# AERIALLY DEPOSITED LEAD ASSESSMENT Silva Valley Parkway and US-50 El Dorado County, California

**Prepared by:** 

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February 2012

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Geotechnical • Construction Services • Forensics

BCI File No. 556.3 February 29, 2012

Derek Minnema Mark Thomas & Co 7300 Folsom Blvd., Suite 203 Sacramento, CA 95826

Subject: Aerially Deposited Lead Assessment Silva Valley Parkway Interchange at US-50 EA 03-1E2901 El Dorado County, California

Dear Mr. Minnema,

Blackburn Consulting (BCI) has prepared this Aerially Deposited Lead (ADL) Assessment for the Silva Valley Parkway Interchange project in El Dorado County, California.

Thank you for including BCI on your team for this important project. Please call if you have questions or require additional information.

Sincerely,

**BLACKBURN CONSULTING** 

David Buck, C.E.G. Senior Project Manager

Jeff S. Patton, P.E. Principal Engineer

# **Aerially Deposited Lead Assessment**

Silva Valley Parkway Interchange

# **TABLE OF CONTENTS**

INTRODUCTION	1
Project Description	1
BACKGROUND	1
Potential Lead Soil Impacts	1
Previous ADL Investigation	1
Current ADL Sampling Events	1
SCOPE	2
SAMPLING SUMMARY	2
Sample Collection	2
Soil Description	3
Sample Analyses and Results	3
STATISTICAL ANALYSIS	4
Total Lead	4
Soluble Lead	5
Predicted WET Lead Solubility	5
CONCLUSIONS AND RECOMMENDATIONS	6
Waste Disposal/Soil Reuse	6
Risk to Human Health	8
Health and Safety Requirements	9
LIMITATIONS	9

#### **FIGURES**

Figure 1 – Vicinity Map Figure 2 – Project Map Figures 2A through 2E – ADL Sampling Location Map

#### **APPENDIX A**

Geocon 2008 ADL Report – (on CD)

# **APPENDIX B**

Caltrans Meeting Notes

#### **APPENDIX C**

Summary of Analytical Results

#### **APPENDIX D**

Analytical Laboratory Reports – (on CD)

#### **APPENDIX E**

ADL Variance

# **INTRODUCTION**

Blackburn Consulting (BCI) prepared this aerially deposited lead (ADL) assessment for the Silva Valley Parkway Interchange at US-50 in El Dorado County, California. The purpose of the assessment is to evaluate whether impacts due to ADL are sufficient to require additional testing and/or mitigation recommendations for construction.

El Dorado County will construct the project. However, because the proposed interchange improvements affect Caltrans-owned right-of-way (ROW), Caltrans requires an ADL investigation.

# **Project Description**

El Dorado County proposes to construct a new Silva Valley Parkway Interchange on US 50 between El Dorado Hills Blvd/Latrobe Road Interchange and Bass Lake Road Interchange primarily east of the existing Clarksville Undercrossing at Silva Valley Parkway. The project extends from Post-Mile (PM) 1.06 to 2.90. Figures 1 and 2 show overviews of the project limits.

This report covers ADL testing of the eastbound and westbound shoulders of US 50 within the project limits.

# BACKGROUND

# **Potential Lead Soil Impacts**

US 50 through El Dorado County, extending east-west, is a divided freeway, constructed in 1965. Ongoing testing by Caltrans has indicated that ADL exists along the shoulders of pre-1987 constructed highways, freeways and other heavily traveled roads, due to emissions from vehicles powered by internal-combustion, leaded-gasoline fueled engines. Caltrans states that total lead concentrations in soils adjacent to these roads typically range from 50 to 3,000 milligrams per kilogram (mg/kg). At sites where the shoulder subgrade has not been disturbed, the presence of ADL is generally limited to the upper 24-inches of the unpaved shoulder and median areas.

# **Previous ADL Investigation**

BCI was supplied with a copy of a site investigation report (Geocon Consultants, Inc. March 2008) which included ADL sampling of the US-50 median within the project limits. A copy of the report is included in Appendix A.

# **Current ADL Sampling Events**

BCI performed two rounds of soil sampling for this ADL assessment. The first round was completed concurrent with our geotechnical boring program from July through September 2010. Results of the first round of sampling were reviewed in a meeting with Caltrans on December 2, 2010. Lead concentrations in samples from some areas of the project exceeded regulatory thresholds; therefore it was determined that additional soil sampling would be required to help

define the lateral and vertical extent of these areas (notes from the meeting are included in Appendix B). BCI prepared a workplan for additional sampling for Caltrans' review and approval and implemented additional sampling in November 2011 in accordance with the approved workplan. Approximate sample locations are shown on Figures 2A through 2E.

# SCOPE

BCI completed the following tasks to prepare this assessment report:

- Prepared, revised and obtained Caltrans approval of our ADL sampling Workplans
- Coordinated with Underground Service Alert to locate underground utilities
- Obtained a Caltrans encroachment permit and implemented the required notification and traffic control measures during sample collection
- Collected 88 soil samples from 32 locations spaced approximately 300 to 500-feet apart along the north and south bound shoulders of US-50
- Submitted the soil samples to a California-certified analytical laboratory to perform analytical testing
- Reviewed analytical results, consulted with Caltrans, and prepared a workplan for an expanded phase of soil sampling and analytical testing to better define ADL distribution
- Collected 43 additional soil samples from 19 locations based on the Caltrans approved workplan. Four of the locations were situated in the immediate vicinity of previous sample ADL-28A to further characterize this area (see Figure 2E)
- Performed statistical analysis of the analytical data set
- Prepared this report

# SAMPLING SUMMARY

# Sample Collection

- Approximate sample locations are plotted on Figures 2A through 2E. GPS coordinates for each sample location are included in Appendix A.
- Depending upon soil/rock conditions, we collected up to 3 discrete samples from each location utilizing a drill rig with split spoon sampling equipment fitted with 2-inch diameter stainless steel liners or from a 3-inch diameter hand auger. Samples were obtained from 0 to 6-inches, 12 to 18-inches, and 24 to 30-inches below the ground surface (bgs). Sampling equipment was cleaned between each boring location by washing with an Alconox solution followed by rinsing with potable water and a second rinse using deionized water.
- Following retrieval, the soil samples were transferred into Ziploc resealable plastic bags and homogenized within the bag.
- The bags were labeled, placed in a cooled ice chest, and delivered to a California certified analytical laboratory under chain-of-custody documentation
- Borings were backfilled with excess cuttings. Wash and rinse water was discharged to the ground surface at the boring locations.

# Soil Description

The soil profile encountered over the project alignment consists of silty fine sand with weathered rock fragments in areas of native soil. In fill areas, we encountered silty sand intermixed with large gravel to boulder size rock.

# Sample Analyses and Results

# 2010 Sampling Event

BCI submitted 88 soil samples to Excelchem for total lead analysis, using EPA Test Method 6010B. Total lead results ranged from below the detection limit (1.0 mg/kg) to a high of 2,100 mg/kg. Three of the 88 sample results exceed the lead TTLC (1,000 mg/kg). These are samples ADL-16A (2,100 mg/kg), ADL-26A(1,510 mg/kg), and ADL-28A (1,540 mg/kg). Twenty-five samples have total lead in excess of 50 mg/kg. The 50 mg/kg threshold indicates a sample having the potential to exceed the Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l).<sup>1</sup> Consequently, all 25 of the samples with total lead exceeding 50 mg/kg were submitted for soluble lead extraction using the Waste Extraction Test (WET) procedure. The extract was analyzed by EPA Test Method 6010B. In addition, the three samples with total lead exceeding the Total Threshold Limit Concentration (TTLC)<sup>2</sup> of 1,000 mg/kg were further analyzed using the Toxicity Characteristic Leaching Potential (TCLP)<sup>3</sup> procedure.

