
DATE: 4/19-4/20/01 BY: K. Schliesen

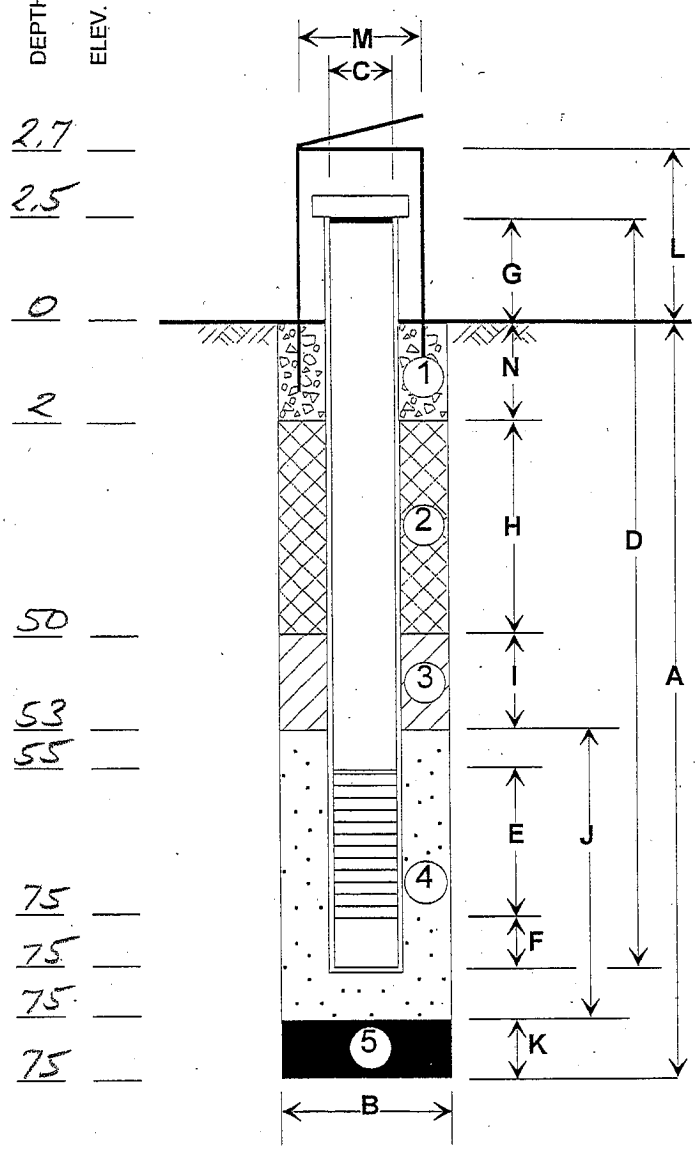
DIMENSIONS

A	Total Depth of Boring (ft.)	75
B	Borehole Diameter (in.)	8
C	Well Casing Diameter (in.)	2
D	Well Casing Length (ft.)	77.5
E	Well Casing Slotted Interval (ft.)	20
F	Well Casing End Cap or Sump (ft.)	0.1
G	Well Casing Height (ft.)	2.5
H	Annular Seal Interval (ft.)	48
I	Annular Seal Interval (ft.)	3
J	Sand Pack Interval (ft.)	22
K	Bottom Material Interval (ft.)	NA
L	Protective Cover Height (ft.)	2.7
M	Protective Cover Diameter (in.)	4
N	Annular Seal Interval (ft.)	2
	Well Centralizer Depth(s) (ft.)	NA

MATERIALS DATA

Monument Footing	1	Concrete
Annular Seal	2	cement grout
Annular Seal	3	bentonite
Sand Pack	4	#2/12 Filter Sand
Bottom Material	5	NA
Slotted Casing		0.02 slot SCH40 PVC
Well Casing		SCH 40 PVC
Well Centralizers		NA
Protective Cover		steel well vault

WELL DESIGNATION
G-11R



SECTION VIEW *(not to scale)*

NOTES:

SITE: B & J Drop Box Sanitary Landfill
PROJ. NO: BJD110
N. E.
WELL PERMIT NO: Solano County MW-01-16

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WELL DEVELOPMENT FORM
Conor Pacific/EFW

Project No.: BJD110	Date: 4/26/01
Site Location: BJ DropBox	Well: G-10R
Name: RFunk	Diameter: 2"
Development Method: surgeblock, bailer, piston pump	Initial DTW: 33.32
Total Water Removed:	Final DTW: 33.9
Water Contained ? no	Initial TD: 68.2'
Important! Estimate of specific capacity or recharge to well:	Final TD: 73.6

Time	Volume (gal.)	Sand/Silt (ml/1000ml)	Temp. (°C)	EC (µS/cm)	pH	DTW (feet)	Turbidity (NTU/vis.)	Appearance/Comments
1555	30	~150	19.6	737	9.62	NM	>999	lt. brown, intake at bottom of
1612	50	~50	19.2	803	9.43	↓	↓	↓ intake at 68' well
1635	74	~20	18.6	1030	9.23	↓	↓	↓

- alternated surging/bailing to remove thick silt/sand laden water from bottom of well: ~7 gallons total, ~20 minutes surging.
- began pumping using hand piston pump - see above.
- well may still have 3-4' packed sand in bottom of well.
- although turbidity >999, visually was decreasing with pumping.

WELL DEVELOPMENT FORM
Conor Pacific/EFW

Project No.: BJD110	Date: 4/24/01
Site Location: B&J Drop Box	Well: G-11R
Name: Frank	Diameter: 2"
Development Method: Surge block, bailer, Peristaltic pump	Initial DTW: 35.06
Total Water Removed:	Final DTW: 36.7
Water Contained ? no	Initial TD: 75.3
Important! Estimate of specific capacity or recharge to well:	Final TD: 76.0

Time	Volume (gal.)	Sand/Silt (ml/1000ml)	Temp. (°C)	EC (µS/cm)	pH	DTW (feet)	Turbidity (NTU/vis.)	Appearance/Comments
1144	20		19.3	1230	7.80	NM	>999	H.Brown, Mtake at 75'
1157	40	~100	19.0	1100	7.75			
1235	60		19.6	1140	8.04			
1245	80		19.3	1080	7.87			
1305	100	40	19.5	1080	7.70			Intake at 70'
1321	120	50	18.9	1080	7.62			

- bailed 3 gal from bottom of well to remove sand
- Surged blocked using 5' stainless/vented block for 25 minutes
- beg on pumping - see above.

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: BJ Drop Box
SAMPLE ID: G-10R
PROJECT NO: BJ Drop 110
SAMPLED BY: RPark
CLIENT: Norcal
REGULATORY AGENCY:

SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____

GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 73.6	Volume in Casing (gal): 6.9
Depth to Water (ft): 33.32	Calculated Purge (volumes / gal.): 20.6
Height of Water Column (ft): 40.28	Actual Pre-Sampling Purge (gal): 24.0

PURGE:

Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer ____
PVC Hand Pump 68' Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Purge Water Containment: non/ground

Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1026	8.0	19.0	990	9.35	lt. brown	high		
1031	16.0	18.8	1030	9.20	↓	↓		
1035	24.0	18.6	1030	9.23	↓	↓		

Purge Date: 4/26/01

SAMPLE:

Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer 68'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1710	18.8	990	9.17	2.73	lt. brown	>999	

Sheen: none Odor: none Sample Date: 4/26/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: Well developed just prior to sampling.

