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Attorneys for Petitioner PACIFIC STATES INDUSTRIES, INC.

BEFORE THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of California Regional Water Quality Control Board – North Coast Region. Rescission of Cleanup and Abatement Order No. 93-111 – Former Louisiana-Pacific Corporation Rounds Lumber Remanufacturing Plant, 26800 Asti Road, Cloverdale, CA No. ____

PETITION FOR REVIEW AND REQUEST FOR HEARING

REQUEST TO HOLD PETITION FOR REVIEW IN ABEYANCE

(Cal. Water Code § 13320; Cal. Code Regs., tit. 23 §§ 2050 et seq.)

INTRODUCTION

Petitioner PACIFIC STATES INDUSTRIES, INC. ("Petitioner") hereby petitions the State Water Resources Control Board (the "State Board") for review of the California Regional Water Quality Control Board, North Coast Region (the "Regional Water Board") Rescission of Cleanup and Abatement Order 93-111, issued on January 10, 2012, Order No. R1-2012-0020. A copy of Order No. R1-2012-0020 is attached as **Exhibit A**.

This petition for review ("Petition") is brought pursuant to the provisions of Water Code section 13320 and Title 23 of the California Code of Regulations ("CCR") sections 2050 *et seq*. Pursuant to CCR section 2050.5, Petitioner hereby requests that the State Board hold this Petition in abeyance pending the outcome of further discussions and communications between Petitioner and the Regional Water Board regarding the rescission of Cleanup and Abatement Order 93-111 ("Order").

PETITION FOR REVIEW

I. NAME, ADDRESS, TELEPHONE NUMBER AND EMAIL ADDRESS OF PETITIONER

Austin Vanderhoof Executive Vice President, CFO Pacific States Industries, Inc. 2 West Santa Clara St. San Jose, CA 95113 Phone: (408) 271-7905 avander@pacificstates.com

II. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL WATER BOARD THAT THE STATE BOARD IS REQUESTED TO REVIEW

Petitioner seeks review of the Regional Water Board's action to rescind the Order contained in Order No. R1-2012-0020 Rescission of Cleanup and Abatement Order No. 93-111.

A copy of the order dated January 10, 2012 is attached as **Exhibit A**. This action was taken by the Regional Water Board Executive Officer without notice, hearing, and opportunity to respond.

III. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR FAILED TO ACT

The Regional Water Board Executive Officer acted on January 10, 2012, as indicated in Order No. R1-2012-0020 of that date.

IV. <u>A FULL AND COMPLETE STATEMENT OF THE REASONS THE ACTION OR INACTION WAS INAPPROPRIATE OR IMPROPER</u>

The Regional Water Board's rescission of the Order is inappropriate and improper because, among other things, this action: (1) was made without notice, hearing, or an opportunity to respond; (2) is arbitrary and capricious; and (2) is unsupported by technical and scientific evidence.

V. THE MANNER IN WHICH PETITIONER IS AGGRIEVED

Petitioner is an aggrieved person within the meaning of California Water Code section 13320 because the Regional Water Board's rescission of the Order contains arbitrary and capricious findings that are unsupported by the evidence in the record. Moreover, the rescission of the Order was conducted without proper due process, depriving Petitioner of notice and an opportunity to comment prior to issuance of the rescission order. The failure to properly consider whether rescission of the Order was appropriate could greatly reduce the value of Petitioner's property and ultimately impose considerable costs on Petitioner for potential penalties for the residual contamination in the future, as well as considerable costs for cleanup. Furthermore, the rescission of the order leaves Petitioner with contaminated property from no fault of its own and a potential deed restriction, while the discharger is released from its obligations under the Order with no harm from the decreased value of 26800 Asti Road, Cloverdale, California (the "Premises").

VI. THE SPECIFIC ACTION BY THE STATE OR THE REGIONAL BOARD THAT PETITIONER REQUESTS

Petitioner respectfully requests that the State Board:

(a) Reinstate the Order, attached as **Exhibit B**

- (b) Hold an evidentiary hearing on the Regional Board's challenged actions.
- (c) Allow Petitioner to supplement the record with such additional evidence as is or may become available. Petitioner will identify such additional evidence once the record is prepared by the Regional Water Board.
- (d) Hold this Petition in abeyance pending the outcome of further discussions and communications between Petitioner and the Regional Board regarding the rescission of the Order.
- (e) Petitioner reserves the right to further request any and all actions authorized in California Water Code section 13320.

VII. <u>A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION</u>

The rescission of the Order was improper for procedural and substantive reasons. The following summarizes the improper actions of which Petitioners complain.

A. Substantive Issues

By rescinding the Order, the Regional Water Board is representing that the cleanup at the Premises is complete. The Order has been rescinded, yet the matter has not been closed with the Regional Water Board due to residual contamination. Thus, there seems to be no basis for rescission of the Order. The imposition of a deed restriction has been suggested in order to close the matter. The possible necessity of a deed restriction clearly demonstrates that cleanup is not complete. In fact, the Regional Water Board's inability to close the order under the current conditions suggests it should be doing precisely the opposite, enforcing the Order to ensure complete cleanup of the Premises.

Most importantly, Louisiana-Pacific Corporation has not complied with the Order. The Order requires "timely cleanup." The Regional Water Board and Louisiana-Pacific Corporation's reliance on natural attenuation is neither "timely," nor is it "cleanup." There is no reference as to how long natural attenuation will take until the groundwater will meet groundwater quality objectives. Furthermore, waiting around for a natural reduction in contaminates is not a cleanup — a cleanup requires the parties to take action to reduce the contamination on the Premises to values within the groundwater quality objectives, and eliminate the threat of future contamination of groundwater.

Neither the threat to the groundwater nor the impact to the groundwater have been fully resolved. It is clear that contaminants remain on the Premises, including pentachlorophenol ("PCP"), dioxins, mineral spirits, and hydrocarbons in soil and groundwater. Aside from the current impact on the groundwater, this poses a threat to groundwater in the future. For example, the extent of dioxins on the Premises is still unknown. Despite previous discoveries of dioxins, there has been no assurance whether the groundwater levels are consistent with the water quality objectives as required by the Water Code.

Furthermore, the water quality objectives require cleanup on the entire property, not merely where it is convenient. The Regional Water Board and Louisiana-Pacific Corporation have failed to investigate whether further cleanup can and should be conducted on the Property, despite the existing structures on the property. In the Additional Site Investigation ("ASI") Report of Findings, attached as **Exhibit C**, SHN Consulting Engineers & Geologists, Inc. identified, "the impacted soil is localized... underneath the paved floor of a building." (ASI, p.8). The known contaminates in soil, in addition to adding pollutants to groundwater, also pose

a threat to health of existing workers, future construction workers, and potential future residents.

A human health risk assessment is needed to assess these threats.

It was improper to rescind the Order before cleanup was completed. Rescission of the Order allows Louisiana-Pacific Corporation to leave the remaining contamination for Petitioner to cleanup at its own expense at a later date – it simply postpones the remediation and passes the costs of cleanup to Petitioner. It was inappropriate to rescind the Order without conducting a health/risk assessment, and thus, Petitioner requests that the Order be reinstated.

B. Procedural Issues

Petitioner was not provided notice or a mechanism for comment prior to the rescission of the Order. This is a clear violation of due process.

Petitioner has owned and operated the property at the Premises since it purchased the Premises from Louisiana-Pacific Corporation in 1996. In 1993, prior to Petitioner's purchase of the land, a cleanup and abatement order was issued against Louisiana-Pacific Corporation, a copy attached as **Exhibit B**. As the current owner, Petitioner has a property interest in the Premises and the cleanup conducted thereon. A deed restriction, which can only be implemented with the consent of Petitioner, has been suggested as a necessity to closure of the matter. Thus, if the rescission of the Order ultimately results in a potential restriction on the use of Petitioner's land, Petitioner should have been provided with the protections of due process – notice of the rescission and an opportunity to comment before the Executive Officer rescinded the Order. Therefore, Petitioner has requested a hearing regarding the rescission of the Order and reinstatement of the Order.

Notwithstanding Petitioner's objections to the Regional Water Board's rescission of the Order, Petitioner intends to obtain and further review the administrative record, as well as discuss the rescission of the Order with the Regional Water Board. Therefore, Petitioner requests that the State Board hold this Petition in abeyance pending further discussions with the Regional Water Board regarding the basis for the rescission. Petitioner reserves its right to submit a detailed and more inclusive statement of points and authorities if these discussions fail to resolve the issues presented in this Petition. Petitioner will submit an additional statement of points and authorities once the State Board converts this Petition to active status and the record in this matter has been prepared.

VIII. STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL BOARD AND TO THE DISCHARGER, IF NOT THE PETITIONER

A copy of this Petition has been sent to the Regional Water Board and the discharger, Louisiana-Pacific Corporation.

IX. STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR AN EXPLANATION OF WHY PETITIONER WAS NOT REQUIRED OR UNABLE TO RAISE THESE ISSUES

Petitioner was unable to raise these issues before the Regional Water Board because the rescission of the Order was issued without prior notice and an opportunity for Petitioner to comment, nor was Petitioner required to raise them. However, Petitioner is the current owner of the property located at 26800 Asti Road, Cloverdale, CA 95425. Thus, Petitioner should have been given notice and an opportunity to comment on the rescission of the Order prior to the Executive Officer's rescission of the Order, in an interest of due process.

X. REQUEST FOR PREPARATION OF THE ADMINISTRATIVE RECORD

By copy of this Petition to the Executive Officer of the Regional Board, Petitioner hereby

requests the preparation of the administrative record herein.

XI. REQUEST FOR HEARING

Petitioner requests that the State Board hold a hearing in this matter.

XII. STATEMENT OF ADDITIONAL EVIDENCE

Petitioner requests that it be permitted to supplement the record before the State Board.

Petitioner will advise the State Board more specifically in this regard once the record has been

prepared by the Regional Board, and it knows what matters have not been included by the

Regional Board.

XIII. REQUEST TO HOLD PETITION IN ABEYANCE

Pursuant to Title 23, California Code of Regulations section 2050.5(d), Petitioner

requests that the State Board hold this petition in abeyance for a brief period to allow the

Regional Board and Petitioner to attempt to resolve the issues raised in this Petition. Petitioner

will notify the State Board when it is ready to have its Petition considered.

Respectfully Submitted,

Dated: February 9, 2012

CASTELLÓN & FUNDERBURK

Bv:

William W. Funderburk

Attorney for Petitioner

PACIFIC STATES INDUSTRIES,

INC.

-8-

PETITION AND REQUEST FOR HEARING; REQUEST TO HOLD PETITION IN ABEYANCE

VERIFICATION

I, Austin Vanderhoof, am the Executive Vice President and Chief Financial Officer of Pacific States Industries, Inc.

I have read the foregoing PETITION AND REQUEST FOR HEARING, REQUEST TO HOLD PETITION IN ABEYANCE. Fam informed and believe that the facts alleged in the Petition are true to the best of my knowledge.

I declare under penalty of perjury under the law of the State of California that the foregoing is true and correct and that this verification is executed on February 9, 2012, at the second of California.

Austin Vanderhoof

1	PROOF OF SERVICE								
3	I am employed in the County of Los Angeles, State of California, I am over the age of 18 and not a party to the within action; my business address is 811 Wilshire Bl., Suite 1025, Los								
4 5	Angeles, Ĉalifornia 90017. February 09, 2012 I served the foregoing document(s) described as:								
6 7	PETITION FOR REVIEW AND REQUEST FOR HEARING; REQUEST TO HOLD PETITION FOR REVIEW IN ABAYENCE								
8	on the interested party(ies) in this action by placing the original _X_ a true copy thereof enclosed in a sealed envelope(s) addressed as follows:								
10 11	Jeannette L. Bashaw, Legal Analyst Office of Chief Counsel State Water Resources Control Board P.O. Box 100 Segregation A 05812 0100 Louisiana-Pacific Corporation 414 Union Street Suite 2000 Nashville TN 37219 U.S. Mail ONLY								
1213	Sacramento, CA 95812-0100 Fax: (916) 341-5199 jbashaw@waterboards.ca.gov								
14 15	X: BY MAIL: I deposited such envelopes in the mail at Los Angeles, California. The envelopes were mailed with postage thereon fully prepaid.								
16 17	: BY E-MAIL - I personally sent a true copy in .pdf format to the e-mail address(es) noted above.								
18 19	: BY FEDERAL EXPRESS: I caused such envelope to be served by Federal Express, Overnight to the offices of the addressee(s) marked by an asterisk.								
20	X: VIA FACSIMILE: I caused the above-referenced document to be served by facsimile transmission to the addresses on the attached Service List.								
21 22	: BY PERSONAL DELIVERY: by causing to be hand delivered, a true copy thereof to the deponent at the address set forth in the accompanying subpoena, if necessary, following the discussions amongst the parties.								
23 24	[X] (STATE) I declare under penalty of perjury that the foregoing is true and correct.								
25	February 09, 2012, at Los Angeles, California								
26 27	Skarleht Samayoa Skarleht Samayoa								
28									

PROOF OF SERVICE

1									
2	PROOF OF SERVICE								
3	I am employed in the County of Los Angeles, State of California, I am over the age of 18 and not a party to the within action; my business address is 811 Wilshire Bl., Suite 1025, Los Angeles, California 90017.								
4	February 09, 2012 I served the foregoing document(s) described as:								
5	t cortain or, not not the torogoning decontrols designated as:								
6	PETITION FOR REVIEW AND REQUEST FOR HEARING; REQUEST TO HOLD PETITION FOR REVIEW IN ABAYENCE								
7									
8	on the interested party(ies) in this action by placing the original _X_ a true copy thereof enclosed in a sealed envelope(s) addressed as follows:								
9	Ms. Janice Goebel								
10	Regional Water Quality Control Board								
11	5550 Skylane Blvd., Suite A Santa Rosa, CA 95403								
12	jgoebel@waterboards.ca.gov								
13									
14									
15	X: BY MAIL: I deposited such envelopes in the mail at Los Angeles, California. The envelopes were mailed with postage thereon fully prepaid.								
16	: BY E-MAIL - I personally sent a true copy in .pdf format to the e-mail address(es) noted above.								
17 18	: BY FEDERAL EXPRESS: I caused such envelope to be served by Federal Express, Overnight to the offices of the addressee(s) marked by an asterisk.								
19	: VIA FACSIMILE: I caused the above-referenced document to be served by facsimile								
20	transmission to the addresses on the attached Service List.								
21	: BY PERSONAL DELIVERY: by causing to be hand delivered, a true copy thereof to the								
22	deponent at the address set forth in the accompanying subpoena, if necessary, following the discussions amongst the parties.								
23	[X] (STATE) I declare under penalty of perjury that the foregoing is true and correct.								
24	February 09, 2012, at Los Angeles, California								
25	Skarleht Samayoa Kaclell								
26	- Shawing								
27									
28									

California Regional Water Quality Control Board North Coast Region

ORDER NO. R1-2012-0020

RECISION OF CLEANUP AND ABATEMENT ORDER NO. 93-111

FOR

LOUISIANA-PACIFIC CORPORATION ROUNDS LUMBER REMANUFACTURING PLANT 26800 Asti Road Cloverdale, California

Sonoma County

- 1. On October 22, 1993, the Executive Officer of the North Coast Regional Water Quality Control Board issued Cleanup and Abatement Order No. 93-111 (CAO 93-111) to Louisiana-Pacific Corporation for the Rounds Remanufacturing Facility located in Cloverdale, California (Site). CAO 93-111 required the Discharger to investigate and cleanup the Site from the discharge of wood treatment chemicals and petroleum hydrocarbons to soil and groundwater.
- 2. Louisiana-Pacific removed over 1,000 cubic yards of soil contaminated with pentachlorophenol, and total petroleum hydrocarbons as diesel and motor oils in the early 1990s. In 1996, a soil vapor extraction system was installed and operated for four years. In addition, an interceptor trench was installed upgradient of the area to divert groundwater from the area of contamination. In 2000, the soil vapor extraction system was converted to a bioventing system.
- 3. Louisiana-Pacific Corporation has complied with CAO 93-111, and the Order is no longer needed.

THEREFORE, it is hereby ordered that Cleanup and Abatement Order No. 93-111 is rescinded.

Ordered by Original signed by
Catherine Kuhlman
Executive Officer

January 10, 2012

12_0020_CDO_Recission_LP_JMG_120110

California Regional Water Quality Control Board North Coast Region

CLEANUP AND ARATEMENT ORDER NO. 93-111

FOR

LOUISIANA-PACTFIC CORFORATION
ROUNDS LUMBER - REMANUFACTURING PLANT

26800 Asti Road, Cloverdale

Sonoma County

The California Regional Water Quality Control Board, North Coast Region, finds that:

- 1. The Louisiana-Pacific Corporation (hereinafter discharger) owns the Rounds Lumber Remanufacturing Plant located at latitude 38° 46' north, Longitude 122° 59° 15" west which is between U.S. Highway 101 and the Russian River approximately three miles south of the City of Cloverdale.
- The Regional board adopted Waste Discharge Requirements Order No. 91-35 for this facility on March 28, 1991. This Order contains the following discharge prohibitions:
 - A.3. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC), is prohibited. [Health and Safety Code, Section 5411]
 - A.5. The discharge of wood treatment chemicals or stain control fungicides to surface waters or to groundwaters is prohibited.
- 3. The discharger applied "Wood Tox" to siding until the mid 1970s. "Wood Tox" was a water repellent formulation containing approximately 5 percent tetrachlorophenol/pentachlorophenol (TCP/PCP) in a "mineral spirits" base. The application was made in the siding department which was located in a covered building. Following the cessation of the use of the water repellent formulation, the facility was reconstructed which involved the removal of the spray equipment and the dismantling or burying of the associated recycling sump.
- 4. The discharger hired SHN Consulting Engineers and Geologists (SHN) to conduct a site assessment for potential contamination from regulated and hazardous materials preliminary to selling the property. In March, 1992, test holes were excavated in the old siding department down gradient from the former spray tank and spray area. Samples collected at 0.5 and 1.3 feet below ground surface revealed maximum concentrations of 12 ppm TCP and 68 ppm PCP. The Department of Health Services' action level for TCP/PCP in soil is 17 ppm.

11. This enforcement action is being taken for the protection of the environment and, therefore, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14 California Code of Regulations.

THEREFORE, IT IS HEREBY ORDERED that pursuant to California Water Code Section 13304, Louisiana-Pacific Corporation, Rounds Lumber Remanufacturing Plant, shall cleanup or abate the waste discharges as follows:

- Comply with the "Cloverdale Remanufacturing Plant Soil And Groundwater Investigation Work Plan* dated September, 1993 as prepared for the discharger by SHN Consulting Engineers & Geologists and submitted to the Regional Board under the dischargers letterhead dated September 23, 1993.
- 2. The subject Work Plan contains a time schedule leading to a "report of findings" to be delivered to the discharger on December 12, 1993. The discharger shall submit a copy of the "report of findings" to the Regional Board by December 31, 1993.
- 3. Evaluate the "report of findings" and submit a plan for the cleanup and/or abatement of contamination to the Regional Board by January 31, 1994, including a schedule leading to the timely cleanup of the contaminated area(s).

Ordered by

Senjamin D. Kor Executive Officer

October 22, 1993

(LP-CA-931

Additional Site Investigation Report of Findings

Former Louisiana-Pacific Corporation Cloverdale Remanufacturing Facility 26800 Asti Road Cloverdale, California Case No. 1NSO040

Prepared for:

Louisiana-Pacific Corporation

CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W. Wabash Ave. * Eureka, CA 95501-2138 * 707-441-8855 * FAX: 707-441-8877 *shninfo@shn-engr.com

Reference: 095107.209

November 15, 2010

Ms. Janice Goebel California Regional Water Quality Control Board North Coast Region 5550 Skylane Boulevard, Suite A Santa Rosa, CA 95403

Subject:

Additional Site Investigation Report of Findings, Former Louisiana-Pacific

Corporation Cloverdale Remanufacturing Facility, 26800 Asti Road,

Cloverdale, California; Case No. 1NSO040

Dear Ms. Goebel:

This report of findings describes the activities and results from the subsurface investigation completed by SHN Consulting Engineers & Geologists, Inc. (SHN) at the Cloverdale Remanufacturing Facility, on behalf of Louisiana-Pacific Corporation (LP). The sampling was conducted in accordance with the April 27, 2009 work plan and November 20, 2009 work plan addendum. The work was approved by the RWQCB in an e-mail dated April 30, 2010. The subsurface investigation activities were conducted at the site on July 22 and 23, 2010. This work was conducted to address remaining gaps in the soil data to justify closure of the site. No additional soil investigation is warranted.

If you have any questions, please call me at 707-441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.

Mike Foget, P.E. Project Manager

MKF/RMR:jlr

Enclosure:

Report

copy w/encl.:

April Ingram, LP Corp.

Jeff Pluim

Reference: 095107.209

Additional Site Investigation Report of Findings

Former Louisiana-Pacific Corporation Cloverdale Remanufacturing Facility 26800 Asti Road Cloverdale, California Case No. 1NSO040

Prepared for:

Louisiana-Pacific Corporation

Prepared by:

Consulting Engineers & Geologists, Inc. 812 W. Wabash Ave.

Eureka, CA 95501-2138 707-441-8855

11/15/10

November 2010

QA/QC:MKF__

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Abbreviations and Acronyms

< "less than" the stated method reporting limit

Not Analyzed

mg/Kg milligram per Kilogram pg/g picograms per gram ug/L micrograms per Liter

AST Aboveground Storage Tank

B-# Boring-number

BGS Below Ground Surface

BTEX Benzene, Toluene, Ethylbenzene, and total Xylenes

CHHSL California Human Health Screening Levels

DOT Department of Transportation

EPA U.S. Environmental Protection Agency

G-P Georgia-Pacific I.D. Inside Diameter

LP Louisiana-Pacific Corporation
MCL Maximum Contaminant Level
MTBE Methyl Tertiary-Butyl Ether
MW-# Monitoring Well-number
P-# Piezometer-number
PCP Pentachlorophenol
PVC Polyvinyl Chloride

R&K Rounds and Kilpatrick Lumber Company

RWQCB California Regional Water Quality Control Board, North Coast Region

SHN Consulting Engineers & Geologists, Inc.

SPT Standard Penetration Test SVE Soil Vapor Extraction

SVOCs Semi-Volatile Organic Compounds

TCP Tetrachlorophenol
TEQ Toxic Equivalent

TPHD Total Petroleum Hydrocarbons as Diesel
TPHG Total Petroleum Hydrocarbons as Gasoline
TPHMO Total Petroleum Hydrocarbons as Motor Oil

TPHSS Total Petroleum Hydrocarbons as Stoddard Solvent

VE-# Vapor Extraction well-number VOCs Volatile Organic Compounds

1.0 Introduction

This report of findings describes the activities and results from the subsurface investigation completed by SHN Consulting Engineers & Geologists, Inc. (SHN) at the Cloverdale Remanufacturing facility, on behalf of Louisiana-Pacific Corporation (LP). The sampling was conducted in accordance with the April 27, 2009 work plan and November 20, 2009 work plan addendum. The work plan was approved by the RWQCB in an e-mail dated April 30, 2010. The subsurface investigation activities were conducted at the site on July 22 and 23, 2010.

1.1 Background

The site is located approximately 2 miles south of Cloverdale, east of Highway 101, at 26800 Asti Road, Cloverdale, Sonoma County, California, Assessor's Parcel numbers 118-010-15 and -34 (Figure 1). Comprised of 42.9 acres, the site is situated within the southwest quarter of Section 28, and the southeast quarter of Section 29, Township 11 North, Range 10 West, Mount Diablo Base and Meridian.

Rounds and Kilpatrick Lumber Company (R&K) originally developed this site as a lumber mill in the late 1940s. In 1948, R&K began using the site for their lumber milling operations. The majority of the development presently remaining at the site was constructed by R&K. In 1967, R&K sold the site to Georgia-Pacific (G-P). In 1972, LP acquired the site. Redwood Empire Lumber acquired the site in 1995 and is the current operator of the facility.

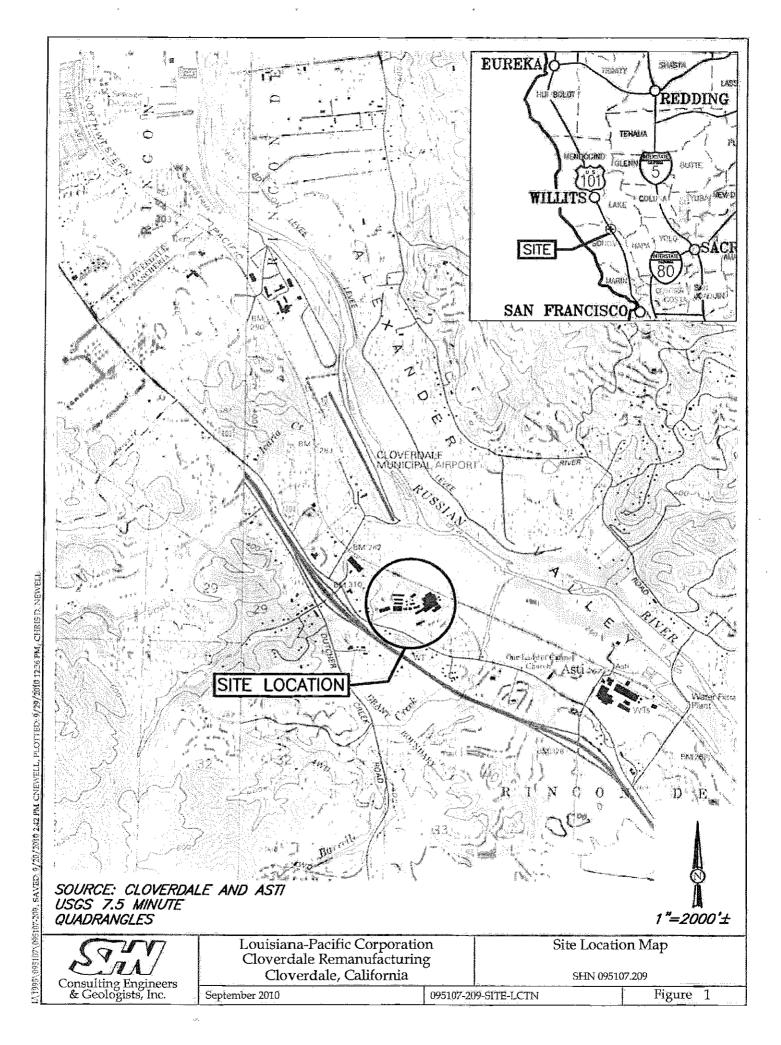
A site plan is included as Figure 2.

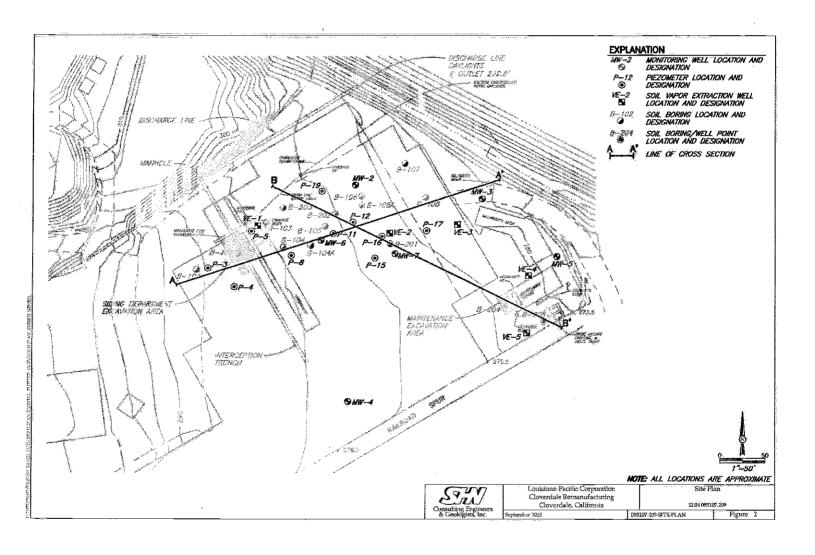
1.2 Site Remedial History

The site remedial history includes the following activities:

- September 1995: 255 cubic yards of Pentachlorophenol (PCP) and Total Petroleum
 Hydrocarbons as Stoddard Solvent (TPHSS) contaminated soil were excavated from
 the former Siding Department area (Figure 2).
- September 1995: 70 cubic yards of Total Petroleum Hydrocarbons as Gasoline (TPHG), as Diesel (TPHD), and as Motor Oil (TPHMO) contaminated soil were excavated from the maintenance area (Figure 2).
- September 1995: 250 cubic yards of PCP and TPHSS contaminated soil were excavated during the installation of the up-gradient dewatering trench (Figure 2).
- September 1996: the Soil Vapor Extraction (SVE) system was installed and began operation. During the operation, an estimated 921 pounds of contaminants were removed by the system (SHN, 2001).
- October 2000: the SVE system was converted to operate in a bioventing mode.
- February 2002: the bioventing system was taken off-line.
- Groundwater monitoring has occurred at the site since October 1993. Historic data is included in Appendix A.







2.0 Objective

The objective of the site work was to fill the remaining gaps in soil data to justify site closure. This was done by obtaining additional information regarding the vertical and lateral extent of soil contamination at the former Siding Department (in the vicinity of historic soil borings B-104 and B-106) and to evaluate site soils for the presence of dioxin/furan compounds. In addition, at the request of the RWQCB, soil and groundwater samples were collected near the Maintenance Shop/Above Ground Storage Tank (AST) area, in order to determine any petroleum hydrocarbon impacts in this area.

3.0 Scope of Work

This scope of work included the following activities:

- Conducting project implementation, including permit acquisition, subcontractor coordination, Underground Service Alert Notification, and agency coordination
- Installing five soil borings and collecting soil samples to delineate the vertical and lateral extent of contaminants of concern in the vicinity of soil borings B-104 and B-106 (Siding Department area)
- Installing two borings/temporary well points in the Maintenance Building/AST area
- Submitting soil and groundwater samples for laboratory analysis
- Preparing this report of findings summarizing the results of the additional investigation, updating the geologic cross-sections, and providing recommendations for further activities to move the site towards closure

3.1 Project Implementation

SHN coordinated all activities related to the project, including obtaining all necessary drilling permits and corresponding with the County of Sonoma Department of Environmental Health. A review of existing as-built drawings of the facility and notification of Underground Service Alert was conducted prior to the commencement of field activities.

3.2 Field Program

The field program consisted of completing soil borings in the vicinity of historic soil borings B-104 and B-106. Soil samples were collected from the soil borings and submitted for laboratory analysis. Two borings/temporary well points were installed in the Maintenance Building/AST area. Field notes for activities completed during the site investigation are included in Appendix B.

3.3 Laboratory Analysis

Soil samples from the Siding Department area were analyzed for the following:

Dioxins and furans, in general accordance with U.S. Environmental Protection Agency (EPA) Method No. 8290



- PCP and Tetrachlorophenol (TCP), in general accordance with EPA Method No.
 8270D SIM
- TPHSS, in general accordance with EPA Method No. 8015M

Soil samples from the Maintenance Building/AST area were analyzed for the following:

- Total Petroleum Hydrocarbons as Motor Oil (TPHMO), as Diesel (TPHD), and as Gasoline (TPHG), in general accordance with EPA Method No. 8015M
- Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX); and Methyl Tertiary-Butyl Ether (MTBE), in general accordance with EPA Method No. 8021B

The groundwater sample from the Maintenance Building/AST area was analyzed for the following:

- TPHMO, TPHD, and TPHG, in general accordance with EPA Method No. 8015M
- BTEX and MTBE, in general accordance with EPA Method No. 8021B

The dioxin and furan analyses were performed by Frontier Analytical Laboratory located in El Dorado Hills, California. All other analyses were performed by Friedman & Bruya, Inc, located in Seattle, Washington.

3.5 Equipment Decontamination Procedures

All small equipment that required on-site cleaning during site investigation activities was cleaned using the following wash system. The equipment was first washed in a water solution containing Liquinox® cleaner, followed by two distilled water rinses. All drilling equipment was cleaned prior to arriving on site, and steam-cleaned between each boring location.

3.6 Waste Handling

Soil generated during drilling activities was contained in 55-gallon Department of Transportation (DOT) approved drums and stored on site. The contents of the drums were sampled for disposal characterization. The soil generated during site investigation activities will be disposed of at an approved facility. Laboratory analytical results from the samples from the drums are included in Appendix C.

Purge and decontamination water generated during field activities were contained in 55-gallon DOT drums and stored on-site. The water will be treated by processing through granular activated carbon.

4.0 Hydrogeology

At elevations ranging between 270 and 350 feet above Mean Sea Level, the project site occupies the surface of a Quaternary fluvial terrace on the west side of the Russian River, which flows south through the Alexander Valley. The Alexander Valley is bound on the east by the Maacama fault zone, and to the west by the Healdsburg fault. Alexander Valley was created by extensional downdropping and en-echelon faulting between the northwest trending, right lateral, strike-slip faults related to the migration of the Mendocino Triple Junction.

Geologic deposits underlying the site consist of two principle units: The Late Jurassic to Late Cretaceous age Central Belt of the Franciscan Complex, and the Quaternary age alluvium, colluvium, and terrace deposits (Wagner and Bortugno, 1982).