The WET results range from below the detection limit of 0.2 mg/l to 59.8 mg/l. Eleven of the 25 WET samples exceeded the lead STLC of 5.0 mg/l. One of the 3 TCLP samples (ADL-28A; 7.4 mg/l) exceeded the TCLP federal hazardous waste regulatory threshold of 5.0 mg/l.

Upon review of the WET and TCLP results, BCI selected 19 samples for further solubility analysis using a variation on the WET procedure which uses distilled water as the extractant (WET-DI). These additional solubility tests were required based on the initial soluble lead results to further determine soil management parameters. WET-DI results ranged from below the detection limit of 0.01 mg/l to 0.109 mg/l. These results are well below the regulatory threshold value of 1.5 mg/l for WET-DI results (see Caltrans "Aerially Deposited Lead Soil Management" chart shown in Table 3 ).

# 2011 Sampling Event

BCI submitted 43 soil samples to Sunstar Labs for total lead analysis. Total lead results range from below the detection limit (3.0 mg/kg) to a high of 480 mg/kg (ADL-36A). Fourteen of these samples have total lead in excess of 50 mg/kg.

<sup>&</sup>lt;sup>1</sup> The STLC is a California regulatory level defining hazardous waste based on solubility of a sample constituent. Solubility is determined using a test known as the WET (Waste Extraction Test)

<sup>&</sup>lt;sup>2</sup> The TTLC is a California regulatory level defining hazardous waste based on total concentration of a sample constituent.

<sup>&</sup>lt;sup>3</sup> The TCLP is the solubility test procedure used to define a Federal hazardous waste.

All samples having total lead concentrations exceeding 50 mg/kg were submitted for soluble lead extraction using the WET procedure. The WET results range from below the 0.1 mg/l detection limit to 2.6 mg/l (ADL-36A).

Sample locations ADL-43, ADL-44, ADL-45, and ADL-46 were situated in the immediate vicinity (on or within 10-feet laterally) of previous sample location ADL-28. The 0-6-inches sample (ADL-28A) obtained previously from this location had relatively high total lead (1,540 mg/kg) and TCLP result of 7.4 mg/l. Results of the additional sampling indicate significantly lower total lead, ranging from 90 to 360 mg/kg for the 0 to 6-inches soil horizon. Soluble lead (WET) test results for these samples ranged from 0.34 to 1.9 mg/l. TCLP testing was not required due to the relatively low total lead results. Results of the additional testing confirm that the elevated total and soluble lead present in sample ADL-28A is of limited lateral and vertical extent.

#### <u>General</u>

In addition to lead testing, soil pH testing was performed on randomly selected samples using EPA Method 9045. Results of pH testing for 14 randomly selected soil samples ranged from 6.06 to 8.1 with an average pH of 6.9.

The analytical laboratories performed Quality Assurance/Quality Control (QA/QC) procedures for each method of analysis. Laboratory QA/QC procedures include: 1) Method Blanks, 2) Duplicate Samples, and 3) Spiked Samples.

Analytical results are summarized in Appendix C.

Copies of the laboratory reports and chain-of-custody documents are included in Appendix D.

# STATISTICAL ANALYSIS

BCI performed statistical analysis of the ADL sample data using ProUCL 4.0 software to calculate the sample mean (average) as well the 95% Upper Confidence Limit (UCL) on the mean. UCLs were calculated using standard bootstrap methodology for nonparametric data distribution.

# **Total Lead**

We analyzed groups of data based on sample depth as well as the sample population as a whole. Table 1 summarizes the total lead results for soil samples from 0 to 6-inches bgs, 12 to18-inches bgs, and 24 to 30-inches bgs. The 0 to 30-inches bgs interval represents the entire sample population (all soil depths).

Based on the mean and UCL values shown in Table 1, the majority of lead impact is located in the 0 to 6-inches bgs interval, with a significant decline at the 12 to 18-inches bgs interval. Total lead concentrations continue to decline in the deeper (24 to 30-inches bgs) interval. The 95% UCL for total lead is well below the TTLC of 1000 mg/kg for all intervals.

Total Lead Statistical Summary by Soil Depth Interval					
Depth Interval	Total Lead Results(mg/kg)				
(inches bgs)	Data Points	Range	Mean	95% UCL	
0-6	51	<1.0 to 2100	201	294	
12–18	48	<1.0 to 650	67	101	
24 - 30	32	<1.0 to 140	21	32	
0 – 18	99	<1.0 to 2100	136	187	
0-30	131	<1.0 to 2100	106	146	

# TABLE 1

#### Soluble Lead

Samples submitted for WET testing had total lead concentrations greater than 50 mg/kg (10 times the STLC of 5.0 mg/l). All but three of the WET lead tests were derived from the 0 to 6-inches bgs and 12 to 18-inches bgs intervals. The WET results range from below the detection limit of 0.1 mg/l to 59.8 mg/l with an average of 6.1 mg/l. Because WET tests were performed only on samples exceeding the 50 mg/kg total lead threshold, this average is expected to be significantly biased toward higher concentrations than would be achieved if all soil samples were tested for soluble lead. An estimate of the expected overall WET lead solubility is predicted statistically in the next section.

TCLP results ranged from 1.9 mg/l (ADL-26A) to 7.4 mg/l (ADL-28A), with an average value of 3.7 mg/l. We did not perform UCL statistical analysis of the TCLP data due to the small sample population.

We did not perform UCL statistical analysis of the DI WET results because the levels were significantly below thresholds that would have a bearing on soil management decisions.

# **Predicted WET Lead Solubility**

Lead solubility (WET) testing was limited to samples with total lead exceeding 50 mg/kg. This tends to introduce an upward bias in solubility results. We used linear regression analysis to attempt to predict the WET solubility of unbiased sample populations. We used Excel software to compare the total lead and corresponding WET lead results to perform the regression analysis. A correlation coefficient (r) for the data set is calculated to be 0.83. A value of "r" greater than 0.8 indicates an acceptable correlation exists between the total and WET data for use in the regression analysis. The regression equation is determined to be:

y = 0.020 (x)

Where:

y = Soluble (WET) lead concentrations in mg/l

x = Total Lead concentrations in mg/kg

Aerially Deposited Lead Assessment	BCI File No. 556.3
Silva Valley Parkway at US-50	February 29, 2012

We used the 95% UCL values for total lead in the regression formula to calculate the predicted WET solubility for various sample groups. The following Table 2 summarizes the calculation of predicted WET solubility results for various soil depth intervals over the entire length of the ADL assessment:

Predicted WET Lead Solubility by Soil Depth Interval				
Depth Interval	Total Lead I	Predicted WET Solubility(mg/l)		
(inches bgs)	Mean 95% UCL		95% UCL	
0-6	201	294	5.9	
12 - 18	67	101	2.0	
24 - 30	21	32	0.64	
0-18	136 187		3.7	
0-30	106	146	2.9	

TABLE 2

Applicability of the information from the various table categories above will depend on subgrade preparation requirements for the project.

# CONCLUSIONS AND RECOMMENDATIONS

#### Waste Disposal/Soil Reuse

Regulatory criteria to classify a waste as "California Hazardous" for handling and disposal purposes are contained in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, subsection 66261.24. Federal criteria to classify a waste as "Resource Conservation and Recovery Act (RCRA) Hazardous Waste" are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), Section 261.

For a waste containing lead, the waste is classified as California Hazardous when: 1) the total lead content exceeds the TTLC (1000 mg/kg); or 2) the soluble lead content exceeds the STLC (5.0 mg/l) based on the WET analysis. The RCRA Hazardous Waste threshold for lead is 5.0 mg/l based on the TCLP test procedure.