SIGNATURE: [signature] DATE: 4/26/01

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Conor Pacific | EFW

WATER SAMPLE FIELD DATA

LOCATION: B&J DropBox
SAMPLE ID: G-11R
PROJECT NO: BJD100
SAMPLED BY: R Pank
CLIENT: Norcal
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ___ Leachate ___ Treatment System ___ Other ___
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ✓ 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 76.0
Volume in Casing (gal): 7.0
Depth to Water (ft): 35.06
Calculated Purge (volumes / gal.): 20.9
Height of Water Column (ft): 40.94
Actual Pre-Sampling Purge (gal): 21.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer ___
PVC Hand Pump 70' Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___
Purge Water Containment: non/ground
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1313	7.0	19.0	1060	7.64	lt. brown	high		
1317	14.0	19.0	1080	7.62	↓	↓		
1321	21.0	18.9	1080	7.62	↓	↓		

Purge Date: 4/26/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer 70'
PVC Hand Pump ___ Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1350	19.9	1110	7.74	2.15	lt. brown	>999	

Sheen: none Odor: none Sample Date: 4/26/01

Field Measurement Devices: Horiba ✓ Omega ___ QuickCheck ___ D.O. Test Kit ___
REMARKS: Well developed ~~[illegible]~~ just prior to Sampling

Calibrated Horiba 1030, 4/26/01: pH: 7.02, 10.05, EC: 0, 2060, fwb: 0, DO: auto, T: 20.1°C

SIGNATURE: [signature] **DATE:** 4/26/01

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APPENDIX E – PARTITIONING OF VOCS BETWEEN GAS AND GROUNDWATER

Partitioning of VOCs between gas and groundwater can be described by standard phase transfer models. A theoretical aqueous concentration can be calculated for compounds for which a Henry's Law constant is available in literature, including most common VOCs. To help identify the source of the VOCs detected in pan lysimeter water, theoretical aqueous VOC concentrations were calculated from VOC concentrations detected in the pan lysimeter gas samples and the soil gas sample in which landfill gas was identified.

Henry's Law and Gas to Water Partitioning

Partitioning of VOCs between the gas and water phase can be described by standard phase transfer models. Henry's Law was used to predict theoretical VOC concentrations in groundwater. At equilibrium, the gas-phase concentrations (C_g) and water-phase concentrations (C_w) are related by Henry's Constant (H) in Henry's Law:

$$C_w = \frac{C_g}{H}$$

where:

C_w is the concentration in the aqueous phase; [mass/volume]
C_g is the concentration in the gaseous phase; [mass/volume]
H is the Henry's Law Constant; [pressure x volume/moles]

The Henry's Law Constant is an index of the partitioning of a chemical between dissolved aqueous and gaseous phases.[4] The Henry's Law Constant depends on the compound, the solvent (in this case, water), and the temperature of the system.[5]

Tables 1 and 2 of this appendix lists those VOCs detected in the pan lysimeter gas samples and in the soil gas sample collected from boring B-01-5. Included in the right most column are the maximum VOC concentrations detected in each pan lysimeter (Table 1) and in both pan lysimeters (Table 2). Also included are the available Henry's Law Constants and the calculated groundwater concentration based on the gaseous VOC concentrations. Below are the equations used in Tables 1 and 2 to calculate the predicted aqueous VOC concentrations based on the measured gaseous VOC concentrations, assuming the two phases are in equilibrium.

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[4] Hern, S.C. and Melancon, S.M. *Vadose Zone Modeling of Organic Pollutants*. Lewis Publishers, Inc.: Michigan, 1986.

[5] Nadim, F., Liu, S., and Hoag, G.E. *The Effect of Air Bubble and Heaspace on the Aqueous Concentrations of Volatile Organic Compounds in Sampling Vials*. Ground Water Monitoring and Remediation, Winter 2001, Vol 21, No. 1. p89-96.

Conversion from parts per billion as volume (ppbv) to micrograms per liter (μg/L):

$$C_g\left[\mu g/L\right] = C_g[ppbv] \times \frac{MW\left[g/mole\right]}{V_o\left[L/mole\right]} \times \frac{10^6\,\mu g}{1g}$$

Estimating the aqueous concentration using Henry's Law:

$$C_W\left[\mu g/L\right] = \frac{C_g\left[\mu g/L\right] \times T[K] \times R\left[L \cdot atm/mole \cdot K\right]}{H\left[atm \cdot m^3/mole\right]} \times \frac{1m^3}{1000L}$$

where:

MW is the molecular weight of the gas compound in grams per mole
Vo is the standard volume of an ideal gas in liters per mole
T is the temperature of the gas in degrees Kelvin
R is the universal gas constant in liter-atmospheres per mole-Kelvin

Note that the universal gas law states that $P \times V = n \times R \times T$, and assuming standard T (68 K) and P (1 atm) for one mole of gas (n = 1 mole), then $V = n \times R \times T/P$, or $V = R \times T$.

The calculated aqueous VOC concentrations found in Tables 1 and 2 of this appendix are significantly below the maximum observed VOC concentrations in the pan lysimeter water samples. There is no obvious correlation between the predicted and observed aqueous VOC concentrations.

The results suggest that VOC partioning is occurring from the aqueous phase to the gaseous phase (Table 1, pan lysimeter gas sample) and not from the landfill gas to the water (Table 2, soil gas sample). These results suggest that the VOCs detected in the pan lysimeter water are not a result of landfill gas compounds partitioning into water, but rather that the water detected in the pan lysimeters contained VOCs before entering.

Appendix E - Table 1
Theoretical Partitioning of VOCs from Gas to Water Phase in Pan Lysimeters
B&J Drop Box Sanitary Landfill

Constituent	Concentration in Gas Phase (ppbv) Cg	Molecular Weight (g/mole) MW	Concentration in Gas Phase (ug/m3) Cg	Henry's Law Constant (atm-m3/mol) H	Predicted Concentration in PL Water (ug/L) Cw	Max. Observed Concentration in PL Water (ug/L)
Pan Lysimeter PL-11.1						
Benzene	**1.0**	78.11	3.5	0.0054	0.015	**1.31**
Chloroethane	<1.0	64.52	ND	0.0113	ND	**4.48**
Chloromethane	<2.0	50.49	ND	0.0240	ND	**4.36**
Chloroform	**4.4**	119.38	23.4	0.0044	0.13	<1.00
1,1-Dichloroethane	**95**	98.96	419.7	0.0059	1.71	**7.07**
cis-1,2-Dichloroethene	<1.0	96.94	ND	0.0034	ND	**4.32**
Ethyl benzene	**2.6**	106.17	12.3	0.0084	0.035	<1.00
Methylene chloride	**2.4**	84.93	9.1	0.0027	0.081	**62.5**
Tetrachloroethene	**15**	165.83	111.0	0.0149	0.18	<1.00
Toluene	**11**	92.14	45.2	0.0059	0.18	<1.00
Trichloroethene	**9.9**	131.39	58.1	0.0103	0.14	<1.00
1,1,1-Trichloroethane	**26**	133.41	154.9	0.0080	0.46	**2.69**
Freon 11 (Trichlorofluoromethane)	**67**	137.37	410.9	0.1091	0.09	**8.64**
Freon 12 (Dichlorodifluoromethane)	**191**	120.91	1,031.0	0.4319	0.06	**2.71**
Freon 113 (1,1,2-Cl 1,2,2-F ethane)	**3.3**	-	-	-	-	<1.00
Freon 114 (1,2-Cl-1,1,2,2-F ethane)	**25**	-	-	-	-	<1.00
1,2,4-Trimethylbenzene	**4.1**	120.2	22.0	0.0056	0.094	<1.00
Vinyl chloride	**7.4**	62.50	20.6	0.0400	0.012	<1.00
m,p-Xylene	**11**	106.17	52.1	0.0077	0.16	<1.00
o-Xylene	**4.2**	106.17	19.9	0.0051	0.094	<1.00
Xylenes, total	NA	-	-	-	-	**2.96**
All other compunds below respective method detection limits.						
Pan Lysimeter PL-11.2						
Acetone	NA	-	-	-	-	**585**
2-Butanone	NA	-	-	-	-	**1,500**
Benzene	**1.1**	78.11	3.8	0.0054	0.017	<1.00
1,1-Dichloroethane	**1.7**	98.96	7.5	0.0059	0.031	<1.00
Ethyl benzene	**3.0**	106.17	14.2	0.0084	0.041	<1.00
Methylene chloride	**2.5**	84.93	9.5	0.0027	0.08	**4.61**
Toluene	**12**	92.14	49.4	0.0059	0.20	**29.0**
Freon 11 (Trichlorofluoromethane)	<1.0	137.37	ND	0.1091	ND	**1.23**
Freon 12 (Dichlorodifluoromethane)	**1.1**	120.91	5.9	0.4319	0.000	<1.00
1,2,4-Trimethylbenzene	**4.2**	120.2	22.5	0.0056	0.097	<1.00
Vinyl chloride	**1.2**	63	3.4	0.0400	0.002	<1.00
m,p-Xylene	**13**	106.17	61.6	0.0077	0.19	<1.00
o-Xylene	**4.6**	106.17	21.8	0.0051	0.10	<1.00
All other compunds below respective method detection limits.						