In the project area, the Franciscan is composed of two principal rock types. The most common rock is interbedded sedimentary rock consisting of arkose sandstone, siltstone, and claystone. The subordinate rock type of the Franciscan is serpentinite and intrusive sills of diabase gabbro, serpentinized peridotite, in addition to glaucophane and related schists. These sills generally occur in concordant sheet or tabular dikes within the sandstone and siltstone. Franciscan bedrock outcrops are present at the southeast and midsections of the property. They are highly fractured, folded, and sheared. Colluvium derived from the Franciscan bedrock mantles the natural slopes and low-lying areas at the project site.

A broad, flat, alluvial plain borders the site to the north-northwest. Quaternary alluvium composed of well-graded silty sand, gravel, sand and silt was encountered northwest of the Siding Department area. These sediments are typical of overbank stream deposits and can be associated with past periodic flooding of the Russian River.

Groundwater at the site generally flows toward the east-northeast with a gradient of approximately 0.003 feet per foot. Depth-to-groundwater varies significantly across the site and historically has ranged from approximately 6 to 28 feet Below Ground Surface (BGS). Hydrogeologic cross sections are included on Figures 3 and 4.

5.0 Results of the Investigation-Maintenance Building/AST Area

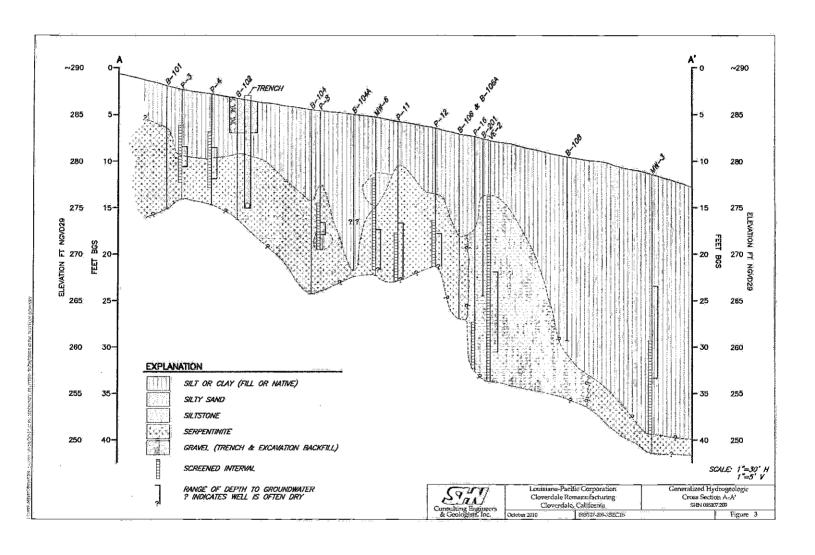
On July 22, 2010, SHN supervised Clearheart Drilling in the installation of two soil borings/temporary well points (B-204 and B-205) for the collection of soil and groundwater samples in the Maintenance Building/AST area. Soil borings were installed using a truck-mounted Deep Rock drill rig. Borings were extended to a maximum of 40 feet BGS. Soil samples were collected from selected depths using a California Modified Split Spoon or Standard Penetration Test (SPT) sampler. Following retrieval of the sampler, the brass sample tubes were removed from the sampler, and the selected sample aliquot was sealed on both ends with Teflon® tape and plastic caps. Soils in the remaining sample tubes were used for soil descriptions. Soils were described in general accordance with the Unified Soil Classification System.

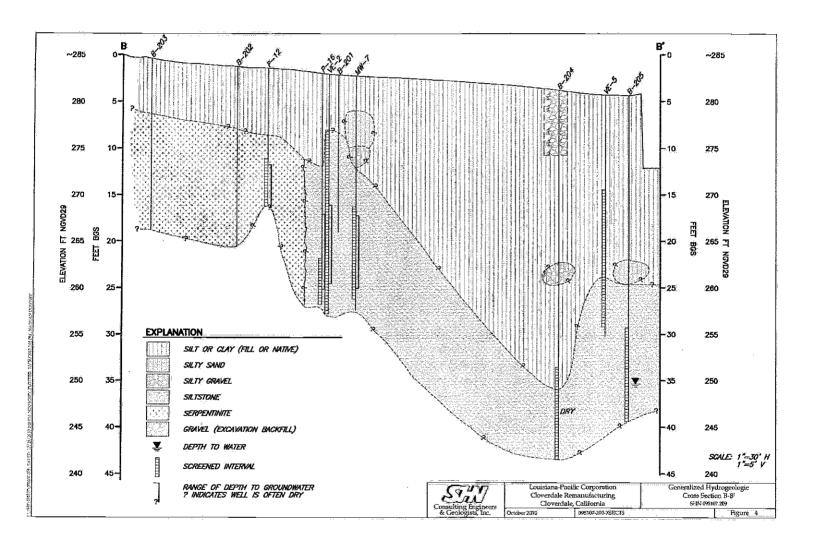
Soil samples were labeled with the project name, project number, sample number, sample depth, and sample time and date. All samples were placed in Ziploc® bags and stored in an iced cooler. Soil samples were analyzed for constituents described in the Laboratory Analysis section below. Sample handling, transport, and delivery to the laboratory were documented using chain-of-custody procedures.

After augering to the desired depth, temporary well points were installed in each borehole. The well points were constructed using 2-inch Inside Diameter (I.D.) Polyvinyl Chloride (PVC) casing and 0.010-slotted well screen.

Temporary well point B-204 was screened from 30-40 feet BGS in silts and weathered sandstone or siltstone. The well point was dry after sitting for approximately 15 hours. No indications of







groundwater were observed in the soil cuttings or soil samples collected. Temporary well point B-205 was screened from 25 to 35 feet BGS in mudstone, and water was evident on the soil sampler when retrieved from 30 feet BGS.

Temporary well point B-205 was purged and sampled using a new disposable bailer. The groundwater sample was decanted directly into laboratory supplied sample containers, labeled with the project name, project number, sample number, sample time, and date. Sample containers were placed into an ice-filled cooler, and transported under chain-of-custody documentation to a State of California-certified analytical laboratory for chemical analysis of constituents described in the Laboratory Analysis section.

All bore holes were backfilled with cement grout and capped to match the existing surface cover. Field notes and soil boring logs are included in Appendix B.

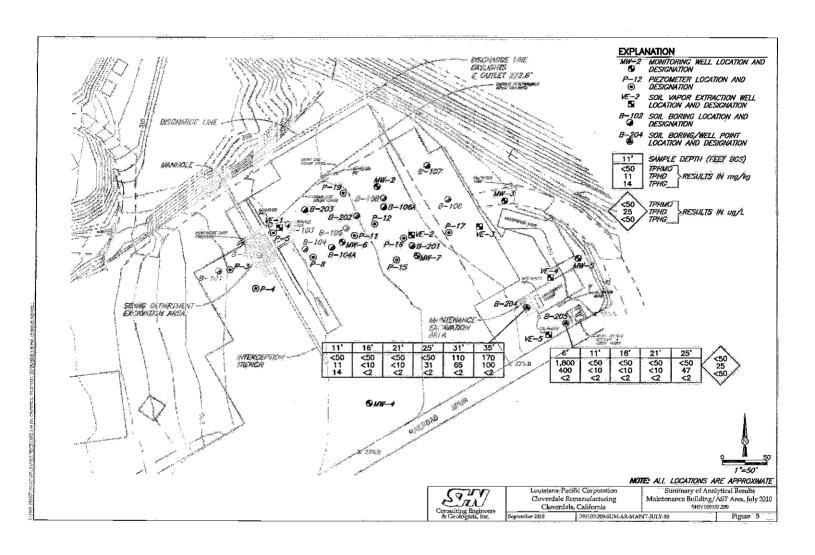
5.1 Soil Analytical Results

Table 1 presents the analytical results for the soil samples collected from the maintenance building/AST area during the July 2010 site investigation. A summary of select analytical results for the maintenance building/AST area are presented in Figure 5. Laboratory analytical reports are included in Appendix C.

Table 1			
Maintenance Building/AST Area-Soil Analytical Results,	July	22, 20)10
Former Cloverdale Remanufacturing Facility, Cloverdale	, Ca	liforn	ia
$(in mg/Kg)^1$			

Sample Location & Depth (feet)	TPHMO ²	TPHD ²	TPHG ²	Benzene ³	Toluene ³	Ethyl- benzene ³	Total Xylenes³	MTBE ³
B-204@111	<50 ⁴	115	14	<0.2	<0.2	0.79	2.1	<0.1
B-204@16'	<50	<10	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-204@21'	<50	<10	<2	<0.2	<0.2	<0.2	<0.06	< 0.1
B-204@25'	< 50	31	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-204@311	11 0 ⁵	65	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-204@35'	170 ⁵	100	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@61	1,800	400	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@11'	<50	<10	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@16'	<50	<10	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@21'	<50	<10	<2	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@25'	<50	47	<2	<0.2	<0.2	<0.2	<0.06	<0.1

- 1. mg/Kg: milligrams per Kilogram
- 2. Total Petroleum Hydrocarbons as Motor Oil (TPHMO), as Diesel (TPHD), and as Gasoline (TPHG) analyzed in general accordance with EPA Method No. 8015M
- 3. Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl Tertiary-Butyl Ether (MTBE), analyzed in general accordance with EPA Method No. 8021B
- 4. <: "less than" the stated method reporting limit
- 5. The sample chromatographic pattern does not resemble the fuel standard used for quantification.



5.2 Groundwater Analytical Results

Table 2 presents the analytical results for the groundwater sample collected from B-205 during the July 2010 site investigation. Laboratory analytical reports are included in Appendix C.

			T	able 2				71
Mai	ntenance Bui	lding/AST	T Area-Gro	oundwater A	Analytical R	esults, July	22, 2010	
	Former Clo	verdale Re	emanufact	uring Facili	ty, Cloverda	le, Californ	nia	
			(iı	n ug/L)¹				
mple	TPHMO2	TPH1)2	TPHC2	Renzene3	Toluene3	Ethyl-	Total	MIT

B-205 <50 ⁴ 25 ⁵ <50 <0.5 <0.5 <1.5 <5		Sample Location	TPHMO ²	KEREL	TPHG ²	Benzene ³	Toluene ³	Ethyl- benzene ³	Total Xylenes ³	MTBE3
	_	B-205		2₹5	< 50	<0.5	<0.5	<0.5	· <15	<5

- ug/L: micrograms per Liter
- Total Petroleum Hydrocarbons as Motor Oil (TPHMO), as Diesel (TPHD), and as Gasoline (TPHG) analyzed in general accordance with EPA Method No. 8015M
- Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl Tertiary-Butyl Ether (MTBE), analyzed in general accordance with EPA Method No. 8021B
- 4. < "less than" the stated method reporting limit
- 5. The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

5.3 Discussion and Recommendations

Low concentrations of petroleum hydrocarbons (TPHMO and TPHD) were detected in four of the six soil samples collected from B-204. Groundwater was not present in the temporary well point in B-204.

Low concentrations of petroleum hydrocarbons (TPHMO and TPHD) were detected in two of the five soil samples collected from B-205. Depth to groundwater was measured at approximately 30 feet BGS. TPHD was detected in the groundwater sample collected from B-205 at a concentration of 25 micrograms per Liter (ug/L), which is below the water quality objective of 100 ug/L (Marshack, 2004).

Based on the low concentrations of petroleum hydrocarbons in soils, the lack of significant groundwater impacts in sample B-205, and the historic groundwater analytical data from wells VE-4 and MW-5, it appears that soil impacts are limited, and groundwater has not been impacted in this area of the site. SHN is recommending no further action for the Maintenance Building/AST area.

6.0 Results of the Investigation-Siding Department Area

On July 23, 2010, SHN supervised Clearheart Drilling in the installation of five soil borings in the Siding Department area. Soil borings were installed using a truck-mounted Deep Rock drill rig. Borings were extended to a maximum of 25 feet BGS. Soil samples were collected from selected depths using a California Modified Split Spoon or SPT sampler. Following retrieval of the sampler, the brass sample tubes were removed from the sampler, and the selected sample aliquot was sealed on both ends with Teflon® tape and plastic caps. Soils in the remaining sample tubes were used for soil descriptions. Soils were described in general accordance with the Unified Soil Classification

System. At a few locations, the sampler could not fully penetrate the subsurface materials, and all soils removed were needed for laboratory analysis. In order to minimize disturbance of the laboratory samples, the soils could not be fully described.

Soil samples were labeled with the project name, project number, sample number, sample depth, and sample time and date. All samples were placed in Ziploc® bags and stored in an iced cooler. Soil samples were analyzed for constituents described in Laboratory Analysis section. Sample handling, transport, and delivery to the laboratory were documented using chain-of-custody procedures.

All bore holes were backfilled with bentonite chips capped to match the existing surface cover. Field notes and soil boring logs are included in Appendix B.

6.1 Soil Analytical Results

Tables 3 and 4 present the analytical results for the soil samples collected in the Siding Department area during the July 2010 site investigation. Laboratory analytical reports are included in Appendix C.

Table 3 Siding Department Area-Soil Analytical Results, July 23, 2010 Former Cloverdale Remanufacturing Facility, Cloverdale, California (in mg/Kg)1								
Sample Location & Depth (feet)	PCP ²	2,3,4,6- TCP ²	2,3,4,5 + 2,3,5,6-TCP	TPHSS ³				
B-104A@16.5'	<0.1 4	<0.1	<0.2	<10				
B-106A@19'	0.26	<0.1	<0.2	39				
B-106A@25'	<0.1	<0.1	<0.2	<10				
B-201@12'	<0.1	<0.1	<0.2	<10				
B-201@17'	<0.1	<0.1	<0.2	<10				
B-202@13.5'	0.91 5	<1	<2	35 0				
B-202@18.5'	<0.1	<0.1	<0.2	<10				
B-203@12.5'	<0.1	<0.1	<0.2	<10				
B-203@17'	<0.1	<0.1	<0.2	<10				

- mg/Kg: milligrams per Kilogram
- Pentachlorophenol (PCP) and Tetrachlorophenol (TCP), analyzed in general accordance with EPA Method No. 8270D SIM
- Total Petroleum Hydrocarbons as Stoddard Solvent (TPHSS) analyzed in general accordance with EPA Method No. 8015M
- 4. <: "less than" the stated method reporting limit
- 5. The result is below normal reporting limits. The value reported is an estimate.

Table 4	3 1. 25							
Siding Department Area-Soil Analytical Results-Dioxin and Furan								
TEQ ¹ , July 23, 2010 Former Cloverdale Remanufacturing Facility, Cloverdale, California								
The state of the s	ity, Cloverdale, Camornia							
(in pg/g) ²	The second secon							
Sample Location & Depth TEQ								
(feet) B-104A@17'	7.10							
B-106A@19.5	149							
B-106A@25'	3,35							
B-201@12'	0							
B-201@17'	48.4							
B-202@14'	557							
B-202@19 ⁱ	5.49							
B-203@13'	0							
B-203@17.5	0							
EPA Region 9- Regional Screening 18.0								
Level for Industrial Soil-May 2010	10.0							
. TEQ: Toxic Equivalent, World Health Organization	1998							
. pg/g: picograms per gram								

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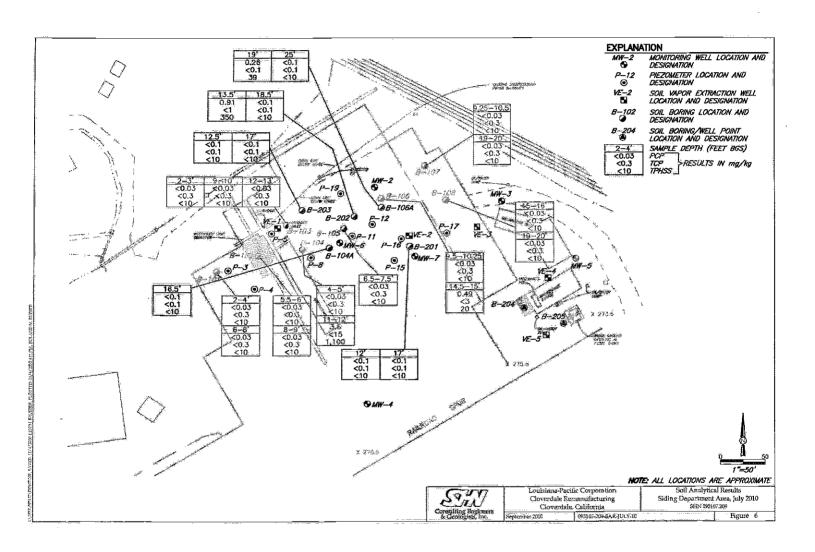
Soil analytical results for the Siding Department area are presented on Figures 6 and 7. Dioxin and furan results were reported as Toxic Equivalents (TEQs). A complete summary of the dioxin and furan analytical results is included in Appendix A.

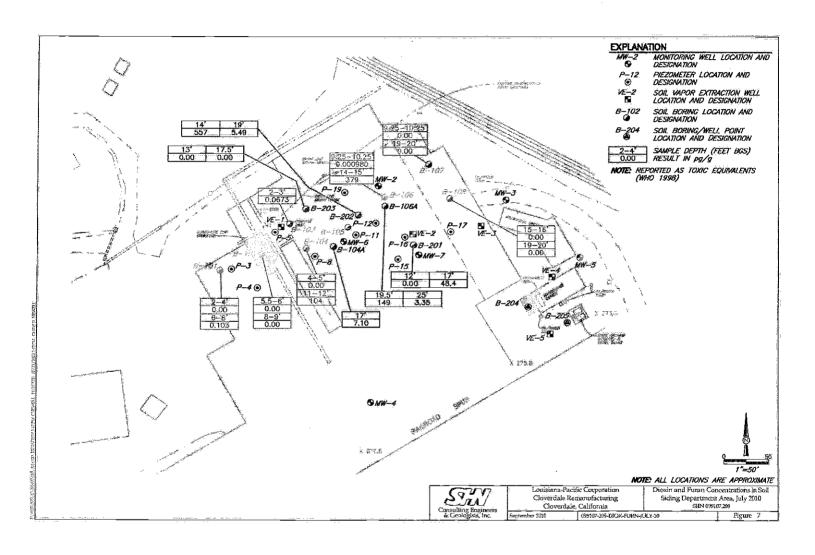
6.2 Discussion and Recommendations

Based on the results of this and previous investigations, the extent of soil impacted with PCP, TCP, and TPHSS has been defined vertically and horizontally in the Siding Department area. Dioxin/furans have been defined to below EPA Regional Screening Levels (RSLs) both vertically and horizontally (except at boring B-201). Drilling conditions were extremely difficult at boring B-201, and the boring could not be advanced below 17 feet BGS. Groundwater samples from well VE-2 (near B-201) were analyzed for dioxins/furans in May 2007, and results from this sample were below the California Department of Health Services Maximum Contaminant Level (MCL) (Marshack, 2003) of 30 picograms per Liter (pg/L).

A groundwater monitoring event took place in October 2010, although several wells were dry. A groundwater monitoring report for this event will be submitted separately. The next groundwater monitoring event will be performed in January 2011. Groundwater samples will be collected from wells MW-2, -3, -6, extraction well VE-2, and piezometers P-5, -11, -12, and -17. Following the January 2011 groundwater monitoring event, a final detailed summary of groundwater conditions will be prepared with estimates of the timeframe to reach water quality objectives.

This report concludes our soil investigation portion of the data gap analysis. Soil impacts have been adequately defined. The impacted soil is localized at depth underneath the paved floor of a building. PCP, TCP, TPHSS, and dioxin/furan compounds are not listed in the California Human Health Screening Levels (CHHSLs) for indoor air and soil gas, therefore vapor intrusion issues are





not a concern (California EPA, 2005). Concentrations of PCP in soil are below the CHHSL for commercial/industrial land use (13 mg/kg). While a few dioxin/furan TEQs in soil are above the EPA Regional Screening Level, the contaminant has not impacted water quality above the MCL. No further investigation of soil impacts is warranted. A no further action request will be prepared for the siding department area following the final groundwater monitoring event in January 2011.

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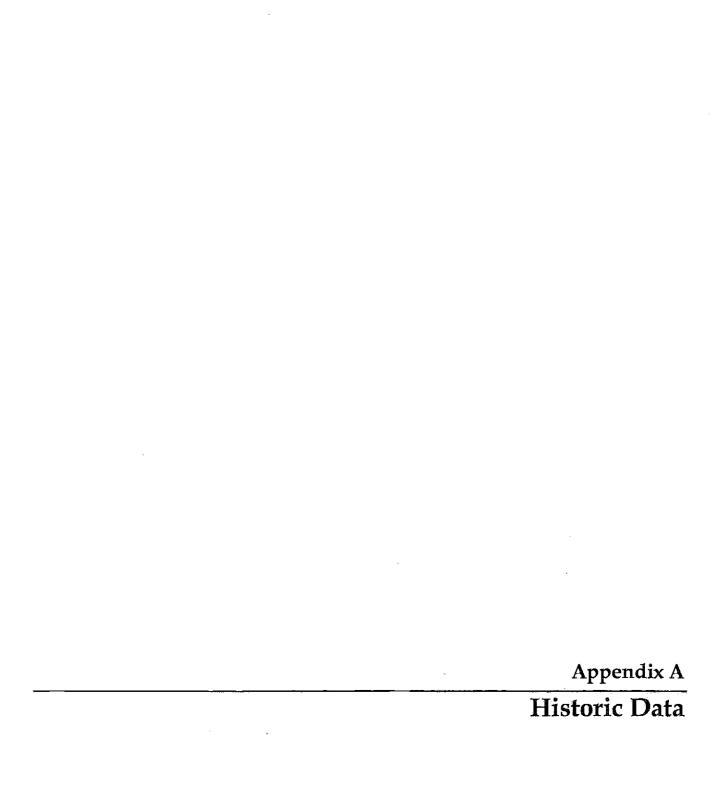


Table A-1

Monitoring Well Screen Details

Former Cloverdale Remanufacturing Facility, Cloverdale, California

Well ID	Top of Casing Elevation (feet NGVD29) ¹	Total Depth (feet below grade)	Screened Interval (feet below grade)
MW-2	284,21	26	10.5-25.5
MW-3	278.61	28.5	18-28
MW-4	285.15	29.5	14.5-29.5
MW-5	279.51	30.5	10-30
MW-6	283.57	17	6.5-16.5
MW-7	284,31	24.5	14-24
P-3	287.42	10	4-10
P-4	286,94	10	4-10
P-5	286.16	15	10-15
P-11	283.93	17	12-17
P-12	283.37	15	10-15
P-15	283,31	25	20-25
P-16	282,61	25	20-25
P-17	281.27	25	20-25
P-19	283.79	25	20-25
VE-1	284.89	26	6-26
VE-2	281.50	26	6-26
VE-3	279.70	30	10-30
VE-4	279,63	20	5-20
VE-5	281.05	25	10-25
1. NGVD 29 : N	Jational Geodetic Verti	cal Datum 1929	

	Table A-2 Groundwater Elevations												
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/24/1995	Former LP Clo Elevation 10/24/1995	Depth-to- Water 11/16/1995	Elevation 11/16/1995	Depth-to- Water 12/22/1995	Elevation 12/22/1995	Depth-to- Water 12/27/1995	Elevation 12/27/1995				
MW-2	284.21	20.04	264.17	19,56	264.65	NM	NM	13.80	270.41				
MW-3	278.61	19.60	259.01	19.65	258.96	NM	NM	16.64	261.97				
MW-4	285.15	9.83	275.32	9.84	275.31	NM	NM	9.48	275.67				
MW-5	279.51	DRY	DRY	29.11	250.40	NM	NM	26.16	253,35				
MW-6	283.57	DRY	DRY	DRY	DRY	NM	. NM	NM	NM				
MW-7	284.31	DRY	DRY	21,93	262.38	NM	NM	18.76	265.55				
P-3	287.42	8.21	279.21	8.37	279.05	7.30	280.12	7.61	279,81				
P-4	286.94	DRY	DRY	8.91	278.03	7.74	279.20	8.05	278,89				
P-5	286.16	12.08	274.08	12.22	273.94	10.34	275,82	11.20	274,96				
P-8	285.42	DRY	DRY	DRY	DRY	12.58	272,84	13.35	272,07				
P-11	283.93	15.49	268.44	16.04	267.89	11,76	272 17	12.56	271.37				
P-12	283.37	DRY	DRY	DRY	DRY	NM	NM	11.95	271,42				
P-15	283.31	22.11	261.2	22.25	261.06	NM	NM	18.97	264.34				
P-16.	282.61	21,96	260.65	22.09	260.52	NM	NM	18.78	263.83				
P-17	281.27	DRY	DRY	21,23	260.04	NM	NM	18.08	263.19				
P-19	283.79	17.78	266.01	17,36	266.43	NM	NM	11,16	272.63				
Monitoring Point	Measuring Point Elevation	Depth-to- Water 1/18/1996	Elevation 1/18/1996	Depth-to- Water 2/21/1996	Elevation 2/21/1996	Depth-to- Water 4/2/1995	Elevation 4/2/1996	Depth-to- Wa <u>t</u> er 5/16/1996	Elevation 5/16/1996				
MW-2	284,21	14.55	269,66	9 .19	275.02	16.74	267.47	17.81	2 66.4				
MW-3	278.61	15.58	263,03	1263	265.98	15.81	262.80	16.95	261.66				
MW-4	285,15	9.47	275,68	9.12	276.03	9.71	275,44	9.72	275.43				
MW-5	279.51	25.03	254.48	19.69	259.82	25.5	254.01	27.14	252.37				
MW-6	283,57	NM	NM	NM	NM	14.96	268.61	DRY	DRY				
MW-7	284,31	18.64	265.67	15,88	268.43	18.62	265.69	DRY	DRY				
P-3	287.42	7.44	279.98	6.31	281.11	7.28	280.14	7.44	279.98				
P-4	286.94	7.86	279.08	6.46	280.48	7.50	279,44	7.68	279.26				
P-5	286,16	11.57	274.59	8.23	277.93	11.92	274.24	11.39	274.77				
P-8	285.42	DRY	DRY	12.07	273.35	DRY	DRY	DRY	DRY				
P-11	283.93	13.48	270,45	10.84	273,09	14.72	269.21	DRY	DRY				
P-12	283,37	12.95	270.42	10.27	273.10	14.15	269.22	DRY	DRY				
P-15	283.31	18.95	264.36	16.10	267.21	18.96	264.35	DRY	DRY				
P-16	282.61	18,63	263,98	15.89	266.72	18.71	263.90	20.34	262:27				
P-17	281.27	17.74	2 63.53	14,80	266.47	17.66	263.61	19,24	262.03				
P-19	283.79	12.22	2 71.57	7.16	276.63	15.98	267:81	16.89	266.90				
Monitoring Point	Measuring Point Elevation	Depth-to- Water 6/12/1996	Elevation 6/12/1996	Depth-to- Water 7/30/1996	Elevation 7/30/1996	Depth-to- Water 8/15/1996	Elevation 8/15/1996	Depth-to- Water 9/4/1996	Elevation 9/4/1996				
MW-2	284.21	18.64	265,57	20.30	263.91	19.24	264.97	19.34	264.87				
MW-3	278.61	18.28	260.33	20,15	258.46	20,30	258.31	20.59	258.02				
MW-4	285.15	9.82	275.33	10.03	275.12	10.00	2 75 .15	9.99	275.16				
MW-5	279,51	28.12	251.39	29.17	250.34	29,19	250,32	29,29	250,22				
MW-6	283.57	15.14	268.43	DRY	DRY	15.14	268,43	15.15	268.42				
MW-7	284.31	20.61	263.70	22.37	26194	22.64	261.67	22.8 L	261.5				
P-3	287.42	7.52	279.90	8.13	279.29	8.17	279.25	8.26	279.16				
P-4	286.94	7.77	279.17	8.57	278,37	8.65	278.29	8.74	278.2				
P-5	286.16	12. 36	273.80	12.45	273.71	12.52	273.64	12.40	273.76				
P-8	285.42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY				
P-11	283,93	16.29	267.64	16.91	267.02	17.16	266.77	17.33	266.6				
		DRY		DRY	DRY	DRY	DRY	DRY	DRY				
P-12	283.37	1.XIC I	DRY	i pici	DKI	DK1		1 DEL	DKI				
P-12 P-15	283.37	21.08	262.23	22.68	260.63	22.00	261.31	23.22	260.09				

22.10

16.89

259.17

266.90

19.88

17.11

261.39

266,68

281.27

283.79

P-17

P-19

259.64

265.55

21,85

16.98

259.42

266.81

21.63

18.24

Table A-2
Groundwater Elevations
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/8/1996	Elevation 10/8/1996	Depth-to- Water 11/19/1996	Elevation 11/19/1996	Depth-to- Water 12/19/1996	Elevation 12/19/1996	Depth-to- Water 1/29/1997	Elevation 1/2 9/1 997
MW-2	284.21	14.79	269.42	16.99	267.22	16.21	268	13.88	270,33
MW-3	278.61	19.80	258,81	17.63	260.98	16.30	262.31	13.20	265.41
MW-4	285.15	9.98	275.17	9.51	275.64	9,35	275.80	9.49	275.66
MW-5	279.51	29.18	250.33	28.78	250.73	24.52	254.99	19 .95	259.56
MW-6	283,57	NM	NM	NM	NM	INN	NM	NM	NM
MW-7	284.31	22.29	262,02	21,55	262,76	18.8	265.51	16.52	267.79
P-3	287,42	8.16	279,26	7.54	279.88	7.24	280.18	7,42	280,00
P-4	286.94	8.61	278.33	8.09	278.85	7.70	279.24	7.33	279.61
P-5	286.16	11.84	274.32	11.74	274.42	12.23	273.93	11,96	274.2
P-8	285,42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283.93	14.90	269.03	16.28	267.65	14.96	268.97	13.69	270.24
P-12	283.37	DRY	DRY	DRY	DRY	DRY	DRY	13.25	270,12
P-15	283,31	22,49	260.82	21,58	261.73	19.21	264.10	16.91	266.40
P-16	282.61	21,69	260.92	20.54	262,07	18.76	263.85	16.53	266.08
P-17	281.27	21.28	259.99	19.76	261.51	17.75	263.52	15.38	265.89
P-19	2 83. 7 9	12,02	271.77	16.75	267.04	15.02	268.77	13.48	270.31
Monitoring Point	Measuring Point Elevation	Depth-to- Water 1/14/1998	Elevation 1/14/1998	Depth-to- Water 4/15/1998	Elevation 4/15/1998	Depth-to- Water 5/5/1998	Elevation 5/5/1998	Depth-to- Water 7/23/1998	Elevation 7/23/1998
MW-2	284,21	15.04	269.17	13.82	270.39	15.05	269.16	18,86	265.35
MW-3	278.61	16.89	261.72	17.75	260.86	19.05	259.56	18.51	260,10
MW-4	285.15	9.67	275.48	9.93	275.22	2,25	275.2	9.75	275.40
MW-5	279.51	26,50	253.01	27.61	251.90	28.97	250.54	DRY	DRY
MW-6	283.57	ŃM	- NM	DRY	DRY	13,11	270.46	NM	NM
MW-7	284.31	19,75	264.56	20:35	263.96	21.66	262.65	21.37	262.94
P-3	287.42	7.47	279.95	7.69	279.73	7,85	279,57	8.02	279,40
P-4	286.94	7.79	2 <i>7</i> 9.15	7.98	278.96	8,32	278.62	7.59	279.35
P-5	286.16	11.98	274.18	11.79	274,37	12.09	274.07	12.71	273.45
P-8	285.42	DRY	DRY	DRY	DRY	DRY	. DRY .	DRY	DRY
P-11	283.93	15.40	268.53	14.81	269.12	14.91	269.02	DRY	DRY
P-12	283.37	DRY	DRY	14.24	269.13	14.35	269:0 2	DRY	DRY
P-15	283.31	20.15	263.16	20.56	262.75	20.70	262,61	NM	NM
P-16	282,61	19.33	263.28	19.79	262.82	20.63	261,98	20.65	261.96
P-17	281.27	18.67	262.6	19.40	261.87	20.35	260.92	20.12	261.15
P-19	283.79	13.65	270.14	11.74	272.05	13.17	270.62	17.90	265.89
Monitoring Point	Measuring Point Elevation	Depth-to- Water 1/14/1998	Elevation 1/14/1998	Depth-to- Water 4/15/1998	Elevation 4/15/1998	Depth-to- Water 5/5/1998	Elevation 5/5/1998	Depth-to- Water 7/23/1998	Elevation 7/2 3/1998
MW-2	284,21	13.74	270.47	17.14	267.07	17.44	266,77	18.88	265,33
MW-3	278.61	12,87	265.74	15.22	263.39	15.98	262.63	18.25	260.36
MW-4	285.15	9.13	276.02	6.41	278.74	9.40	275,75	9.19	275.96
MW-5	279.51	21.69	257.82	24.69	254,82	26.03	253.48	28.05	251.46
MW-6	283.57	NM	NM	NM	NM.	MM	NM	NM NM	NM
MW-7	284.31	16.55	267,76	17.59	266.72	18.63	265.68	20.92	263.39
P-3	287.42	6.74	280,68	6.82	280.6	6.79	280.63	7.26	280.16
P-4	286.94	6.77	280.17	5.70	281.24	6.47	280.47	6.95	279.99
P-5	286.16	12.15	274.01	12.48	273.68	12.39	273.77	12.57	273.59
P-8	285,42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283.93	13.60	270.33	14.49	269.44	15.03	268.9	16.13	267.80
P-12	283,37	12.93	270.44	13.93	269,44	DRY	DRY	DRY	DRY
P-15	283,31	17.12	266.19	8,19	275.12	19.19	264.12	21.40	261.91
P-16	282.61	16.65	265.96	17.25	265.36	18.74	263.87	20.71	261.90
		WW. TF/FF TH	265.98		264.62	17.68	263.59	19,92	261,35
P-17	281.27	15.29	265.98	16.65	204.02	1 4/300 1		1 1/2/2	201,00