Management of lead-impacted soil on projects within Caltrans Right of Way (ROW) is governed by the statewide variance for reuse of lead-contaminated soil issued by the State Department of Toxic Substances Control (DTSC). The variance is included in Appendix E. A summary of Caltrans' soil management and variance criteria is included in Table 3.

# Based on our review and analysis of the lead testing data and the results of the statistical analyses, we conclude that all soil excavated within the project boundaries may either be reused without restriction within Caltrans ROW (Lead Compliance Plan required) or managed within Caltrans ROW under the provisions of the DTSC variance.

The need for application of the variance depends on how soil is managed during construction. Assuming that a minimum 0 to18-inches bgs soil profile will be managed as a unit (not

segregated by depth), the site soil can be classified as Soil Type X (Caltrans-defined soil type; see Table 3), the variance would not apply and the soil could be used without restrictions within the ROW:

• Soil Type X – "Non –hazardous Waste. Notify and require Lead Compliance Plan for worker Safety."

However, if construction segregates soil, material generated from the upper (0 to 6-inches) soil horizon and managed independently would be classified as follows and would require invoking the DTSC variance:

• Soil Type Y1 – "Hazardous Waste. Variance applies - cover with minimum of 1 foot of clean soil." This applies to project soil with 95% UCL for WET lead > 5.0 mg/l. This designation is expected to apply only to the 0 to 6-inch soil horizon if managed as an independent unit. Invoking the DTSC variance would require special figures and compliance notes to be included in project engineering plans.

If off-site disposal of excess soil is required for the project, there is an additional soil type from Table 3 which would need to be considered:

• Soil Type Z2 – "Hazardous Waste – Surplus. Dispose at Class 1 disposal site." This applies to surplus project soil with 95% UCL for WET lead > 5.0 mg/l. This designation is expected to apply only to the 0 to 6-inch soil horizon if managed as an independent unit and disposed off-site.

Any excess soil should be disposed as specified to meet landfill-acceptance criteria specific to lead-impacted soil. Prior to transport to the facility, the contractor should consult the with the landfill operator to determine specific waste acceptance and testing criteria. We recommend that the Contractor conduct additional testing of stockpiled soil to determine final disposal requirements. We anticipate that, after additional soil testing, the excess materials may be disposed at a either a Class 1 Hazardous Waste or a Class 2 Designated Waste landfill.

The project soil pH averages 6.9 (essentially neutral) and ranges from slightly acidic to slightly basic, conditions that do not enhance lead leaching potential. The pH conditions do not impose any special soil management requirements.

TABLE 3					
	AERIALLY DEPOSITED LEAD SOIL MANAGEMENT				
Soluble Lead (mg/1)Total Lead (mg/kg)		Soil Type	Handling		
CALIFORNIA T	ESTING				
	TTLC <1000	Х	<b>Non-hazardous Waste -</b> Notify and require Lead Compliance Plan for worker safety.		
	1000 — 1411 and DI WET < 1.5 mg/l	Y1	Hazardous Waste, Variance applies - cover with minimum 1 foot of clean soil.*		
STLC (WET) < 5.0	1411 — 3397 and DI WET < 150 mg/l	Y2	<b>Hazardous Waste, Variance applies -</b> cover with pavement structure. *		
	1000 — 3397 but Surplus	Z2	Hazardous Waste - Surplus. Dispose at Class 1 disposal site.		
	> 3397 or 1000 — 3397 & DI WET > 150 mg/1	Z2	Hazardous Waste - not reusable under Variance. Dispose at Class 1 disposal site.		
	TTLC < 1411 and DI WET < 1.5 mg/1	Y1	Hazardous Waste, Variance applies - cover with minimum of 1 foot of clean soil.*		
STLC	1411 — 3397 and DI WET < 150 mg/1	Y2	<b>Hazardous Waste, Variance applies -</b> cover with pavement structure.*		
(WET) > 5.0	< 3397 and DI WET < 150 mg/1 but Surplus	Z2	Hazardous Waste - Surplus. Dispose at Class I disposal site.		
	> 3397 or DI WET > 150 mg/l	Z2	Hazardous Waste - not reusable under Variance. Dispose at Class 1 disposal site.		
FEDERAL TEST	TING				
TCLP > 5.0 mg/1	N/A	Z3	<b>RCRA Hazardous Waste -</b> Dispose at Class 1 disposal site as a RCRA waste regardless of TTLC and STLC results.		

# TADLES

\*Note: For hazardous waste levels of lead – if pH is less than 5.5 soil must be placed under a pavement structure. If pH is less than 5.0 variance can not be used and the soil must be disposed as Z-2 material.

#### **Risk to Human Health**

Based on the current and proposed land use for the project and surrounding areas, it is appropriate to compare the total lead values to the California Human Health Screening Levels (CHHSL) for lead. The total lead CHHSL for a commercial/industrial exposure scenario is 320 mg/kg. Total lead concentrations above the CHHSL do not automatically trigger a response action or suggest that a significant risk to human health exists. If the CHHSL is exceeded, it may be appropriate to evaluate potential risks posed by site contaminants.

Eight of the total 131 ADL samples exceed the commercial/industrial CHHSL for lead. However the average values and 95% UCLs for the various soil depth intervals are all significantly less than the CHHSL for commercial/industrial exposure scenario. The tested area is subject to excavation and reuse as embankment material within the Caltrans ROW in accordance with the DTSC variance. Based on the results of our ADL assessment, we conclude that lead-impacted soil within the median area does not pose a significant health risk to site workers.

# Health and Safety Requirements

We recommend that the Contractor conduct all grading operations with the full awareness that lead-impacted soil is present within the surface and subgrade of the project. We recommend that the County provide the Contractor with a copy of our report.

We also recommend that the grading Contractor conduct his fieldwork in compliance with Title 8 CCR, Section 5192, which includes an appropriate project-specific worker Health & Safety Plan (HASP) and a project-specific Hazardous Waste Operations and Emergency Response Plan.

# LIMITATIONS

BCI performed these services in accordance with generally accepted environmental engineering principles and practices currently used in Northern California. We do not warranty our services.

Our scope does not include evaluation of other hazardous materials or a determination of their potential presence on the site.

This report is not a comprehensive site characterization and shall not be so construed. The findings presented in this report are predicated on the results of limited sampling and laboratory analyses. In addition, the obtained information is not intended to address potential impacts related to sources other than those specified herein. Therefore, we deem the report conclusive only with respect to the information presented.

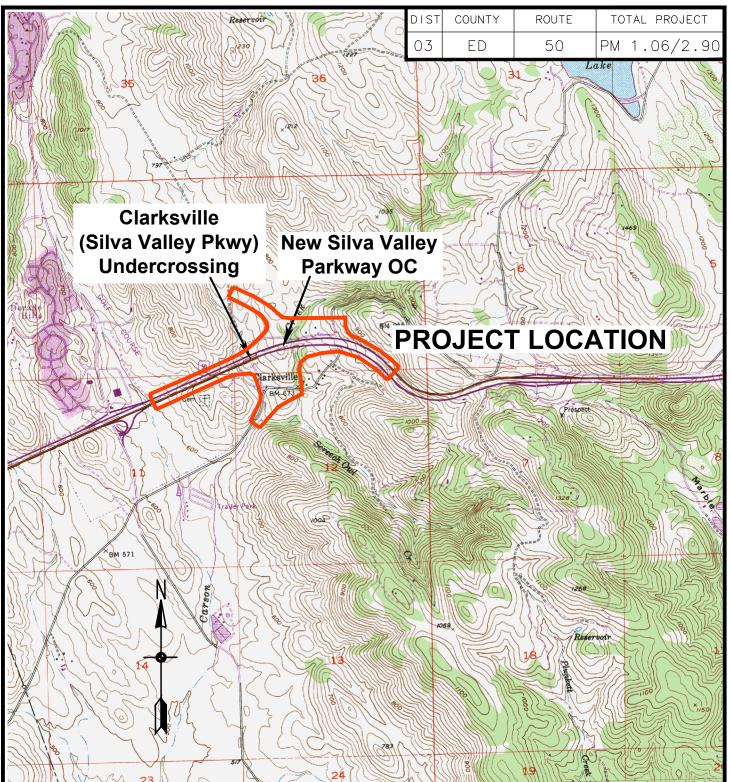
# Figures

Figure 1 - Vicinity Map

Figure 2 - Project Map

Figure 2A through 2E - ADL Sampling Location Map





Source: MAPTECH Terrain Navigator Pro, v. 7.01, USGS topographic map, 7.5 minute quadrangle, 1:24000, Clarksville 1953 (revised 1980).