Notes:
ND = analyte not detected
NA = not analyzed, analyte not on TO-14 compound list

Conversion from ppbv to ug/m3:
ug/m3 = ppbv/22.4*MW
22.4 = L per mole of ideal gas; MW = molecular weight of compound

ug/m3 = 0.001 ug/L

Henry's Law: Cw = (Cg x 0.024) / 1000 / H
Cw = liquid phase concentration (ug/L)
Cg = vapor phase concentration (ug/m3)
H = Henry's law coefficient (atm-m3/mol)
0.024 = the value for R x T, where R is the Universal Gas Constant and T is degrees Kelvin
1000 = conversion factor for cubic metres to liters
Predicted concentrations in groundwater are calculated at standard temperature (68 degrees F) and pressure (1 atmosphere) conditions.

Appendix E - Table 2
Theoretical Partitioning of VOCs from Landfill Gas (B-01-5) to Water in Pan Lysimeters
B&J Drop Box Sanitary Landfill

Constituent	Landfill Gas Concentration B-01-5 (ppbv) Cg	Molecular Weight (g/mole) MW	Landfill Gas Concentration (ug/m3) Cg	Henry's Law Constant (atm-m3/mol) H	Predicted Concentration in Water (ug/L) Cw	Max. Observed Concentration in PL-11.1 or Pl-11.2 Water (ug/L)
Acetone	NA	-	-	-	-	**585**
2-Butanone	NA	-	-	-	-	**1,500**
Benzene	**25**	78.11	87.2	0.0054	0.387	**1.31**
Chloroethane	**9.8**	64.52	28.2	0.0113	0.060	**4.48**
Chloromethane	<2.7	50.49	ND	0.0240	ND	**4.36**
1,1-Dichloroethane	<2.7	98.96	ND	0.0056	ND	**7.07**
cis-1,2-Dichloroethene	<2.7	96.94	ND	0.0034	ND	**4.32**
Methylene chloride	<2.7	84.93	ND	0.0027	ND	**62.5**
Toluene	**62**	92.14	255.0	0.0059	1.04	**29.0**
1,1,1-Trichloroethane	<2.7	133.41	ND	0.0080	ND	**2.69**
Freon 11 (Trichlorofluoromethane)	<2.7	137.37	ND	0.1091	ND	**8.64**
Freon 12 (Dichlorodifluoromethane	**22**	120.91	118.8	0.4319	0.01	**2.71**
Freon 114 (1,2-Cl-1,1,2,2-F ethane	**23**	-	-	-	-	<1.00
1,2,4-Trimethylbenzene	**7.2**	120.2	38.6	0.0056	0.166	<1.00
Vinyl chloride	**41**	62.50	114.4	0.0400	0.069	<1.00
m,p-Xylene	**9.8**	106.17	46.4	0.0077	0.14	<1.00
o-Xylene	**4.5**	106.17	21.3	0.0051	0.100	<1.00
Xylenes, total	NA	-	-	-	-	**2.96**
Hexane	**750**	-	-	-	-	NA
Cyclohexane	**440**	-	-	-	-	NA
Heptane	**350**	-	-	-	-	NA

All other compunds below respective method detection limits.

Notes:
ND = analyte not detected
NA = not analyzed, analyte not on TO-14 compound list

Conversion from ppbv to ug/m3:
ug/m3 = ppbv/22.4*MW
22.4 = L per mole of ideal gas; MW = molecular weight of compound

ug/m3 = 0.001 ug/L

Henry's Law: Cw = (Cg x 0.024) / 1000 / H
Cw = liquid phase concentration (ug/L)
Cg = vapor phase concentration (ug/m3)
H = Henry's law coefficient (atm-m3/mol)
0.024 = the value for R x T, where R is the Universal Gas Constant and T is degrees Kelvin
1000 = conversion factor for cubic metres to liters
Predicted concentrations in groundwater are calculated at standard temperature (68 degrees F) and pressure (1 atmosphere) conditions.

APPENDIX D

APPENDIX D – DRILLING AND INSTALLATION OF REPLACEMENT WELLS G-10R AND G-11R

Pre-Field Activities

A workplan outlining the drilling and installation of replacement wells G-10R and G-11R was submitted in May 2001 and approved, with comments, in an April 2001 letter from the RWQCB.[2,3] A permit to drill and install G-10R and G-11R to approximately 75 feet bgs was obtained from the Solano County Department of Environmental Management (SCDEM), a copy of which is included in this appendix.

Drilling and Well Installation

Conor Pacific subcontracted Spectrum Exploration, Inc. of Stockton, California (Spectrum), to drill the borings and construct replacement groundwater monitoring wells G-10R and G-11R. Drilling and well installed was conducted on April 19-20, 2001. Spectrum drilled the borings using 8-inch-diameter hollow stem augers. Soil samples for soil logging were collected at 5 feet intervals, from ground surface to 35 feet below ground surface (bgs) using a split spoon sampler, and continuously from 35 to 75 feet bgs using a CME 5-foot continuous barrel. Water was encountered at approximately 40 and 38 feet bgs in G-10R and G-11R, respectively. Soils were logged according to the Unified Soil Classification System (USCS) under the direction of a California State Registered Geologist. Soil logs are included herein. The soil borings for G-10R and G-11R were advanced to 75 feet bgs, allowing the well screens to be approximately 5 feet deeper than the proposed deepest portion of the nearby borrow pit to ensure that the wells will not become dry with on-going groundwater extraction from the borrow pit.

Well installation procedures followed State and SCDEM guidelines. The wells were constructed within the augers using Schedule 40, 2-inch-diameter flush-threaded polyvinyl chloride (PVC) casing to 55 feet bgs. The well screens consist of 2-inch-diameter flush-treaded 0.02-inch machine-slotted PVC. Number 12 silica sand was poured through the augers to bring the filter sand to two feet above the top of the well screen. A two to three foot thick bentonite plug was placed above the filter sand. The augers were removed, the borings remained open and a sanitary seal of neat cement and approximately 4% bentonite was pumped through a 1-inch tremie pipe and placed around the well casing to ground surface. The top of the well casing was cut to approximately 2.5 feet above ground surface and capped with a watertight locking expansion well cap. A locking steel well vault was installed at surface to complete each well. Well completion details are included.

Well Development

Conor Pacific developed wells G-10R and G-11R on April 26, 2001. Prior to well development, the water levels in wells G-10R and G-11R was measured at approximately 33 and 35 feet below top of casing (TOC), respectively, and the total depth of each well inside the casing was measured at approximately 68 and 75 feet below TOC, respectively. The wells were bailed and surged, then

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[2] Conor Pacific. *Workplan for Replacement Wells, B&J Sanitary Landfill, Solano County, California.* May 14, 2001.
[3] Central Valley RWQCB. Letter to Mr. Greg Pryor of B&J Sanitary Landfill re: "Work Plan for Replacement Wells; B&J Sanitary Landfill, Solano County". April 11, 2001.

pumped using a hand piston pump to remove a total of 74 and 121 gallons of water from G-10R and G-11R, respectively. Fine sand and silt sediments were removed from each well during development and the total depth after well development was measured at 73.6 and 76 feet below TOC. The water level measured in G-10R and G-11R after development was 33.9 and 36.7 feet below TOC, respectively. Well development data sheets are included in herein. Although the total depth measurements indicate that sediments were not completely removed from the wells during development, hard bottoms were tagged, field parameters stabilized, and because most wells at the landfill produce silty water even after years of sampling, wells G-10R and G-11R are considered sufficiently developed. The top of casing elevations of these wells have not been surveyed yet and will be surveyed along with other wells to be drilled at the landfill during the next few months.