Table A-2
Groundwater Elevations
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/14/1998	Elevation 10/14/1998	Depth-to- Water 1/19/1999	Elevation 1/19/1999	Depth-to- Water 4/27/1999	Elevation 4/27/1999	Depth-to- Water 7/30/1999	Elevation 7/30/1999
MW-2	284,21	19.06	265.15	17.39	266.82	16.88	267.33	18.26	265.95
MW-3	278.61	19.09	259.52	18.24	241.28	17.47	261.14	20.03	258.58
MW-4	285,15	8.92	276.23	9.13	267.10	9.27	275.88	9.13	276.02
MW-5	279.51	28.41	251.10	27 .38	223.72	26.45	253.06	28.64	250,87
MW-6	283.57	NM T	NM	DRY	DRY	12.45	271.12	15,25	268.32
MW-7	284.31	21,34	262.97	21.04	241,93	19.87	264.44	22,58	261.73
P-3	287.42	7.12	280.30	7.15	273.15	7.13	280.29	7.67	279.75
P-4	286.94	7.39	279.55	7.13	272.42	7,08	279.86	8.03	278.91
P-5	286.16	12.81	273.35	12,32	261.03	DRY	DRY	DRY	DRY
P-8	285.42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283.93	16.87	267.06	15.68	251,38	15,22	268.71	16.52	267.41
P-11 P-12	283.37	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	283,31	21.93	261.38	21.26	240.12	20.22	263.09	23.18	260.13
P-15			261.47	20.96_	240.51	18.28	264.33	21.88	260.73
P-16	282,51	21.14		DRY	240,31 DRY	19.12	262.15	DRY	DRY
P-17 P-19	281,27	18.02	260,35 265,77	16.62	249.15	16.35	267.44	17.60	266.19
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/21/1999	Elevation 10/21/1999	Depth-to- Water 1/17/2000	Elevation 1/17/2000	Depth-to- Water 4/12/2000	Elevation 4/12/2000	Depth-to- Water 7/18/2000	Elevation 7/18/2000
MW-2	284,21	18.74	265.47	15.76	268.45	17.93	266.28	18.82	246.65
MW-3	278.61	20.20	258.41	16,32	262.29	18.17	260.44	19,29	2 39.12
MW-4	285:15	9.11	276.04	9.08	276.07	9.52	275,63	9,46	266.58
MW-5	279.51	28 ,83	250.68	26.22	253.29	27.26	252,25	.28.69	221.99
MW-6	283.57	NM	NM	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	284.31	DRY	DRY	19.57	264.74	20.68	263.63	21,96	2 62.35
P-3	287.42	7.51	279.91	7.04	280,38	7.52	279.90	7,44	272,47
P-4	286.94	7.97	278.97	7.25 ·	279,69	7.68	279,26	7.66	271,31
P-5	286.16	DRY	DRY	11,28	274.88	DRY	DRY	13.57	272.59
P-8	285.42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283.93	DRY	DRY	14.75	269.18	16.05	267,88	DRY	DRY
P-12	283.37	DRY	DRY	DŘÝ	DRY	DRY	DRY	DRY	DRY
P-15	283.31	DRY	DRY	NM	NM	21.10	262.21	22.71	2 60,60
P-16	282.61	21.85	260.76	19,61	263.00	20.71	261.90	NM	NM
P-17	281.27	DRY	DRY	18.69	262,58	19.94	261,33	21.17	260.10
P-19	283.79	17.72	266.07	15.11	268.68	17.32	266.47	18.34	247,73
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/25/2000	Elevation 10/25/2000	Depth-to- Water 1/10/2001	Elevation 1/10/2001	Depth-to- Water 4/30/2001	Elevation 4/30/2001	Depth-to- Water 7/31/2001	Elevation 7/31/2001
MW-2	284.21	18.90	265.31	16.84	267.37	18,14	266.07	20.06	264.15
MW-3	278.61	19.10	259.51	17.70	260.91	19.74	258,87	19.56	259.05
MW-4	285.15	9.37	275.78	9.49	275.66	9.69	275.46	9.78	275,37
MW-5	279.51	28.94	250.57	28.31	251.20	28.09	251.42	29.20	250.31
MW-6	283.57	DRY	DRY	NM	NM	DRY	DRY	NM	NM
MW-7	284.31	DRY	DRY	21.93	262.38	22.16	2 62.15	22,90	2 61,41
P-3	287.42	6.81	280.61	NM	NM	7.21	280.21	8.03	279.39
P-4	286.94	6.64	280.30	6.72	280.22	7.40	279.54	8.32	278.62
P-5	286.16	DRY	DRY	DRY	DRY	13.20	272.96	DRY	DRY
P-S	285.42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283,93	DRY	DRY	1,6,15	267.78	16,2	267.73	DRY	DRY
P-12	283,37	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-15	283.31	22.80	260.41	22,12	261.19	22.29	261.02	23.66	259.65
P-16	282.61	NM	NM	NM	NM	NM	NM	NM	NM
1			259.79	20.57	260.70	21.31	259.96	DRY	DRY
P-17	281.27	21.48	Z35.24	E ZU.37	200.70	1 41.31	20/20		F 12.45%

Table A-2
Groundwater Elevations
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

			Former LP Clo	verdale Reman	ufacturing Faci	lity, Cloverdale,	CA		
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/29/2001	Elevation 10/29/2001	Depth-to- Water 1/29/2002	Elevation 1/29/2002	Depth-to- Water 4/10/2002	Elevation 4/10/2002	Depth-to- Water 8/15/2002	Elevation 8/15/2002
MW-2	284,21	20.13	264.08	15.73	268.48	17.01	267.20	19.81	264.40
MW-3	278.61	21.77	256.84	15.49	263.12	16.93	261.68	19.33	259.28
MW-4	285.15	10.06	275.09	9.32	. 275.83	9.89	275.26	10.15	275.00
MW-5	279.51	29.04	250.47	26.08	253.43	27.17	2 52.34	29.14	250.37
MW-6	283.57	NM	NM.	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	284.31	DRY	DRY	19.48	2 64.83	19.44	264.87	21.85	262.46
P-3	287.42	8.25	279.17	7.18	280.24	7.00	280.42	8.29	279.13
P-4	286.94	8.62	278.32	7.39	279.55	7.03	2 79.91	7.91	279.03
P-5	286.16	DRY	DRY	12.81	273.35	13.16	27 3.00	DRY	DRY
P-8	285,42	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
P-11	283,93	DRY	DRY	13.81	270.12	15.14	268.79	DRY	DRY
P-12	283.37	DRY	DRY	13.42	269.95	DRY	DRY	DRY	DRY
P-15	283.31	DRY	DRY	16.72	266.59	19.68	263.63	22.08	261.23
P-16		NM	NM	NM	NM	NM	NM	NM	NM
P-17	282.61	DRY	DRY	16.35	264.92	18.66	262.61	21.02	260.25
P-19	281.27 283.79	18.57	265.22	14.91	268.88	16.37	267.42	18.61	265.18
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/23/2002	Elevation 10/23/2002	Depth-to- Water 1/23/2003	Elevation 1/23/2003	Depth-to- Water 5/12/2003	Elevation 5/12/2003	Depth-to- Water 7/9/2003	Elevation 7/9/2003
MW-2	284,21	18.75	265.46	13.05	271.16	16.18	268.03	18,88	265.33
MW-3	278.61	19,46	259,15	13.03	265.58	14.58	264.03	18.26	260.35
MW-4	285.15	10.18	274.97	8.62	276,53	9.09	276.06	10.09	275.06
	279.51	29.35	250.16	22.74	256.77	25.25	254.26	28.75	250.76
MW-5	·		4	13.21		14.04	269.53	DRY	DRY
MW-6	283.57	DRY 22.11	DRY	15.88	270.36 268.43	17.09	267.22	20.87	263.44
MW-7	284.31		262,20		280.28	6.73	280.69	6.71	280.71
P-3.	287.42	7.62 8,19	279.80	7.14	280.21	6.82	280.12	6.42	280.52
P-4	286,94	أدر فليسطفي البرائي فيصيد كالسياد سند	278.75	6.73	VII - A II TVIIII WWW.	12,23	273.93	12.50	273.66
P-5	286.16	13,39	272,77 DRY	11.77 DRY	274.39 DRY	DRY	DRY	DRY	275.00 DRY
P-8	285,42	DRY						16.25	267.68
P-11	283,93	DRY	DRY	12.64	271.29	14.12	269.81	DRY	DRY
P-12	283,37	DRY	DRY	12,13	271.24	13.55	269.82		262.22
P-15_	283,31	INM.	NM .	16.15	267.16	17.40	265.91	21,09	
P-16	282,61	<u>NM</u>	NM .	NM	NM	NM	NM	NM NM	NM.
P-17	281,27	DRY	DRY	NM	NM	NM	NM 255 02	20.08	261.19
P-19	283.79	17.64	266.15	12.85	270.94	15.93	267.86	18.03	265,76
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/8/2003	Elevation 10/8/2003	Depth-to- Water 1/21/2004	Elevation 1/21/2004	Depth-to- Water 4/21/2004	Elevation 4/21/2004	Depth-to- Water 4/21/2004	Elevation 4/21/2004
MW-2	284.21	19,45	264.76	16.46	267.75	16.43	267.78	19,17	265.04
MW-3	278.61	19:41	259.20	15.11	263.50	15.29	263.32	18.79	259.82
MW-4	285.15	10.12	275.03	9,31	275.84	9.83	275.32	10.11	275.04
MW-5	279,51	29.25	250.26	24.93	254.58	27.12	252.39	29.23	250.28
MW-6	283,57	DRY	DRY	13,98	269,59	DRY	DRY	dry	dry
MW-7	284,31	22.12	262.19	17.45	266.86	17.79	266.52	21.57	262.74
P-3	287.42	6.61	280.81	6.30	281.12	6.50	280.92	7.31	280.11
P-4	286.94	6.62	280,32	6.42	280.52	6.51	280.43	7.57	279.37
P-5	286.16	13.01	273.15	12.77	273.39	12.52	273.64	dry	dry
P-8	285.42	DRY	DRY	DRY	DRY	DRY	DRY	dry	dty
P-11	283.93	16.66	267.27	14.29	269.64	14.51	269,42	16.57	267.36
P-12	283.37	DRY	DRY	DRY	DRY	13.98	269.39	dry	dry
P-15	283.31	22.38	260.93	17.77	265.54	17.97	242.96	21.88	261.43
			NM	NM	NM	NM	NM	NM	NM
P-16	282.61	NM	I INIVI	1 A YAT					
P-16 P-17	282.61 281.27	DRY	DRY	NM	NM	NM	NM	NM	NM

Table A-2 Groundwater Elevations

Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

			Former LP Clo	verdale Reman	unfacturing Faci	lity, Cloverdale,	CA		
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/16/2004	Elevation 10/16/2004	Depth-to- Water 1/19/2005	Elevation 1/19/2005	Depth-to- Water 4/7/2005	Elevation 4/7/2005	Depth-to- Water 7/25/2005	Elevation 7/25/2005
VE-2	281.50	1	<u> </u>	DRY	DRÝ	15.50	266.00	20.30	261.20
MW-2	284.21	19.71	264.50	15,41	268.80	15.23	268.98	18.71	265.50
MW-3	278.61	20.05	258.56	14.34	264.27	13.73	264.88	18.61	260.00
MW-4	285.15	10.17	274.98	9.64	275.51	9:50	275.65	10.19	274.96
MW-5	279.51	29.54	249.97	24.16	255.35	24,27	255,24	29.13	250.38
MW-6	283.57	DRY	DRY	DRY	DRY	13.77	269.80	15.33	268.24
MW-7	284.31	22.85	261,46	DRY	DRY	16.55	267.76	21.40	262.91
P-3	287.42	8.02	279.40	7.30	280.12	7.09		7.62	
P-4	286.94	8,33	278.61	7.51	- Later - Late	7.19	280,33		279.80
P-5	286.16	DRY	de la companya della	12,20	279.43 273.96	12.03	279,75	7.86	279.08
P-8	285.42	DRY	DRY			4 	274.13	13.07	2 73.09
		DRY	DRY	DRY	DRY	DRY	DRY	NM	NM
P-11	283.93		DRY	DRY	DRY	13.54	270.39	16.15	267.78
P-12	283.37	DRY	DRY	DRY	DRY	12.97	270.40	DRY	DRY
P-15	283.31	23.25	260,06	DRY	DRY	15.87	267.44	21.62	261.69
P-16	282,61	NM	. :NM	NM	NM	NM	NM	DRY	DRY
P-17	281,27	NM	NM	NM	NM	NM	NM	DRY	DRY
P-19	283.79	18.51	265.28	15.04	268.75	15.04	268.75	17.85	2 65.94
Monitoring Point	Measuring Point Elevation	Depth-fo- Water 10/27/2005	Elevation 10/27/2005	Depth-to- Water 1/10/2006	Elevation 1/10/2006	Depth-to- Water 3/13/2006	Elevation 3/13/2006	Depth-to- Water 8/28/2006	Elevation 8/28/2006
VE-2	281.50	2 1,31	260.19	14.01	267.49	14.00	2 67,50	21.42	260.08
MW-2	284.21	18,61	265.60	14.02	270.19	13.97	270.24	18,71	265.50
MW-3	278.61	19.41	259,20	12.49	266,12	12.53	266.08	19.59	259.02
MW-4	285.15	10.12	275.03	9.51	275,64	NM .	NM	10.23	274.92
MW-5	279.51	29.51	250,00	21.43	258,08	NM	NM	29.77	249.74
MW-6	283,57	15.33	268.24	12.49	271.08	12,36	271.21	DRY	DRY
MW-7	284.31	22.46	261.85	15.07	269.24	15.03	269.28	22,54	261.77
P-3	287.42	7.90	279.52	6.94	280.48	NM	NM	7.58	279.84
P-4	286,94	8.35	278.59	6.99	279.95	NM	NM	7.70	279.24
P-5	286.16	13.13	273.03	14.83	271.33	11.88	274.28	12.62	273,54
P-8	285.42	NM.	NM	NM	NM	, NM	NM	NM	NM
P-11	283.93	16.69	267,24	12.22	271.71	12.10	271.83	16.54	267.39
P-12	283.37	DRY	DRY	11.64	271.73	11.57	271.80	NM	NM
P-15	283,31	22.70	260.61	15.42	267.89	15.34	267.97	NM	NM
P-16	282.61	NM	NM	NM	NM	15.04	267.57	NM	282.61
P-17	281,27	NM	NM	NM	NM	NM	NM.	NM	281,27
P-19	283,79	17.62	266,17	13.63	270.16	13.63	270.16	17.72	
* * * * * * * * * * * * * * * * * * * *			206,17		270,10	} _	270.10		266.07
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/24/2006	Elevation 10/24/2006	Depth-to- Water 1/17/2007	Elevation 1/17/2007	Depth-to- Water 5/9/2007	Elevation 5/9/2007	Depth-to- Water 7/13/2007	Elevation 7/13/2007
VE-2	281.50	22,12	259.38	19.19	262.31	19.66	261.84	21.39	260.11
MW-2	284.21	19.60	264.61	17.24	266,97	16.32	267.89	18.07	266.14
MW-3	278.61	20,42	258.19	17.45	261.16	17.89	260.72	19.60	259.01
MW-4	285,15	10.21	274.94	9.96	275.19	10.04	275.11	10.16	274.99
					251.89	28.96	250.55	29.99	249.52
MW-5	279.51	29,95	249.56	27.62	2.01.07	1 2000			
MW-5 MW-6	279.51 283.57	29,95 DRY	249,56 DRY	27.62 DRY	DRY	DRY	DRY	DRY	DRY
		100000000000000000000000000000000000000						DRY Inaccessible	DRY Inaccessable
MW-6	283.57	DRY	DRY	DRY	DRY	DRY	DRY 263.52		
MW-6 MW-7	283.57 284.31	DRY 22.89	DRY 261.42 279.52	DRY 20.32	DRY 263,99	DRY 20.79 7.41	DRY 263.52 280.01	Inaccessible	Inaccessable
MW-6 MW-7 P-3	283.57 284.31 287.42	DRY 22.89 7.90 8.26	DRY 261.42 279.52 278.68	DRY 20.32 7.41 7.61	DRY 263,99 280.01 279.33	DRY 20.79 7.41 7.62	DRY 263.52 280.01 279.32	Inaccessible 7.73 8.03	Inaccessable 279.69 278.91
MW-6 MW-7 P-3 P-4 P-5	283.57 284.31 287.42 286.94 286.16	DRY 22.89 7.90 8.26 13.12	DRY 261.42 279.52 278.68 273.04	DRY 20.32 7.41 7.61 12.98	DRY 263,99 280.01 279.33 273.18	DRY 20.79 7.41 7.62 12.63	DRY 263.52 280.01 279.32 273.53	7.73 8.03 12.90	Inaccessable 279.69 278.91 273.26
MW-6 MW-7 P-3 P-4 P-5 P-8	283.57 284.31 287.42 286.94 286.16 285.42	DRY 22.89 7.90 8.26 13.12 NM	DRY 261,42 279,52 278,68 273,04 NM	DRY 20.32 7.41 7.61 12.98 NM	DRY 263,99 280.01 279.33 273.18 NM	DRY 20.79 7.41 7.62 12.63 NM	DRY 263.52 280.01 279.32 273.53 NM	7.73 8.03 12.90 Inaccessible	Inaccessable 279,69 278,91 273,26 Inaccessable
MW-6 MW-7 P-3 P-4 P-5 P-8 P-11	283.57 284.31 287.42 286.94 286.16 285.42 283.93	DRY 22.89 7.90 8.26 13.12 NM DRY	DRY 261,42 279.52 278.68 273.04 NM DRY	DRY 20.32 7.41 7.61 12.98 NM 15.32	DRY 263.99 280.01 279.33 273.18 NM 268.61	DRY 20.79 7.41 7.62 12.63 NM 14.66	DRY 263.52 280.01 279.32 273.53 NM 269.27	Inaccessible 7.73 8.03 12.90 Inaccessible 16.03	279,69 278,91 273,26 Inaccessable 267,90
MW-6 MW-7 P-3 P-4 P-5 P-8 P-11 P-12	283.57 284.31 287.42 286.94 286.16 285.42 283.93 283.37	DRY 22.89 7.90 8.26 13.12 NM DRY DRY	DRY 261,42 279.52 278.68 273.04 NM DRY DRY	DRY 20.32 7.41 7.61 12.98 NM 15.32 DRY	DRY 263.99 280.01 279.33 273.18 NM 268.61 DRY	DRY 20.79 7.41 7.62 12.63 NM 14.66 DRY	DRY 263.52 280.01 279.32 273.53 NM 269.27 DRY	Inaccessible 7.73 8.03 12.90 Inaccessible 16.03 DRY	279.69 278.91 273.26 Inaccessable 267.90 DRY
MW-6 MW-7 P-3 P-4 P-5 P-8 P-11 P-12 P-15	283.57 284.31 287.42 286.94 286.16 285.42 283.93 283.37 283.31	DRY 22.89 7.90 8.26 13.12 NM DRY DRY 23.47	DRY 261.42 279.52 278.68 273.04 NM DRY DRY 259.84	DRY 20.32 7.41 7.61 12.98 NM 15.32 DRY 20.54	DRY 263.99 280.01 279.33 273.18 NM 268.61 DRY 262.77	DRY 20.79 7.41 7.62 12.63 NM 14.66 DRY 20.94	DRY 263.52 280.01 279.32 273.53 NM 269.27 DRY 262.37	Inaccessible 7.73 8.03 12.90 Inaccessible 16.03 DRY 22.74	279.69 278.91 273.26 Inaccessable 267.90 DRY 260.57
MW-6 MW-7 P-3 P-4 P-5 P-8 P-11 P-12	283.57 284.31 287.42 286.94 286.16 285.42 283.93 283.37	DRY 22.89 7.90 8.26 13.12 NM DRY DRY	DRY 261,42 279.52 278.68 273.04 NM DRY DRY	DRY 20.32 7.41 7.61 12.98 NM 15.32 DRY	DRY 263.99 280.01 279.33 273.18 NM 268.61 DRY	DRY 20.79 7.41 7.62 12.63 NM 14.66 DRY	DRY 263.52 280.01 279.32 273.53 NM 269.27 DRY	Inaccessible 7.73 8.03 12.90 Inaccessible 16.03 DRY	279.69 278.91 273.26 Inaccessable 267.90 DRY

Table A-2 Groundwater Elevations

Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

			Former LP Clo	verdale Remar	rufacturing Faci	lity, Cloverdale	, CA:		
Monitoring Point	Measuring Point Elevation	Depth-to- Water 10/18/2007	Elevation 10/18/2007	Depth-to- Water 2/21/2008	Elevation 2/21/2008	Depth-to- Water 5/14/2008	Elevation 5/14/2008	Depth-to- Water 7/30/2008	Elevation 7/30/2008
VE-2	281.50	20.20	261.30	17,68	263.82	21.20	260.30	22.55	258,95
MW-2	284,21	15.80	268.41	14.92	269. 2 9	17.00	267.21	18.51	265.70
MW-3	278.61	18,29	260.32	16.23	262.38	19.54	259.07	20,96	257,65
MW-4	285.15	9,98	275.17	9,85	275.30	10,20	274.95	10.19	27 4.96
MW-5	279.51	29.47	250.04	25.60	253.91	29.43	250.08	30.10	249.41
MW-6	283.57	DRY	DRY	13.62	2 69.95	DRY	DRY	DRY	DRY
MW-7	284.31	21,39	262,92	Inaccessible	Inaccessible	22,32	261,99	Inaccessible	Inaccessable
P-3	287.42	7.34	280.08	7.35	280.07	7.87	279,55	8.03	279.39
r-4	286.94	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible	8.25	278.69
P-5	286.16	12.32	273.84	12.37	273.79	12.91	273,25	12.81	273,35.
P-8	285.42	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible		
		<u> </u>			THERESAND IN III - P	·		Inaccessible	Inaccessable
P-11	283.93	12.49	269.44	13.43	270.50	15.74	268.19	16,76	267.17
P-12	283.37	DRY	DRY	12.99	270.38	DRY	DRY	DRY	DRY
P-15	283.31	21 .50	261.81	Inaccessible	Inaccessible	, 22,51	260,80	23.84	2 59, 47
P-16	282.61	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible	Inaccessible	<u>Inaccessible</u>	Inaccessable
P-17	281.27	DRY	DRY:	17.91	263.36	21,39	2 59.88	DRY	DRY
P-19	283,79	14,67	269.12	14.24	269.55	16.08	267.71	17.23	266.56
Monitoring Point	Measuring Point Elevation	Depth-to- Water 12/2/2008	Rievation 12/2/2008	Depth-to- Water 5/28/2009	Elevation 5/28/2009	Depth-to- Water 8/18/2009	Elevation 8/18/2009	Depth-to- Water 10/15/2009	Elevation 10/15/2009
VE-2	281,50	21.09	260.41	20,36	261.14	22.61	258.89	22.11	2 59.39
MW-2	284,21	16.52	267.69	16,71	267.50	19.06	265.15	12.21	272.00
MW-3	278.61	19.76	258.85	18.72	259,89	21.26	257.35	18.64	259.97
MW-4	285,15	9.78	275.37	9.86	275.29	9.91	275.24	9.41	275.74
MW-5	279,51	29.97	249.54	29.45	250.06	DRY	DRY	29.13	250.38
MW-6	283,57	15.10	268.47	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	284,31	22.23	262.08			·			Carrier Communication Communic
				21.41	262.90	DRY	DRY	DRY	DRY
P-3	287.42	7.68	279.74	7,60	279.82	8.06	279.36	7,46	279.96
P-4	286.94	7.76	279,18	7.68	279.26	Inaccessible	Inaccessible	7.81	279.13
P-5	286.16	12.45	273.71	12.59	273,57	DRY	DRY	9.99	276.17
P-8	285.42	Inaccessible	lnaccessible	Inaccessible	Inaccessible	DRY	DRY	Inaccessi <u>b</u> le	Inaccessable
P-11	283,93	14.98	268.95	15.07	268.86	DRY	DRY_	14.93	269.00
P-12	283.37	14.41	268.96	DRY	DRY	DRY	DRY	DRY	DRY
P-15	283.31	22,20	261.11	21.50	261.81	23.89	259.42	24.41	258.90
P-16	282.61	Inaccessible	Inaccessible	Inaccessible	Inaccessible.	Inaccessible	Inaccessible	Inaccessible	Inaccessable
P-17	281.27	21.43	259.84	DRY	DRY	DRY	DRY	DRY	DRY
P-19	283.79	Inaccessible	Inaccessible	Inaccessible	Inaccessible	17.87	265.92	10.06	275.73
Monitoring Point	Measuring Point Elevation	Depth-to- Water 3/9/2010	Elevation 3/9/2010	Depth-to- Water 6/3/2010	Elevation 6/3/2010	Depth-to- Water 8/11/2010	Elevation 8/11/2010		
VE-2	281,50	15.47	266.03	18.34	263,16	22.62	258.88		
MW-2	284.21	13.20	2 71.01	15.36	268.85	18,83	265.38	\	
MW-3	278.61	14.29	_ 264.32	16.88	261.73	20.95	257.66		
MW-4	285.15	9.13	276.02	9.44	275.71	9.79	275.36		· · · · · · · · · · · · · · · · · · ·
MW-5	279.51	24.46	255.05	27.94	251.57	29.99	249.52		(m v
MW-6	283.57	12.29	271.28	13.95	269.62	DRY	DRY	· · · · · · · · · · · · · · · · · · ·	
MW-7	284.31	NM	NM	NM.	NM.	22.78	261.53		
P-3	287.42	7.06	280.36	7.03	280.39	7.95	279.47		1
P-4	286.94	6.87	280.07	6.82	280.12	7.93 8.25			
P-5	100000000000000000000000000000000000000						278.69		
	286.16	11.52	274.64	12.07	274.09	12.50	273.66		
P-8	285.42	NM	NM	NM	MM	Inaccessible	Inaccessible		
P-11	283.93	11.86	272.07	13.39	270.54	DRY	DRY		
P-12	283.37	11.27	272,10	13.12	270,25	DRY	DRY		
P-15	283.31	NM	NM	19.56	263.75	23.33	259.98		
D de	282.61	NM	NM	NM	NM	Inaccessible	Inaccessible		
P-16		·		10.50	262.69	DRY	DRY		· · · · · · · · · · · · · · · · · · ·
P-16 P-17	281.27	15.78	265.49	18.58	202.09			ł .	
	281.27 283.79	15.78 12.41	265.49	14.70	269.09	17.64	266.15		

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID,	Date	PCP ¹	TCP ¹	TPHSS ³	Alkalinity	Nitrate		Dissolved Iron
wen id.	Date	(ug/L) ²	(ug/L)	(ug/L)	(mg/L) ⁴	(mg/L)	(mg/L)	(mg/L)
MW-02	10/12/1993	5.1	1.2	<50 ⁵	6			
	8/31/1994	3.6	<1.0	<50	, militar			 -
	12/28/1994	7.7	<0.2	<50	""			<u>:-</u>
	3/21/1995	1.9	<0.2	<50	<u> </u>	ing wa	4.0 0.1.	
	6/29/1995	2.5	0.6	<50	• •	e	=	-
	4/3/1996	0.7	<0.2	<50	· 		-	
	10/8/1996	0.5	<0.2	< 50.			ię	·
	4/15/1998	<0.2	<0.2	<50		· · · · · · · · · · · · · · · · · · ·	1 pinario	 :
	10/14/1998	<0.2	<0.2	<50			\$ ≈, *	 -
	10/21/1999	<0.2	<0.2	<50	400	*		
	4/12/2000	0.72	<0.2	<50	75	13-	-	يست
	10/25/2000	0.8	<0.2	<50	nive.	<u> </u>		Americal
	4/30/2001	0.71	<0.2	<50	بند	, - 4	- 	
	7/31/2001	0.28	<0.2	<50		754	-	
	4/10/2002	1. 7	0.45	<50	46 0	0.23	8.6	***
:	8/15/2002	1.3	0.23	<50	45 0	< 0.10	7. 0	
	10/23/2002	1.3	0.24	<50	42 0	<0.10	9.4	
:	1/23/2003	0.77	<0.2	<50	440	0.58	11.0	ži.
	5/12/2003	0.69	<0.2	<50	510	0.93	9.9	केरिक
	7/9/2003	0.86	<0.2	 .		. /**	. 191 .	
	10/8/2003	0.61	<0.20	<50	- ще	: 	550 %	прине, .
	1/21/2004	1.9	<1.0	<50	***	-,	-	≠ ₩:
	4/21/2004	2.2	0.43	<50	e de primeiro de la composición dela composición de la composición dela composición dela composición dela composición de la composición dela composición	- wikini	(m)	≕
	7/2/2004	1.2	0.31	<50				! 4#
	10/16/2004	1.4	0.35/<0.1	<50	إحسا		See.	 -
	1/19/2005	1.1	0.3	<50	-	· •		- rust
	4/7/2005	4.0	0.4	<250	*****	-		±emi
	7/25/2005	1.4	0.3	<50	-	. 	*****	=1#
	10/27/2005	0.06	<0.01	<50		. 		i: Menig
	1/10/2006	0.7	0.1	<50		· ······		i de
	3/14/2006	1.2	0.2	± ~₩	423	0.224	10.2	<0.15
	8/28/2006	1.0	0.6	<50		` ##*		*****
	10/24/2006	1.4	0.4	<50			-	inger.
	1/17/2007	1.8	0.5	<50	<u></u>	. <u></u>	"-ئە	
	5/ 9 /2007	1.1	0.2)			ئ ند	; ;
	7/13/2007	0.8	0.2	**************************************				-
	10/18/2007	0.6	0.2) jerune:				
į	2/21/2008	0 .7	0.1	==			<u> </u>	
	5/14/2008	0.6	0.1	2.0	denterior .	Saadiige'		
	7/30/2008	0.9	0 .2	 ,			inia	
	12/2/2008	0.5	<1.0		¥¥**	-service.		