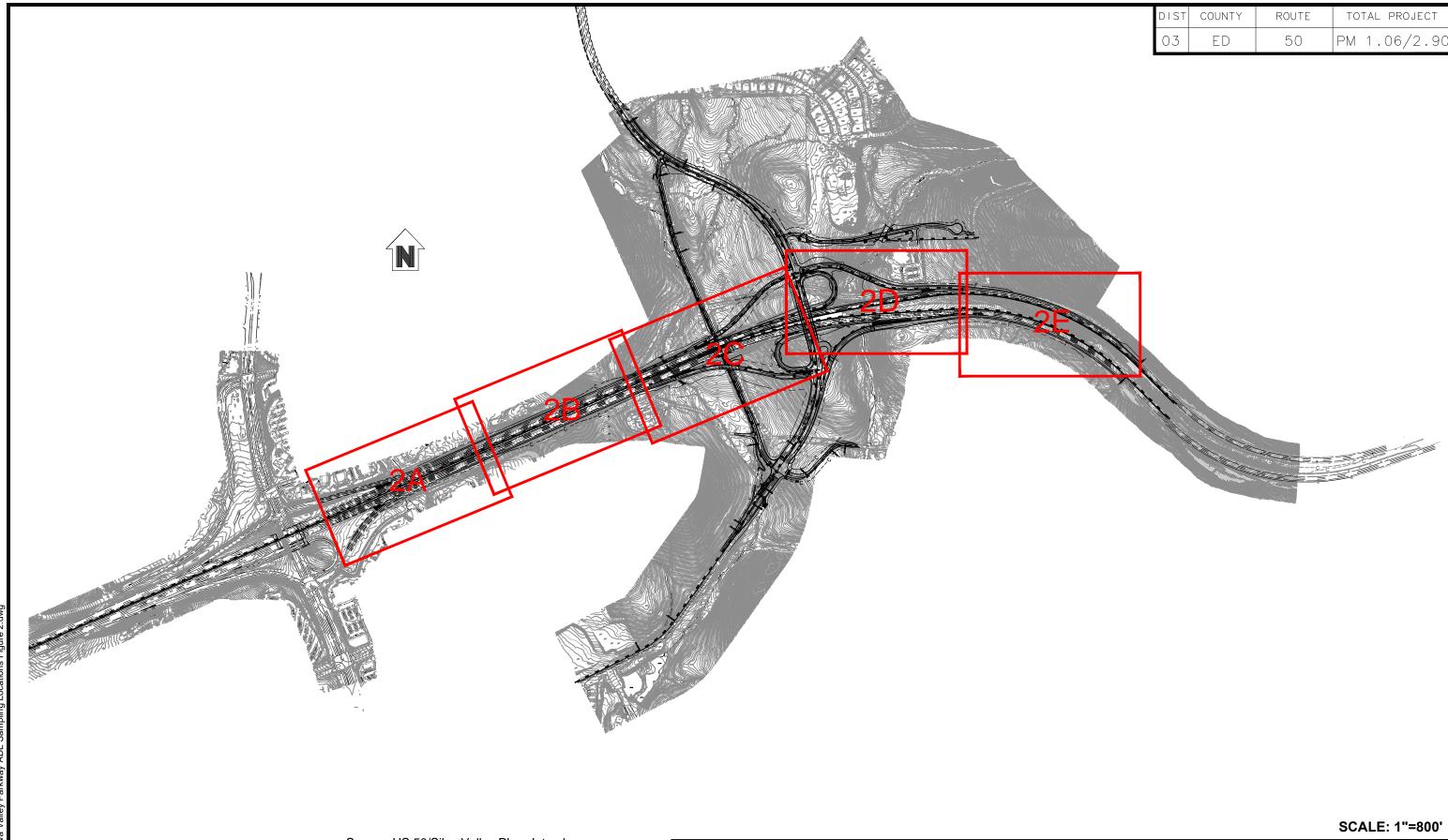


11521 Blocker Drive, Suite 110 Auburn,CA 95603 Phone: (530) 887-1494 Fax: (530) 887-1495 www.blackburnconsulting.com VICINITY MAP Silva Valley Parkway Interchange EA 03-1E290 El Dorado County, California SCALE: 1"=0.5 Miles

File No. 556.3

February 2012

Figure 1



Source: US 50/Silva Valley Pkwy Interchange Geometric Approval Drawing, dated 5-24-10 and 1-30-12 by Mark Thomas & Company, Inc.



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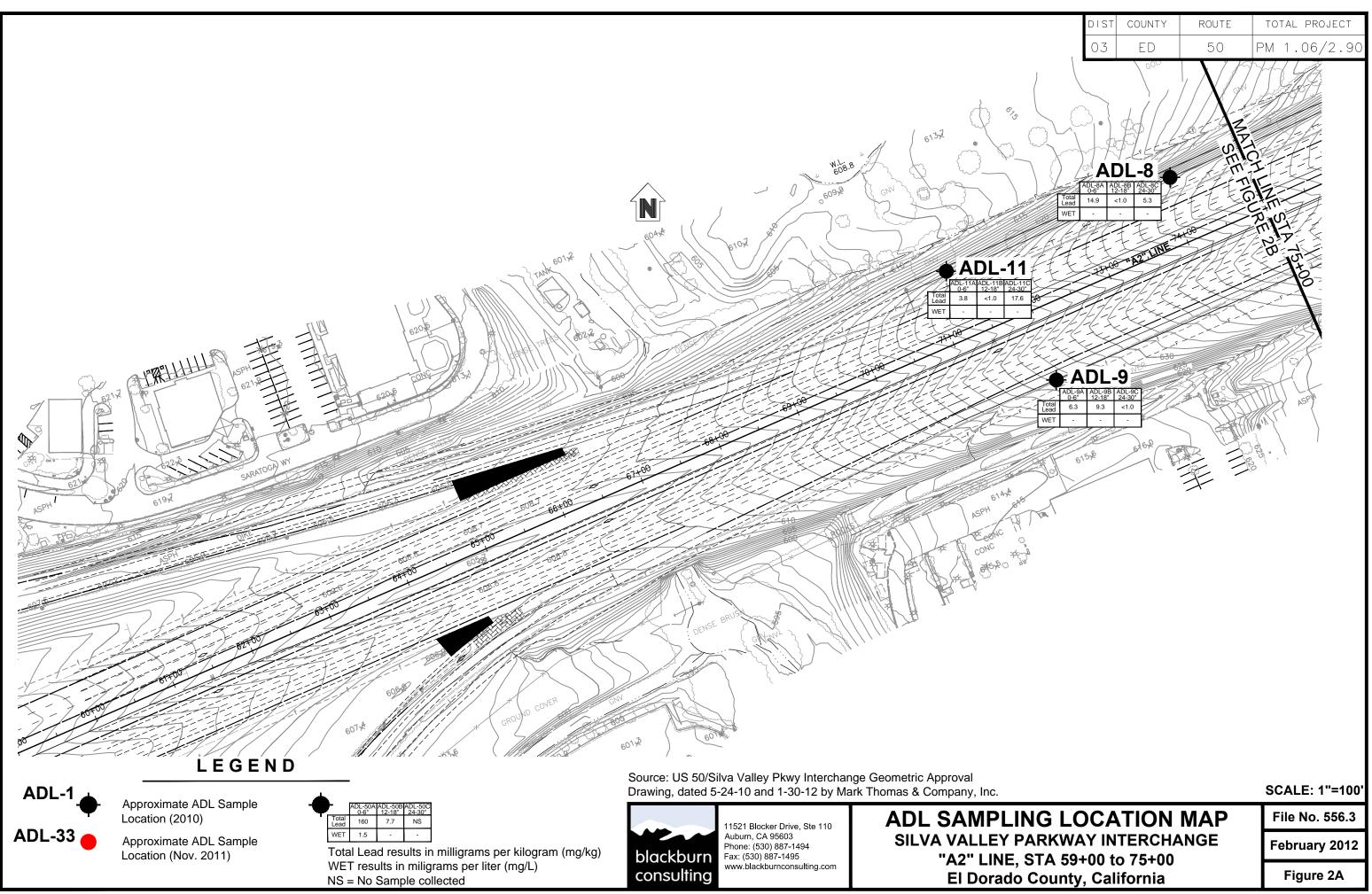
DIST	COUNTY	ROUTE	TOTAL PROJECT
03	ED	50	PM 1.06/2.90