Initial well sampling

Groundwater monitoring wells G-10R and G-11R were sampled for the first time on April 26, 2001. Samples were analyzed by Sequoia Analytical for the full list of COC compounds as described in this report.

Note: Geologic cross section which includes replacement wells G-10R and G-11R will be submitted separately.

SOLANO COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH SERVICES DIVISION

W001147

WELL PERMIT

Owner: B & J Sanitary Landfill
Site Address: 6426 Hay Road
APN: 42-020-28,02,06
Application No.: MW-01-16

Applicant: B & J Sanitary Landfill
Mailing Address: 6426 Hay Rd., Vacaville, Ca. 95687

- ☐ Boring
- ☐ Water
- ☒ Monitoring
- ☐ Cathodic
- ☐ Destruction

NOT TRANSFERABLE

Expires 04/11/, 20 02 By Ricardo M. Serrano
Environmental Health Specialist

THIS PERMIT IS ISSUED SUBJECT TO ALL STATE LAWS AND ORDINANCES IN THE COUNTY, STATE OF CALIFORNIA, AND IS REVOCABLE FOR VIOLATION AT ANY TIME.

6426 Hay Rd, Vacaville
Site Address

42-020-28, 02, 06
Assessor's Parcel Number

MW-01-16
Application/Permit Number

Department of Environmental Management

601 TEXAS STREET
FAIRFIELD, CALIFORNIA • 94533

(707) 421-6770

WELL PERMIT APPLICATION

Property Owner B & J Sanitary Landfill Phone 707-678-4718

Mailing Address 6426 Hay Road, Vacaville, CA 95687

Drilling Contractor Spectrum Exploration Phone 209-465-8712

License Number C57 #512268 Expires April 31, 2003

WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.)
__Certified copy is hereby furnished. ✓ Certified copy is filed with the County of Solano Environmental Health Division.

Date 4-10-01 Applicant K. Schlie for Conor Pacific

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if the permit is for work valued at three hundred dollars ($300) or less.)
I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

PERMIT TYPE: ✓ New Well __Repair/Modification __Destruction

WELL USE: __Domestic __Agriculture __Commercial __Cathodic ✓ Monitoring (Describe Groundwater)

DRILLING METHOD: __Rotary __Cable ✓ Hollow Stem Auger __Other _____

CASING INFORMATION: Material: __Steel ✓ PVC __Other _____ Proposed Depth 75' bgs
Wall/Gauge SCH 40 Casing Diameter 2 in. Well Bore Diameter 8 in.

ANNULAR SEAL: Depth _____ ft. Width of Annular Space _____ in.
Sealing Material: __Neat Cement __Sand Cement __Concrete __Bentonite _____

Additional Work Description: Install 2 groundwater monitoring wells to estimated depth of 75 feet bgs. Anticipate 20 foot well screens and 55 feet blank casing for each well. Sand filterpack, bentonite transition seal, neat cement sanitary seal.

I hereby agree to comply with all regulations of the Solano County Code pertaining to well construction, repair, modification, destruction and abandonment. The well driller shall furnish Environmental Health with a complete well log upon completion of well construction.

Applicant Kathy Schlie for Conor Pacific Date April 10, 2001
Site Approved _____ Date _____

FOR OFFICE USE ONLY - ENVIRONMENTAL HEALTH

$265.00 Fee paid on 4-11-01 Receipt No. 808355 Permit expires 4/02 G:WELLAPP.RV1

Conor Pacific

BORING LOG

BORING NO. G-10R
WELL NO. G-10R
SHEET 1 OF 4

SITE: B&J Drum Box
CLIENT: Norcal Waste Systems
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 4/19/01
DATE(S) WELL INSTALLED: 4/20/01
DRILLING CO./DRILLER: Spectrum Exploration

GROUND ELEVATION: approx 30' MSL
T.O.C. ELEVATION: approx 32.5' MSL
COORDINATES: NA
DRILLING METHOD: hollow stem auger
BOREHOLE TOTAL DEPTH: 75' bgs
FINAL BOREHOLE DIAMETER: 8"

DRILLING SUMMARY: Drill boring to 75' bgs using 8" HSA. Sample every 5' to 35' bgs, continuous sample from 35' to 75' bgs. Install 2" diam SCH40 PVC well to 75' bgs, w 0.02-slot well screen (55-75' bgs). Filter sand (#2/12) 52.6-75' bgs bentonite seal 50-52.6' bgs. Cement-bentonite grout 2-50' bgs. Steel well vault box at surface.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		
							2		
							3		
							4		
							5		
			8						CL lean clay 80% fines, 20% fine sand
			14				6		firm to hard, moist
			21						yellowish brown 10YR 5/6
							7		
							8		
							9		
			14				10		CL sandy lean clay 60% fines 40% fine sand
			25						v. hard, moist
			30						
							11		
							12		
							13		
							14		
							15		
			11						SM silty sand 60% fine sand 40% fines
			15				16		planes of weathering, mainly vertical - white
			20						dry
							17		
							18		
							19		
							20		

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 2 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						20		ML sandy silt 60% fines 40% v. fine sand hard, dark yellowish brown 10YR 4/6
						21		
						22		
						23		
						24		
						25		
		3						ML silt 90% fines 10% fine sand low touch / soft to firm consist
		5				26		CL gravelly lean clay 60% fines 30% fine gravel 10% fine-med sand firm consist / light olive brown 2.5Y 5/6 mottled w. white, black, moist
		6				27		
						28		
						29		
						30		SP-SM poorly graded sand w silt 90% fine sand 10% fines yellowish brown 10YR 5/6 mottled w light yellowish brown 2.5Y 6/3 moist
						31		
						32		
						33		
						34		
						35		ML sandy silt 70% fines 30% fine sand yellowish brown mottled w orange, some weathering pitted & white firm consist / low plastic
						36		
						37		
						38		
						39		
					▽	40		ML silt w sand 85% fines 15% fine sand
						41		
						42		CL lean clay w gravel 70% fines 10% fine sand 20% coarse sand-fine gravel dark yellowish brown 10YR 4/6 trace gray mottles
						43		
						44		
						45		

Logged by: K. Schlieven
Checked by:
Date Checked:

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 3 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						46		SM silty sand w/ gravel 70% fines, 20% fine sand, 10% fine gravel (black, rounded) moist
						47		SP-SM well graded sand w/ silt 90% fine sand 10% fines, dark yellowish brown mottled w/ gray, yellow, rust. moist
						48		
						49		
						50		SM silty sand 85% fines 15% fine sand moist
						51		
						52		SP poorly graded sand 95% fine sand 5% fines moist
						53		SM silty sand 80% fine sand 20% fines interbedded to 60% fines 40% fine sand. lots of gray white weathering patterns moist
						54		
						55		
						56		
						57		
						58		ML sandy silt 60% fines 40% fine sand soft 60% fines moist
						59		
						60		
						61		SP-SM poorly graded sand w/ silt 90% fine sand 10% fines yellowish brown heavily mottled w/ rust gray black in irregular patterns
						62		
						63		
						64		
						65		
						66		CL sandy lean clay 70% fines 20% fine sand 10% fine gravel mottled w/ white
						67		SM silty sand 70% fine sand 30% fines moist. dark yellowish brown w/ black sand veins
						68		ML sandy silt 60% fines 40% v. fine sand
						69		
						70		

Logged by: K. Schlieuer
Checked by: KJ
Date Checked:

Conor Pacific

PROJECT NO: BTD 110
CLIENT: Norcal Waste
SITE: BTJ Drop Box

BORING NO. G-10R
WELL NO. G-10R
SHEET 4 OF 4

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
									ML-rat'n
							71		
							72		
							73		CL sandy lean clay, 80% fines, 40% fine sand, sticky, firm to hard consist, mottled.
							74		
							75	TD	

Logged by: K. Sakhiewa
Checked by: KS
Date Checked:

EINARSON FOWLER & WATSON

WELL CONSTRUCTION DETAILS

BORING DESIGNATION: G-10R

INSTALLATION
DATE: 4/19 - 4/20/01 BY: K. Schliewen

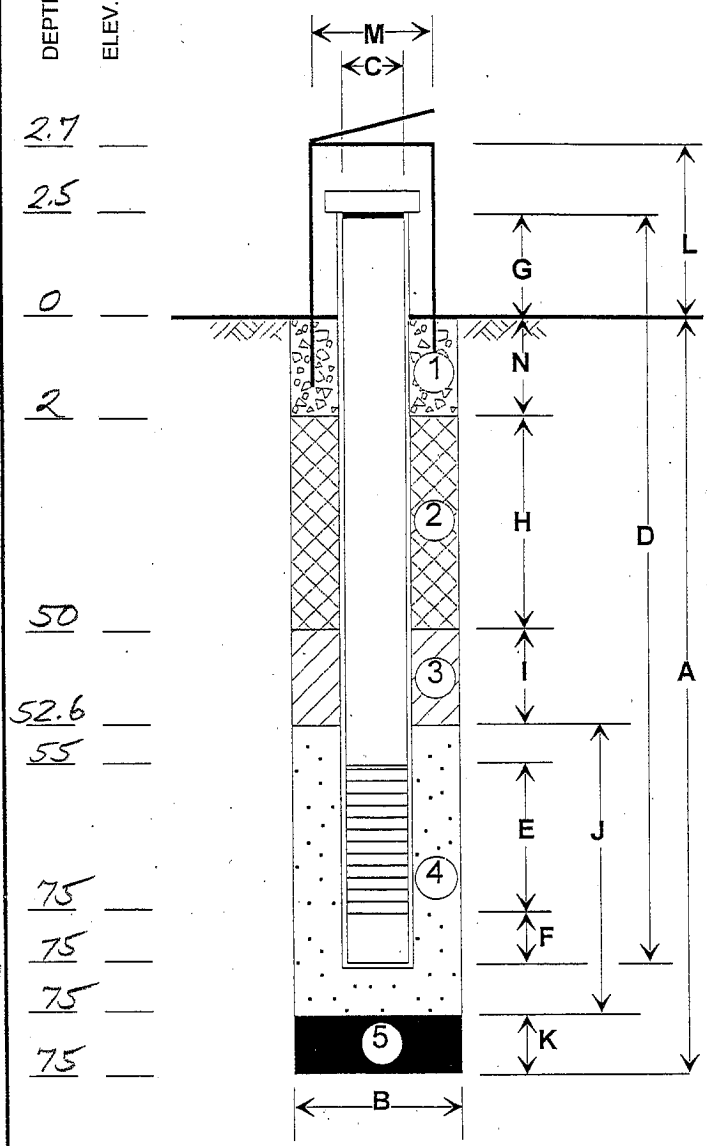
DIMENSIONS

A	Total Depth of Boring (ft.)	75
B	Borehole Diameter (in.)	8
C	Well Casing Diameter (in.)	2
D	Well Casing Length (ft.)	77.5
E	Well Casing Slotted Interval (ft.)	20
F	Well Casing End Cap or Sump (ft.)	0.1
G	Well Casing Height (ft.)	2.5
H	Annular Seal Interval (ft.)	48
I	Annular Seal Interval (ft.)	2.6
J	Sand Pack Interval (ft.)	22.4
K	Bottom Material Interval (ft.)	NA
L	Protective Cover Height (ft.)	2.7
M	Protective Cover Diameter (in.)	4
N	Annular Seal Interval (ft.)	2
	Well Centralizer Depth(s) (ft.)	NA

MATERIALS DATA

Monument Footing	1	Concrete
Annular Seal	2	cement grout
Annular Seal	3	bentonite
Sand Pack	4	#2/12 Filter Sand
Bottom Material	5	NA
Slotted Casing		0.02 slot SCH40 PVC
Well Casing		SCH40 PVC
Well Centralizers		NA
Protective Cover		Steel well vault

WELL DESIGNATION
G-10R



SECTION VIEW *(not to scale)*

NOTES:

SITE: B & J Drop Box Sanitary Landfill
PROJ. NO: BJD110
N. **E.**
WELL PERMIT NO: Solano County MW-01-16

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Conor Pacific

BORING LOG

BORING NO. G-11R
WELL NO. G-11R
SHEET 1 OF ____

SITE: B & J Drop Box
CLIENT: Norcal Waste Systems
PROJECT NUMBER: BJD110
DATE(S) DRILLED: 4/19/01
DATE(S) WELL INSTALLED: 4/19-20/01
DRILLING CO./DRILLER: Spectrum Exploration

GROUND ELEVATION: approx 32' MSL
T.O.C. ELEVATION: approx 34.5' MSL
COORDINATES: NA
DRILLING METHOD: hollow stem auger
BOREHOLE TOTAL DEPTH: 75' bgs
FINAL BOREHOLE DIAMETER: 8"

DRILLING SUMMARY: Drill boring to 75' bgs using 8" HSA. Sample every 5' to 35' bgs. Continuous sample from 35' to 75' bgs. Install 2" diam SCH40 PVC well to 75' bgs w/ 0.02-slot well screen (55-75' bgs). Filter sand (#2/12) 53-75' bgs, bentonite seal 50-53' bgs, cement-bentonite grout 2-50' bgs. Steel well vault box at surface.

	Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
							1		
							2		
							3		
							4		
							5		
			8	X	X		6		CL sandy lean clay 70% fines 20% fine sand 10% fine gravel light olive brown 2.5Y5/4
			15						
			23				7		
							8		
							9		
			8	X	X		10		SP-SM poorly graded sand w/ silt 90% fine-med sand 10% fines mottled light olive brown 2.5Y5/4 w/ yellowish brown 10YR5/6, gray and black moist
			11				11		
			15						
							12		
							13		
							14		
			7	X	X		15		SP poorly graded sand 95% fine-med sand <5% fines
			11				16		SP-SC poorly graded sand w/ clay 90% fine-med sand 10% fines
			15				17		
							18		
							19		
							20		

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Waste
SITE: B & J Landfill

BORING NO. G-11R
WELL NO. G-11R
SHEET 2 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		7						CL sandy lean clay 70% fines 30% fine sand
		12						firm consist med touch
		15				21		SP poorly graded sand 95% med sand
						22		<5% fines
								yellowish brown 10YR 5/6 mottled
						23		to black, gray, white, brown, yellow
								moist
						24		
						25		
		9						CL sandy lean clay 70% fines 30% fine
		13				26		sand firm to hard consist
		21						med-high touch low to med plastic
						27		yellowish brown 10YR 5/8 mottled
								to gray, black, brown
						28		
						29		
						30		
		7						CL lean clay with sand 70% fines
		8				31		20% fine sand 10% fine gravel
		12						med plastic firm touch
						32		mottled yellowish brown 10YR 5/4
								to gray, black, red
						33		
						34		
						35		
						36		ML sandy silt 70% fines 30% fine sand
						37		soft to firm consist med touch
					▽	38		med plastic dark yellowish brown 10YR 4/6
								mottled to gray
						39		ML sandy silt 60% fines 40% fine sand
								trace gravel wet
						40		CL sandy lean clay 60% fines 40% fine-
						41		med sand low to med touch soft consist
								dark yellowish brown 10YR 3/6
						42		
						43		CL lean clay to sand 80% fines 20% fine
						44		sand
						45		