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID.	Date	PCP ¹ (ug/L) ²	TCP ¹ (ug/L)	TPHSS ³ (ug/L)	Alkalinity (mg/L) ⁴	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
MW-02	5/28/2009	0.7	0.1					<u></u>
cont'd	8/18/2009	0.7	0.1	<50	-	بنيلت	-	
	10/15/2009	0.5	<0.1	aniii i			<u></u>	sa¥##
	3/9/2010	0.6	<0.1		يند	: Sinii	,i	
	6/3/2010	0.5	<0.1	<50	بيب	. 200 0		ėsim.
	8/11/2010	0.7	0.2			esitaik.		
MW-03	10/12/1993	2.0	<1.0	<50				
	8/31/1994	1.2	<1.0	<50	#		مسد	
	12/28/1994	0.6	<0.2	<50		فبات		شسف
E	2/14/1995	0.5	<0.2	<50	تينيد	<u></u>	÷.	
e E	3/21/1995	0 . 7	<0.2	<50	. a.e .	ian-yu		Whene,
4	5/4/1995	0.6	<0.2	<50	1910ल्ड्री			
	6/29/1995	0.5	<0.2	<50	, iya		**	ب. نــ
	8/28/1995	<0.2	<0.2	<50	مت ن		:	 :
	10/24/1995	<0.2	<0.2	<50	,	and:	÷	:
	1/19/1996	0 . 7	<0.2	<50		'44		.
	7/30/1996	<0.2	<0.2	<50		خخد	rgan (:	 :
	1/28/1997	0.39	<0.2	<50		 -	<u>غ</u> يب	-buser,
,	4/8/1997	<0.2	<0.2	<50		- شه	<u></u> ,	٠
	7/15/1997	0.38	<0.2	<50		. <u></u>	. 9. %	
:	1/14/1998	0.21	<0.2	<50	we.		1 11 7	- -
	7/23/1998	0.34	<0.2	<50	=2		ereps	-
	1/19/1999	0 .49	<0.2	<50	****		***	**.
	4/27/1999	0.32	<0.2	< 50	. wide		Aire:	
	1/17/2000	0.3	<0.2	<50	*****		· ipuni	
	4/12/2000	<0.2	<0.2	<50	 =		 -	 -
ľ	7/18/2000	<0.2	<0.2	<50	ديد .		-	
	10/25/2000	<0.2	<0.2	<50	i 174			wist:
	1/10/2001	<0.2	<0.2	<50	<u></u>	= -w.	*** *	
Silverigitations.	4/30/2001 7/31/2001	<0.2 <0.2	<0.2	<50 <50	****	: <u></u>		
	10/29/2001	<0.2	<0.2 <0.2	<50 <50	***. 		مين الله	
	1/29/2002	<0.2	<0.2	<50				
	4/10/2002	<0.2	<0.2	<50	330	<0.10	41	
	8/15/2002	0.34	<0.2	<50	250	<0.10	56	
	10/23/2002	0.41	<0.2	<50	230	<0.10	47	
	1/23/2003	0.31	<0.2	<50	24 0	<0.10	41	
	5/12/2003	<0.2	<0.2	<50	32 0	<0.10	29	
	7/9/2003	0.38	<0.2	-mani	رين نيين		44	
	10/8/2003	0.35	<0.20	<50	·	·)	
[.	1/21/2004	0.4	<1.0	garden.	in più	' mem'		
	4/21/2004	0.45	<0.20	- despec	-			

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID.	Date	PCP ¹ (ug/L) ²	TCP ¹ (ug/L)	TPHSS ³ (ug/L)	Alkalinity (mg/L) ⁴		Sulfate (mg/L)	Dissolved Iron (mg/L)
MW-03	7/2/2004	0.37	<0.20			2		450
cont'd	10/16/2004	0.34	<0.20	.=		نت		
	1/19/2005	0.30	<0.1	بسيني	-		-	
	4/7/2005	<0.3	0.3		-	≅ ₩		-
	7/25/2005	<0.2	<0.2					
	10/27/2005	<0.1	<0.1	-		-4		3mm.enii)
	1/10/2006	0.2	<0.1			#	wine,	عفقه
•	3/14/2006	0.3	<0.1	<u></u>	336	<0.200	25.4	<0.15
1	8/28/2006	0.7	0.5	: दश्क ा,	<i>-</i>	***	***	4-
	10/24/2006	0.3	<0.1			new t		uiji a.
	1/17/2007	0.2	<0.1	· -	بنب	jauriusi.	-4	
	5/9/2007	0.2	<0.1	<50	<u></u>	ليكنت	· 🔐	
	7/13/2007	0.1	<0.1	62	;=.)+ ;	·	- Mari	~~4.
	10/18/2007	0.1	<0.1	<50				
:	2/21/2008	0.2	<0.1	<50	पूर ा			.=
,	5/14/2008	0.1	<0.1	<50	444	, en mandré	****	
	7/30/2008	0.2	<0.1	<50	uriani⊓			<u></u>
	12/2/2008	0.2	<0.1	<50	19/10 :	. 	, in 4	
:	5/28/2009	0.1	<0.1	<50		-co-cond	-	
	8/18/2009	<0.1	<0.1		ligo		~~	
	10/15/2009	0.1	<0.1		نخو		, _	<u></u>
	3/9/2010	0.2	<0.1		<u> </u>		2400	
	6/3/2010	<0.1	<0.1	<50		आँक-	×	<u>-</u> _
	8/11/2010	<0.1	<0.1	ليبت		-	زميد	'
MW-04	10/12/1993	<0.3	<1.0	<50	7.4	*****	4.	√
	8/31/1994	<0.3	<1.0	<50	وثنين		ستت	
	12/ 2 8/1994	<0.2	<0.2	<50	ing.		# -	
	3/21/1995	<0.2	<0.2	<50		scorrage.	-25, 1	 -
	6/29/1995	<0.2	<0.2	<50	**	-	=	****
and a second	10/24/1995	1.0	<0.2	<50		بنية	; 	بنب
	4/10/2002	<0.2	<0.2	<50	720	<0.10	370	
MW-05	10/12/1993	<0.3	<1.0	<50	ابكنت	<u></u>	د نت پ د	- *
	12/28/1994	<0.2	<0.2	<50·		==5	Service:	
	3/21/1995 4/3/1996	<0.2 <0.2	<0.2 <0.2	<50 <50		نابت :		
	1/28/1997	<0.2	<0.2 <0.2	NT NT		,		**** <u>*</u>
	4/8/1997	<0.2	<0.2	110			م نت سنيد	
	7/15/1997	<0.2	<0.2	<50			**	
	4/15/1998	<0.2	<0.2	<50		enner.	···	
	10/14/1998	<0.2	<0.2	<50	 -		3 4 - 11	
	4/27/1999	<0.2	<0.2	<50		- 11	ANTE:	
- Additional Control of the Control	4/12/2000	<0.2	<0.2	<50	·***:			-
	4/30/2001	<0.2	<0.2	<50			<u> </u>	

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID.	Date	PCP ¹ (ug/L) ²	TCP ¹ (ug/L)	TPHSS ³ (ug/L)	Alkalinity (mg/L) ⁴	,	1	Dissolved Iron (mg/L)
MW-05	4/10/2002	(ag/L)	*************************************	<u> </u>	280	0.17	50	
cont'd	8/15/2002				310	0.45	50	
Concu	10/23/2002				320	0.44	48	
	1/23/2003		شد	name:	320	0.16	41	
MW-06	10/12/1993	540	72	7,700	~~~	0,10		
1924 4-00	8/31/1994	3,300	660	22,000				
	12/28/1994	1,000	57	57,000			Ì	
	3/21/1995	520	54	61,000	***		 -	yamin.
	1/28/1997	280	64	33,000		Solvense ***********************************		
	7/15/1997	57	11	4,700	*****			
	1 ' ' 1	ľ 1	1.2	•		No. of the second	***	
	4/27/1999	3.5		2,600	****	: 1994		
	8/15/2002	Dry	1004	velor .		,		
	10/23/2002	Dry	~~ 0.20	- -	F20	0.41	10	ingi.
	1/23/2003	1.3	0.30	<50	530	0.11	1.3	: بيد د.
	5/12/2003	0.49	<0.20	<50	560	0.32	1.9	
	7/9/2003	Dry	 0.1	pagang.				# #200 0**
	1/10/2006 3/14/2006	0.4 0.3	0.1 0.1	<50	 638	<0.200	1.72	<0.15
KATAT OF							1.72	
MW-07	10/12/1993	0.59	<1.0	<50	ن <u>نن</u>	,		**
	8/31/1994	0.49	<1.0	<50		, 224,		<u> </u>
	12/28/1994	0.2	<0.2	178		· ***		==
	3/21/1995	0.3	<0.2	175	-	Hermit.		*** .
	6/29/1995	<0.2	<0.2	<50	,			- 12 20
	1/28/1997	3.6 <0.2	0.93 <0.2	170 <50		njeropo ;		ң г
	7/15/1997 4/27/1999	<0.2 <0.2	<0.2 <0.2	<50 <50		speciment.		يقيقي المناسبة
	4/2//1999	0.44	<0.2	<50		-		<u></u>
	4/30/2001	<0.2	<0.2	<50	****	alaji mas	_	one in
	4/10/2002	<0.2	<0.2	< 50	180	0.28	37	
1	8/15/2002	<0.2	<0.2	<50 ⁻	200	0.36	38	"
	10/23/2002	Dry	~U.		200	OuDU mm:	. 50	
	1/23/2003	<0.2	<0.2	< 50	260	0.52	22	
	3/14/2006	0.1	<0.1	<50	250	1.29	9.83	<0.15
P-4	5/10/2007	<1.0	<1.0					50.10
P-5	1/29/1997	1.8	<0.2	<50				·
13	7/15/1997	0.56	<0.2	<50°				
	3/14/2006	0.30	<0.1	420	478	<0.200	83.7	<0.15
P-11	1/29/1997	3.7	1.5	1,400	-	~U.ZUU	00.7	
且 ™ 其足	· · · · · · · · · · · · · · · · · · ·	:		1,400				
Avocamente	7/15/1997	18	6.1	980		·	_	-
	4/27/1999	1.7	2.2		_	-	<u> </u>	
	4/30/2001	2.4	0.87	390		===	-	نبنے
<u> </u>	3/13/2006	10	2.5	120	<u> </u>			p

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID.	Date	PCP ¹ (ug/L) ²	TCP ¹ (ug/L)	TPHSS ³ (ug/L)	Alkalinity (mg/L) ⁴	Nitrate (mg/L)		Dissolved Iron (mg/L)
P-11	5/10/2007	0.2	<0.1	1,200		<u>.</u>	_	
cont'd	6/3/2010	0.2	<0.1	380		-		-
P-12	1/29/1997	7.5	4.4	81	224	in in the second		
. • • • • • • • • • • • • • • • • • • •	1/14/1998	1.1	<0.2	<50		. Autom	-	3,,0 %.
S	3/14/2006	0.2	0.1	140			-	-
P-15	1/29/1997	<0.2	<0.2	<50			- 1 6 3	-
+	7/15/1997	<0.2	<0.2	77				
	4/27/1999	<0.2	<0.2	79		4.		-
	4/12/2000	<0.2	<0.2	<50		استند		 -
P-16	10/12/1993	4.8	1.3	14,000				-
,	12/28/1994	5,1	3.0	170,000	. :	: - 	- 	
E	3/21/1995	3,3	0.6	36,000		=	<u> </u>	***
I	6/29/1995	1.3	0.4	61,000		. 👼	+	
	4/3/1996	2.4	0.9	100,000	i in	· •	ا متنب	ا <u>شحب</u>
	1/28/1997	71	19	14,000		in the second se	<u>-</u> -	district.
	7/15/1997	38	10	4,700		***	<u></u>	: 477 0
	4/15/1998	1.9	0.6	1,500	· -	E		
	3/14/2006	0.7	0.1	750	681	<0.200	<0.400	<0.15
P-17	10/12/1993	<0.30	<1.0	3,4 00		Ç₹		
	8/31/1994	<0.3	<1.0	930	, white	pagas)		
	12/28/1994	<0.2	<0.2	3,350	<u></u>		i i	÷
pl	3/21/1995	1.0	<0.2	1,300	<u>+==</u> :	يبد		
	5/4/1995	<0.2	<0.2	1,660			, 244	
	6/29/1995	<0.2	<0.2	1,340	-			
ı	1/19/1996	<0.2	<0.2	3,260	-	ć ma		شف
	1/28/1997	<0.2	2.3	8,400	ione.			ت.
	7/15/1997	0.97	0.43	1,200		5-11		
	1/14/1998	2,3	<0.2	<50			*.*	
	4/27/1999	1.3	<0.2	760		**************************************	, ,	interpretation
	1/17/2000	0.35	<0.2	210		ا بيني	yeards	-
	4/12/2000	0.7	<0.2	260	بيشي.	yal isi		ಷ್ಟೇ
	1/10/2001	0.22	<0.2	220	_	÷		
	4/10/2002	<0.2	<0.2	97	480	<0.10	7.4	900 im
	8/15/2002	Dry				0.21		
	1/23/2003	<0.2	<0.2	110 57	640	0,31	3.3	
	3/13/2006 6/3/2010	0.1 <0.1	<0.1 <0.1	1,200) 	;	
P-19				1,200 <50				.
た-1 為	1/29/1997	0.31	<0.2 <0.2	<50 <50	*			
	7/15/1997 4/12/2000	0.29 0.27	<0.2 <0.2	<50 <50		_ 		₩ ₩
	10/25/2000	0.56	<0.2 <0.2	<50		-		- -
	10/25/2000	0.50	~∪.∠					}

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

	FUI.			emanufacturin			1	¥,
Well ID.	Date	PCP ¹	TCP ¹	TPHSS ³	Alkalinity	ł	1	Dissolved Iro
A		(ug/L) ²	(ug/L)	(ug/L)	(mg/L) ⁴	(mg/L)	(mg/L)	(mg/L)
P-19	4/30/2001	0.33	<0.2	<50	<u> </u>		-	
cont'd	3/13/2006	0.1	<0.1	· min				
VE-1	1/29/1997	<0.2	<0.2	<50			<i>></i> ≒;	
	7/15/1997	<0.2	< 0.2	<50		-122	: 244	
	4/27/1999	<0.2	<0.2	<50		· +	==	
	4/12/2000	<0.2	<0.2	<50	<u> </u>	<u> </u>		
	10/25/2000	<0.2	<0.2	<50			***	 ,
	4/30/2001	<0.2	<0.2	<50			·	
VE-2	1/29/1997	6.2	0.45	13,000				#4.1m.
	7/15/1997	8.1	1.9	8,400	: Missai	i <u>www.</u>	ri u	
	4/27/1999	1.3	<0.2	4,200		***	شبة	***
	7/30/1999	41	15	23,000	*****	<i>-</i>		. == :
	4/12/2000	30	5.0	37,000	₩ =	≱ juijt	-	i n the
	10/25/2000	6.4	1.4	7,900		[-	
	4/30/2001	10	2.0	2,900		i _ ;	÷	
	1/29/2002	1,5	0.43	<50	<u></u>			44
	4/10/2002	2.3	1.3	92	580	<0.10	50	استنه
	8/15/2002	3.5	0.57	270	640	0.12	18	 -
	10/23/2002	8.5	2.1	110	1,200	0,12	51	**
	1/23/2003	0.91	0.21	<50	570	< 0.10	14	7
	5/12/2003	<0.2	<0.20	<50	560	<0.10	4.3	ė.
	7/9/2003	2.3	0.41	200		January .		***
	10/8/2003	0.9	<0.20	74		'⊶		~
	1/21/2004	1.0	1.0	<50		دينة.		
	4/21/2004	0.22	<0.20	<50			÷÷	ā jās
	7/2/2004	<0.2	< 0.20	61				******
	10/16/2004	2.8	0.58	220	<u></u>	يشو		
	4/7/2005	<0.1	<0.1	<50	· · · · · · · · · · · · · · · · · · ·	***		****
	7/25/2005	<0.2	<0.2	70	, mail		same.	***************************************
	10/27/2005	0.2	<0.1	<50			بنبند	
	1/10/2006	0.3	0.1	<50		:		interior
	3/14/2006	0.3	<0.1	53	<u> </u>	خجمر	ajin i	
	8/28/2006	0.4	0.6	<50		****	· -	<u></u>
ŀ	1/17/2007	1.9	0.4	290		•••••	<u></u>	
	5/10/2007	0.4	0.2	9 8		-		
	7/13/2007	1.5	0.6	<50				-
***	10/18/2007	1.4	0.7	480	,	÷.		
:	2/21/2008	0.3	<0.1	<50		***		-
<u>.</u>	5/14/2008	0.6	0.3	1,100	. 			100
	12/2/2008	0.8	0.4	250	:			
F	5/28/2009	<0.1	0.1	<50			<u></u>	

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

	FOR			emanutacturin			*	
Well ID.	Date	PCP ¹	TCP ¹	TPHSS ³	Alkalinity	Nitrate	Sulfate	Dissolved Iron
	2 /2 2722	(ug/L) ²	(ug/L)	(ug/L)	(mg/L) ⁴	(mg/L)	(mg/L)	(mg/L)
VE-2	3/9/2010	0.5	<0.1	280	*=	- " "	-	
cont'd	6/3/2010	0.2	<0.1	390	-		•••	
VE-3	1/29/1997	<0.2	<0.2	<50	***			-
	7/15/1997	<0.2	<0.2	<50		201	- -	
	7/30/1999	<0.2	<0.2	<50		***		, .
	10/25/2000	<0.2	<0.2	<50		imani	_	==
	4/30/2001	<0.2	<0.2	<50	<u> </u>	-24		nia Tare
I	4/10/2002	<0.2	<0.2	<50	310	6.9	61	
	8/15/2002	<0.2	<0.2	<50	290	2.0	45	
	10/23/2002	<0.2	<0.2	<50	280	0,99	39	
<u> </u>	1/23/2003	<0.2	<0.2	<50	270	1.2	38	1
VE-4	4/10/2002	***		200	250	2.3	44	4-
	8/15/2002	أتشيط	 -	#wit	260	<0.10	34	<u> سب</u> د
i i	10/23/2002	No.	dominade.	enter (270	0.21	30	- magain
	1/23/2003		7.	sin .	280	<0.10	27	juni.
Trench-Out	10/11/1995	<0.2	<0.2	<50	****,	yanani A		110
	10/24/1995	<0.2	<0.2	<50	·	<u></u>	: <u></u> -	: :
:	11/16/1995	<0.2	<0.2	<50		-,	Parties,	, the
	12/27/1995	<0.2	<0.2	<50	. when	****	140	****
	1/19/1996	<0.2	<0.2	<50			-117	
	3/29/1996	<0.2	<0.2	<50	*** *		-	·ia:
	4/3/1996	<0.2	<0.2	<50	- 44	-		THE STATE OF THE S
	5/16/1996	0.34	<0.2	<50	بصبت		سرخم	. -
	6/10/1996	<0.2	<0.2	<50			***	
	7/30/1996	<0.2	<0.2	<50			. <u>Q</u>	 -
:	8/15/1996	<0.2	<0.2	<50	7,ò			ing con-
	9/4/1996	<0.2	<0.2	<50		- - -4	1,4	· · · · · · · · · · · · · · · · · · ·
	11/19/1996	<0.2	<0.2	<50	iiii		ग्रह्म ग्रह	
÷	12/19/1996	<0.2	<0.2	<50			. ******	· ·
	8/28/1997	<0.2	<0.2	<50	***		-	juing lang
	1/14/1998	<0.2	<0.2	<50		· 	i nad ,	: ***
Signal Si	2/16/1998	<0.2	<0.2	<50		***	ESPOND.	***
	3/18/1998	<0.2	<0.2	<50	· •		,≅*	***
	4/15/1998 5/5/1998	<0.2 <0.2	<0.2 <0.2	<50 <50	***	٠٠٠٠٠	47 75	i in
	6/15/1998	<0.2	<0.2 <0.2	<50 <50				_edicore s
	7/23/1998	<0.2	<0.2	<50	-		-	
	8/10/1998	<0.2	<0.2	<50 <50	****			
	10/14/1998	<0.2	<0.2	< 50	***	·		;
	1/19/1999	<0.2	<0.2	< 5 0			 -	
	4/27/1999	<0.2	<0.2	<50		<u> </u>		- in the second
	7/30/1999	<0.2	<0.2	<50			Americani Americani	
	10/21/1999	<0.2	<0.2	<50)		in we.	
	1/17/2000	<0.2	<0.2	<50	quela ;		7 declared _	अंग्र ें

Table A-3
Groundwater Analytical Data
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA

Well ID.	Date	PCP ¹ (ug/L) ²	TCP ¹ (ug/L)	TPHSS ³ (ug/L)	Alkalinity (mg/L) ⁴	Nitrate (mg/L)	Sulfate (mg/L)	Dissolved Iron (mg/L)
Trench-Out	4/12/2001	<0.2	<0.2	<50	***		-	
cont'd	7/18/2000	0.33	<0.2	<50		11 <u>1291</u>		~~
	10/25/2000	<0.2	<0.2	<50		***		
	1/10/2001	<0.2	<0.2	<50			——	<u>₩</u> .
	4/30/2001	<0.2	<0.2	<50	<u></u>			· · · · · · · · · · · · · · · · · · ·
	10/29/2001	<0.2	<0.2	<50	No. Applies	1	_	- landings'
	8/15/2002	<0.2	<0.2	<50	44	يستيه		
	10/23/2002	<0.2	<0.2	<50	, 40 (40)		· · · · · · · · · · · · · · · · · · ·	24 .
	1/23/2003	<0.2	<0.2	<50				 ×
Trench-In	10/11/1995	190	37	288				
	10/24/1995	9.1	1.7	<50	***		₩ .	process,
	11/16/1995	3.2	<0.2	<50			 -	
-	12/27/1995	14.4	<0.2	; < 50		-396.860	·	discount.
	1/19/1996	7.9	1.2	<50	 		·	ie-i.
	3/29/1996	0.5	<0.2	<50	بنديسيز .	li time de la companion de la	چېند	
	4/3/1996	1.9	3,6	<50				
in the second se	5/16/1996	0.64	<0.2	<50	***************************************	· ·	-	. research
	6/10/1996	0.4	<0.2	<50	<u> </u>	i i		<u></u> }
Ī	7/30/1996	<0.2	<0.2	10,600	अ <u>नेतृत्व</u>	ii etae	- Lane	
	8/15/1996	<0.2	< 0.2	<50			<u> </u>	_
į	9/4/1996	<0.2	<0.2	<50	<u></u>	***		<u> (m</u>
	1/28/1997	<0,2	<0.2	<50	- *		-	· :
	2/12/1997	<0.2	<0.2	<50	4.00	1 1	777	indivino.
	3/18/1997	<0.2	<0.2	<50	- <u> </u>	·		;
6 69 0 d de la best best .	4/8/1997	<0.2	<0.2	< 50	· 97. 9 5 500 III.	Section 1995 1995 1995 1995 1995	·	r a - c r ridnike

- 1. PCP/TCP: Pentachlorophenol/Tetrachlorophenol
- 2. ug/L: micrograms per Liter
- 3. TPHSS: Total Petroleum Hydrocarbons as Stoddard Solvent
- 4. mg/L: milligrams per Liter
- 5. < "less than" the stated method reporting limit
- 6. –: Not Analyzed

Table A-4 Groundwater Analytical Data, Petroleum Hydrocarbons Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA (units in ug/L)¹

Well ID.	Date	MTBE ²	TPHG ³	Benzene	Toluene	Ethyl	m,p-	0-	TPHD4	Motor
		*,******				benzene	Xylene	Xylene	11111	Oil
MW-05	1/29/2002	<3.0 ⁵	5	<0.50	<0.50	<0.50	<0.50	<0.50	<50	
	4/10/2002	<3.0	<50	<0.50	< 0.50	<0.50	<0.50	< 0.50	<50	<170
	8/15/2002	<3.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<170
	10/23/2002	<3.0	<50	<0.50	<0.50	<0,50	<0.50	< 0.50	<50	
	1/23/2003	<3.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<170
VE-4	4/12/2000	<3.0	180	7.7	<1.0	2.3	2.3	1.6	4-8	——————————————————————————————————————
	1/29/2002	<3.0	-سيوسوا	<0.50	<0.50	<0.50	<0.50	<0.50	<50	;
	4/10/2002	<3.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<170
	8/15/2002	<3.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<170
	10/23/2002	<3.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<u> </u>
	1/23/2003	<3.0	<50	<0.50	< 0.50	<0.50	<0.50	<0.50	<50	<170

1. ug/L: micrograms per Liter

2. MTBE: Methyl Tertiary-Butyl Ether

3. TPHG: Total Petroleum Hydrocarbaons as Gasoline

4. TPHD: Total Petroleum Hydrocarbons as Diesel

5. <: "less than" the stated method reporting limit

6. -: not tested

Table A-5
Groundwater Analytical Results, Dioxin and Furan Compounds, May 23, 2007
Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA
(in pg/L)¹

		(m pg/L)	- <u></u>		
Constituent	MW-2	MW-3	VE-2	P-4	P-11
2,3,7,8-TCDD	ND ²	ND	ND	ND	ND
1,2,3,7,8-PeCDD	ND.	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	ND	ND	10.7J ³	ND	2.53J
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	ND.
1,2,3,4,6,7,8-HpCDD	ND	ND	264	8.19J	47.9
OCDD	14.3J	ND	2,350	90.8	541
Total TCDD	2.95J	ND	ND	ND	ND
Total PeCDD	ND	ND	12.8 J	ND	12.9J
Total HxCDD	ND	ND	80.9	ND	31.5
Total HpCDD	ND	ND	435	14.5J	81.3
2,3,7,8-TCDF	ND	ND	ND	ND	ND.
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDF	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDF	ND	ND	3.64]	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	7.41J	ND	ND
1,2,3,7,8,9-HxCDF	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDF	ND	ND	142	2.73J	23.7J
1,2,3,4,7,8,9-HpCDF	ND	ND	10.5)	ND	ND
OCDF	ND	ND	633	7.26J	104
Total TCDF	ND	ND	200D,M ^{4, 5}	ND	7.96D,M
Total PeCDF	ND	ND	271D,M	ND	15.4D,J,M
Total HxCDF	ND	ND	398D,M	1.7J	43.1D,M
Total HpCDF	ND	ND	582	6.5]	82.5
TEQ ⁶ (WHO, 1996)	0.00143	0	6.64	0.119	1.03
	 				

^{1.} pg/L: picograms per Liter (approximately equivalent to parts per quadrillion)

^{2.} ND: Not Detected

^{3.} J. Analyte Concentration Below Calibration Range

^{4.} D: Presence of Diphenyl Ethers

^{5.} M: Maximum possible concentration

^{6.} TEQ: Toxic Equivalent

		Table A-0	6			
	5	Soil Physical Properties	August 23, 200	7		;
	Former Clovere	dale Remanufacturing F	acility, Clover	dale, Californi	a	
Sample Location @ Depth (ft) ¹	Gravimetric Moisture Content (%, g/g) ²	Volumetric Moisture Content (%, cm³/cm³)³	Dry Bulk Density (g/cm³) ⁴	Wet Bulk Density (g/cm³)	Calculated Porosity (%)	Total Organic Carbon (%
B-102 @ 10.5-12'	20.6	33.8	1.64	1.98	38.2	<0.1
B-108 @ 17.25-18.5	20.9	35.8	1.71	2.07	35.4	0.22
1. ft; linear feet	W		*** * ** * * * * * * * * * * * * * * *	ims per cubic cer		

^{5. &}lt;: "less than" the stated method reporting limit

g/g: grams per gram cm³/cm³: cubic centimeters per cubic centimeter

Table A-7 Soil Analytical Results, August 23, 2007 Former Cloverdale Remanufacturing Facility, Cloverdale, California (in mg/kg)¹

Sample Location and Depth PCP^2 TCP^2 TPHSS3 (feet) B-101 @ 2.0-4.0' < 0.034 < 0.3 <10 B-101 @ 6.0-8.0' < 0.03 < 0.3 <10 B-102 @ 5.5-6.0' < 0.03 < 0.3 <10 B-102 @ 8.0-9.0' < 0.03 < 0.3 <10 B-103 @ 2.0-3.0' < 0.03 < 0.3 <10 B-103 @ 9.0-10.0' < 0.03 < 0.3 <10 B-103 @ 12.0-13.0' < 0.03 < 0.3 <10 < 0.3 <10 B-104 @ 4.0-5.0' < 0.03 <15 B-104@ 11.0-12.0' 3.6 1,100 B-105 @ 6.5-7.5' < 0.03 < 0.3 <10 B-106 @ 9.5-10.25' < 0.03 < 0.3 <10 B-106 @ 14.5-15.0' <3 0.49 20 B-107 @ 9.25-10.25' <0.03 < 0.3 <10 B-107 @ 19.0-20.0' < 0.03 < 0.3 <10 B-108 @ 15.0-16.0' < 0.03 < 0.3 <10 B-108 @ 19.0-20.0' < 0.03 < 0.3 <10

1. mg/kg: milligrams per kilogram

Remediation Goals

- 2. Pentachlorophenol (PCP) and Tetrachlorophenol (TCP), in accordance With EPA Method No. 8270C SIM
- 3. TPHSS: Total Petroleum Hydrocarbons as Stoddard Solvent, in general accordance with EPA Method No. 8015M

 18.000^{-5}

- 4. <: "less than" the stated method reporting limit
- 5. U.S. Environmental Protection Agency, (2004). Region 9 PRGs 2004 Table for industrial soils.

9.05

- Source: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, California
 Environmental Protection Agency, Regional Water Quality Control Board, San Francisco Bay Area Region,
 November, 2007.
- 7. Value is for commercial/industrial sites with deep soils where groundwater is not used as a source of drinking water. TPH (middle distillates) used as surrogate for TPHSS.

99 ^{6,7}

Table A-8
Soil Analytical Data-Dioxin and Furan Compounds, July 2000

Former Cloverdale Remanufacturing Facility, Cloverdale, California

(in	pg/g)*	

Dioxin or Error Common 1		Sample Ide	entification	
Dioxin or Furan Compound	P-2	P-7	N-1	TEF ² Factor
2,3,7,8-TCDD	<1.1 ³	<1.1	<1.1	1
1,2,3,7,8-PeCDD	<5.6	<5.7	< 5.4	1
1,2,3,4,7,8-HxCDD	32	13	8.7	0.1
1,2,3,6,7,8-HxCDD	5,000	3,500	72	0.1
1,2,3,7,8,9-HxCDD	1,200	870	25	0.1
1,2,3,4,6,7,8-HpCDD	38,000	33,000	1,900	0.01
OCDD	310,000	270,000	21,000	0.0001
2,3,7,8-TCDF	<1.1	<1.1	<1.1	0.1
1,2,3,7,8-PeCDF	7	<5.7	<5.4	0.05
2,3,4,7,8-PeCDF	<5.6	<5.7	< 5.4	0.5
1,2,3,4,7,8-HxCDF	190	110	16	0.1
1,2,3,6,7,8-HxCDF	70	29	<5.4	0.1
2,3,4,6,7,8-HxCD F	47	25	<5.4	0,1
1,2,3,7,8,9-HxCDF	5.8	<5.7	<5.4	0.1
1,2,3,4,6,7,8-HpCDF	7,800	5,500	410	0.01
1,2,3,4,7,8,9-HpCDF	380	290	20	0.01
OCDF	37,00 0	33,000	1,900	0.0001
TEQ ⁴ (World Health Organization)	1,156	878	43	

- pg/g: picograms per gram
- 2. TEF: Toxic Equivalency Factor
- 3. <: "less than" the method reporting limit
- 4. TEQ: Toxic Equivalent calculated for each sample
- 5. --: Not Applicable

		To common the state of the stat	Soil Analy	lytical Resu	T Its, Dioxin a	Table A-9 cical Results, Dioxin and Furan Compounds, August 23, 2007	ompounds	August 23,	2007		A CONTRACTOR OF THE CONTRACTOR	Wilder Control	
			Form	Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA (in pg/g) ¹	dale Remar (i	ıanufacturing (in pg/g) ¹	Facility, Cl	overdale, C	₩				
Constituent	B-101 @ 2-	B-101 @ 6- 8'	B-102@ 5.5-6.0′	B-102 @ 8-	B-103 @ 2-	B-104 @ 4- 5'	B-104 @ 11. 12'	B-106 @ 9.25-10.25	B-106 @ 14 15'	B-107 @ 9.25-10.25	B-107 @ 19-20′	B-108 @ 15-16′	B-108 @
2,3,7,8-TCDD	<0.0782	<0.0681	<0.111	<0.167	<0.0747	<0.106	<0.0739	<0.0968	2.46	<0.322	<0.0978	<0.143	<0.123
[1,2,3,7,8-PeCDD	<0.106	<0.114	<0.0934	<0.166	<0.117	<0.186	<0.196	<0.124	68.9	<0.196	<0.136	<0.115	<0.118
1,2,3,4,7,8-HxCDD	<0.237	<0.424	<0.254	<0.370	<0.215	<0.372	1.80	<0.242	8.44	<0.750	<0.434	<0.488	<0.316
1,2,3,6,7,8-HxCDD	<0.256	<0,455	<0.287	<0.402	0.323 ³	<0.382	159	<0.264	1,820	<0.818	<0.479	<0.506	<0.339
1,2,3,7,8,9-HxCDD	<0.274	<0.504	<0.312	<0.282	<0,246	<0.412	16	<0.284	543	<0.901	<0,484	<0.544	<0.393
1,2,3,4,6,7,8-HpCDD	<0.294	<0.224	<0.333	<0.489	2.373	<0,244	5,470	<0.764	10,400	<0.552	<0.503	<0.472	8/9.0>
OCDD	<0.707	<0.641	<0.923	<1.54	19.8	<0.459	46,000	2.60	58,200	<0.936	<0.710	<0.819	<0.999
Total TCDD	0.292 3	0.230 ³	<0.111	<0.167	0.2773	2.26	1.11	2.69	385	<0.322	0.2843	<0.143	<0.123
Total PeCDD	<0,106	<0.114	<0.0934	<0.166	<0.117	<0.186	0.901	<0.124	1,220	<0.196	<0.136	<0.115	<0.118
Total HxCDD	<0.274	<0.504	<0.312	<0.402	0.8493	<0.412	476	<0.284	12,000	<0.901	<0.484	<0.544	<0.393
Total HpCDD	<0.294	<0.224	<0.333	<0.489	4.18	<0.244	8,270	<0.764	16,400	<0.552	<0,503	<0.472	<0.678
2,3,7,8-TCDF	<0.0689	<0.0843	<0.0834	<0.124	<0.0898	<0.0850	<0.0805	<0.0878	<0.0765	<0.142	<0.0863	<0.137	<0.107
1,2,3,7,8-PeCDF	<0.150	<0.0981	<0.121	<0,161	<0.166	<0.145	0.595 ³	<0.120	0.6303	<0.148	∆0.164	<0.161	<0.146
2,3,4,7,8-PeCDF	<0.165	<0.114	<0.136	<0.177	<0.179	<0.176	0.7563	<0.125	0.522	<0.171	<0.185	<0.174	<0.165
1,2,3,4,7,8-HxCDF	<0.0735	<0.0929	<0.118	<0.133	<0.0805	<0.151	23.7	<0.142	13.1	<0.151	<0,111	<0.107	<0.127
1,2,3,6,7,8-HxCDF	<0.0716	1.03 3	<0.114	<0.107	<0.0796	<0.154	7.16	<0,141	8.19	<0.146	<0.107	<0.106	<0.116
2,3,4,6,7,8-HxCDF	<0.0849	<0.106	<0.134	<0.132	<0.0880	<0.176	19.9	<0.155	18.5	<0.175	<0.144	<0.137	<0.138
1,2,3,7,8,9-HxCDF	<0.195	<0.136	<0,161	<0.181	<0.116	<0.231	5.65	<0.194	3.44	<0.235	<0.209	<0.189	<0.197
1,2,3,4,6,7,8-HpCDF	<0.126	<0.108	<0.129	<0.237	6.897 ³	<0,143	1,930	<0,285	1,650	<0.224	<0.140	<0.239	<0.139
1,2,3,4,7,8,9-HpCDF	<0.164	<0.138	<0,177	<0.327	<0.153	<0.176	79.5	<0.361	62.1	<0.279	<0.181	<0.306	<0.207
OCDF	<0,409	<0.422	<0.484	<0.865	3.10^{3}	<0.337	066'6	2.20 3	8,190	<0.894	<0,624	<0.776	<0.727
Total TCDF	0.248 3	0.782	<0.0837	<0.124	0.680	3.17	16.5	0.702	21	0.2933	0,285 3	<0.137	<0.107
Total PeCDF	<0.165	0.445	<0.136	<0.177	<0.280	<0.176	15.9	<0.125	50.4	<0.171	<0.185	<0.174	<0.165
Total HxCDF	<0.195	1.03 ³	<0.161	<0.181	0.842³	<0.231	2,1904	<0.194	1,8904	<0.235	<0.209	<0.189	<0.197
Total HpCDF	<0.164	<0.138	<0.177	<0.327	3.27	<0.176	10,200	<0.361	8,010	<0.279	<0,181	<0.306	<0.207
TEQ5 (WHO, 1998)	0.00	0.103	0.00	000	0.0673	0.00	104	0.00098	379	0.00 104 0.00098 379 0.00	0.00	00.0	0.00
1. pg/g: picograms per gram	١.		والمساود وال		,	4. Presence o	f Diphenyl E	thers/Maxim	um possible	concentration	•		