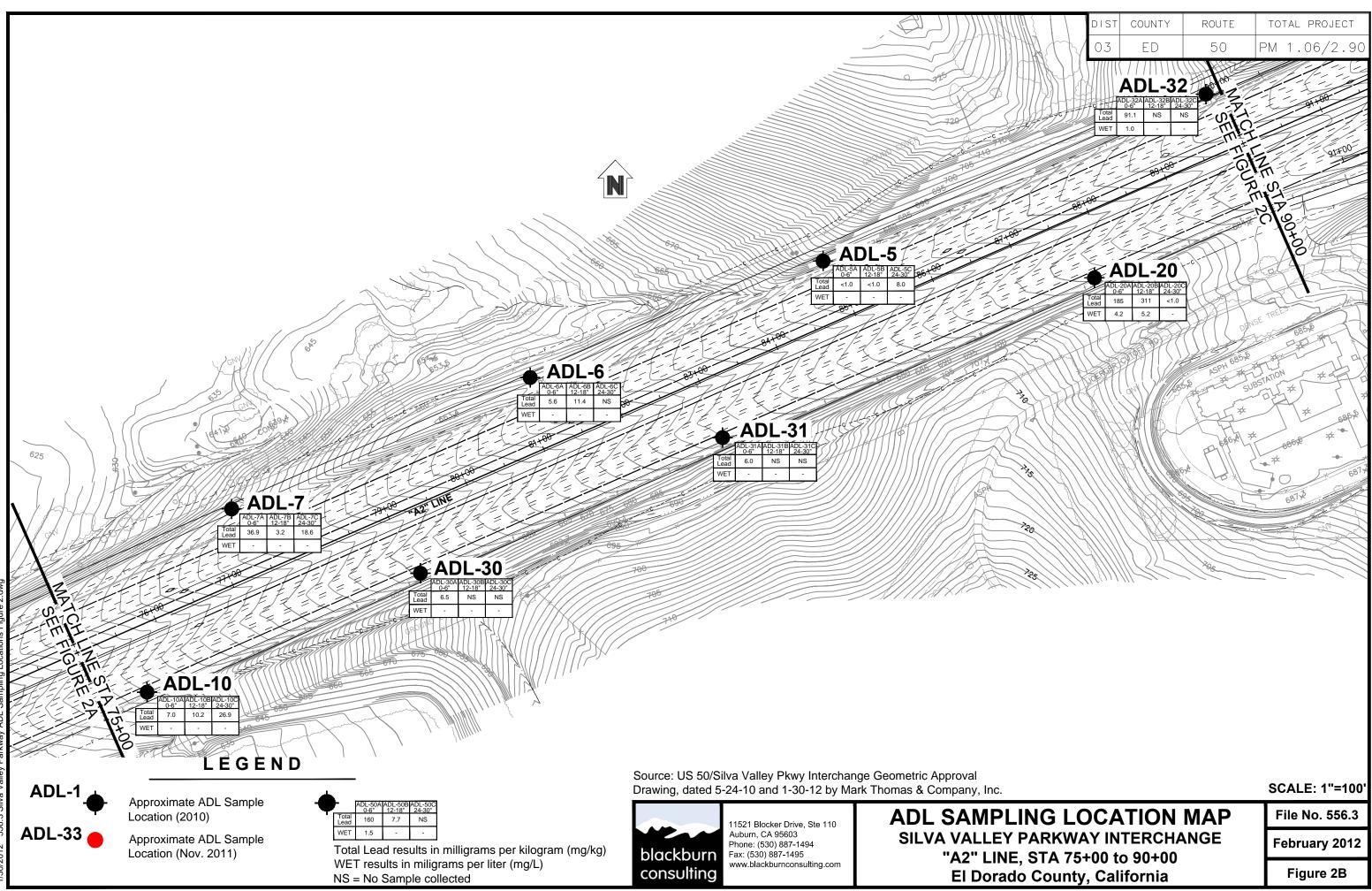
# **PROJECT MAP - ADL EVALUATION** SILVA VALLEY PARKWAY INTERCHANGE El Dorado County, California