Logged by: T. Schlieuer
Checked by: KJ
Date Checked:

Conor Pacific

PROJECT NO: BOD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-11R
WELL NO. G-11R
SHEET 3 OF 4

Sample No.	Sample Type	Blows/Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						46		SC clayey sand w/ gravel 60% fine - med-coarse sand, 20% fines, 20% fine - coarse gravel sticky, soft consist dark yellowish brown 10YR 3/4 moist to wet
						47		
						48		
						49		
						50		
						51		SP-SC poorly graded sand w/ clay, 70% fine - med sand, 20% fine - coarse gravel 10% fines, moist - wet
						52		← mottled w/ gray
						53		ML sandy silt 70% fines 30% fine - med sand firm to hard consist stratified colors
						54		
						55		
						56		
						57		SM silty sand 70% fine sand, 20% fines 10% coarse sand mostly black rounded friable
						58		@ 57 - 58.5 thin black lined patterns old root structures
						59		@ 58.5 - 58.75 white irregular layers w/ thin vert and horizontal patterns
						60		@ 57 - 58.75 increasing size of black rounded grains, soft friable / smeared at cuts.
						61		SP-SM poorly graded sand w/ silt 90% fine - med sand, 10% fines dark yellowish brown 10YR 4/6 mottled w/ gray and w/ black specks, moist
						62		SM silty sand 80% fines - coarse sand 20% fines light yellowish brown 2.5Y 6/3 mottled w/ rust colors, moist
						63		SP-SM poorly graded sand w/ silt 10YR 5/8 90% med sand 10% fines yellowish brown and black rounded med sand, moist
						64		ML sandy silt 60% fines 40% fine sand mottled light olive br 2.5Y 5/4 w/ white
						65		SM silty sand 80% fines 20% fine - med sand
						66		ML sandy silt 60% fines 40% fine sand
						67		
						68		
						69		
						70		

Logged by: K. Schlieuer
Checked by: KJ
Date Checked:

Conor Pacific

PROJECT NO: BJD 110
CLIENT: Norcal Wastes
SITE: B & J Drop Box

BORING NO. G-11R
WELL NO. G-11R
SHEET 4 OF 4

Sample No.	Sample Type	Blows\Run	Recovery	Sampler	Water Level	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
								ML cont'd
						71		
						72		SM- Silty sand, 80% fine - med sand 20% fines, moist
						73		SP-SM poorly graded sand w silt 90% fine-med sand, 10% fines, moist
						74		
						75		
							TD	

Date Checked:

Checked by: KJ

Logged by: K. Schlueter

EINARSON FOWLER & WATSON

WELL CONSTRUCTION DETAILS

BORING DESIGNATION: G-11R

INSTALLATION

DATE: 4/19-4/20/01 BY: K. Schliesen

DIMENSIONS

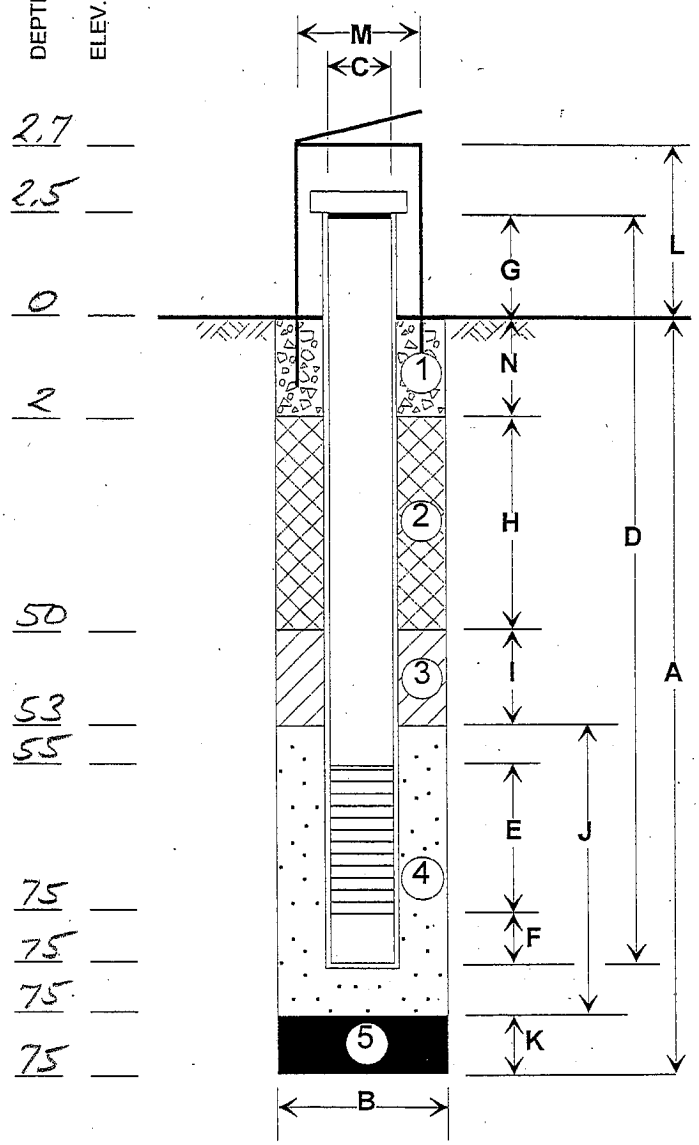
A	Total Depth of Boring (ft.)	75
B	Borehole Diameter (in.)	8
C	Well Casing Diameter (in.)	2
D	Well Casing Length (ft.)	77.5
E	Well Casing Slotted Interval (ft.)	20
F	Well Casing End Cap or Sump (ft.)	0.1
G	Well Casing Height (ft.)	2.5
H	Annular Seal Interval (ft.)	48
I	Annular Seal Interval (ft.)	3
J	Sand Pack Interval (ft.)	22
K	Bottom Material Interval (ft.)	NA
L	Protective Cover Height (ft.)	2.7
M	Protective Cover Diameter (in.)	4
N	Annular Seal Interval (ft.)	2
	Well Centralizer Depth(s) (ft.)	NA

MATERIALS DATA

Monument Footing	1	Concrete
Annular Seal	2	cement grout
Annular Seal	3	bentonite
Sand Pack	4	#2/12 filter sand
Bottom Material	5	NA
Slotted Casing		0.02 slot SCH40 PVC
Well Casing		SCH 40 PVC
Well Centralizers		NA
Protective Cover		steel well vault

WELL DESIGNATION

G-11R



SECTION VIEW *(not to scale)*

NOTES:

SITE: B & J Drop Box Sanitary Landfill
PROJ. NO: BJD110
N. E.
WELL PERMIT NO: Solano County MW-01-16

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WELL DEVELOPMENT FORM
Conor Pacific/EFW

Project No.: BJD110	Date: 4/26/01
Site Location: BJ DropBox	Well: G-10R
Name: RPWK	Diameter: 2"
Development Method: surgeblock, bailer, piston pump	Initial DTW: 33.32
Total Water Removed:	Final DTW: 33.9
Water Contained ? no	Initial TD: 68.2'
Important! Estimate of specific capacity or recharge to well:	Final TD: 73.6

Time	Volume (gal.)	Sand/Silt (ml/1000ml)	Temp. (°C)	EC (µS/cm)	pH	DTW (feet)	Turbidity (NTU/vis.)	Appearance/Comments
1555	30	~150	19.6	737	9.62	NM	>999	lt. brown, intake at bottom of
1612	50	~50	19.2	803	9.43	↓	↓	↓ intake at 68' well
1635	74	~20	18.6	1030	9.23	↓	↓	↓

- alternated surging/bailing to remove thick silt/sand laden water from bottom of well: ~7 gallons total, ~20 minutes surging.
- began pumping using hand piston pump - see above.
- well may still have 3-4' packed sand in bottom of well.
- although turbidity >999, visually was decreasing with pumping.