5. TEQ: Toxic Equivalent, 1998 World Health Organization

				Table A-10			***************************************		
	Siding I	Siding Department Are Former Ll	ment Area-Soil Analytical Results-Dioxin and Furan Compound Former LP Cloverdale Remanufacturing Facility, Cloverdale, CA	al Results-Dio emanufacturin	xin and Furan g Facility, Clor	Area-Soil Analytical Results-Dioxin and Furan Compounds, July 23, 2010 er LP Cloverdale Remanufacturing Facility, Cloverdale, CA	aly 23, 2010		
A de septembre de la constante	And the second s			(in pg/g) 1		The state of the s			Van den V
Constituent	B-104A@17	B-106A@19.5	B-106A@25'	B-201@12'	B-201@17	B-202@14"	B-202@19	B-203@13	B-203@17,5
2,3,7,8-TCDD	<0.255 ²	<0.228	<0.141	<0.327	<0.176	<0,272	<0.284	<0,132	<0.213
1,2,3,7,8-PeCDD	3,41 3	1,65³	<0.276	<0.496	<0.406	4.673	2.16 3	<0.257	<0,33
1,2,3,4,7,8-HxCDD	8.30	10.5	<0.626	<0.671	2.57.3	34.0	3,38 3	<0.376	<0.366
1,2,3,6,7,8-HxCDD	10.9	514	11.9	<0.747	68.1	3,210	16.7	<0.415	4.0>
1,2,3,7,8,9-HxCDD	3.39 3	136	3,23 3	<0.731	6.35	705	4.113	<0.408	<0.395
1,2,3,4,6,7,8-HpCDD	137	5,210	123	<1,49	2,180	13,300	6.68	<0.769	<1.1
ОСДД	80.0	40,100	740	<2.64	19,600	46,000	65.3	<2.37	<2.7
2,3,7,8-TCDF	<0.0732	<0.0701	<0.0569	<0.191	<0.0834	<0.0823	<0.110	<0.073	<0.0914
1,2,3,7,8-PeCDF	<0.139	0.5753	<0.226	<0.387	₹0°394	0.705 ³	<0.253	<0.175	<0.241
2,3,4,7,8-PeCDF	<0.148	0.5483	<0,241	<0.408	1.04 3	0.909	<0.376	<0.169	<0,246
1,2,3,4,7,8-HxCDF	<0.236	13.8	0.5993	<0.502	10.7	12.4	<0.523	<0.266	<0.222
1,2,3,6,7,8-HxCDF	0.4433	7.73	<0,239	<0.481	6.27	10.8	<0.544	<0.282	<0.225
2,3,4,6,7,8-HxCDF	<0.262	24.0	0.855 ³	<0.536	16.5	22.5	<1.04	<0.298	<0.256
1,2,3,7,8,9-HxCDF	<0.321	2.70 ³	<0.334	969.0>	1.873	6.57	<1.16	<0.396	<0.302
1,2,3,4,6,7,8-HpCDF	0.645	1,840	34.8	<0.836	1,190	1,290	<1.18	<0.414	<0.36
1,2,3,4,7,8,9-HpCDF	<0.339	46.2	1.78 3	<1.10	34.1	36.4	<1.95	<0.508	<0.429
OCDF	3.55 3	9,710	180	<2.18	099′9	9,760	5.17 3	<1.28	<1.11
Total TCDD	242	16.4	1.22	<0.328	6.36	17.8	162	<0.132	<0.213
Total PeCDD	80.2	119	10.0	<0.496	28.0	87.8	80.3	<0.257	<0.33
Total HxCDD	118	2,680	107	<0.747	244	13,900	134	<0.415	<0.4
Total HpCDD	162	8250	228	<1.49	3,390	17,900	115	<0.769	<1.1
Total TCDF	1.04	27.9 4	2.08	<0.191	21.54	27.7 ⁴	0.516 3	<0.073	<0.0914
Total PeCDF	0.913 ³	35.4 4	0.993	<0.408	* 5.95	28.34	<0.376	<0.175	<0.246
Total HxCDF	1.42 3	2,3504	59.2	<0.698	1,650 4	1,880 4	<1,16	<0.396	<0.302
Total HpCDF	2.28 3	9,150	155	<1.10	2,700	7,020	2.52 ³	<0.508	<0.429
TEQ ⁵ (WHO, 1998)	7.10	149	3.35	0	48.4	557	5,49	0	0
 pg/s: plcograms per gram <: "less than" the stated method reporting limit 	thod reporting lin	nit		4. Presence of D 5. TEO: Toxicity	iphenyl Ethers/1 Fauivalents (Wo	4. Presence of Diphenyl Ethers/Maximum possible concentration 5. TEO: Toxicity Equivalents (World Health Greanization 1998)	le concentration	vontrijatičnosti.) jakom kaj dama ako komininka.	
3. Analyte Concentration Below Calibration Range	w Calibration Ran)ge			The second section is a second		for a series in the series of		
	Mindle Company of the	-0-			The state of the s	A STATE OF THE PROPERTY OF THE	mandan Addisabili		

Table A-11

Soil Analytical Results, July 22 & 23, 2010 Former Cloverdale Remanufacturing Facility, Cloverdale, California

(in mg/Kg)1

Sample Location & Depth (feet)	PCP ²	2,3,4,6- TCP ²	2,3,4,5 + 2,3,5,6- TCP ²	ТРНМО ³	TPHD ³	TPHG ³	TPHSS ³	B ⁴	T 4	E ⁴	Χ ⁴	MTBE ⁴
B-104A@16.5'	<0.1 ⁵	<0.1	<0.2	6			<10			4-2		-
B-106A@19'	0.26	<0.1	<0.2	₹			39	**		** :		
B-106A@25'	<0.1	<0.1	<0.2	14			<10	===		قاب		443
B-201@12'	<0.1	<0.1	<0.2		- FT-	 -	<10	,,,,	ALCONO.			
B-201@17'	<0.1	<0.1	<0.2	-			<10	- 	**			
B-202@13.5'	0.91 7	<1	<2	***	id*		**************************************	-iui			•	- Marie
B-2 02@13.5 ¹	1.5 8	<0.1	0.44	(CALANA) CA SAN NECES	n nen wen - e eesta a n Filip	1	350	<u>44</u>	-		ا اعظم	
B-202@18.5 ¹	<0.1	<0.1	<0.2	Marie James de la companya	Selecti	***	<10				· · · · · · · · · · · · · · · · · · ·	_
B-203@12,5 ¹	<0.1	<0.1	<0.2			+	<10	122			-	4÷
B-203@17	<0.1	≤0.1	<0.2				<10	***				, *
B-204@11'	44			<50	11 9	14		<0.2	<0.2	0.79	2.1	<0.1
B-204@16'	.]			<50	<10	<2	2000 m	<0.2	<0.2	≤0.2 _{.b}	<0.06	<0.1
B-204@21'	eijo	- 44	100	<50	<10	<2	1 22	<0.2	<0.2	<0.2	<0.06	<0.1
B-204@25'				<50	31	<u></u>	hannana hijihan Petan per	<0.2	<0.2	<0.2	<0.06	<0.1
B-204@31		-		110 ⁹	65	<2		<0.2	<0.2	<0.2	<0.06	<0.1
B-204@35'		T. 🖦	 -	170 ⁹	100	<2	TANK-	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@6'	-		₩	1,800	400	<2		<0.2	<0.2	<0.2	<0.06	<0.1
B-205@11'	Nett.		-	<50	<10	<2	saw	<0.2	<0.2	<0,2	<0.06	<0.1_
B-205@16'	(C)	, A-2		<50	<10	<2		<0.2	<0.2	<0.2	<0.06	<0.1
B-205@21		=]	· •••	<50	<10	<2	-2724	<0.2	<0.2	<0.2	<0.06	<0.1
B-205@25 ¹		- 5-		<50	47	<2		<0.2	<0.2	<0.2	<0.06	< 0.1

- Iamg/Kg; milligrams per Kilogram
- 2. Pentachlorophenol (PCP) and Tetrachlorophenol (TCP), analyzed in general accordance with EPA Method No. 8270D SIM
- 3. Total Petroleum Hydrocarbons as Motor Oil (TPHMO), as Diesel (TPHD), as Gasoline (TPHG), and as Stoddard Solvent (TPHSS), analyzed in general accordance with EPA Method No. 8015M
- 4, Benzene (B), Toluene (T), Ethylbenzene (E), total Xylenes (X), and Methyl Tertiary-Butyl Ether (MTBE), analyzed in general accordance with EPA Method No. 8021B
- 5_{κ} <: "less than" the stated method reporting limit
- 6. -: Not Analyzed
- The results is below normal reporting limits. The value reported is an estimate.
- Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- 9. The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-12

Maintenance Building/AST Area-Groundwater Analytical Results, July 22, 2010 Former Cloverdale Remanufacturing Facility, Cloverdale, California

(in ug/L)¹

Sample Location & Depth (feet)	TPHMO ²	TPHD ²	TPHG ²	Benzene ³	Toluene ³	Ethyl- benzene ³	Total Xylenes ³	MTBE ³
B-205	<50 ⁴	25 ⁵	<50	<0.5	<0.5	<0.5	<1.5	<5

- 1. ug/L; micrograms per Liter
- 2. Total Petroleum Hydrocarbons as Motor Oil (TPHMO), as Diesel (TPHD), and as Gasoline (TPHG), analyzed in general accordance with EPA Method No. 8015M
- 3. Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl Tertiary-Butyl Ether (MTBE), analyzed in general accordance with EPA Method No. 8021B
- Less than" the stated method reporting limit
- 5. The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Daily Field	Donort	Job No. 095107-209										
Dany Field	Keport	Page of \										
	Owner	OVERAST / SWAY & WARM										
General Location of Work Project	Manager	Date Day of Week										
	N. FOGET	7-22-10 THURS.										
Type of Work	The state of the s	Field Personnel										
SOR /GID SAMPGE		Z. Rueba										
	O STIES CHECKING LO											
- MRET W/ DOLC - SHO	NO APP WIRED ON BU	10 T 1										
LAUTION SHOULD BE OF	<u> </u>											
-950 CLOSSHOURT ON SITE -												
- 50 00 B-205 NOT	WHER CLARAS 2 TEAL &	Ruezon - Hilber										
- CHECK 2" Wed	LOSA STANGA											
DTW 82.22 BT	IN ESTON - YOU	<u> </u>										
TD 23.6 Broc -	TD 23-10' BTOC - SOFT - 10" SILT ON PROBLE											
Maria da La Caracteria de Cara	1 4/ 100 PFM ISOBUT	18										
940 BCW BOULLE O BLI	BOW BOULER OR BIRS - TR" HEA B" SHUT SPOON											
140 -0-25 = RIC	194 - 0-35 - RIC CHATTERING 27-36" 85- SAMPLE 597 1.5"											
MARIE TUBES - 1-5	SAMPLE TUBES - 1-5 DRUMS OF CUTTINGS											
1100 SET 2" PUC 10 0	1 11 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a	E BANK BEN										
n s	S - PULLED 3 AUGUS!											
1235 DTW ~30.9 BGS ~	COLLECT STAPLE W/ DISI	PAILER										
GRAB SAMPLE - Q 1	1:40 - PULL AUGUES	B CHSING										
l ·	a PORTUNIO COMULT & WA											
- MOVE TO 1-204												
1330 SAMPLE BRUM 1 / B-	(05)											
1340 DOGIN @ B-804												
1400 SAMPLED DRUM-2												
	SS TO DO SPT SANGLE	as - 36 -										
;	AST SAMPLES - ANGER TO 40.	:										
	- SET P.W. 10" 0.010											
LET SIT PULLED 3												
	A CONTRACT OF STREET,											
1020 OFFSITE		The Control of the Co										
IV W OTESHE	Copy given to:	Reported By:										

		Job No. 095107.209									
Daily	Field Report	Page / of									
Project Name	Client/Owner	Weather									
COURDING General Location of Work	Project Manager	Date Day of Week									
ASTI CA	M. FOGET	7-23-16 FR									
Type of Work		Field Personnel									
SOR /GW SAMPLING		2. Russer									
710 ON-SITE - CI	reck Tens wellowT (O R-204									
DRY - 40, 500	DEPT NO TRUE PEG - R	2 5000 -									
)35 COLPHOLET ON	SULTON PTOLES - 972										
Funnie 8-204	CASING /ANGORS										
1	- LA SAID HE CAN THE CALLED	DAGON WATER									
DROW A RAGE ON	TO I LAT BIM KNOW WALL	MOCH									
\$10 NO TEACE OF WILTER	ON OSUK DIR SOON !	8-104									
GOLDT WY TIPE	14 Courses & Girant										
840 MOVE TO 8-201	. ±2.15										
	REGING B-201 - 10" SOUD FLIGHT + UGOS SANTLE 12 \$17										
	DO START @ 6-104A ADG DE -10 16' SAMPLE 16-17.5'										
	T COTTINGE FROM E-										
	- MOND LODGERS DUN TO										
	MAS CO OF RODUR SI										
- move TO B-20											
The contract the contract of the contract that the contract the contract the contract that the contract the contract the contract that the contract the contract that the cont	- BUGER TO 13- 8	PMPLE AUGENTO									
18' SAMPLE											
L Da (A s	& MOD RIC TO 5-106	A - Delle TO 19- (21/55)									
· ·	- DRILL TO 25 LIMITE										
WHER IN SET T											
	- CLUTULD / CHIP	UP SHOLES FROM TODAY									
	THE CHIPS & HYDEATE										
FATCH ALL HOL											
	FROM 8-204/205 2	- DRIMS CARRIFFORM									
5 HOVES TODAY		WATER FROM 204/205									
The state of the s	5 GAL FROM TODAY CORUM										
1600 OFFS17e	Copy given to:	Reported By:									

Consulting Engineers & Geologists, Inc. 812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: SFA SAMPLER TYPE: SPT

LOGGED BY: R. Rueber

LOCATION: Cloverdale, CA **GROUND ELEVATION:-**

DEPTH OF BORING: 17.5 feet BGS

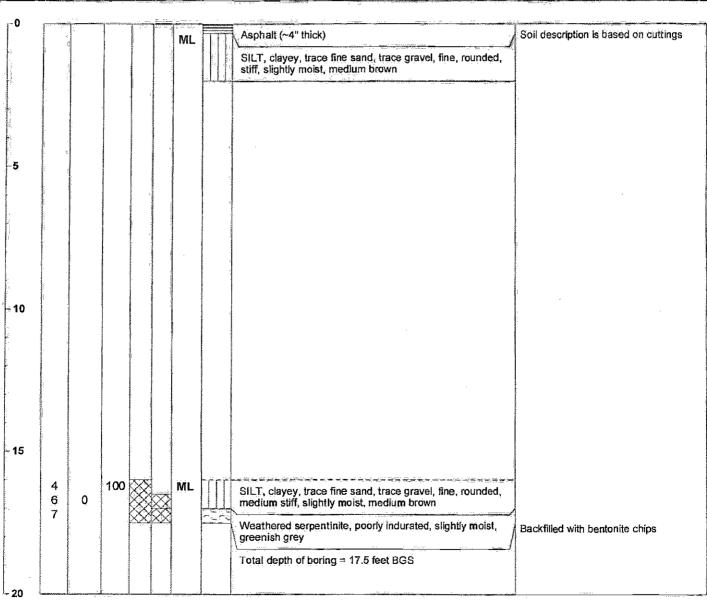
DEPTH TO FIRST WATER:--

DATE: 7/23/10

SOIL BORING LOG

B-104A

eet BGS)		SAMP			PATTERN	SOIL F	DESCRIPTION			REMARKS	1
DEPTH (Fe	BLOW COL	(ppm) % RECOVE	DRILLING	uscs	ПТНОСОС	SOIL		- K. P. J.	II A		





"☑" Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: SFA

SAMPLER TYPE: 2-inch Split Spoon/SPT LOGGED BY: R. Rueber

LOCATION: Cloverdale, CA

GROUND ELEVATION:--

DEPTH OF BORING: 25.5 feet BGS

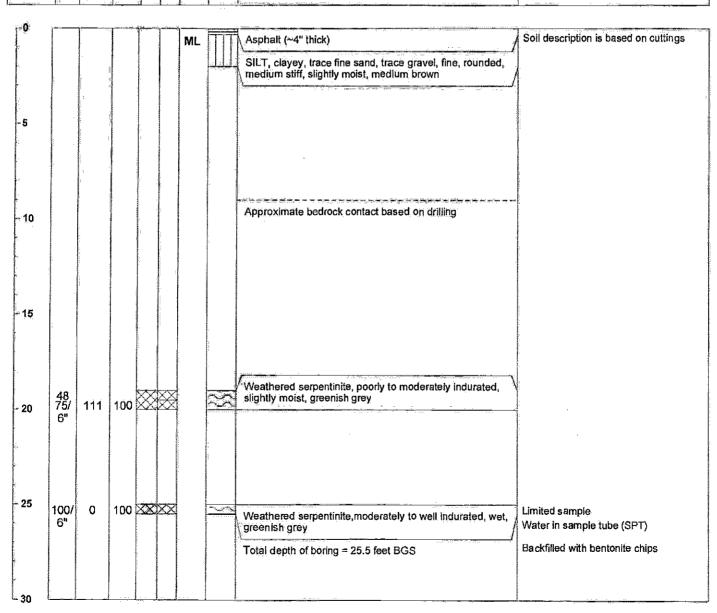
DEPTH TO FIRST WATER:--

DATE: 7/23/10

SOIL BORING LOG

B-106A

		S	SAMPLE			ERN	_	
DEPTH (Feet BGS)	BLOW COUNT	OVA READING (ppm)	% RECOVERY	DRILLING	2 2 2 9	LITHOLOGY PATTE	SOIL DESCRIPTION	REMARKS



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PROJ. NAME: LP Cloverdale PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: SFA

SAMPLER TYPE: SPT

LOCATION: Cloverdale, CA

GROUND ELEVATION:--

DEPTH OF BORING: 17.5 feet BGS

DEPTH TO FIRST WATER:--

DATE: 7/23/10

SOIL BORING LOG

B-201

LOUDE		R. Rueber SAMPLE								z		
DEPTH (Feet BGS)	BLOW COUNT	OVA READING (ppm)	% RECOVERY	DRILLING	LABORATORY	uscs	LITHOLOGY PATTER	SOIL DESCRIPTION	REMARKS			

-0						VIL	Asphalt (~4" thick)	Soil description is based on cuttings
	, and the second			-			SILT, clayey, trace fine sand, few gravel, fine, rounded, stiff, slightly moist, medium brown	
-5	THE PROPERTY OF THE PROPERTY O	And the state of t	онтення по	And the second s		mente de l'Albaha mande eggir proposere è de dimense anno		
	Address and the second		Section (Control of the control of t	Account to the second s		onnellise met erstelle men dillitte ontennen skristisk	Approximate bedrock contact based on drilling	Hard drilling from 6.0 to 17.0 feet BGS
- -10				ж анной от применя в прим				
	80/ 5"	2	60		\boxtimes		MUDSTONE or SANDSTONE, silt, fine sand, dry, light grey, sample pulverized from driving sampler	All soil needed for lab samples Description from shoe
15	The state of the s			The state of the s				POPULATION AND ADMINISTRATION AN
	100/ 6"	10	60	XX	\boxtimes		MUDSTONE or SANDSTONE, silt, fine sand, dry, light grey, sample pulverized from driving sampler Total depth of boring = 17.5 feet BGS	Backfilled with bentonite chips
			The state of the s		A COLUMN TO THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER	THE STREET COMMERCIAL PROPERTY AS A STREET COMMERCIAL PROPERTY OF THE STREET, THE STREET COMMERCIAL PROPERTY OF THE STREET, TH		



V7 Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale PROJ. NUMBER: 095107,209

DRILLER: Clearheart Drilling
DRILLING METHOD: SFA

SAMPLER TYPE: 2.0-inch Spilt Spoon

SAMPLER TYPE: 2.0-inch Spilt Spoo

LOCATION: Cloverdale, CA

GROUND ELEVATION:--

DEPTH OF BORING: 19.5 feet BGS

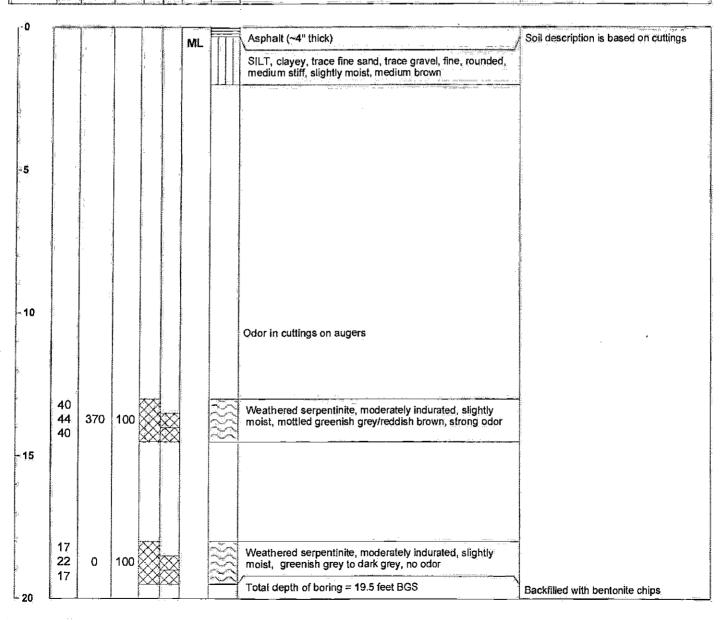
DEPTH TO FIRST WATER:--

DATE: 7/23/10

SOIL BORING LOG

B-202

		AMPLE				æ		
DEPTH (Feet BGS)	OVA READING (ppm)	% RECOVERY	DRILLING	LABORATORY	uscs	ITHOLOGY PATTER	SOIL DESCRIPTION	REMARKS





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812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale

PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: SFA

SAMPLER TYPE: 2.0-inch Spilt Spoon

LOCATION: Cloverdale, CA

GROUND ELEVATION:--

DEPTH OF BORING: 18.0 feet BGS

DEPTH TO FIRST WATER:-

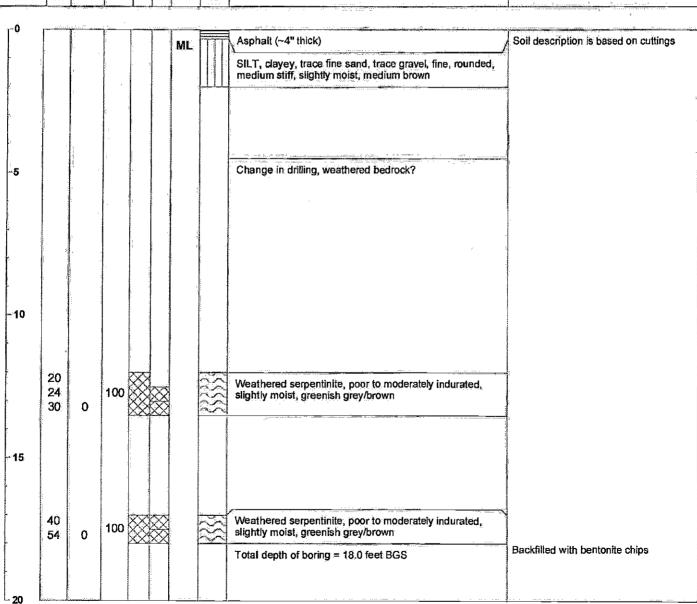
DATE: 7/23/10

SOIL BORING LOG

B-203

LOGGED BY: R. Rueber

		S	SAMPLE				ERN		
DEPTH (Feet BGS)	BLOW COUNT	OVA READING (ppm)	% RECOVERY	DRILLING	LABORATORY	uscs	LITHOLOGY PATTE	SOIL DESCRIPTION	REMARKS



812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale

PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: HSA

SAMPLER TYPE: 2-inch Split Spoon/SPT

LOCATION: Cloverdale, CA

TOC ELEVATION: --

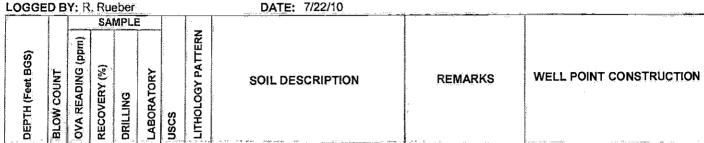
DEPTH OF BORING/WELL: 40.0 feet BGS

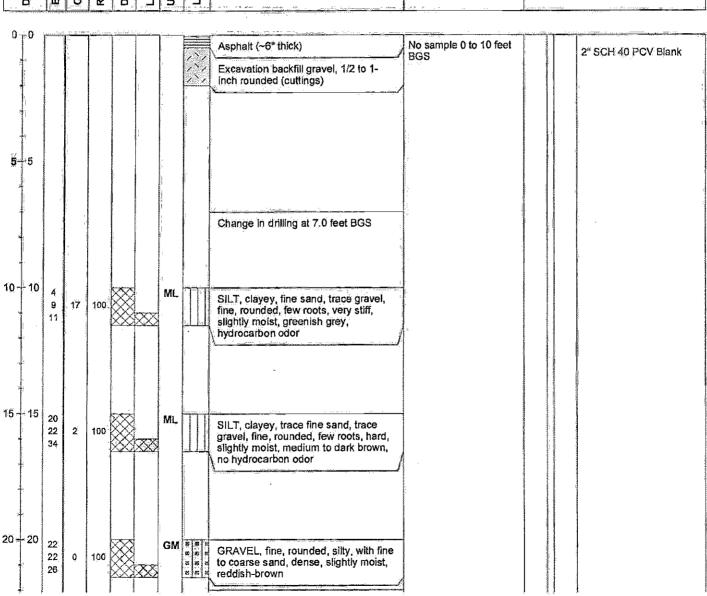
DEPTH TO FIRST WATER: --

SCREEN INTERVAL: 30-40 feet BGS

DATE: 7/22/10

WELL POINT LOG





812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale

PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: HSA

SAMPLER TYPE: 2-inch Split Spoon/SPT

LOCATION: Cloverdale, CA

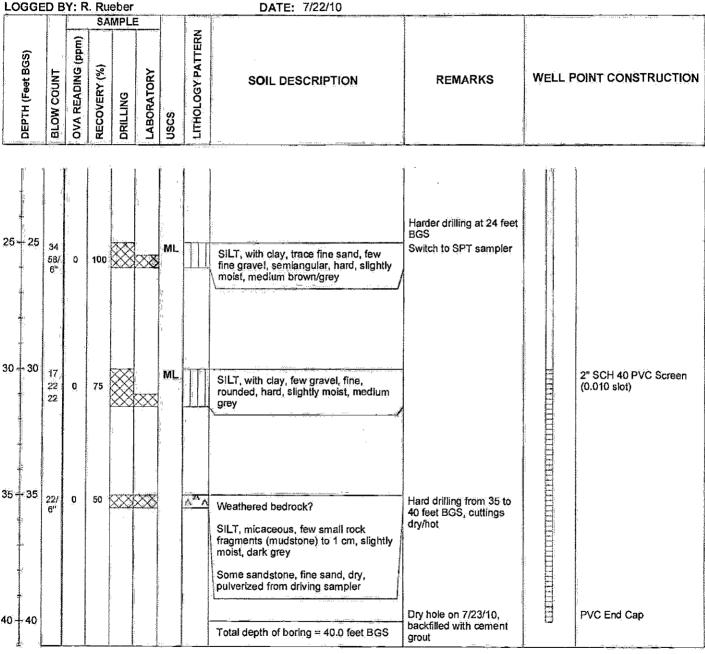
TOC ELEVATION: -

DEPTH OF BORING/WELL: 40.0 feet BGS

DEPTH TO FIRST WATER: --

SCREEN INTERVAL: 30-40 feet BGS

WELL POINT LOG



812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale

PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: HSA

SAMPLER TYPE: 2-inch Split Spoon

LOCATION: Cloverdale, CA

TOC ELEVATION: --

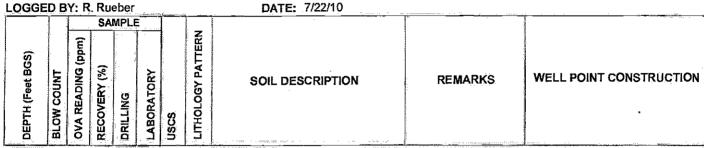
DEPTH OF BORING/WELL: 35.0 feet BGS

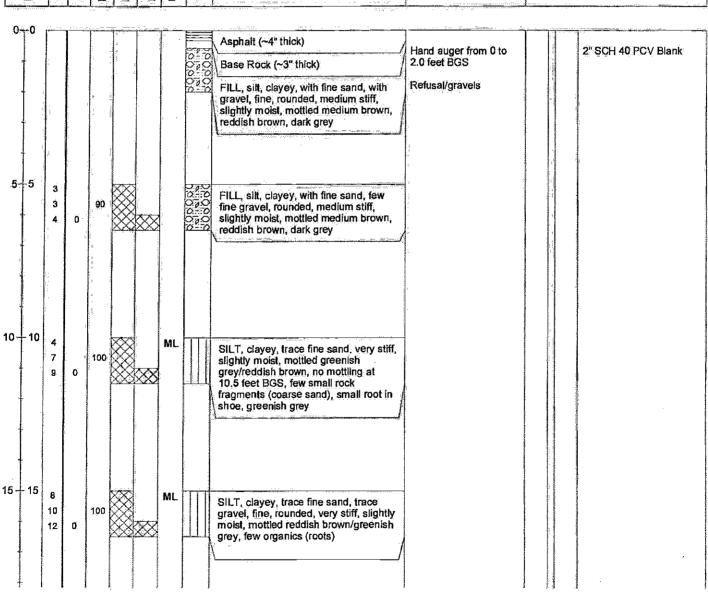
DEPTH TO FIRST WATER: --

SCREEN INTERVAL: 30-40 feet BGS

DATE: 7/22/10

WELL POINT LOG





812 West Wabash, Eureka, CA ph. (707) 441-8855 fax. (707) 441-8877

PROJ. NAME: LP Cloverdale

PROJ. NUMBER: 095107.209

DRILLER: Clearheart Drilling

DRILLING METHOD: HSA

SAMPLER TYPE: 2-inch Split Spoon

LOCATION: Cloverdale, CA

TOC ELEVATION: -

DEPTH OF BORING/WELL: 35.0 feet BGS

DEPTH TO FIRST WATER: -

SCREEN INTERVAL: 30-40 feet BGS

WELL POINT LOG

LO	GGE								DATE: 7/22/10			
	DEPTH (Feet BGS)	SAMPLE Z				LITHOLOGY PATTERN	SOIL DESCRIPTION	REMARKS	POINT CONSTRUCTION			
20	20	10 18 50/ 6"	O.	100		The state of the s	SM		SAND, fine, silty, dense to medium dense, slightly moist, mottled light greenish grey/reddish brown MUDSTONE, moderately indurated, dark grey, darker on fractures, slightly moist			The state of the s
25 ←	- 25	88/ 6"	* "	1007			Rx		Mudstone as above	Rig chattering from 27 to 30 feet BGS	THE STATE OF	2" SCH 40 PVC Screen (0.010 slot)
30	30	100/ 4*	Ö	100					All sample in tube for lab/water on sampler	to 30 feet BGS Depth to water approximately 30.9 feet BGS		
35	-35		en e						Total depth of boring = 35.0 ft BGS	Set PVC in borehole/pulled 3 augers Backfilled with grout		PVC End Cap





August 6, 2010

FAL Project ID: 6261

Mr. Roland Rueber SHN Engineering 812 W. Wabash Avenue Eureka, CA 95501-2138

Dear Mr. Rueber,

Enclosed are the results for Frontier Analytical Laboratory project 6261. This corresponds to your LP Cloverdale project and project number 095107.209. Nine soil samples were received on 7/27/2010 in good condition. These samples were extracted and analyzed by EPA Method 8290 for tetra through octa chlorinated dibenzo dioxins and furans. The TEQ for your samples has been calculated using the 1998 World Health Organization's Toxic Equivalency Factors. SHN Engineering requested a turnaround time of fifteen business days for project 6261.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your original chain of custody, our sample login form and a sample photo. The attached results are specifically for the samples referenced in this report only. This report, along with Frontier Analytical Laboratory's basic Excel EDD and the Geotracker EDD, has been sent to you via email. A hardcopy of this report will not be sent to you unless specifically requested. These results meet all NELAC requirements and shall not be reproduced except in full.