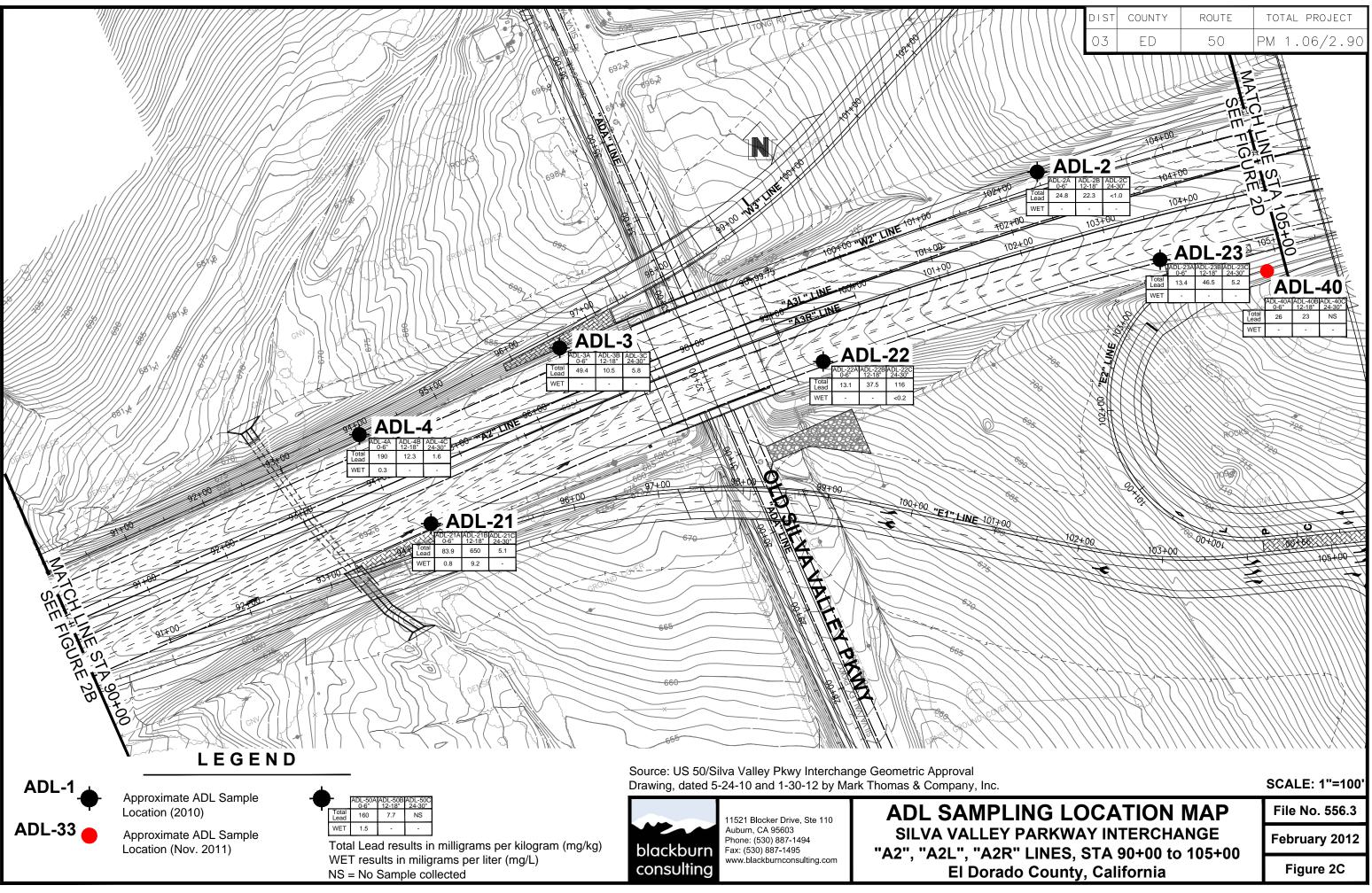
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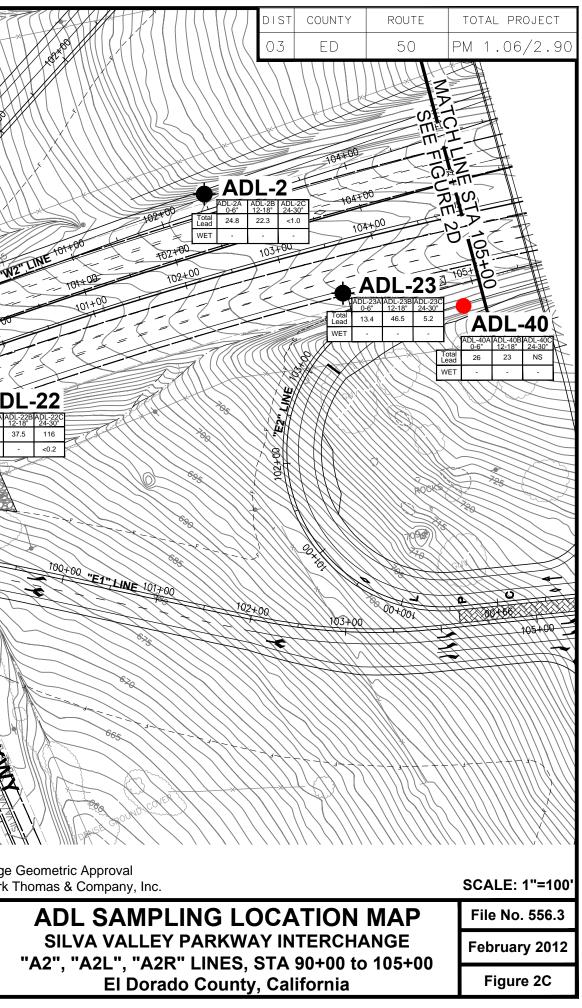
February 2012