WELL DEVELOPMENT FORM
Conor Pacific/EFW

Project No.: BJD110	Date: 4/26/01
Site Location: BJ Drop Box	Well: G-11R
Name: Frank	Diameter: 2"
Development Method: Surge block, bailer, piston pump	Initial DTW: 35.06
Total Water Removed:	Final DTW: 36.7
Water Contained ? no	Initial TD: 75.3
Important! Estimate of specific capacity or recharge to well:	Final TD: 76.0

Time	Volume (gal.)	Sand/Silt (ml/1000ml)	Temp. (°C)	EC (µS/cm)	pH	DTW (feet)	Turbidity (NTU/vis.)	Appearance/Comments
1144	20		19.3	1230	7.80	NM	>999	H. brown, intake at 75'
1157	40	~100	19.0	1100	7.75	↓	↓	↓ ↓
1235	60		19.6	1140	8.04	↓	↓	↓ ↓
1245	80		19.3	1080	7.87	↓	↓	↓ ↓
1305	100	40	19.5	1080	7.70	↓	↓	↓ intake at 70'
1321	120	50	18.9	1080	7.62	↓	↓	↓ ↓

- bailed 3 gal from bottom of well to remove sand
- surged blocked using 5' stainless/vented block for 25 minutes
- beg on pumping - see above.

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: BJ Drop Box
SAMPLE ID: G-10R
PROJECT NO: BJ D~~HOU~~ 110
SAMPLED BY: RPark
CLIENT: Norcal
REGULATORY AGENCY:

SAMPLE TYPE: Groundwater ✓ Surface Water ___ Leachate ___ Treatment System ___ Other ___

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ✓ 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___

GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 73.6	Volume in Casing (gal): 6.9
Depth to Water (ft): 33.32	Calculated Purge (volumes / gal.): 20.6
Height of Water Column (ft): 40.28	Actual Pre-Sampling Purge (gal): 24.0

PURGE:

Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer ___
PVC Hand Pump 68' Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Purge Water Containment: non/ground

Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1026	8.0	19.0	990	9.35	lt.brown	high		
1031	16.0	18.8	1030	9.20	↓	↓		
1035	24.0	18.6	1030	9.23	↓	↓		

Purge Date: 4/26/01

SAMPLE:

Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer 68'
PVC Hand Pump ___ Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1710	18.8	990	9.17	2.73	lt.brown	>999	

Sheen: none Odor: none Sample Date: 4/26/01

Field Measurement Devices: Horiba ✓ Omega ___ QuickCheck ___ D.O. Test Kit ___

REMARKS: Well developed just prior to sampling.

SIGNATURE: [signature] DATE: 4/26/01

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Conor Pacific EFW

WATER SAMPLE FIELD DATA

LOCATION: B&J DropBox
SAMPLE ID: G-11R
PROJECT NO: BJD100
SAMPLED BY: R Pank
CLIENT: Norcal
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ___ Leachate ___ Treatment System ___ Other ___
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ✓ 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 76.0
Volume in Casing (gal): 7.0
Depth to Water (ft): 35.06
Calculated Purge (volumes / gal.): 20.9
Height of Water Column (ft): 40.94
Actual Pre-Sampling Purge (gal): 21.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer ___
PVC Hand Pump 70' Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___
Purge Water Containment: none/ground
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1313	7.0	19.0	1060	7.64	lt. brown	high		
1317	14.0	19.0	1080	7.62	↓	↓		
1321	21.0	19.9	1080	7.62	↓	↓		

Purge Date: 4/26/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ___ Teflon Bailer ___ PVC Bailer ___ Disp. Bailer 70'
PVC Hand Pump ___ Peristaltic Pump ___ Centrifugal Pump ___ Bladder Pump ___
Pneumatic Displacement Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1350	19.9	1110	7.74	2.15	lt. brown	>999	

Sheen: none Odor: none Sample Date: 4/26/01

Field Measurement Devices: Horiba ✓ Omega ___ QuickCheck ___ D.O. Test Kit ___
REMARKS: Well developed ~~after~~ just prior to Sampling

Calibrated Horiba 1030, 4/26/01: pH: 7.02, 10.05, EC: 0, 2060, fwb: 0, DO: auto, T: 20.1°C

SIGNATURE: [signature] **DATE:** 4/26/01

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APPENDIX E

APPENDIX E – PARTITIONING OF VOCS BETWEEN GAS AND GROUNDWATER

Partitioning of VOCs between gas and groundwater can be described by standard phase transfer models. A theoretical aqueous concentration can be calculated for compounds for which a Henry's Law constant is available in literature, including most common VOCs. To help identify the source of the VOCs detected in pan lysimeter water, theoretical aqueous VOC concentrations were calculated from VOC concentrations detected in the pan lysimeter gas samples and the soil gas sample in which landfill gas was identified.

Henry's Law and Gas to Water Partitioning

Partitioning of VOCs between the gas and water phase can be described by standard phase transfer models. Henry's Law was used to predict theoretical VOC concentrations in groundwater. At equilibrium, the gas-phase concentrations (C_g) and water-phase concentrations (C_w) are related by Henry's Constant (H) in Henry's Law:

$$C_w = \frac{C_g}{H}$$

where:

C_w is the concentration in the aqueous phase; [mass/volume]
C_g is the concentration in the gaseous phase; [mass/volume]
H is the Henry's Law Constant; [pressure x volume/moles]

The Henry's Law Constant is an index of the partitioning of a chemical between dissolved aqueous and gaseous phases.[4] The Henry's Law Constant depends on the compound, the solvent (in this case, water), and the temperature of the system.[5]

Tables 1 and 2 of this appendix lists those VOCs detected in the pan lysimeter gas samples and in the soil gas sample collected from boring B-01-5. Included in the right most column are the maximum VOC concentrations detected in each pan lysimeter (Table 1) and in both pan lysimeters (Table 2). Also included are the available Henry's Law Constants and the calculated groundwater concentration based on the gaseous VOC concentrations. Below are the equations used in Tables 1 and 2 to calculate the predicted aqueous VOC concentrations based on the measured gaseous VOC concentrations, assuming the two phases are in equilibrium.

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[4] Hern, S.C. and Melancon, S.M. *Vadose Zone Modeling of Organic Pollutants*. Lewis Publishers, Inc.: Michigan, 1986.

[5] Nadim, F., Liu, S., and Hoag, G.E. *The Effect of Air Bubble and Heaspace on the Aqueous Concentrations of Volatile Organic Compounds in Sampling Vials*. Ground Water Monitoring and Remediation, Winter 2001, Vol 21, No. 1. p89-96.

Conversion from parts per billion as volume (ppbv) to micrograms per liter (μg/L):

$$C_g\left[\mu g/L\right] = C_g[ppbv] \times \frac{MW\left[g/mole\right]}{V_o\left[L/mole\right]} \times \frac{10^6\,\mu g}{1g}$$

Estimating the aqueous concentration using Henry's Law:

$$C_W\left[\mu g/L\right] = \frac{C_g\left[\mu g/L\right] \times T[K] \times R\left[L \cdot atm/mole \cdot K\right]}{H\left[atm \cdot m^3/mole\right]} \times \frac{1m^3}{1000L}$$

where:

MW is the molecular weight of the gas compound in grams per mole
Vo is the standard volume of an ideal gas in liters per mole
T is the temperature of the gas in degrees Kelvin
R is the universal gas constant in liter-atmospheres per mole-Kelvin

Note that the universal gas law states that $P \times V = n \times R \times T$, and assuming standard *T* (68 K) and *P* (1 atm) for one mole of gas ($n = 1$ mole), then $V = n \times R \times T/P$, or $V = R \times T$.

The calculated aqueous VOC concentrations found in Tables 1 and 2 of this appendix are significantly below the maximum observed VOC concentrations in the pan lysimeter water samples. There is no obvious correlation between the predicted and observed aqueous VOC concentrations.