If you have any questions regarding project 6261, please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Director of Operations



Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 6261

	Received on:	<u>07/27/2010</u>		Project Due:	08/18/2010	Storage:	<u>R1</u>	
FAL	_	Client	Client,	Requested	21.21	Sampling	Sempling	Hold Time
Sample ID	Dup:	Project ID	Sample ID:	Method	Matrix	Date	Time	Due Date
6261-001-SA	O	LP Cloverdale	B-201@12'	EPÄ 8290 D/F	Soil	07/23/2010	09:20 am	08/24/2010
6261-002-SA	Ô	LP Cloverdate	B-201@17'	EPA 8290 D/F	Soll	07/23/2010	09:40 am	08/24/2010
6261-003-SA	Ö	LP Cloverdale	B-104A@17"	EPA 8290 D/F	Soil	07/23/2010	10;20 am	08/24/2010
6261-004-SA	0 -	LP Cloverdale	B-203@13'	EPA 8290 D/F	Soil	07/23/2010	10:55 am	08/24/2010
6261-005-SA	0	LP Cloverdale	6-203@17.5	EPA 8290 D/F	Soil	07/23/2010	11:10 am	08/24/2010
6261-006-SA	ж. О	LP Cloverdale	B-202@14'	EPA 8290 D/F	Soil	07/23/2010	11:50 am	08/24/2010
6261-007-SA	O	LP Cloverdale	B-202@19'	EPA 8290 D/F	Soil	07/23/2010	12:05 pm	08/24/2010
6261-008-SA	, <mark>O</mark> -	LP Cloverdale	B-106A@19.5	EPA 8290 D/F	Soli	07/23/2010	01:40 pm	08/24/2010
6261-009-SA	Ö	LP Cloverdale	B-106A@25	EPA 8290 D/F	Soll	07/23/2010	02:00 pm	08/24/2010



FAL ID: 6261-001-MB Client ID: Method Blank Matrix: Soil Date Extracted: 07-29-2010 Date Received: NA

Amount: 5.00 g

ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 07-31-2010 1998 WHO TEQ: 0.00

Matrix: Soil Batch No: X2070

Compound	Conc	ĎΓ	Qual	1998 WHO Tox		MDL	Compound	Conc	ĎĹ	Qual
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD	ND ND ND ND ND ND	0.313 0.428 0.480 0.469 0.788		(m) 		0.0262 0.0442 0.0486 0.0586 0.0529 0.0954 0.154	Total TCDD Total PeCDD Total HxCDD Total HpCDD	ND ND ND ND	0.148 0.313 0.480 0.788	
2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	ND ND ND ND ND ND ND ND	0.231 0.246 0.306 0.308 0.355 0.447 0.459 0.512		(1) (2) (2) (2) (3) (4) (4) (4) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7		0.0205 0.0298 0.0313 0.0308 0.0317 0.0341 0.0387 0.0418 0.0429 0.105	Total TCDF Total PeCDF Total HxCDF Total HpCDF	ND ND ND ND	0.0927 0.246 0.447 0.512	د
Internal Standards	% Rec	QC Limits	Qual							
13C-2,3,7,8-TCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-OCDD 13C-0CDD 13C-2,3,7,8-PeCDF 13C-1,2,3,4,7,8-PeCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,7,8,9-HpCDF 13C-1,2,3,4,7,8,9-HpCDF	89.7 85.6 63.2 48.8 79.2 67.6 66.4 94.4 89.3 84.8 83.4 68.3 72.2	40.0 - 135 40.0 - 135		j.	BCDEFJENPPS	signal to Analyte is Chemica Presence Analyte of Analyte of Maximum Analyte Not Provi Pre-filtere Sample a	abeled Standard noise ratio is >10 s present in Method Interference of Diphenyl Etheroncentration is altonomeration in secondariation in possible concentration is but Detected ded at through a What acceptance criteria efferences	:1 od Blank ers bove calib econdary c elow calib stration	ration rang column ration rang um GF/F fil	0
Cleanup Surrogate		4					enerences ken from dilution	or reinject	tion	Herotania in control

Analyst: 8/2/0

37CI-2,3,7,8-TCDD

75.1

50.0 - 150

Reviewed By: A



FAL ID: 6261-001-OPR Client ID: OPR Matrix: Soil

Batch No: X2070

Date Extracted: 07-29-2010 Date Received: NA

86.6 50.0 - 150

Amount: 5.00 g

ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: ng/ml Acquired: 07-31-2010 1998 WHO TEQ: NA

Compound	Conc	QC Limits	Qual	
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 0CDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF	50.7 53.5 52.5 50.7 50.0 110 9.61 48.2 48.2			
1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	47.2	35.0 - 65.0 35.0 - 65.0 35.0 - 65.0 35.0 - 65.0 35.0 - 65.0 35.0 - 65.0 70.0 - 130		
Internal Standards	% Rec	QC Limits	Qual	*
13C-2,3,7,8-TCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,6,7,8-HyCDD 13C-0CDD 13C-0CDD 13C-0CDD 13C-0CDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF 13C-1,2,3,4,6,7,8-HyCDF	72.1 95.6 90.6 68.4 61.2 84.1 72.5 73.3 97.7 96.6 93.6 73.8 79.2	40.0 - 135 40.0 - 135		A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1 B Analyte is present in Method Blank C Chemical Interference D Presence of Diphenyl Ethers E Analyte concentration is above calibration range F Analyte concentration on secondary column J Analyte concentration is below calibration range M Maximum possible concentration ND Analyte Not Detected NP Not Provided P Pre-filtered through a Whatman 0.7um GF/F filter S Sample acceptance criteria not met
Cleanup Surrogate				X Matrix interferences * Result taken from dilution or reinjection

Analyst: 8/2/10

37CI-2,3,7,8-TCDD

Reviewed By: State: X/(////)



FAL ID: 6261-001-SA Client ID: B-201@12 Matrix: Soil Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 08-02-2010 1998 WHO TEQ: 0.00

Matrix: Soil Amount: 5.10 g
Batch No: X2070 % Solids: 93.51

Compound	Conc	DL	Qual	1998 WHO Tox	MDL	Compound	Conc	DL	Qual
2.3.7.8-TCDD	ND	0.327		20- <u>6</u>	0.0262				
1,2,3,7,8-PeCDD	ND	0.496		*	0.0442				
1.2.3.4.7.8-HxCDD	ND	0.671		¥	0.0486				
1,2,3,6,7,8-HxCDD	ND	0.747			0.0586	Total TCDD	ND	0.328	
1,2,3,7,8,9-HxCDD	ND	0.731		<u></u>	0.0529	Total PeCDD	ND	0.496	
1,2,3,4,6,7,8-HpCDD	ND	1.49	1		0.0954	Total HxCDD	ND	0.747	
OCDD	ND	2.64		žet.	0.154	Total HpCDD	ND	1.49	
2.3.7.8-TCDF	ND	0.191		4,	0.0205				
1,2,3,7,8-PeCDF	ND	0.387		₩.	0.0298				
2,3,4,7,8-PeCDF	ND	0.408		**	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.502		·	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.481		_	0.0317				
2,3,4,6,7,8-HxCDF	ND	0.536		-	0.0341				
1,2,3,7,8,9-HxCDF	ND	0.698		- - -	0.0387	Total TCDF	ND	0.191	
1,2,3,4,6,7,8-HpCDF		0.836		<u> </u>	0.0418	Total PeCDF	ND	0.408	
1,2,3,4,7,8,9-HpCDF	ND	1.10		.	0.0429	Total HxCDF	ND	0.698	
OCDF	ND	2,18		· · · · · · · · · · · · · · · · · · ·	0.105	Total HpCDF	ND	1.10	
Internal Standards	% Rec Q	C Limits	Qual				.		

abeled Standard outside QC range but noise ratio is >10:1 present in Method Blank Interference
of Diphenyl Ethers concentration is above calibration range confirmation on secondary column concentration is below calibration range a possible concentration lot Detected ded ded through a Whatman 0.7um GF/F filter cceptance criteria not met erferences sen from dilution or reinjection
onc i po lot i ded ed ti cce erfe

Analyst: 8/2/10

37CI-2,3,7,8-TCDD

87.3

50.0 - 150

Date: 8/6/16



FAL ID: 6261-002-SA Client ID: B-201@17 Matrix: Soil Batch No: X2070

Date Extracted: 07-29-2010 Date Received: 07-27-2010 Amount: 5.05 g

% Solids: 93.25

ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g

Acquired: 07-31-2010 1998 WHO TEQ: 48.4

Compound	Con	c DL	Qual	1998 WHO Tox		MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	NI	0.176		, as		0.0262				
1,2,3,7,8-PeCDD	NE	0.403		. *		0.0442				
1,2,3,4,7,8-HxCDD	2.5		J	0.257		0.0486				
1,2,3,6,7,8-HxCDD	68.			6.81		0.0586	Total TCDD	6.36	*	
1,2,3,7,8,9-HxCDD	6.3	-		0.635		0.0529	Total PeCDD	28.0	*	
1,2,3,4,6,7,8-HpCDD	2180			21.8		0.0954	Total HxCDD	244	we"	
OCDD	1960)	4.	1.96		0.154	Total HpCDD	3390	₩.	
2,3,7,8-TCDF	NE			₩.		0.0205				
1,2,3,7,8-PeCDF	NE					0.0298				
2,3,4,7,8-PeCDF	1.0		J	0.520		0.0313				
1,2,3,4,7,8-HxCDF	10.			1.07		0.0308				
1,2,3,6,7,8-HxCDF	6.2			0.627		0.0317				
2,3,4,6,7,8-HxCDF	16.			1.65		0.0341	TULTODE	.04 *		D 84
1,2,3,7,8,9-HxCDF	1.8		J	0.187		0.0387	Total TCDF	21.5	77	D,M
1,2,3,4,6,7,8-HpCDF	119 34.			11.9 0.341		0.0418 0.0429	Total PeCDF	56.5 1650		D,M
1,2,3,4,7,8,9-HpCDF OCDF	666			0.341		0.105	Total HxCDF Total HpCDF	5700		D,M
OCDA	000) *.;		0.000		0.105	TOTAL FIDEDE	3700	35	
Internal Standards	% Rec	QC Limits	Qual							
13C-2,3,7,8-TCDD	77.9	40.0 - 135				Icotopia	Labeled Standard	autoida C	C more h	. 1
13C-1,2,3,7,8-PeCDD	61.6	40.0 - 135			Α		noise ratio is >10		ic range n	JL
13C-1,2,3,4,7,8-HxCDD	103	40.0 - 135			١,	•				1
13C-1,2,3,6,7,8-HxCDD	100	40.0 - 135			B		s present in Meth	od Blank]
13C-1,2,3,4,6,7,8-HpCDD	82.2	40.0 - 135			C	Chemica	I Interference			1
13C-OCDD	73.1	40.0 - 135			D	Presence	e of Diphenyl Ethi	ers		
13C-2,3,7,8-TCDF	73.8	40.0 - 135			E	Analyte o	concentration is a	bove calib	ration rang	e \end{vmatrix}
13C-1,2,3,7,8-PeCDF	65.1	40.0 - 135] F	Analyte of	confirmation on se	econdary o	olumn	1
13C-2,3,4,7,8-PeCDF	57.8	40.0 - 135			J	Analyte o	concentration is b	elow calib	ration rand	a
13C-1,2,3,4,7,8-HxCDF	108	40.0 - 135			1	•			anon rang	
13C-1,2,3,6,7,8-HxCDF	102	40,0 - 135			I		n possible concer	igation		**************************************
13C-2,3,4,6,7,8-HxCDF	80.5	40.0 - 135			ND	Analyte I	Not Detected			¥
13C-1,2,3,7,8,9-HxCDF	83.1	40.0 - 135			ΝP	Not Prov	ided			richina
13C-1,2,3,4,6,7,8-HpCDF	86.6	40.0 - 135			Р	Pre-filter	ed through a Wha	alman 0 7:	m.GE/E fil	er [
13C-1,2,3,4,7,8,9-HpCDF 13C-OCDF	78.8 76.9	40.0 - 135 40.0 - 135			l l				Oivi mi	~
ISC-OCDF	10.5	สบ.บ เจอ			S	pamble a	acceptance criteri	a not met		i

Analyst

Cleanup Surrogate 37CI-2,3,7,8-TCDD

69.5

50.0 - 150

Result taken from dilution or reinjection

X Matrix interferences



FAL ID: 6261-003-SA Client ID: B-104A@17 Matrix: Soil Date Extracted: 07-29-2010 Date Received: 07-27-2010 Amount: 5.04 g % Solids: 58.84 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 07-31-2010 1998 WHO TEQ: 7.10

Matrix; Soil Amount: 5,04 c Batch No: X2070 % Solids: 58.84

Compound	Cond	DL.	Quai	1998 WHO Tox		MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD	NE 3.4 8.30 10.9 3.39 137 80.0	· · · · · · · · · · · · · · · · · · ·	j J	3.41 0.830 1.09 0.339 1.37 0.00800		0.0262 0.0442 0.0486 0.0586 0.0529 0.0954 0.154	Total TCDD Total PeCDD Total HxCDD Total HpCDD	242 80.2 118 162	# # #	
2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	NE NE NE 0.443 NE 0.644 0.645 3.56	0 0.139 0 0.148 0 0.236 0 0.262 0 0.321	J J	0.0443 0.00645 0.000355		0.0205 0.0298 0.0313 0.0308 0.0317 0.0341 0.0387 0.0418 0.0429 0.105	Total TCDF Total PeCDF Total HxCDF Total HpCDF	1.04 0.913 1.42 2.28	\$* \$\tilde{\psi}\$ \$\tilde{\psi}\$	j ĵ
Internal Standards	% Rec	QC Limits	Qual							
13C-2,3,7,8-TCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-2,3,7,8-TCDF 13C-1,2,3,4,7,8-PeCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HpCDF 13C-1,2,3,4,7,8-HpCDF 13C-1,2,3,4,7,8-HpCDF 13C-1,2,3,4,7,8,9-HpCDF 13C-1,2,3,4,7,8,9-HpCDF	82.7 69.9 95.0 85.7 75.3 59.4 80.0 67.2 68.5 95.3 90.9 90.4 91.4 77.6 79.2 61.3	40.0 - 135 40.0 - 135			CDUFJADPS	signal to Analyte in Chemica Presence Analyte of Analyte of Analyte of Analyte of Maximum Analyte in Not Provi Pre-filtere Sample at Matrix int	ed through a Wha icceptance criteri erferences	:1 od Blank ers bove calibra condary oc elow calibra atration trans 0.7ur a not met	ation rang olumn ation rang m GF/F fill	·e e
Cleanup Surrogate					•	Result ta	ken from dilution	or reinjectio	חֹת	

Analyst:

37CI-2,3,7,8-TCDD

82.2

50.0 - 150

Reviewed By:

Date:



FAL ID: 6261-004-SA Client ID: 8-203@13 Matrix: 50il

Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 07-31-2010 1998 WHO TEQ: 0.00

Matrix: Soil Amount: 4.99 g
Batch No: X2070 % Solids: 63.97

Compound 2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD	Conc ND ND ND ND ND ND ND	0.132 0.257 0.376 0.415 0.408		1998 WHO Tox	MDL 0.0262 0.0442 0.0486	Compound	Conc	DL	Qual
1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD	ND ND ND ND ND	0.257 0.376 0.415 0.408		• 	0.0442				
1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD	ND ND ND ND	0.376 0.415 0.408		i.					
1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD	ND ND ND	0.415 0.408			ስ ስለያል				
1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD	ND ND	0.408			7				
1,2,3,4,6,7,8-HpCDD	ND				0.0586	Total TCDD	ND	0.132	
				¥	0.0529	Total PeCDD	ND	0.257	
OCDD	ND	0.769		` `	0.0954	Total HxCDD	ND	0.415	
	.,-	2.37		•	0.154	Total HpCDD	ND	0.769	
2,3,7,8-TCDF	ND	0.0730		¥,	0.0205				
1,2,3,7,8-PeCDF	ND	0.175		. <u> </u>	0.0298				
2,3,4,7,8-PeCDF	ND	0.169		*	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.266		4 *	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.282		ű.	0,0317 0.0341				
2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF	ND ND	0,298 0.396		.#s €.	0.0341	Total TCDF	ND:	0.0730	
1,2,3,4,6,7,8-HpCDF	ND	0.393		•	0.0337	Total PeCDF	ND	0.0730	
1,2,3,4,6,7,8-HpCDF	ND	0.508		Ser.	0.0418	Total HxCDF	ND	0.396	
0CDF	ND.	1,28			0.0425	Total HpCDF	ND	0.508	
OODI	ND	i iso		-	0.100	iore (ibos)	145	- 9,,000	
Internal Standards	% Rec Q	C Limits	Qual			,			
13C-2,3,7,8-TCDD	82.0 40	.0 - 135			leotopic l	abeled Standard	outside C	C range hi	17
13C-1,2,3,7,8-PeCDD		.0 - 135		[A signal to	noise ratio is >10	:1	to range b	*
13C-1,2,3,4,7,8-HxCDD		.0 - 135			-	s present in Metho			1.
13C-1,2,3,6,7,8-HxCDD		.0 - 135		1		•	o Diank		- 1
		.0 - 135		1	C Chemica	I Interference			1
13C-OCDD	57.5 40	.0 - 135		1 1		of Diphenyl Ethe			
13C-2,3,7,8-TCDF	81.5 40	.0 - 135			E Analyte o	concentration is al	ove calib	ration rang	e
		.0 - 135			F Analyte o	confirmation on se	condary o	column	1
		.0 - 135			J Analyte o	concentration is be	elow callb	ration range	e
		.0 - 135			5 1	n possible concen			l
		.0 - 135		1.		• •	HOUDII		
		.0 - 135		1		Not Detected			I
		.0 - 135		N	IP Not Prov	ided			
		.0 - 135 .0 - 135		J	P Pre-filter	ed through a Wha	tman 0.7	ım GF/F filt	er
		.0 - 135 .0 - 135				acceptance criteria			
				1:	X Matrix int	•			
Cleanup Surrogate					* Result ta	ken from dilution (or reinject	ion	

Analyst: 8/2/10

37CI-2,3,7,8-TCDD

84.0

50.0 - 150

Reviewed By:
Date: $\delta/(\delta/\ell)$



FAL ID: 6261-005-SA Client ID: B-203@17.5 Matrix: Soil

Date Extracted: 07-29-2010 Date Received: 07-27-2010 Amount: 5.01 a ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 07-31-2010 1998 WHO TEQ: 0.00

Matrix: Soil Amount: 5.01 g Batch No: X2070 % Solids: 81.07

Compound	Conc	; DL	Qual	1998 WHO Tox	ı	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD	ND ND ND ND ND	0.330 0.366 0.400 0.395 0.110		6 8 9 9 9	0.0 0.0 0.0 0.0 0.0	0262 0442 0486 0586 0529 0954	Total TCDD Total PeCDD Total HxCDD Total HpCDD	ND ND ND ND	0.213 0.330 0.400 1.10	
2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF		0 0.241 0 0.246 0 0.222 0 0.225 0 0.256 0 0.302 0 0.360 0 0,429		· 第 · · · · · · · · · · · · · · · · · ·	0.0 0.0 0.0 0.0 0.0 0.0	0205 0298 0313 0308 0317 0341 0387 0418 0429 .105	Total TCDF Total PeCDF Total HxCDF Total HpCDF	ND ND ND ND	0.0914 0.246 0.302 0.429	*
Internal Standards	% Rec	QC Limits	Qual					,		×
13C-2,3,7,8-TCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,4,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HpCDD 13C-0CDD 13C-2,3,7,8-TCDF 13C-1,2,3,4,7,8-PeCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,7,8,9-HxCDF 13C-1,2,3,4,7,8,9-HxCDF 13C-1,2,3,4,7,8,9-HxCDF	77.0 69.7 85.1 81.7 61.0 43.9 74.0 64.0 66.3 91.3 86.9 81.6 83.4 64.8 66.7 47.6	40.0 - 135 40.0 - 135		, N. I.	B An C Ch D Pre An Man Man Min Man Min Man Min Man Min Man Min Min Min Min Min Min Min Min Min Mi	inal to realyte is allyte or allyte all all all all all all all all all al	abeled Standard noise ratio is >10 present in Meth Interference of Diphenyl Etheonocentration is all portional procentration in the possible concentration on the Detected ded of through a What exceptance criteria afferences en from dilution	:1 od Blank ers bove calib econdary c elow calib dration tman 0.70 a not met	ration rang column ration rang um GF/F filt	O O
37Cl-2,3,7,8-TCDD	78.5	50.0 - 150								·

Analyst 8/2/10

Reviewed By: *

Date: **IU////



FAL ID: 6261-006-SA Client ID: B-202@14 Matrix: Soil Batch No: X2070

Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g

Acquired: 07-31-2010 1998 WHO TEQ: 557

Amount: 5.04 g % Solids: 88.79

Compound	Conc	DL	Qual	1998 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD	ND 4.67 34.0 3210 705 13300 46000	0.272 ** ** **	J	4.67 3.40 321 70.5 133 4.60	0.0262 0.0442 0.0486 0.0586 0.0529 0.0954	Total TCDD Total PeCDD Total HxCDD Total HpCDD	17.8 97.8 13900 17900	යා දේ ප මා	
2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 0CDF	ND 0.705 0.909 12.4 10.8 22.5 6.57 1290 36.4 6760	0.0823	J	0.0352 0.454 1.24 1.08 2.25 0.657 12.9 0.364 0.676	0.0205 0.0298 0.0313 0.0308 0.0317 0.0341 0.0387 0.0418 0.0429 0.105	Total TCDF Total PeCDF Total HxCDF Total HpCDF	27.7 28.3 1880 7020	e e e e	D.M D.M D.M
13C-2,3,7,8-TCDD 13C-1,2,3,7,8-PeCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,4,6,7,8-HxCDD 13C-0CDD 13C-0CDD 13C-2,3,7,8-PeCDF 13C-1,2,3,4,7,8-PeCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF 13C-1,2,3,4,6,7,8-HxCDF	74.6 76.9 65.9 46.5 64.7 56.8 54.2 79.7 81.4 59.6 60.6 57.4 54.8	40.0 - 135 40.0 - 135			signal to B Analyte C Chemica D Presenc E Analyte F Analyte J Analyte M Maximum ND Analyte NP Not Pro- P Pre-filter	red through a Wha acceptance criteri	od Blank ers bove calib econdary c elow calibn ntration	ration range solumn ration range	omo indicate manuscripturas manuscripturas properties manuscripturas immensioneros. On the contract of the co

Date:

Cleanup Surrogate 37CI-2,3,7,8-TCDD

62.2

50.0 - 150

Reviewed By Date:

Result taken from dilution or reinjection



FAL ID: 6261-007-SA Client ID: B-202@19 Matrix: Soil Batch No: X2070 Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Units: pg/g Acquired: 07-31-2010 1998 WHO TEQ: 5.49

ix: Soil Amount: 5.02 g h No: X2070 % Solids: 87.96

Compound	Свпо	DL	Qual	1998 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.284		4	0.0262				
1,2,3,7,8-PeCDD	2.16		J	2.16	0.0442				
1,2,3,4,7,8-HxCDD	3,38		Ü	0.338	0.0486				
1,2,3,6,7,8-HxCDD	16.7			1.67	0.0586	Total TCDD	162	<u>ي</u>	
1,2,3,7,8,9-HxCDD	4.11	÷.	J.	0.411	0.0529	Total PeCDD	80.3	#	
1,2,3,4,6,7,8-HpCDD	89.9			0.899	0.0954	Total HxCDD	134	*** ****	
OCDD	65.3	ä.		0.00653	0.154	Total HpCDD	115	€ -	
2,3,7,8-TCDF	- ND	0.110		5	0.0205				
1,2,3,7,8-PeCDF	NÞ	0.253		-	0.0298				
2,3,4,7,8-PeCDF	ND	0.376		•	0.0313				
1,2,3,4,7,8-HxCDF	ND	0.523		-	0.0308				
1,2,3,6,7,8-HxCDF	ND	0.544		-44	0.0317				
2,3,4,6,7,8-HxCDF	ŅD	1.04		-	0.0341				
1,2,3,7,8,9-HxCDF	ND			;**	0.0387	Total TCDF	0.516	5 55	ال
1,2,3,4,6,7,8-HpCDF	ŅD			~	0.0418	Total PeCDF	ND	0.376	* ,
1,2,3,4,7,8,9-HpCDF	ND	17			0.0429	Total HxCDF	ND	1.16	
OCDF	5.17	,	,J	0.000517	0.105	Total HpCDF	2.52	÷.	j
Internal Standards	% Rec	QC Limits	Qual	÷			··		
13C-2,3,7,8-TCDD	60.7	40.0 - 135		1	[antonia			30 h	
13C-1,2,3,7,8-PeCDD	51.1	40.0 - 135		1		Labeled Standard noise ratio is >10		ac range b	ul [
13C-1,2,3,4,7,8-HxCDD	103	40.0 - 135							Fallelity
13C-1,2,3,6,7,8-HxCDD	99.8	40.0 - 135		•	B Analyte i	is present in Meth	od Blank		
3C-1,2,3,4,6,7,8-HpCDD	55.0	40.0 - 135			C Chemica	Interference			

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	60.7	40.0 - 135	
13C-1,2,3,7,8-PeCDD	51.1	40.0 - 135	
13C-1,2,3,4,7,8-HxCDD	103	40.0 - 135	
13C-1,2,3,6,7,8-HxCDD	99.8	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDD	55.0	40.0 - 135	
13C-OCDD	21.2	40.0 - 135	A.
	7.00		1
13C-2,3,7,8-TCDF	54.6	40.0 - 135	
13C-1,2,3,7,8-PeCDF	53.5	40.0 - 135	
13C-2.3.4.7.8-PeCDF	39.2	40.0 - 135	
13C-1,2,3,4,7,8-HxCDF	116	40.0 - 135	
13C-1,2,3,5,7,8-HxCDF	109	40.0 - 135	
13C-2,3,4,6,7,8-HxCDF	60.6	40.0 - 135	
13C-1,2,3,7,8,9-HxCDF	67.3	40.0 - 135	
13C-1,2,3,4,6,7,8-HpCDF	73.7	40.0 - 135	
13C-1,2,3,4,7,8,9-HpCDF	55.1	40.0 - 135	
13C-OCDF	30.1	40.0 - 135	Α
130-0001	00.1	40.0 - 100	Δ.

63.4

50.0 - 150

- D Presence of Diphenyl Ethers
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- Result taken from dilution or reinjection