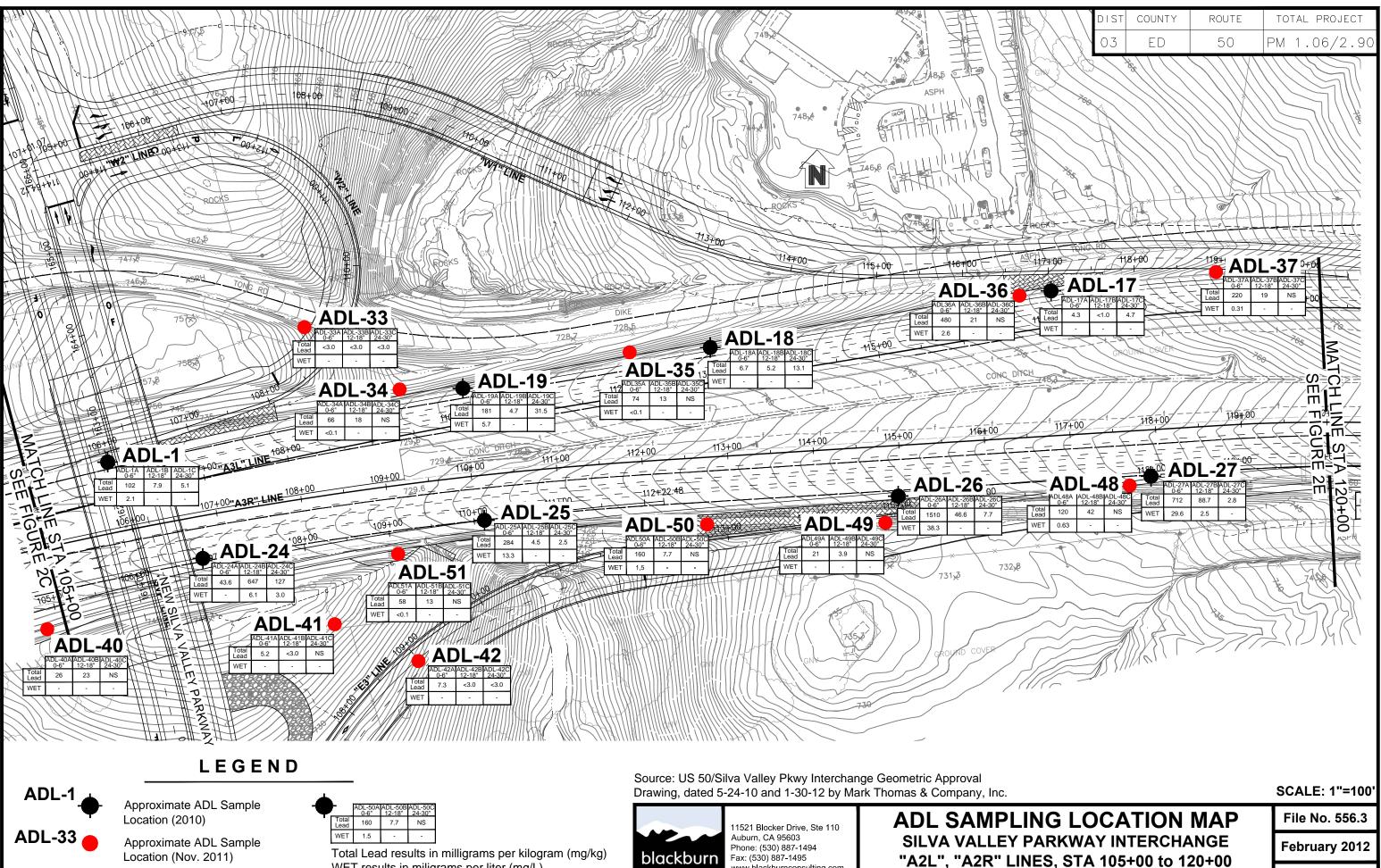
Figure 2





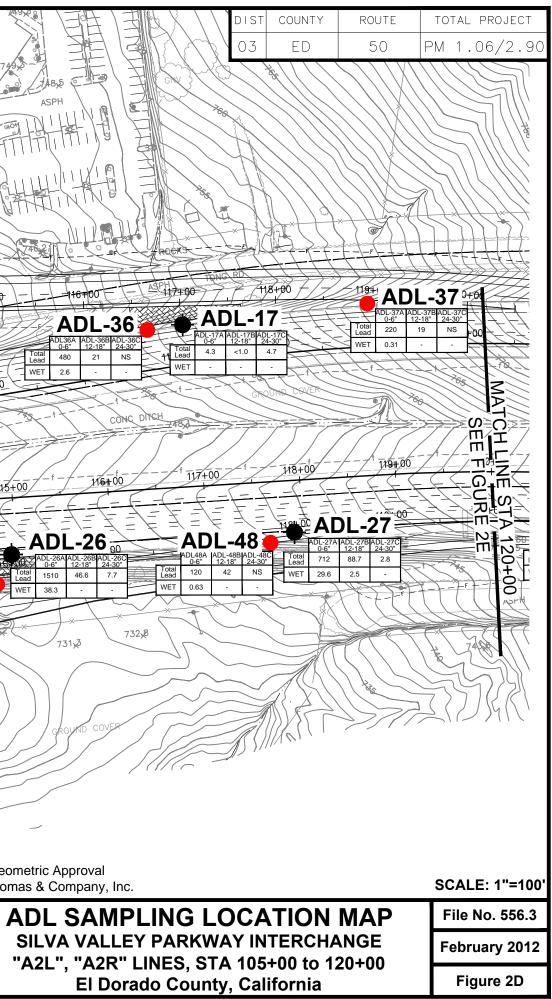


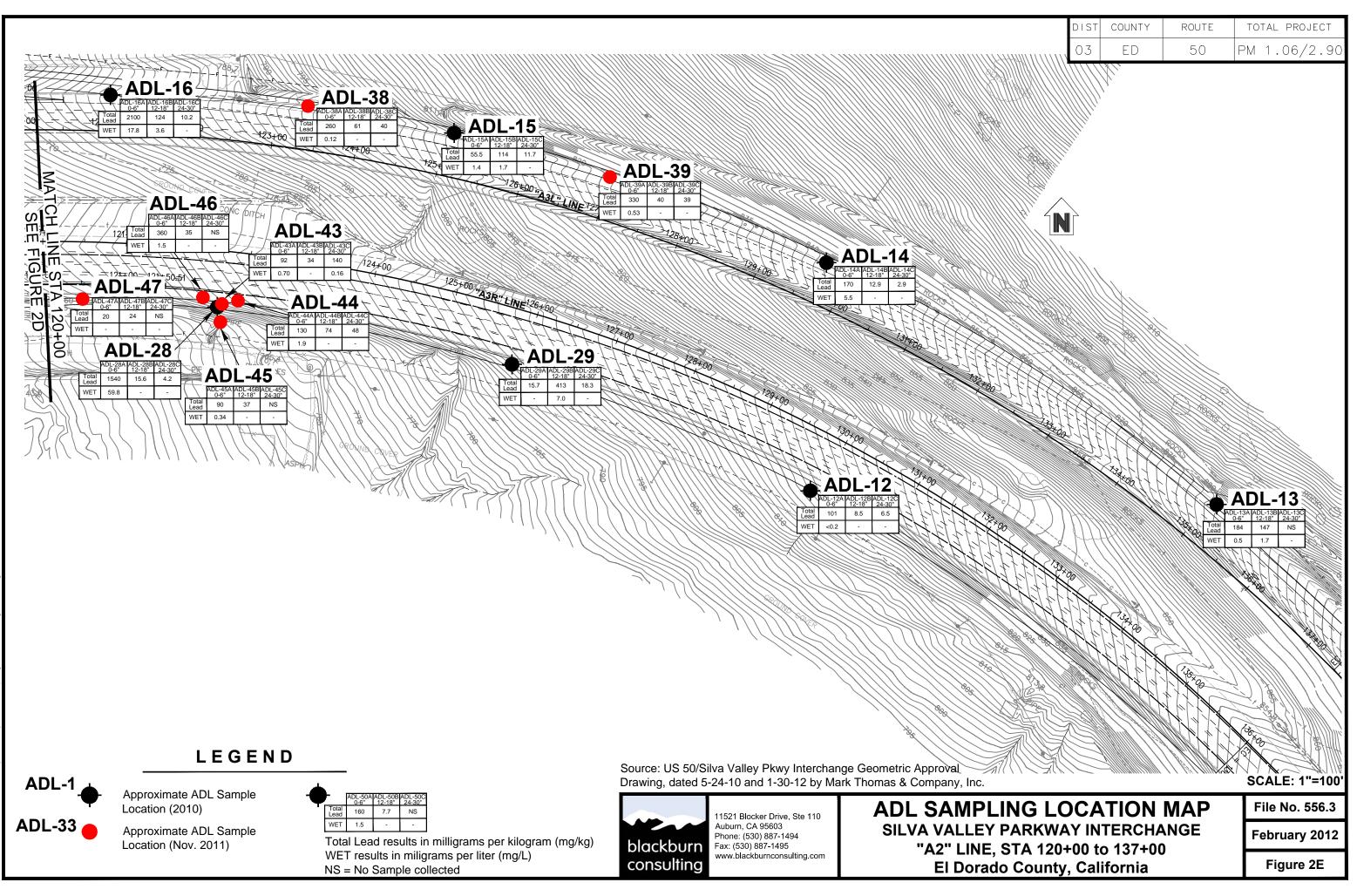




WET results in miligrams per liter (mg/L) NS = No Sample collected



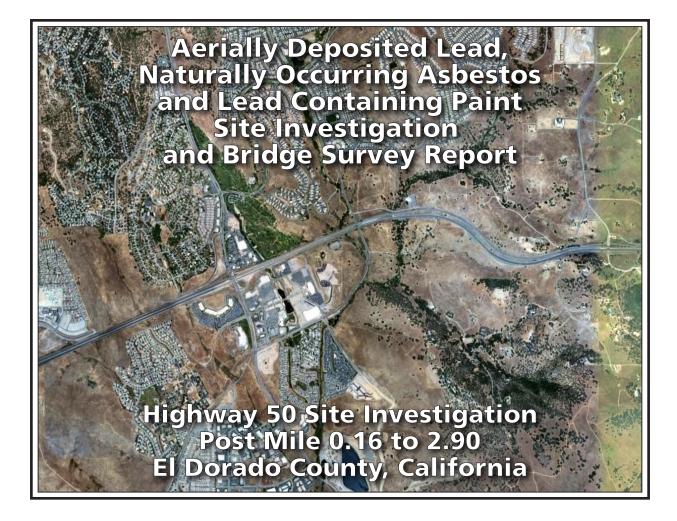




# Appendix A

# Geocon 2008 ADL Report - (on CD)





#### **PREPARED FOR:**

CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT 3 703 B STREET, P.O. BOX 911 MARYSVILLE, CALIFORNIA

#### **PREPARED BY:**

GEOCON CONSULTANTS, INC. 3160 GOLD VALLEY DRIVE, SUITE 800 RANCHO CORDOVA, CALIFORNIA 95742

GEOCON PROJECT NO. S9300-06-22 TASK ORDER NO. 22, CONTRACT NO. 03A1368







GEOTECHNICAL

ENVIRONMENTAL **MATERIALS** 



Project No. S9300-06-22 March 10, 2008

Mr. Rajive Chadha California Department of Transportation – District 3 Environmental Engineering Office P.O. Box 911 Marysville, California 95901

Subject: HIGHWAY 50 SITE INVESTIGAION, POST MILE 0.16/2.90 EL DORADO COUNTY, CALIFORNIA CONTRACT NO. 03A1368 TASK ORDER NO. 22, EA 03-3A7111 AERIALLY DEPOSITED LEAD, NATURALLY OCCURRING ASBESTOS, AND LEAD-CONTAINING PAINT SITE INVESTIGATION AND BRIDGE SURVEY REPORT

Dear Mr. Chadha:

In accordance with California Department of Transportation (Caltrans) Contract No. 03A1368, Task Order No. 22, and Expenditure Authorization 03-3A7111, we have performed environmental engineering services at the project site. The Site consists of the Highway 50 median in El Dorado County, California, from Post Mile 0.16 to 2.90. The accompanying report summarizes the services performed including a geological reconnaissance, the excavation of 37 direct-push borings and three hand-auger borings for the collection of samples for aerially deposited lead (ADL) and naturally occurring asbestos (NOA) analyses; the collection of two traffic stripe paint chip samples for lead and chromium analysis; and surveys of bridges for asbestos-containing materials and lead-based paint.