The results suggest that VOC partioning is occurring from the aqueous phase to the gaseous phase (Table 1, pan lysimeter gas sample) and not from the landfill gas to the water (Table 2, soil gas sample). These results suggest that the VOCs detected in the pan lysimeter water are not a result of landfill gas compounds partitioning into water, but rather that the water detected in the pan lysimeters contained VOCs before entering.

Appendix E - Table 1
Theoretical Partitioning of VOCs from Gas to Water Phase in Pan Lysimeters
B&J Drop Box Sanitary Landfill

Constituent	Concentration in Gas Phase (ppbv) Cg	Molecular Weight (g/mole) MW	Concentration in Gas Phase (ug/m3) Cg	Henry's Law Constant (atm-m3/mol) H	Predicted Concentration in PL Water (ug/L) Cw	Max. Observed Concentration in PL Water (ug/L)
Pan Lysimeter PL-11.1						
Benzene	**1.0**	78.11	3.5	0.0054	0.015	**1.31**
Chloroethane	<1.0	64.52	ND	0.0113	ND	**4.48**
Chloromethane	<2.0	50.49	ND	0.0240	ND	**4.36**
Chloroform	**4.4**	119.38	23.4	0.0044	0.13	<1.00
1,1-Dichloroethane	**95**	98.96	419.7	0.0059	1.71	**7.07**
cis-1,2-Dichloroethene	<1.0	96.94	ND	0.0034	ND	**4.32**
Ethyl benzene	**2.6**	106.17	12.3	0.0084	0.035	<1.00
Methylene chloride	**2.4**	84.93	9.1	0.0027	0.081	**62.5**
Tetrachloroethene	**15**	165.83	111.0	0.0149	0.18	<1.00
Toluene	**11**	92.14	45.2	0.0059	0.18	<1.00
Trichloroethene	**9.9**	131.39	58.1	0.0103	0.14	<1.00
1,1,1-Trichloroethane	**26**	133.41	154.9	0.0080	0.46	**2.69**
Freon 11 (Trichlorofluoromethane)	**67**	137.37	410.9	0.1091	0.09	**8.64**
Freon 12 (Dichlorodifluoromethane)	**191**	120.91	1,031.0	0.4319	0.06	**2.71**
Freon 113 (1,1,2-Cl 1,2,2-F ethane)	**3.3**	-	-	-	-	<1.00
Freon 114 (1,2-Cl-1,1,2,2-F ethane)	**25**	-	-	-	-	<1.00
1,2,4-Trimethylbenzene	**4.1**	120.2	22.0	0.0056	0.094	<1.00
Vinyl chloride	**7.4**	62.50	20.6	0.0400	0.012	<1.00
m,p-Xylene	**11**	106.17	52.1	0.0077	0.16	<1.00
o-Xylene	**4.2**	106.17	19.9	0.0051	0.094	<1.00
Xylenes, total	NA	-	-	-	-	**2.96**
All other compunds below respective method detection limits.						
Pan Lysimeter PL-11.2						
Acetone	NA	-	-	-	-	**585**
2-Butanone	NA	-	-	-	-	**1,500**
Benzene	**1.1**	78.11	3.8	0.0054	0.017	<1.00
1,1-Dichloroethane	**1.7**	98.96	7.5	0.0059	0.031	<1.00
Ethyl benzene	**3.0**	106.17	14.2	0.0084	0.041	<1.00
Methylene chloride	**2.5**	84.93	9.5	0.0027	0.08	**4.61**
Toluene	**12**	92.14	49.4	0.0059	0.20	**29.0**
Freon 11 (Trichlorofluoromethane)	<1.0	137.37	ND	0.1091	ND	**1.23**
Freon 12 (Dichlorodifluoromethane)	**1.1**	120.91	5.9	0.4319	0.000	<1.00
1,2,4-Trimethylbenzene	**4.2**	120.2	22.5	0.0056	0.097	<1.00
Vinyl chloride	**1.2**	63	3.4	0.0400	0.002	<1.00
m,p-Xylene	**13**	106.17	61.6	0.0077	0.19	<1.00
o-Xylene	**4.6**	106.17	21.8	0.0051	0.10	<1.00
All other compunds below respective method detection limits.						

Notes:
ND = analyte not detected
NA = not analyzed, analyte not on TO-14 compound list

Conversion from ppbv to ug/m3:
ug/m3 = ppbv/22.4*MW
22.4 = L per mole of ideal gas; MW = molecular weight of compound

ug/m3 = 0.001 ug/L

Henry's Law: Cw = (Cg x 0.024) / 1000 / H
Cw = liquid phase concentration (ug/L)
Cg = vapor phase concentration (ug/m3)
H = Henry's law coefficient (atm-m3/mol)
0.024 = the value for R x T, where R is the Universal Gas Constant and T is degrees Kelvin
1000 = conversion factor for cubic metres to liters
Predicted concentrations in groundwater are calculated at standard temperature (68 degrees F) and pressure (1 atmosphere) conditions.

Appendix E - Table 2
Theoretical Partitioning of VOCs from Landfill Gas (B-01-5) to Water in Pan Lysimeters
B&J Drop Box Sanitary Landfill

Constituent	Landfill Gas Concentration B-01-5 (ppbv) Cg	Molecular Weight (g/mole) MW	Landfill Gas Concentration (ug/m3) Cg	Henry's Law Constant (atm-m3/mol) H	Predicted Concentration in Water (ug/L) Cw	Max. Observed Concentration in PL-11.1 or Pl-11.2 Water (ug/L)
Acetone	NA	-	-	-	-	**585**
2-Butanone	NA	-	-	-	-	**1,500**
Benzene	**25**	78.11	87.2	0.0054	0.387	**1.31**
Chloroethane	**9.8**	64.52	28.2	0.0113	0.060	**4.48**
Chloromethane	<2.7	50.49	ND	0.0240	ND	**4.36**
1,1-Dichloroethane	<2.7	98.96	ND	0.0056	ND	**7.07**
cis-1,2-Dichloroethene	<2.7	96.94	ND	0.0034	ND	**4.32**
Methylene chloride	<2.7	84.93	ND	0.0027	ND	**62.5**
Toluene	**62**	92.14	255.0	0.0059	1.04	**29.0**
1,1,1-Trichloroethane	<2.7	133.41	ND	0.0080	ND	**2.69**
Freon 11 (Trichlorofluoromethane)	<2.7	137.37	ND	0.1091	ND	**8.64**
Freon 12 (Dichlorodifluoromethane	**22**	120.91	118.8	0.4319	0.01	**2.71**
Freon 114 (1,2-Cl-1,1,2,2-F ethane	**23**	-	-	-	-	<1.00
1,2,4-Trimethylbenzene	**7.2**	120.2	38.6	0.0056	0.166	<1.00
Vinyl chloride	**41**	62.50	114.4	0.0400	0.069	<1.00
m,p-Xylene	**9.8**	106.17	46.4	0.0077	0.14	<1.00
o-Xylene	**4.5**	106.17	21.3	0.0051	0.100	<1.00
Xylenes, total	NA	-	-	-	-	**2.96**
Hexane	**750**	-	-	-	-	NA
Cyclohexane	**440**	-	-	-	-	NA
Heptane	**350**	-	-	-	-	NA

All other compunds below respective method detection limits.

Notes:
ND = analyte not detected
NA = not analyzed, analyte not on TO-14 compound list

Conversion from ppbv to ug/m3:
ug/m3 = ppbv/22.4*MW
22.4 = L per mole of ideal gas; MW = molecular weight of compound

ug/m3 = 0.001 ug/L

Henry's Law: Cw = (Cg x 0.024) / 1000 / H
Cw = liquid phase concentration (ug/L)
Cg = vapor phase concentration (ug/m3)
H = Henry's law coefficient (atm-m3/mol)
0.024 = the value for R x T, where R is the Universal Gas Constant and T is degrees Kelvin
1000 = conversion factor for cubic metres to liters
Predicted concentrations in groundwater are calculated at standard temperature (68 degrees F) and pressure (1 atmosphere) conditions.