Analyst: 8/2/10

Cleanup Surrogate

Reviewed By: Solly



FAL ID: 6261-008-SA Client ID: B-106A@19.5 Matrix: Soil

Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5

Acquired: 07-31-2010 1998 WHO TEQ: 149

Amount: 5.01 g % Solids: 88.18 Batch No: X2070

Units: pg/g

Compound Conc DL Qual 1998 WHO Tox MDL Compound Conc DL Qual											
1,2,3,7,8-PcDD 1,65 1,2,3,47,8-HxCDD 10,5 1,2,3,47,8-HxCDD 514 1,2,3,47,8-HxCDD 514 1,2,3,4,6,7,8-HxCDD 5210 2,3,7,8-PcDF ND 0,0701 1,2,3,7,8-PcDF 0,575 2,3,4,7,8-HxCDF 0,575 2,3,4,7,8-HxCDF 13.8 1,2,3,4,7,8-HxCDF 13.8 1,2,3,4,7,8-HxCDF 24.0 1,2,3,6,7,8-HxCDF 24.0 1,2,3,4,6,7,8-HxCDF 1840 1,2,3,4,7,8-HxCDF 1840 1,2,3,4,	Compound	Con	ic DL	Qual	1998 WHO Tox		MDL	Compound	Conc	DL	Qual
1,2,3,7,8-PcDD 1,65 1,2,3,47,8-HxCDD 10,5 1,2,3,47,8-HxCDD 514 1,2,3,47,8-HxCDD 514 1,2,3,4,6,7,8-HxCDD 5210 2,3,7,8-PcDF ND 0,0701 1,2,3,7,8-PcDF 0,575 2,3,4,7,8-HxCDF 0,575 2,3,4,7,8-HxCDF 13.8 1,2,3,4,7,8-HxCDF 13.8 1,2,3,4,7,8-HxCDF 24.0 1,2,3,6,7,8-HxCDF 24.0 1,2,3,4,6,7,8-HxCDF 1840 1,2,3,4,7,8-HxCDF 1840 1,2,3,4,	2.3.7.8-TCDD	NI	D 0.228		_		0.0262				
1.2.3.4,7,8+HxCDD 10.5 14 51.4 0.0588 Total TCDD 16.4 - 12.3.7,8,9+HxCDD 136 13.6 0.0529 Total PeCDD 119 12.3.4,8,7,8+HxCDD 5210 52.1 0.0954 Total HxCDD 2680 - 0CDD 40100 4.010 1.18 Total HxCDD 2680 - 0CDD 40100 4.010 1.18 Total HxCDD 2680 - 0.000 4.010 1.18 Total HxCDD 2690 - 0.000 4.010 1.18 Total HxCDD 27.9 - 0.000 4.010 1.18 Total HxCDF 27.9 - 0.000 4.0	1,2,3,7,8-PeCDD	1.6		ڶ	1.65		0.0442				
1,2,3,7,8,9+HxCDD 136		10.	5 🔻 🤲		1.05		0.0486				
1,2,3,7,8,9+HxCDD 136	1,2,3,6,7,8-HxCDD	51	4 🚙		51.4		0.0586	Total TCDD	16.4	**	
CCDD	1,2,3,7,8,9-HxCDD	13	6 -		13,6		0.0529	Total PeCDD	119·		
2,3,7,8-TCDF ND 0.0701	1,2,3,4,6,7,8-HpCDD	521	0 🐃							i⇒	
1,2,3,7,8-PeCDF 0,575 J 0,0288 0,0298 2,3,4,7,8-PeCDF 0,548 J 0,274 0,0313 1,2,3,4,7,8-PeCDF 13.8 1,38 0,0308 1,2,3,4,7,8-HxCDF 7,73 0,773 0,0317 2,3,4,6,7,8-HxCDF 24,0 2,40 0,0341 1,2,3,7,8,9-HxCDF 24,0 1,2,3,4,6,7,8-HxCDF 1840 1,8,4 0,0418 Total PeCDF 35,4 D,M 1,2,3,4,6,7,8-HxCDF 1840 1,8,4 0,0418 Total PeCDF 35,4 D,M 1,2,3,4,7,8,9-HxCDF 46,2 0,462 0,462 0,462 0,462 0,462 0,462 0,462 0,462 0,049 Total HxCDF 2350 D,M 0CDF 9710 0,0971 0,105 Total HxCDF 2350 D,M 13C-1,2,3,7,8-PeCDD 64,9 40,0 1,35 13C-1,2,3,4,7,8-HxCDD 93,3 40,0 1,35 13C-1,2,3,4,7,8-HxCDD 93,3 40,0 1,35 B Analyte is present in Method Blank 13C-1,2,3,4,7,8-HxCDD 93,1 40,0 1,35 C Chemical Interference D Presence of Diphenyl Ethers 13C-2,3,4,7,8-PeCDF 68,8 40,0 1,35 F Analyte concentration is above calibration range 13C-1,2,3,4,7,8-HxCDF 98,9 40,0 1,35 M Analyte Not Detected NP Not Provided 13C-1,2,3,4,7,8-HxCDF 89,5 40,0 1,35 ND Analyte Not Detected NP Not Provided 13C-1,2,3,4,7,8-HxCDF 88,5 40,0 1,35 ND Analyte Not Detected NP Not Provided 13C-1,2,3,4,7,8-HxCDF 88,6 40,0 1,35 ND Analyte Not Detected NP Not Provided NP Not Provided 13C-1,2,3,4,7,8,9-HxCDF 88,6 40,0 1,35 ND Analyte Not Detected NP Not Provided NP Not Provided New Year Not Detected NP Not Provided N	OCDD	4010	0 🙀)#i	4.01		0.154	Total HpCDD	8250	22	
2.3.4.7.8-PeCDF											
2,3,4,7,8-PeCDF 13.8											
1,2,3,6,7,8-HxCDF 7.73 2,4 0 0.0341 2,3,4,6,7,8-HxCDF 24.0 2,70 2,0 0.0347 1,2,3,7,8,9-HxCDF 1840 18.4 0.0418 Total PeCDF 35.4 D,M 1,2,3,4,7,8,9-HyCDF 46.2 0,462 0,0429 Total HxCDF 2350 D,M 0CDF 9710 0.071 0.105 Total HyCDF 9150 Internal Standards % Rec CC Limits Cual 13C-2,3,7,8-TCDD 84.1 40.0 - 135 13C-1,2,3,7,8-HxCDD 93.3 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.1 40.0 - 135 13C-1,2,3,7,8-TCDF 83.7 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-1,2,3,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,7,8-HxCDF 98.9 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 88.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 88.6 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 88.6 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 88.6 40.0 - 135 13C-1,2,3,4,7,8-HyCDF 88.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 88.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 88.0 40.0 -		- , - , - ,	8 🐭	J							
2,34,6,7,8-HxCDF 24.0											
1,2,3,7,8,9-HxCDF											
1,2,3,4,6,7,8-HpCDF											
1,2,3,4,7,8,9-HpCDF OCDF 9710				J						si	
Internal Standards											
13C-2,3,7,8-TCDD		117	2							×	D _, M
13C-2,3,7,8-TCDD 84.1 40.0 - 135 13C-1,2,3,7,8-PeCDD 64.9 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.3 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 102 40.0 - 135 13C-2,3,7,8-TCDF 83.7 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8-PeCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 85.6 40.0 - 135 13C-1,2,3,4,	€CDF	971	0 .		0,971		0.105	Total HpCDF	9150	Ħ	
13C-1,2,3,7,8-PeCDD 64.9 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.3 40.0 - 135 13C-1,2,3,6,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-2,3,7,8-PeCDF 83.7 40.0 - 135 13C-2,3,7,8-PeCDF 68.8 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-PeCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 88.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.5 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.8 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2	Internal Standards	% Rec	QC Limits	Qual							
13C-1,2,3,7,8-PeCDD 64.9 40.0 - 135 13C-1,2,3,4,7,8-HxCDD 93.3 40.0 - 135 13C-1,2,3,6,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-2,3,7,8-PeCDF 83.7 40.0 - 135 13C-2,3,7,8-PeCDF 68.8 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-PeCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 88.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.5 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.8 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 89.9 40.0 - 135 13C-1,2	13C-2.3.7.8-TCDD	84 1	40.0 - 135			ī	 			<u> </u>	
13C-1,2,3,4,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,6,7,8-HxCDD 93.1 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDD 93.1 40.0 - 135 13C-2,3,7,8-TCDF 83.7 40.0 - 135 13C-2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 88.9 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.6 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.8 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 89.9 40.0 - 135 13						A				C range b	ut j
13C-1,2,3,6,7,8-HxCDD 93.8 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDD 93.1 40.0 - 135 13C-2,3,4,6,7,8-HpCDD 102 40.0 - 135 13C-2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 85.6 40.0 - 135 13					:		•				and
13C-OCDD 102 40.0 - 135 13C-2,3,7,8-TCDF 83.7 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HyCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HyCDF 85.6 40.0 - 13		93.8				В	Analyte i	s present in Meth	od Blank		
13C-OCDD 102 40.0 - 135 13C-2,3,7,8-TCDF 83.7 40.0 - 135 13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 85.0 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.0 40.0 - 13	13C-1,2,3,4,6,7,8-HpCDD	93.1	40.0 - 135			C	Chemica	Interference			-
13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 85.0 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 8	13C-OCDD	102	40.0 - 135			D			ers		
13C-1,2,3,7,8-PeCDF 68.8 40.0 - 135 13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-0CDF 90.8 40.0 - 135 Yes-filtered through a Whatman 0.7um GF/F filter Sample acceptance criteria not met X Matrix interferences	13C-2.3.7.8-TCDF	83.7	40.0 - 135			E	Analyte o	concentration is a	bove calib	ration rang	e !
13C-2,3,4,7,8-PeCDF 64.5 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 101 40.0 - 135 13C-1,2,3,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-0CDF 90.8 40.0 - 135 X Matrix interferences						F	Analyte o	confirmation on se	econdary o	olumn	-
13C-1,2,3,4,7,8-HxCDF 98.9 40.0 - 135 13C-1,2,3,4,6,7,8-HxCDF 98.9 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 84.0 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-0CDF 90.8 40.0 - 135 X Matrix interferences		64.5	40.0 - 135			1	. •				_
13C-2,3,4,6,7,8-HxCDF 87.2 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-OCDF 90.8 40.0 - 135 X Matrix interferences		101				1		and the second s		ration rang	e
13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-OCDF 90.8 40.0 - 135 X Matrix interferences	13C-1,2,3,6,7,8-HxCDF	98.9	40.0 - 135			l M	Maximur	n possible concer	ntration		
13C-1,2,3,7,8,9-HxCDF 89.5 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-OCDF 90.8 40.0 - 135 Pre-filtered through a Whatman 0.7um GF/F filter S Sample acceptance criteria not met X Matrix interferences	13C-2,3,4,6,7,8-HxCDF	87.2	40.0 - 135			ND	Analyte N	Not Detected			Î
13C-1,2,3,4,6,7,8-HpCDF 85.6 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 84.0 40.0 - 135 13C-OCDF 90.8 40.0 - 135 P Pre-filtered through a Whatman 0.7um GF/F filter S Sample acceptance criteria not met X Matrix interferences	13C-1,2,3,7,8,9-HxCDF	89.5	40.0 - 135				•	· ·			
13C-OCDF 90.8 40.0 - 135 Sample acceptance criteria not met X Matrix interferences	13C-1,2,3,4,6,7,8-HpCDF	85.6	40.0 - 135			1		•			
X Matrix interferences		84.0	40.0 - 135			P	Pre-filter	ed through a Wha	atman 0,7u	m GF/F fil	ter [
	13C-OCDF	90.8	40.0 - 135			S	Sample a	acceptance criteri	a not met		
Cleanup Surrogate * Result taken from dilution or reinjection						X	Matrix int	terferences			
	Cleanup Surrogate					*	Result ta	ken from dilution	or reinject	ion	

37CI-2,3,7,8-TCDD

85.1

50.0 - 150

Reviewed By Date:



FAL ID: 6261-009-SA Client ID: B-106A@25 Matrix: Soil Batch No: X2070 Date Extracted: 07-29-2010 Date Received: 07-27-2010 ICal: PCDDFAL3-5-12-10 GC Column: DB5 Acquired: 07-31-2010 1998 WHO TEQ: 3.35

Amount: 5.06 g % Solids: 81.83

Units: pg/g

Qual	DL.	Conc	Compound	MDL	1998 WHO Tox	Qual	DL	Conc	Compound
				0.0262	<i>₩</i>		0.141	ND	2,3,7,8-TCDD
				0.0442	 ₩11		0.276	ND	1,2,3,7,8-PeCDD
				0.0486	reconstruction of the contract		0.626	ND	1,2,3,4,7,8-HxCDD
	· *	1.22	Total TCDD	0.0586	1.19		*-	11.9	1,2,3,6,7,8-HxCDD
	₹	10.0.	Total PeCDD	0.0529	0.323	Ĵ	÷	3.23	1,2,3,7,8,9-HxCDD
	<u>-</u> -	107	Total HxCDD	0.0954	1.23			123	1,2,3,4,6,7,8-HpCDD
	2	228	Total HpCDD	0.154	0.0740		:=	740	* OCDD
				0.0205	4		0.0569	ND	2,3,7,8-TCDF
				0.0298	œ.		0.226	ND	1,2,3,7,8-PeCDF
				0.0313	*		0.241	ND	2,3,4,7,8-PeCDF
				0.0308	0.0599	J	🛬	0.599	1,2,3,4,7,8-HxCDF
				0.0317	₩		0.239	ND	1,2,3,6,7,8-HxCDF
				0.0341	0.0855	J	3 ₹ √	0.855	2,3,4,6,7,8-HxCDF
	1	2.08	Total TCDF	0.0387	•		0.334	ND	1,2,3,7,8,9-HxCDF
J	<u>.</u>	0.993	Total PeCDF	0.0418	0.348			34.8	1,2,3,4,6,7,8-HpCDF
	e te j.	59.2	Total HxCDF	0.0429	0.0178	J		1.78	1,2,3,4,7,8,9-HpCDF
	· :	155	Total HpCDF	0.105	0.0180		÷	180	OCDF

13C-2,3,4,7,8-PeCDF 66.2 40.0 - 135 13C-1,2,3,4,7,8-HxCDF 108 40.0 - 135 13C-1,2,3,4,6,7,8-HxCDF 99.1 40.0 - 135 13C-2,3,4,6,7,8-HxCDF 91.0 40.0 - 135 13C-1,2,3,7,8,9-HxCDF 91.0 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 75.6 40.0 - 135 13C-1,2,3,4,6,7,8-HpCDF 80.5 40.0 - 135 13C-1,2,3,4,7,8,9-HpCDF 80.5 40.0 - 135 13C-0CDF 66.2 40.0 - 135 X Matrix in	confirmation on secondary column concentration is below calibration range in possible concentration Not Detected vided red through a Whatman 0.7um GF/F filter acceptance criteria not met interferences
Cleanup Surrogate * Result to	aken from dilution or reinjection

Analyst: 8/2/(2

Reviewed By: No. 1011

Frontier Analytical Laboratory 5172 Hillsdale Circle	FALUSE ONLY (0,00)	Chain of Cus
22	Laboratory Project No:	www.fronteranalytical.com
Tel: 916-934-0900		
Fax: 916-934-0999		riease rint in ren

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Company Name: CHAND RUCECE Contact Name: RCIAND RUCECE Address: SIS No 11 A BASIT 2. CKA Phone: 207-441-8855 Fax: 202-441-857 Email: RRIVES CE SHAI-5AIGR. CI	15×8	Company Name: Left Contact Name: APPAL Address: HH LINION Phone: Ci5- 754-51451 Email: APRIL-11468-M	1 4921 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	195	1.0 GPAM STREET Par: Sier 54.0 © 1.00000 G		प्रहम्याएट ज्या	2	P.O. #: Cef 55 Project #: Cef 55 Project Name: L TAT (business days): * FAL must agree v	Name strings	25.5 lays): gree v	P.O. #. P. Cet 5 10 つ。O.G. Project #. Cet 5 10 つ。O.G. Project Name: L.P. C.L.C. ひこうみんデ TAT (business gays): 図 15 口 10 口 5* 口 3* (Von *FAL must agree with price and RUSH TAT in writing	たりみんデ ロ 5* ロ 3* SH TAT in w	(Vone)
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Client understands that all ferras described in the proposals, quotations, and/or the general terms provided in the current FAL, price schedules will be followed. FAL, reserves the rights to terminate its service or withhold delivery of reports, if in FAL's sole discretion the terms of the project have been broken.	Il terms described in	the proposals, q	notation delivery	s, and/or of report	the gents, if in)	eral tem RAL's s	ts provi	ded in t retion fl	te curr	ont FAU s of the	price projec	schedules will be t thave been broken	followed.	
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White Copy - Report



Frontier Analytical Laboratory

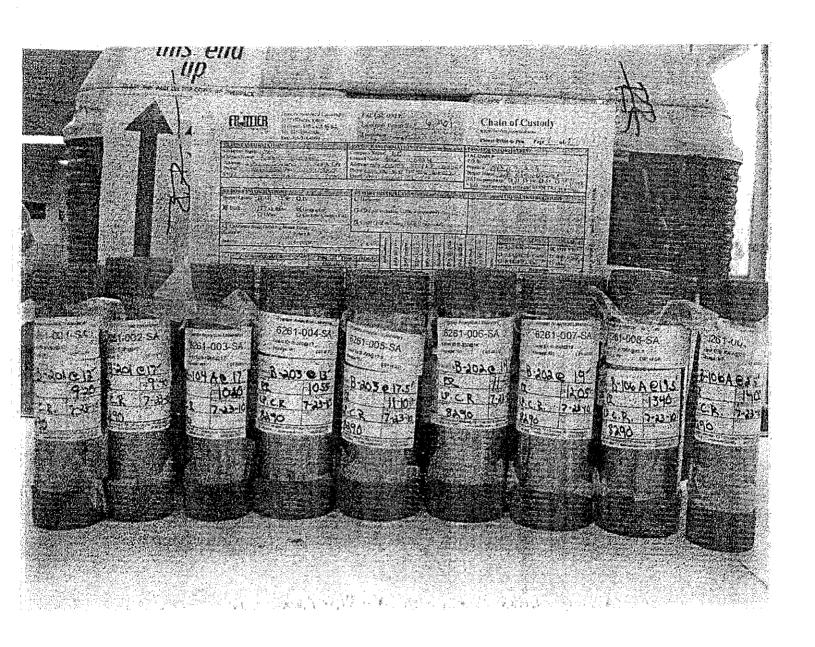
Sample Login Form

FAL Project ID: 6261

10	A CONTRACTOR OF THE CONTRACTOR
Client:	SHN Engineering
Client Project ID:	LP Cloverdale
Date Received	07/27/2010
Time Received:	09:40 am
Received By:	KZ .
Logged In By:	KZ
# of Samples Received:	9
Duplicates	0
Storage Location	R1

Method of Delivery:	Fed-Ex
Tracking Number:	798885235216
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Oustody seals(s) intact?	No
Sample Arrival Temperature (C)	2
Seeling Method	lce
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Fest for residual Chlorine	No
Thiosulfate Added	No
arliest Sample Hold Time Expiration	08/24/2010
Adequate Sample Volume	Yes
Anomalies or additional comments:	





ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 16, 2010

Roland Rueber, Project Manager SHN 812 W. Wabash Eureka, CA 95501

Dear Mr. Rueber:

Included are the results from the testing of material submitted on July 27, 2010 from the LP Cloverdale 095107.209, F&BI 007276 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0816R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 27, 2010 by Friedman & Bruya, Inc. from the SHN LP Cloverdale 095107.209, F&BI 007276 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SHN
007276-01	B-205@6'
007276-02	B-205@11'
007276-03	B-205@16'
007276-04	B-205@21'
007276-05	B-205@25'
007276-06	B-205@30'
007276-07	B-204@11'
007276-08	B-204@16'
007276-09	B-204@21'
007276-10	B-204@25.5'
007276-11	B-204@31'
007276-12	B-204@35'
007276-13	B-205

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 07/28/10

Date Analyzed: 07/29/10 and 07/30/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHODS 8021B AND 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	MTBE	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	$\begin{array}{c} \textbf{Gasoline} \\ \underline{\textbf{Range}} \\ \textbf{(C_6-C_{10})} \end{array}$	Surrogate (% Recovery) (Limit 50-132)
B-205@6' 007276-01	<0.1	<0.02	< 0.02	<0.02	<0.06	<2	95
B-205@11' 007276-02	<0.1	<0.02	<0.02	<0.02	<0.06	<2	83
B-205@16' 007276-03	<0.1	< 0.02	<0.02	<0.02	< 0.06	<2	97
B-205@21' 007276-04	<0.1	<0.02	< 0.02	<0.02	<0.06	<2	88
B-205@25' 007276-05	<0.1	< 0.02	< 0.02	<0.02	<0.06	<2	88
B-204@11' 007276-07	<0.1	<0.02	<0.02	0.79	2.1	14	102
B-204@16 ⁹ 007276-08	<0.1	<0.02	< 0.02	<0.02	<0.06	<2	89
B-204@21' 007276-09	<0.1	<0.02	<0.02	< 0.02	<0.06	<2	90
B-204@25.5' 007276-10	<0.1	<0.02	<0.02	<0.02	<0.06	<2.	86
B-204@31' 007276-11	<0.1	<0.02	<0.02	<0.02	<0.06	<2.	70

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

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RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHODS 8021B AND 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>MTBE</u>	Benzene	Toluene	Ethyl <u>Benzene</u>	Total Xylenes	Gasoline Range (C ₆ -C ₁₀)	Surrogate (% Recovery) (Limit 50-132)
B-204@35' 007276-12	<0.1	<0.02	<0.02	<0.02	<0.06	<2	79
Method Blank	<0.1	<0.02	< 0.02	<0.02	<0.06	<2	88

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 07/29/10 Date Analyzed: 07/29/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHODS 8021B AND 8015M

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	MTBE	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline Range (C ₆ -C ₁₀)	Surrogate (% Recovery) (Limit 52-124)
B-205 007276-13	< 5,	<0.5	<0.5	<0.5	<1.5	<50	78
Method Blank	<5	<0.5	<0.5	<0.5	<1.5	<50	79

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 08/02/10

Date Analyzed: 08/06/10 and 08/07/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	$\frac{\text{Diesel Range}}{(C_{10}\text{-}C_{25})}$	Surrogate (% Recovery) (Limit 50-150)
B-205@6' 007276-01	400	96
B-205@11' 007276-02	<10	86
B-205@16' 007276-03	<10	97
B-205@21' 007276-04	<10	93
B-205@25, 007276-05	47	97
B-204@11 ³ .	11 x	87
B-204@16' 007276-08	<10	96
B-204@21' 007276-09	<10	86
B-204@25.5' 007276-10	31	86
B-204@31' 007276-11	65	88

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107,209, F&BI 007276

Date Extracted: 08/02/10

Date Analyzed: 08/06/10 and 08/07/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	Surrogate (% Recovery) (Limit 50-150)
B-204@35* 007276-12	100	92
Method Blank	<10	87

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 07/27/10 Date Analyzed: 07/28/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	<u>Diesel Range</u> (C10-C25)	Surrogate (% Recovery) (Limit 51-134)
B-205 007276-13	25 ×	101
Method Blank	<10	91

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 08/02/10

Date Analyzed: 08/06/10, 08/07/10, and 08/11/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	$rac{ ext{Motor Oil Range}}{ ext{(C}_{25} ext{-C}_{36} ext{)}}$	Surrogate (% Recovery) (Limit 50-150)
B-205@6' 007276-01	1,800	78
B-205@11' 007276-02	<50	55
B-205@16° 007276-03	<50	60
B-205@21' 007276-04	<50	149
B-205@25' 007276-05	<50	75
B-204@11'	<50	54
B-204@16' 007276-08	<50	52
B-204@21' 007276-09	<50	150
B-204@25.5° 007276-10	<50	61
B-204@31' 007276-11	110 x	71

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 08/02/10

Date Analyzed: 08/06/10, 08/07/10, and 08/11/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Motor Oil Range (C25-C36)	Surrogate (% Recovery) (Limit 50-150)
B-204@35' 007276-12	170 x	85
Method Blank	<50	87

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

Date Extracted: 07/27/10 Date Analyzed: 07/28/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Motor Oil Range (C ₂₅ -C ₉₆)	Surrogate (% Recovery) (Limit 51-184)
B-205 007276-13	<50	101
Method Blank	<50	91

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHODS 8021B AND 8015M

Laboratory Code: 007276-12 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
MTBE	mg/kg (ppm)	<0.1	<0.1	nm
Benzene	mg/kg (ppm)	< 0.02	< 0.02	\mathbf{nm}
Toluene	mg/kg (ppm)	< 0.02	< 0.02	\mathbf{nm}
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria_
MTBE	mg/kg (ppm)	0.5	105	70-130
Benzene	mg/kg (ppm)	0.5	110	66-121
Toluene	mg/kg (ppm)	0.5	110	72-12 8
Ethylbenzene	mg/kg (ppm)	0.5	103	69-132
Xylenes	mg/kg (ppm)	1.5	114	69-131
Gasoline	mg/kg (ppm)	10	87	6 1- 1 53

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 007244-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
MTBE	ug/L (ppb)	<5	< 5	nm
Benzene	ug/L (ppb)	< 0.5	< 0.5	\mathbf{nm}
Toluene	ug/L (ppb)	< 0.5	< 0.5	nm
Ethylbenzene	ug/L (ppb)	< 0.5	< 0.5	nm
Xylenes	ug/L (ppb)	<1.5	<1.5	nm
Gasoline	ug/L (ppb)	< 50	<50	nm

	Percent					
Analyte	Reporting Units	Spike Level	Recovery LCS	Acceptance Criteria		
MTBE	ug/L (ppb)	50	80	50-150		
Benzene	ug/L (ppb)	50	95	72-119		
Toluene	ug/L (ppb)	50	101	71-113		
Ethylbenzene	ug/L (ppb)	50	99	72-114		
Xylenes	ug/L (ppb)	150	97	72-113		
Gasoline	ug/L (ppb)	1,000	92	70-11 9		

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Laboratory Code: 007276-04 (Matrix Spike)

v	•	•	(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	\mathbb{RPD}
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel	mg/kg (ppm)	5,000	<50	92	89	73-135	3

	Percent					
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Diesel	mg/kg (ppm)	5,000	101	74-139		

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

	ay — settien park same e par m∰s — 1974a mili		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte.	Units	Level	LCS _	LCSD	Criteria	(Limit 20)
Diesel	ug/L (ppb)	2,500	102	100	58-134	.2.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Laboratory Code: 007276-04 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria _	(Limit 20)
Motor Oil	mg/kg (ppm)	500	<50	109	113	50 -150	4

			rercent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Motor Oil	mg/kg (ppm)	500	103	70-130

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007276

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

	, 5*		Percent	Percent		_
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LOSD	Orit eria	(Limit 20)
Mot or Oil	ug/L (ppb)	2,500	114	114	70-1 30	0

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dy Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j-The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- il. The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Fax (206) 283-5044 Ph. (206) 285-8282

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Rush charges authorized by: Return samples Will call with instructions SAMPLE DISPOSAL ☐ Dispose after 30 days Z'Standard (2 Weeks) C RUSH 01/40/10 PO# K SAMPLE CHAIN OF CUSTODY SAMPLERS (signature) PROJECT NAME/NO. CSSK7.2C9 REMARKS Phone # 702-441 \$\$55 Fax # 20 2-441 - 5877 City, State, ZIP & LRKKA, CA 15501 Company SITN - KENA JU AN DEL Address 812 Li WASSH 007276 Send Report To

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Received by:

FORMS\COC\COC.DOC Fax (206) 283-5044 Ph. (206) 285-8282

Received by:

Seattle, WA 98119-2029 3012 16th Avenue West

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Samples received at

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 23, 2010

Roland Rueber, Project Manager SHN 812 W. Wabash Eureka, CA 95501

Dear Mr. Rueber:

Included are the results from the testing of material submitted on July 27, 2010 from the LP Cloverdale 095107.209, F&BI 007277 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0823R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 27, 2010 by Friedman & Bruya, Inc. from the SHN LP Cloverdale 095107.209, F&BI 007277 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	$\underline{\mathbf{SHN}}$
007277-01	B-201@12'
007277-02	B-201@17'
007277-03	B-104A@16.5'
007277-04	B-203@12.5'
007277-05	B-203@17'
007277-06	B-202@13.5
007277-07	B-202@18.5'
007277-08	B-106A@19'
007277-09	B-106A@25

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/23/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007277

Date Extracted: 07/29/10

Date Analyzed: 07/30/10 and 08/12/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C ₈ -C ₁₁)	Surrogate (% Recovery) (Limit 53-144)
B-201@12'	<10	113
B-201@17' 007277-02	<10	111
B-104A@16.5' 007277-03	<10	108
B-203@12.5° 007277-04	<10	108
B-203@17' 007277-05	<10	108
B-202@13.5° 007277-06	350	109
B-202@18.5°	<10	107
B-106A@19'	39	113
B-106A@25' 007277-09	<10	108
Method Blank	<10	106

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-201@12	Client:	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID;	007277-01
Date Analyzed:	08/11/10	Data File:	081107.D
Matrix:	Soil	Instrument:	GCMS3
Unita:	mg/kg (ppm)	Operator:	YA

		Lower	Upper
Surrogates	% Recovery:	Limit:	Limit:
2-Fluorophenol	68	10	178
Phenol-d6	69	10	175
2,4,6-Tribromophenol	74	10	157

Concentration mg/kg (ppm)

2,3,4,6-Tetrachlorophenol <0.1 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol <0.2 Pentachlorophenol <0.1

Compounds:

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-201@17'	Client:	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-02
Date Analyzed:	08/11/10	Data File:	081108.D
Matrix	Soil	Instrument:	GCMS3
Units	mg/kg (ppm)	Operator:	YA
			wete

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	81	10	178
Phenol-d6	83	10	175
2,4,6-Tribromophenol	83	10	157

Concentration mg/kg (ppm)

 $\begin{array}{ll} \textbf{2.3.4.6-Tetrachlorophenol} & \textbf{<0.1} \\ \textbf{2.3.4.5-Tetrachlorophenol} + \textbf{2.3.5.6-Tetrachlorophenol} & \textbf{<0.2} \\ \textbf{Pentachlorophenol} & \textbf{<0.1} \end{array}$

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-104A@16.5'	Client:	SHIN
Date Received:	07/27/10	Projecti	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-03
Date Analyzed:	08/11/10	Data File:	081109.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA
		Tomassa.	The same of the sa

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	91	10	178
Phenol-d6	85	10	175
2,4,6-Tribromophenol	84,	10	1 67

Concentration mg/kg (ppm)

Compounds:

 $\begin{array}{ll} \textbf{2,3,4,6:} \\ \textbf{Tetrachlorophenol} & < 0.1 \\ \textbf{2,3,4,5:} \\ \textbf{Tetrachlorophenol} + \textbf{2,3,5,6:} \\ \textbf{Tetrachlorophenol} & < 0.2 \\ \textbf{Pentachlorophenol} & < 0.1 \\ \end{array}$

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID;	B-203@12.5	Client;	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-04
Date Analyzed:	08/11/10	Data File:	081112.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator,	YA
		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:

À	Elica service	Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenal	71	10	178
Phenol-d6	70	10	175
2,4,6-Tribromophenol	70	10	157
		1960	

Compounds: Concentration mg/kg (ppm)

2,3,4,6-Tetrachlorophenol <0.1 2,3,4,5-Tetrachlorophenol +2,3,5,6-Tetrachlorophenol <0.2 Pentachlorophenol <0.1

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-203@17*	Client:	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-05
Date Analyzed:	08/11/10	Data File	081113.D
Matrix	Soil	Instrumenta	GCMS3
Units:	mg/kg (ppm)	Operator:	V A

	e can a china	Lower	Upper
Surrogates:	% Recovery:	Limit	Limit.
2-Fluoroph en ol	67	10	178
Phenol-d6	73	10	175
2,4,6-Tribromophenol	75	10	157

Concentration mg/kg (ppm)

Compounds: mg

2,3,4,6-Tetrachlorophenol <0.1 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol <0.2 Pentachlorophenol <0.1

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-202@13.5'		Client:	SHN
Date Received:	07/27/10		Projecta	LP Cloverdale 095107,209, F&BI 007277
Date Extracted:	08/02/10		Lab ID:	007277-06
Date Analyzed:	08/11/10		Data File:	081114.D
Matrix:	Soil		Instrument	GCMS3
Units:	mg/kg (ppm)		Operator:	YA
	-		Lower	Upper
Surrogates:		% Recovery:	Limit	Limit
2-Eluoroph enol		26 J	10	178
Phenol-d6		309 J, ip	10 10 10	175
2,4,6-Tribromopher	loc	90	10	157
			Concentrati	on'
Compounds:			mg/kg (ppm)	n
2.3.4.6-Tetrachloro	phenol		<0.1	
2,8,4,5-Tetrachloro		.6-Tetrachloro	phenol 0.44	
Pentachlorophenol			1.5 ve	

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:		Client:	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-06 1/10
Date Analyzed:	08/13/10	Data File:	081306.D
Matrix:	Soil	Instrument	GCMS3
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
	ze necovery.		
2-Fluorophenol	31	10	178
Phenol-d6	142	10	175
2,4,6-Tribromophenol	82	10	157

Concentration mg/kg (ppm)

2,3,4,6-Tetrachlorophenol <1 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol <2 Pentachlorophenol 0.9

Compounds:

0.91j

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-202@18.5'	Client:	SHN
Date Received:	07/27/10	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	007277-07
Date Analyzed:	08/11/10	Data File:	081116.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	75	10	178
Phenol-d6	76	10	175
2,4,6-Tribromophenol	83	10	157

Concentration mg/kg (ppm)

Compounds:

 $\begin{array}{ll} \textbf{2.3.4.6-Tetrachlerophenol} & \textbf{<0.1} \\ \textbf{2.3.4.5-Tetrachlerophenol} + \textbf{2.3.5.6-Tetrachlerophenol} & \textbf{<0.2} \\ \textbf{Pentachlerophenol} & \textbf{<0.1} \end{array}$

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-106A@19' 07/27/10 08/02/10 08/11/10 Soil mg/kg (ppm)		Client: Project: Lab ID: Data File: Instrument: Operator:	SHN LP Cloverdale 095107.209, F&BI 007277 007277-08 081117.D GCMS3 YA
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit
2-Fluorophenol		47	10	178
Phenol-d6		5 6	10	176
2,4,6-Tribromopher	iol.	83	10	157
Compounds:			Concentrat mg/kg (ppn	
2,3,4,6-Tetrachloro 2,3,4,5-Tetrachloro Pentachlorophenol	phenol $+2,3,5$,6-Tetrachloro	<0.1 phenol <0.2 0.26	

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-106A@25' 07/27/10 08/02/10 08/11/10 Soil mg/kg (ppm)	Client:	SHN
Date Received:		Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:		Lab ID:	007277-09
Date Analyzed:		Data File:	081115.D
Matrix:		Instrument:	GCMS3
Units:		Operator:	YA
Surrogates:	% Recovery:	Lower Limit:	Upper Limit:

after w. A. V. Fl.	man and a second	Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	92	10	178
Phenol-d6	89	10	175
2,4,6-Trib romophenol	82	10	157

Concentration mg/kg (ppm)

2,3,4,6-Tetrachlorophenol	<0.1
2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol	< 0.2
Pentachlorophenol	< 0.1

Compounds:

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SHN
Date Received:	Not Applicable	Project:	LP Cloverdale 095107.209, F&BI 007277
Date Extracted:	08/02/10	Lab ID:	00-1154 mb
Date Analyzed:	08/11/10	Data File:	081106.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA
		Lower	Upper
Surrogates:	% Recovery:	Làmit:	Limit
2-Fluorophenol	84	10	178
Phenol-d6	90	10	176
2,4,6-Tribromopher	90 nol 89	10	167
		Concentra	
Compounds:		mg/kg (pp	m)

2,3,4,6-Tetrachlorophenol <0.1 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol <0.2 Pentachlorophenol <0.1

ENVIRONMENTAL CHEMISTS

Date of Report: 08/23/10 **Date Received:** 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007277

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING EPA METHOD 8015M

Laboratory Code: 007277-03 (Matrix Spike)

•	,	-	(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Stoddard Solvent	mg/kg (ppm)	5,000	<50	104	102	50-150	2

	Reporting	Spike	Percent Recovery	Acceptance
Analyte	Units _	_Level	LCS	Criteria
Stoddard Solven	t mg/kg (ppm)	5,000	105	70-130

ENVIRONMENTAL CHEMISTS

Date of Report: 08/23/10 Date Received: 07/27/10

Project: LP Cloverdale 095107.209, F&BI 007277

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE PHENOLS BY EPA METHOD 8270D SIM

Laboratory Code: 007277-03 (Duplicate)

	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
2,3,4,6-Tetrachlorophenol 2,3,4,5-Tetrachlorophenol		<0.1	<0.1	nm
2,3,5,6-Tetrachlorophenol	mg/kg (ppm)	< 0.2	<0.2	nm
Pentachlorophenol	mg/kg (ppm)	< 0.1	<0.1	nm

Laboratory Code: 007277-03 (Matrix Spike)

				Percent	
Analyte	Reporting Units	Spike Level	Sample Result	Recovery MS	Acceptance Criteria
2,3,4,6-Tetrachlorophenol	mg/kg (ppm)	0.25	<0.1	75	50-150
2,3,4,5-Tetrachlorophenol	t-			•	
2,3,5,6-Tetrachlorophenol	mg/kg (ppm)	0.50	< 0.2	79	50-150
Pentachlorophenol	mg/kg (ppm)	0.25	< 0.1	70	50-150

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
2,3,4,6-Tetrachlorophenol	mg/kg (ppm)	0.25	75	80	42-105	6
2,3,4,5-Tetrachlorophenol	[·					
2,3,5,6-Tetrachlorophenol	mg/kg (ppm)	0.50	75	77	47 - 112	3
Pentachlorophenol	mg/kg (ppm)	0.25	78	85	10-200	9

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- il The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- is The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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NAMPLE DISPOSAL
Se after 30 days
rn samples
call with instructions

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 18, 2010

Roland Rueber, Project Manager SHN 812 W. Wabash Eureka, CA 95501

Dear Mr. Rueber:

Included are the results from the testing of material submitted on July 27, 2010 from the L.P. Cloverdale, F&BI 007275 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0818R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 27, 2010 by Friedman & Bruya, Inc. from the SHN L.P. Cloverdale, F&BI 007275 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u> SHN 007275-01 Drum-A 007275-02 Drum-B

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/10 Date Received: 07/27/10

Project: L.P. Cloverdale, F&BI 007275

Date Extracted: 07/27/10 Date Analyzed: 07/27/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total <u>Xylenes</u>	Surrogate (% Recovery) (Limit 50-150)
Drum-A/B 007275-01/02	<0.02	<0.02	0.36	0.28	104
Method Blank	<0.02	<0.02	<0.02	<0.06	64

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	Drum-A/B	Client:	SHN
Date Received:	07/27/10	Project:	L.P. Cloverdale, F&BI 007275
Date Extracted:	08/02/10	Lab ID:	007275-01/02
Date Analyzed:	08/11/10 2 1:35	Data File:	081119.D
Matrix:	Soîl	Instrument:	GCMS3
Units	mg/kg (ppm)	Operator:	YA
		* ***	419he 11

	_	Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	37	10	178
Phenol-d6	4 6	10	175.
2,4,6-Tribromophenol	49	10	157

Concentration mg/kg (ppm)

Compounds: <0.1 2,3,4,6-Tetrachlorophenol 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol < 0.2 Pentachlorophenol 0.60

0.60 ve

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	Drum-A/B	Client:	SHN
Date Received:	07/27/10	Project:	L.P. Cloverdale, F&BI 007275
Date Extracted:	08/02/10	Lab ID:	007275-01/02 1/10
Date Analyzed:	08/11/10 21:00	Data File:	081118.D
Matrix:	Soil	Instrument.	GCMS3
Units:	mg/kg (ppm)	Operators	**A

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit
2-Fluorophenol	75	10	178
Phenol d6	75	. 10	175
2,4,6-Tribromophenel	57	10	157

Compounds: Concentration mg/kg (ppm)

 $\begin{array}{ll} 2,3,4,6\text{-}Tetrachlorophenol} & <1 \\ 2,3,4,5\text{-}Tetrachlorophenol} + 2,3,5,6\text{-}Tetrachlorophenol} & <2 \\ Pentachlorophenol & 0.46 j \end{array}$

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SHN
Date Received:	Not Applicable	Project:	L.P. Cloverdale, F&BI 007275
Date Extracted:	08/02/10	Lab ID:	00-1154 mb
Date Analyzed:	08/11/10 14:10	Data File:	081106.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA

		Lower	\mathbf{Upper}
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	84	10	178
Phenol-d6	90	10	175
2,4,6-Tribromophenol	89	10	157

Compounds: Concentration mg/kg (ppm)

2,3,4,6-Tetrachlorophenol <0.1 2,3,4,5-Tetrachlorophenol + 2,3,5,6-Tetrachlorophenol <0.2 Pentachlorophenol <0.1

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/10 Date Received: 07/27/10

Project: L.P. Cloverdale, F&BI 007275

Date Extracted: 07/29/10 Date Analyzed: 07/30/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Stoddard Solvent Range (C ₈ -C ₁₁)	Surrogate <u>©6 Recovery)</u> Olimit 53-144)
Drum-A/B 007275-01//02	120	113
Method Blank	≤ 5 0	106

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/10 Date Received: 07/27/10

Project: L.P. Cloverdale, F&BI 007275

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Laboratory Code: 007212-02 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Rësult	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	<0.02
Toluene	mg/kg (ppm)	< 0.02	< 0.02	< 0.02
Ethylbenzene	mg/kg (ppm)	< 0.02	0.02	< 0.02
Xylenes	mg/kg (ppm)	0.15	0.19	24 a

	Percent							
alike e e e e e e e e e e e e e e e e e e	Reporting	Spike	Recovery	Acceptance				
Analyte	Units	Level	LCS	Criteria				
Benzene	mg/kg (ppm)	0.5	80	69-120				
Toluene	mg/kg (ppm)	0.5	87	70-117				
Ethylbenzene	mg/kg (ppm)	0.5	88	65-123				
Xylenes	mg/kg (ppm)	1.5	87	66-120				

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/10 Date Received: 07/27/10

Project: L.P. Cloverdale, F&BI 007275

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE PHENOLS BY EPA METHOD 8270D SIM

Laboratory Code: 007277-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
2,3,4,6-Tetrachlorophenol 2,3,4,5-Tetrachlorophenol		<0.1	<0.1	nm
2,3,5,6-Tetrachlorophenol	mg/kg (ppm)	< 0.2	< 0.2	nm
Pentachlorophenol	mg/kg (ppm)	<0.1	< 0.1	nm

Laboratory Code: 007277-03 (Matrix Spike)

				$\operatorname{Percent}$	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
2,3,4,6-Tetrachlorophenol	mg/kg (ppm)	0.25	<0.1	75	50-150
2,3,4,5-Tetrachlorophenol -	+	W			
2,3,5,6-Tetrachlorophenol	mg/kg (ppm)	0.50	< 0.2	79	50-150
Pentachlorophenol	mg/kg (ppm)	0.25	< 0.1	70	50-150

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
2,3,4,6-Tetrachlorophenol 2,3,4,5-Tetrachlorophenol		0.25	75	80	42-105	6
2,3,5,6-Tetrachlorophenol Pentachlorophenol	mg/kg (ppm) mg/kg (ppm)	$0.50 \\ 0.25$	75 78	77 85	47-112 10-200	3 9

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/10 Date Received: 07/27/10

Project: L.P. Cloverdale, F&BI 007275

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS STODDARD SOLVENT USING EPA METHOD 8015M

Laboratory Code: 007277-03 (Matrix Spike)

	Reporting	Spike	(Wet wt) Sample	Percent Recovery	Percent Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Stoddard Solvent	mg/kg (ppm)	5,000	<50	104	102	50-150	2

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Stoddard Solvent	mg/kg (ppm)	5,000	105	70-130

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j-The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- il The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr-The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte,
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Fax (206) 283-5044 Ph. (206) 285-8282

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 24, 2010

Roland Rueber, Project Manager SHN 812 W. Wabash Eureka, CA 95501

Dear Mr. Rueber:

Included are the results from the testing of material submitted on July 27, 2010 from the L.P. Cloverdale 095107.209, F&BI 007274 project. There are 21 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0824R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 27, 2010 by Friedman & Bruya, Inc. from the SHN L.P. Cloverdale 095107.209, F&BI 007274 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SHN
007274-01	Drum-1
007274-02	Drum-2
007274-03	Drum-3

The 8260C compound 1,3,5 trimethylbenzene failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data are likely due to sample matrix effect.

All other quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 07/27/10 Date Analyzed: 07/27/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range (C ₆ -C ₁₀)	Surrogate (<u>% Recovery</u> (Limit 58-139)
Drum-Composite 007274-01/02/03	<2	73
Method Blank	<2	64

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 08/02/10 Date Analyzed: 08/02/10

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS IR SCAN USING METHOD 418 MODIFIED

Results Reported as mg/kg (ppm)

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 08/02/10 Date Analyzed: 08/06/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Diesel Range</u> (C ₁₀₋ C ₂₅)	Surrogate (% Recovery) (Limit 50-150)
Drum-Composite 007274-01//03	67	95
Method Blank	<10	87

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 08/02/10 Date Analyzed: 08/06/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Motor Oil Range (C25-C36)	Surrogate (% Recovery) (Limit 50-150)
Drum-Composite 007274-01//03	140	65
Method Blank 00-1140 MB	<50	87

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Drum-Composite	Client:	SHN
Date Received:	07/27/10	Project:	L.P. Cloverdale 095107.209, F&BI 007274
Date Extracted:	08/02/10	Lab ID:	007274-01-03
Date Analyzed:	08/03/10	Data File:	007274-01-03.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

		Lower	∪pper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	114	60	125
Indium	89	60	125
Holmium	97	60	125

Analyte	Concentration mg/kg (ppm)
Chronium	86.0
Nickel	54.5
Zinc	89.4
Cadmium	<1
Lead	11.6

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Method Blank Client: SHN

Date Received: NA Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 08/02/10 Lab ID: I0-408 mb

Date Analyzed: 08/08/10 Data File: I0-408 mb.030

Matrix: Soil Instrument: ICPMS1

Units: mg/kg (ppm) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit: Germanium 96 60 125

 Germanium
 96
 60
 125

 Indium
 94
 60
 125

 Holmium
 96
 60
 125

Analyte: Concentration mg/kg (ppm)

 Chromium
 <1</td>

 Nickel
 <1</td>

 Zinc
 <1</td>

 Cadmium
 <1</td>

 Lead
 <1</td>

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

 Client Sample ID:
 Drum-Composite
 Client:
 SHN

 Date Received:
 07/27/10
 Project:
 L.P. Cloverdale 095107.209, F&BI 007274

 Date Extracted:
 07/28/10
 Lab ID:
 007274-01/02/03

Date Analyzed: 07/28/10 Data File: 072812.D

Matrix: Soil Instrument: GCMS4
Units: mg/kg (ppm) Operator: MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	49	132
Toluene-d8	100	44	140
4-Bromofluorobenzene	110	38	156

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2 Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	<0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank Client: SHN

Date Received: Not Applicable Project: L.P. Cloverdale 095107.209, F&BI 007274

Date Extracted: 07/27/10 Lab ID: 001120 mb

Date Analyzed: 07/28/10 Data File: 072807.D

Matrix: Soil Instrument: GCMS4

Units: mg/kg (ppm) Operator: MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	49	132
Toluene-d8	97	44	140
4-Bromofluorobenzene	103	38	156

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	< 0.1
Methylene chloride	<0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	<0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Drum-Composite	Clienț:	SHN
Date Received:	07/27/10	Project:	L.P. Cloverdale 095107.209, F&BI 007274
Date Extracted:	08/04/10	Lab ID:	007274-01-03
Date Analyzed:	08/05/10	Data File:	080518.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA
	•	_	

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	94	30	118
Phenol-d6	90	30	118
Nitrobenzene-d5	100	10	180
2-Fluorobiphenyl	94	40	130
2,4,6-Tribromophenol	89	16	116
Terphenyl-d14	91	30	1 44

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<0.9
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	< 0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	< 0.03	4-Nitrophenol	<0.3
Benzyl alcohol	<0.03	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	< 0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	< 0.03
Hexachloroethane	< 0.03	N-Nitrosodiphenylamine	< 0.03
N-Nitroso-di-n-propylamine	< 0.03	4-Nitroaniline	< 0.9
3-Methylphenol + 4-Methylphen		4,6-Dinitro-2-methylphenol	< 0.9
Nitrobenzene	< 0.03	4-Bromophenyl phenyl ether	< 0.03
Isophorone	< 0.03	Hexachlorobenzene	< 0.03
2-Nitrophenol	< 0.3	Pentachlorophenol	< 0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	< 0.03
Benzoic acid	<3	Anthracene	< 0.03
Bis(2-chloroethoxy)methane	< 0.03	Carbazole	< 0.03
2,4-Dichlorophenol	< 0.3	Di-n-butyl phthalate	< 0.03
1,2,4-Trichlorobenzene	< 0.03	Fluoranthene	< 0.03
Naphthalene	< 0.03	Pyrene	< 0.03
Hexachlorobutadiene	< 0.03	Benzyl butyl phthalate	< 0.03
4-Chloroaniline	<3	Benz(a)anthracene	< 0.03
4-Chloro-3-methylphenol	< 0.3	Chrysene	0.031
2-Methylnaphthalene	< 0.03	Bis(2-ethylhexyl) phthalate	<0.3
Hexachlorocyclopentadiene	< 0.09	Di-n-octyl phthalate	< 0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	< 0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	< 0.03
2-Chloronaphthalene	< 0.03	Benzo(k)fluoranthene	< 0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	< 0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	< 0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	< 0.03
2,6-Dinitrotoluene	< 0.03		

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SHN
Date Received:	Not Applicable	Project:	L.P. Cloverdale 095107.209, F&BI 007274
Date Extracted:	08/04/10	Lab ID:	00-1160 mb
Date Analyzed:	08/05/10	Data File:	080509.D
Matrix:	Soil	Instrument:	GCMS3
Units:	mg/kg (ppm)	Operator:	YA
		_	

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2-Fluorophenol	95	30	118
Phenol-d6	93	30	118
Nitrobenzene-d5	101	10	180
2-Fluorobiphenyl	97	40	130
2,4,6-Tribromophenol	88	16	116
Terphenyl-d14	95	30	144

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Phenol	< 0.3	3-Nitroaniline	<0.9
Bis(2-chloroethyl) ether	< 0.03	Acenaphthene	< 0.03
2-Chlorophenol	< 0.3	2,4-Dinitrophenol	< 0.9
1,3-Dichlorobenzene	< 0.03	Dibenzofuran	< 0.03
1,4-Dichlorobenzene	< 0.03	2,4-Dinitrotoluene	< 0.03
1,2-Dichlorobenzene	< 0.03	4-Nitrophenol	< 0.3
Benzyl alcohol	< 0.03	Diethyl phthalate	< 0.03
Bis(2-chloroisopropyl) ether	< 0.03	Fluorene	< 0.03
2-Methylphenol	< 0.3	4-Chlorophenyl phenyl ether	< 0.03
Hexachloroethane	< 0.03	N-Nitrosodiphenylamine	< 0.03
N-Nitroso-di-n-propylamine	< 0.03	4-Nitroaniline	< 0.9
3-Methylphenol + 4-Methylphen	ol <0.3	4,6-Dinitro-2-methylphenol	< 0.9
Nitrobenzene	< 0.03	4-Bromophenyl phenyl ether	< 0.03
Isophorone	< 0.03	Hexachlorobenzene	< 0.03
2-Nitrophenol	< 0.3	Pentachlorophenol	< 0.3
2,4-Dimethylphenol	< 0.3	Phenanthrene	< 0.03
Benzoic acid	<3	Anthracene	< 0.03
Bis(2-chloroethoxy)methane	< 0.03	Carbazole	< 0.03
2,4-Dichlorophenol	< 0.3	Di-n-butyl phthalate	< 0.03
1,2,4-Trichlorobenzene	< 0.03	Fluoranthene	< 0.03
Naphthalene	< 0.03	Pyrene	< 0.03
Hexachlorobutadiene	< 0.03	Benzyl butyl phthalate	< 0.03
4-Chloroaniline	<3	Benz(a)anthracene	< 0.03
4-Chloro-3-methylphenol	< 0.3	Chrysene	< 0.03
2-Methylnaphthalene	< 0.03	Bis(2-ethylhexyl) phthalate	< 0.3
Hexachlorocyclopent adiene	< 0.09	Di-n-octyl phthalate	< 0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	< 0.03
2,4,5-Trichlorophenol	< 0.3	Benzo(b)fluoranthene	< 0.03
2-Chloronaphthalene	< 0.03	Benzo(k)fluoranthene	< 0.03
2-Nitroaniline	< 0.03	Indeno(1,2,3-cd)pyrene	< 0.03
Dimethyl phthalate	< 0.03	Dibenz(a,h)anthracene	< 0.03
Acenaphthylene	< 0.03	Benzo(g,h,i)perylene	< 0.03
2,6-Dinitrotoluene	< 0.03	•	

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING EPA METHOD 8015M

Laboratory Code:	007212-02	(Duplicate)

		(Wet Wt)	(Wet Wt)	Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Gasoline	mg/kg (ppm)	12	13	17

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Gasoline	mg/kg (ppm)	20	95	71-131

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING EPA METHOD 8015M

Laboratory Code: 007276-04 (Matrix Spike)

•	,		(Wet wt)	Percent	Percent	2	
	Reporting	\mathbf{Spike}	\mathbf{Sample}	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel	mg/kg (ppm)	5,000	<50	92	89	73-135	3

	•		Percent	
	Reporting	\mathbf{Spike}	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel	mg/kg (ppm)	5,000	101	74-139

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL USING EPA METHOD 8015M

Laboratory Code: 007276-04 (Matrix Spike)

	•	• •	(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Motor Oil	mg/kg (ppm)	500	<50	109	113	50-150	4

			$\mathbf{Percent}$	rcent		
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Motor Oil	mg/kg (ppm)	500	103	70-130		

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 007291-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	9.89	103	106	51-132	3
Nickel	mg/kg (ppm)	25	17.0	101 b	113 b	33-149	11
Zinc	mg/kg (ppm)	50	16.4	100 b	99 b	40-135	1
Cadmium	mg/kg (ppm)	10	<1	104	105	83-120	Ï
Lead	mg/kg (ppm)	20	4.79	105 b	105 b	65-126	0

			Percent	
Analyte	Reporting Units	Spike Level	Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	105	79-125
Nickel	mg/kg (ppm)	25	104	84-116
Zinc	mg/kg (ppm)	50	101	79-120
Cadmium	mg/kg (ppm)	10	101	89-116
Lead	mg/kg (ppm)	20	106	81-120

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 007257-01 (Matrix Spike)

we i e e	Reporting	Spike	Sample	Percent Recovery	Percent Recovery	Acceptance	RPD
Airalyte	Units	Level	Result	MS	MSD	Criteria	(Tám: 20)
Dichlerodill coromethane	mg/kg (ppm)	2.5	<0.5	24.	21	10-142	13
Chloromethane	mg/kg (ppni)	2.5	<0.5	51 45	49 46	10-126 10-138	\$ 2
Vinyl chloride Bromomethane	mg/kg (ppm)	2,5 2.5	<0.05 <0.5	5i	53	10-150	s.
Chloroethane	mg/kg (ppm)	2.5	<0.5	55 55	59	10-150	5. 7.
Unicroethane Trichlorofluoromethane	mg/kg (ppm) mg/kg (ppm)	2.5	<0.5	49	49	10-150	O'
Acetone	mg/kg (ppm)	12.5	<0.5	67	63	10-150	G
T.IDichloroethene	mg/kg (ppm)	2.5	<0.05	55	55	10-160	ß
Methylene chloride	mg/kg (ppm)	2,5	<0.5	61	60	10-156	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2,5	<0.05	79	80	36-145	ĩ.
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0,05	63	64	25-137	. 2
1,1-Dichloroethane	mg/kg (ppm)	2.5	< 0.05	77	77	83-135	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	87	90	10-158	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	.80	79	41-127	1.
Chloroform	mg/kg (ppm)	2,5	< 0.05	83	83	34-140	0
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	89	90	23-148	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2,5	<0.05	78	78	28-154	0
1,1,1-Trichloroethane	mg/kg (ppm)	2,5	<0,05	76	76	21-151	Ð.
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	73	72	34-131	1
Carbon tetrachloride	mg/kg (ppm)	2.5	< 0.05	71	78	10-162	3
Benzene	mg/kg (ppm)	2,5	<0,03	75	74	43-130	1
Trichloroethene	mg/gg (phur)	2.5	<0,03	74	74	37-139	0.
1,2-Dichleropropane	mg/kg (ppm)	2,5	< 0.05	82	82	47-127	Ü
Bromodichloromethene	mg/kg (ppm)	2.5	< 0.05	87	87	46-142	0
Dibromomethane	mg/kg (ppm)	2.5	<0.05	81	81	32-144	0
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5 <0.05	92	94 88	29-156 46-133	2.
cis-1,3-Dichloropropene Toluene	mg/kg (ppm)	2,5 2.5	<0.05	87 75	72	36-143	4 a:
	mg/kg (ppm)	2.5	<0.05 <0.05	90	92	39-139	2
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	mg/kg (ppm) mg/kg (ppm)	2,p 2,5	< 0.05	85	85	48-129	0
2-liexanone	mg/kg (ppm)	12.5	<0.5	97	98	15-166	
1.8-Dichleropropane	nig/kg (ppm)	2.5	< 0.05	85	84	46-127	mum (S) dis
Tetrachloroethene	mg/kg (ppm)	2.5	< 0.025	62	58	33-127	ŕ
Dibromochloromethane	mg/kg (ppm)	2,5	< 0.05	89	92	41-141	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2,5	< 0.05	83	82	41-134	ì
Chlorobenzene	mg/kg (ppm)	2,5	<0.05	75	73	50-150	3.
Ethylbenzene	mg/kg (ppm)	2,5	<0.05	68	65	39-141	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	84	83	47-131) 5
m,p-Xylene	mg/kg (ppm)	5	<0.1	60	57	37-143	5
o-Xylene	mg/kg (ppm)	2,5	< 0.05	65	61	47-124	6
Styrene	mg/kg (ppm)	2.5	<0.05	79	76	50-150	4
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	66	63	50-150	5
Bromoform	mg/kg (ppm)	2.5	<0.05	87	88	24-154	¥
n-Propylbenzene	mg/kg (opm)	2,5	<0.05 <0.05	59 76	55 74	50:150 50-150	7
Bromobenzene 1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5 2.5	<0.05	/0 35 ve	30 vo	46-124	3. 15
1,1,2,2-Tetrachloroethane	mg/kg (ppm) mg/kg (ppm)	2,5	<0.05	35 V0 88	88	31-144	15. D
1,2,3-Trichleropropane	mg/kg (ppm)	2.5	<0.05	85	84	32-141	ĭ
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	73	69	50-150	6
4-Chlorotoluene	mg/kg (ppm)	2.5	< 0.05	74	72	50-150	3
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	69	64	50-150	8
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	70	72	47-125	3
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	59	54	50-150	9
p-Isopropyltoluene	mg/kg (ppm)	2,5	<0.05	59	53	50-150	Ĭ1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	70	67	50-150	4
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	71	69	46-116	3
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	75	78	50-150	\$
1,2-Dibromo-3-chloroprepane	mg/kg (ppm)	2,5	<0.5	94	96	15-156	2
1.2.4-Trichlorobenzene	mg/kg (ppm)	2.5	< 0.25	75	70	47-124	7
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	70	. 62	46-127	12
Naphthalene	mg/kg (ppm)	2.5	< 0.05	74	75	32-134	-1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	79	74	45-124	7

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Analyte	Reporting Units	Spike Lovel	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dishloradifluorometh ane	mg/kg (ppm)	2.5	81	29	10-146	7
Chlorenethane	mg/kg (ppm)	2.5	59	59	27-133	o:
Vinyl chloride	mg/kg (ppm)	2.5	69	67	22-139	3
Bromomethane	mg/kg (ppm)	2,5	72	75	38-114	4
Chlorosthane	mg/kg (ppm)	2.5	75	73	10-142	31
Trichlorofluoromethane	mg/kg (ppm)	2.5	89	89	28-177	D .
Acetone	mg/kg (ppm)	12.5	74	77	52-141	4.
1,1-Dichloroethene	nag/kg (ppm)	2.5	95	91	47-128	4
Methylene chloride	mg/kg (ppm)	2.5	96	105	53-121	9
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	78	78	63-121	30
trans-1,2-Dichloroethene	neg/kg (ppm)	2.5	92	90	67-127	5
1,1-Dichloroethane	mg/kg (ppm)	2.5	85	84	71-124	23°
2,2-Dichloropropane	mg/kg (ppm)	2.5	109	107	59-139	. 🐲
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	88	87	77-125	10
Chloroform	mg/kg (ppm)	2.5	87	87	75-122	Ð
2-Butanone (MEK)	mg/kg (ppm)	12.5	77	7.5	57-123	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	84	85	74-122	
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	88	8.7	74-125	3
1,1 Dichloropropene	mg/kg (ppm)	2.5	87	86	69-128	ή,
Carbon tetrachloride	mg/kg (ppm)	2.5	89	89	67-133	(O)
Benzene	mg/kg (ppm)	2.5	86:	86	72-121	b
Trichloroethene	mg/kg (ppm)	2,5	87	87	73-122	t)
1,2-Dichloropropane	mg/kg (ppm)	2.5	89	90	72-127	i.
Bromodichloromethane	mg/kg (ppm)	2.5	95	96	75-129	11
Dibromomethanc	mg/kg (ppm)	2.5	86	88	76-116	2 2 3 2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	83	81	45-145	2
cis-1.3-Dichloropropene	mg/kg (ppm)	2.5	95	98	75-136	3
Toluene	mg/kg (ppm)	2,6	87	89	66-126	2
trans-1,S-Dichloropropene	mg/kg (ppm)	2,5	96	97	72-132	ķ 1 ;
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	87	86	77-117	1
2-Hexanone	mg/kg (ppm)	12.5	83	81	33-152	2 2 2 2 2
1,3-Dichloropropane	mg/kg (ppm)	2.5	86	88	72-130	2
Tetrachloroethene	mg/kg (ppm)	2.5	87	89:	77-114	₽.
Dibromochlaromethane	mg/kg (ppm)	2.5	96	99	74-125	3
1,2-Dibromeethane (EDB)	mg/kg (ppm)	2.5	88	88	74-132	0
Chlorobenzene	mg/kg (p pm)	2.5	89	90:	77-111	T.
Ethylbenzene	mg/kg (ppm)	2.6	90	91	64-123	1,
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	95	95	69-135	6 3
m,p-Xylene	mg/kg (ppm)	5_	92	95	78-122	35
o-Xylene	mg/kg (ppm)	2.5	92	94	77-124	.2
Styrene	те/ки (рр и)	2.5	96	98:	74-126	2
Isopropyibenzene	mg/kg (ppm)	2.5	94	95	76-127	Į.
Bromoform	mg/kg (ppm)	2.5	96	97	56-132	9
n-Propylbenzene	mg/kg (ppm)	2.5 2.5	93 91	95 93	74-124 72-122	2
Bromobenzene	mg/kg (ppm)		91 92	93 93		
1,3,5-Trimethylbenzene	mg/sg (ppm)	2.5			76-126	1
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	mg/kg (ppm)	2.5 2.5	81 82	82 83	56-143 61-137) 1
2-Chlorotoluene	mg/kg (ppm)	2.5	88 88	91	74-121	3
4-Chlorotoluene	mg/kg (ppm)	2.5	90	92	75-122	*A-
tert-Butylbenzene	mg/kg (ppm)	2.5	91	93	73-122	2
1.2.4-Trimethylbenzene	mg/kg (ppm)	2.5	93	96	76-125	, å ;
sec-Butylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	93	95	71-130	2) 2) 3) 3) 4)
p-Isopropylioluene	mg/kg (ppm)	2.5	95	98	70-132	9
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	92	93	75-121	*
1.4-Dichlorobenzene	mg/kg (ppm)	2.5	88	89	74-117	1
1.2 Dichlorobenzene	me/kg (ppm)	2.5	91	92	76-121	1
1.2-Dibrome-3-chloropropage	mg/kg (ppm)	2.5	79	82	62-187	1 1
1.2.4-Trichlorobenzene	mg/kg (ppm)	2.5	94	94	70-129	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	89	91	50-153	2
Naphthalene	mg/kg (ppm)	2.5	84	83	60-125	1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	90	92	62-130	2
Time transmission	meige firm)	w.U	v v	<i>34</i>	00 A 00	· ••

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 008024-01 (Duplicate)

	Reporting	Sample	Duplicate	RPD
Analyte	Units	Result	Result	(Limit 20)
Phenol	mg/kg (ppm)	< 0.3	< 0.3	nm
2-Chlorophenol	mg/kg (ppm)	<0.3	< 0.3	nm
1,4-Dichlorobenzene	mg/kg (ppm)	< 0.03	< 0.03	nm
2-Methylphenol	mg/kg (ppm)	< 0.3	< 0.3	nm
N-Nitroso-di-n-propylamine	mg/kg (ppm)	< 0.03	< 0.03	nm
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	<0.3	< 0.3	nm
2-Nitrophenol	mg/kg (ppm)	< 0.3	< 0.3	nm
2,4-Dimethylphenol	mg/kg (ppm)	< 0.3	< 0.3	$\mathbf{n}\mathbf{m}$
Benzoic acid	mg/kg (ppm)	<3	<3	nm
2,4-Dichlorophenol	mg/kg (ppm)	<0.3	< 0.3	nm
1,2,4-Trichlorobenzene	mg/kg (ppm)	< 0.3	< 0.3	nm
Naphthalene	mg/kg (ppm)	< 0.03	<0.03	nm
4-Chloro-3-methylphenol	mg/kg (ppm)	<0.3	<0.3	nm
Hexachlorocyclopentadiene	mg/kg (ppm)	< 0.09	< 0.09	nm
2,4,6-Trichlorophenol	mg/kg (ppm)	< 0.3	<0.3	nm
2,4,5-Trichlorophenol	mg/kg (ppm)	<0.3	< 0.3	\mathbf{nm}
Acenaphthene	mg/kg (ppm)	< 0.03	< 0.03	nm
2,4-Dinitrophenol	mg/kg (ppm)	<0.9	< 0.9	nm
2,4-Dinitrotoluene	mg/kg (ppm)	< 0.03	< 0.03	$\mathbf{n}\mathbf{m}$
4-Nitrophenol	mg/kg (ppm)	< 0.3	< 0.3	\mathbf{nm}
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	<0.9	< 0.9	nm
Hexachlorobenzene	mg/kg (ppm)	< 0.03	< 0.03	nm
Pentachlorophenol	mg/kg (ppm)	< 0.3	< 0.3	\mathbf{nm}
Pyrene	mg/kg (ppm)	0.13	0.19	37 a
Benzo(a)pyrene	mg/kg (ppm)	0.10	0.16	46 a

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10 Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 008024-01 (Matrix Spike)

				Percent	
	Reporting	\mathbf{Spike}	\mathbf{Sample}	Recovery	
Analyte	Units	Level	Result	MS	Criteria
Phenol	mg/kg (ppm)	2.5	< 0.3	78	10-129
2-Chlorophenol	mg/kg (ppm)	2.5	< 0.3	82	47-108
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	< 0.03	88	39-110
2-Methylphenol	mg/kg (ppm)	2.5	< 0.03	86	50-1 5 0
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	< 0.03	91	50-150
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	5.0	< 0.03	86	50-150
2-Nitrophenol	mg/kg (ppm)	2.5	< 0.03	72	50-150
2,4-Dimethylphenol	mg/kg (ppm)	2.5	<3	78	50-150
Benzoic acid	mg/kg (ppm)	2.5	< 0.3	0 ip	50-150
2,4-Dichlorophenol	mg/kg (ppm)	2.5	< 0.03	65	50-150
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	< 0.03	8 9	44-111
Naphthalene	mg/kg (ppm)	1.7	< 0.03	91	29-120
4-Chloro-3-methylphenol	mg/kg (ppm)	2.5	< 0.9	84	35-115
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	< 0.03	55	50-150
2,4,6-Trichlorophenol	mg/kg (ppm)	2.5	< 0.03	22 ip	50-150
2,4,5-Trichlorophenol	mg/kg (ppm)	2.5	< 0.03	$26 \mathrm{~ip}$	50-150
Acenaphthene	mg/kg (ppm)	1.7	< 0.3	- 88	60-106
2,4-Dinitrophenol	mg/kg (ppm)	2.5	< 0.03	0 ip	50-150
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	< 0.9	89	47-126
4-Nitrophenol	mg/kg (ppm)	2.5	< 0.3	18	10-134
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	2.5	< 0.03	1 ip	50-150
Hexachlorobenzene	mg/kg (ppm)	1.7	< 0.03	87	50-150
Pentachlorophenol	mg/kg (ppm)	2.5	< 0.03	1 ip	31-120
Pyrene	mg/kg (ppm)	1.7	< 0.03	86	45-119
Benzo(a)pyrene	mg/kg (ppm)	1.7	< 0.03	80	28 -1 26

ENVIRONMENTAL CHEMISTS

Date of Report: 08/24/10
Date Received: 07/27/10

Project: L.P. Cloverdale 095107.209, F&BI 007274

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

naboratory coue. Daboratory con	intoi Dainpio		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Phenol	mg/kg (ppm)	2.5	80	79	40-105	1
2-Chlorophenol	mg/kg (ppm)	2.5	90	93	43-106	$\ddot{3}$
1,4 Dichlorobenzene	mg/kg (ppm)	1.7	86	91	44-107	3 6
2-Methylphenol	mg/kg (ppm)	2.5	84	86	49-102	2
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	88	88	36-116	
3-Methylphenol + 4-Methylphenol		5.0	88	88	70-130	0
2-Nitrophenol	mg/kg (ppm)	2.5	89	96	53-104	8
2,4-Dimethylphenol	mg/kg (ppm)	2.5	93	104 vo	30-103	11
Benzoic acid	mg/kg (ppm)	2.5	92	85	46-125	8
2,4-Dichlorophenol	mg/kg (ppm)	2.5	91	101	53-102	10
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	89	98	45-109	10
Naphthalene	mg/kg (ppm)	1.7	89	96	42-116	8
4-Chloro-3-methylphenol	mg/kg (ppm)	2.5	92	100	42-114	8
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	84	85	35-121	1
2,4,6-Trichlorophenol	mg/kg (ppm)	2.5	89	92	35-120	3
2,4,5-Trichlorophenol	mg/kg (ppm)	2.5	92	96	51-111	4
Acenaphthene	mg/kg (ppm)	1.7	88	92	55-105	4
2,4-Dinitrophenol	mg/kg (ppm)	2.5	80	74	52-128	8
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	91	95	43-115	4
4-Nitrophenol	mg/kg (ppm)	2.5	89	91	34-125	2
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	2.5	90	90	38-135	0
Hexachlorobenzene	mg/kg (ppm)	1.7	88	91	40-119	3
Pentachlorophenol	mg/kg (ppm)	2.5	97	94	31-125	3
Pyrene	mg/kg (ppm)	1.7	90	96	39 -113	6
Benzo(a)pyrene	mg/kg (ppm)	1.7	87	95	44-113	9

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- i The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- is The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr-The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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