The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

Please contact us if you have any questions concerning the contents of this report or if we may be of further service.

Sincerely,

GEOCÓN CONSULVANTS

David W. Bieber, PGP, CEG, CHG Senior Geologist

IMS:DWB:jaj

Ian M. Stevenson, PG Project Geologist



(5 + 2CD) Addressee

#### TABLE OF CONTENTS

Page

#### AERIALLY DEPOSITED LEAD, NATURALLY OCCURRING ASBESTOS, AND LEAD CONTAINING PAINT SITE INVESTIGATION AND BRIDGE SURVEY REPORT

1.0	INTRODUCTION	
2.0	1.2       General Objectives       1         BACKGROUND       1         2.1       Potential Lead Soil Impacts       2	
	<ul> <li>2.2 Naturally Occurring Asbestos</li></ul>	
3.0	SCOPE OF SERVICES       3         3.1       Pre-field Activities         3.2       Field Activities	ŀ
4.0	INVESTIGATIVE METHODS44.1ADL Investigation44.2NOA Investigation54.3Lead-Containing Paint Investigation64.4Traffic Control64.5Quality Assurance/Quality Control Procedures64.6Laboratory Analyses64.6.1Aerially Deposited Lead Samples74.6.2Naturally Occurring Asbestos Samples74.6.3Lead-Containing Paint Samples74.6.4Laboratory QA/QC Procedures7	45555777
5.0	FIELD OBSERVATIONS AND INVESTIGATIVE RESULTS       8         5.1       Site Geology	
6.0	CONCLUSIONS AND RECOMMENDATIONS       12         6.1       Aerially Deposited Lead       12         6.2       Yellow Traffic Stripe Paint Waste Classification/Disposal       12         6.2       Yellow Traffic Stripe Paint Waste Classification/Disposal       12         6.2       Yellow Traffic Stripe Paint Waste Classification/Disposal       12         6.2.1       Worker Protection       13         6.3       Naturally Occurring Asbestos       13         6.3.1       Asbestos Risk to Human Health       14         6.4       Asbestos Containing Materials       14         REPORT LIMITATIONS       15	223344
7.0	REFORT LIMITATIONS	,

#### FIGURES

1.	Vicinity Map
2-1 & 2.2.	Site Plan

#### TABLES

- 1. Summary of Soil Boring and Traffic Stripe Paint Sample Coordinates
- 2. Summary of Lead and Soil pH Analytical Results
- 3. Summary of Asbestos Analytical Results
- 4. Summary of Traffic Stripe Paint Sample Analytical Results Lead and Chromium
- 5. Summary of Statistical Analysis

#### APPENDICIES

- A. February 2000, Highway 50 Bridge Sites, Asbestos and Lead-Based Paint Survey Report
- B. Laboratory Reports and Chain-of-custody Documentation
- C. Lead Statistics Results

# AERIALLY DEPOSITED LEAD, NATURALLY OCCURRING ASBESTOS, AND LEAD CONTAINING PAINT SITE INVESTIGATION AND BRIDGE SURVEY REPORT

# 1.0 INTRODUCTION

This Aerially Deposited Lead (ADL), Naturally Occurring Asbestos (NOA), and Lead Containing Paint (LCP) Site Investigation and Bridge Survey Report was prepared under California Department of Transportation (Caltrans) Contract No. 03A1368, Task Order (TO) No. 22, and Expenditure Authorization (EA) 03-3A7111.

# 1.1 Project Description and Proposed Improvements

The project area consists of the center median along Highway 50 (ED-50) (the Site) from approximately 0.16 miles east of the Sacramento/El Dorado County line to approximately 0.45 miles west of the Bass lake Road overcrossing, approximate Post Mile (PM) 0.16 to 2.90, in El Dorado County, California. The approximate project location is depicted on the attached Vicinity Map, Figure 1. The Site and major roadway features are depicted on the Site Plans, Figures 2-1 and 2-2. Proposed improvements include the extension of the high occupancy vehicle (HOV) lanes east from the El Dorado Hills Boulevard/Latrobe Road undercrossing to near Bass Lake Road.

# 1.2 General Objectives

The construction of an HOV lane and associated bridge and shoulder improvements along ED-50 will require the disturbance of soil, rock outcrops, and existing pavement at the Site. The purpose of the scope of services outlined in TO No. 22 was to evaluate the Site for potential impacts due to ADL from motor vehicle exhaust in the surface and near surface soils, evaluate the Site for the presence of naturally occurring asbestos derived from serpentine and ultramafic rock within and adjacent to the project boundaries, and evaluate the yellow median traffic stripe paint for lead and chromium content. The investigative results will be used by Caltrans to inform the construction contractor if lead or NOA impacted soils, or lead or chromium containing traffic stripe paint are present within the project boundaries for health, safety and disposal purposes. An asbestos-containing materials (ACM) investigation was previously conducted under Caltrans Contract No. 43A0012 and TO 03-3A7100-CR at the Latrobe Road and Clarksville Road under crossings. The February 2000, *Highway 50 Bridge Sites, Asbestos and Lead-Based Paint Survey Report*, is presented in Appendix A.

# 2.0 BACKGROUND

The Site is comprised of the existing right-of-way along approximately 2.74 miles of ED-50. Caltrans has proposed to construct an HOV lane from approximately the El Dorado Hills Boulevard/Latrobe Road undercrossing, to PM 2.90, west of the Bass Lake Road undercrossing. Caltrans requested assessment of the Site to provide data regarding the presence of ADL, asbestos, and LCP within the proposed roadway improvement areas.

The regulatory criteria used to classify a waste as "California hazardous" for handling and disposal purposes are contained in California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, § 66261.24. Criteria to classify a waste as "Resource, Conservation, and Recovery Act (RCRA) hazardous" are contained in Chapter 40 of the Code of Federal Regulations, Section 261.

# 2.1 Potential Lead Soil Impacts

Ongoing testing by Caltrans has indicated that ADL exists along major freeway routes due to emissions from vehicles powered by leaded gasoline.

For waste containing metals, the waste is classified as California hazardous when: 1) the total metal content exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the soluble metal content exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste may have the potential of exceeding the STLC when the waste's total metal content is greater than or equal to ten times the respective STLC value, since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal analysis is required. However, if sufficient data is available to perform a statistical evaluation of the probability that the metals content of a waste material will not exceed ten times the STLC, WET analysis is not required on the individual samples used to characterize that waste material. A material is classified as RCRA hazardous, or Federal hazardous, when the soluble metal content exceeds the Federal regulatory level based on the Toxicity Characteristic Leaching Procedure.

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability and corrosivity; however, for the purposes of this investigation, toxicity (i.e., lead concentrations) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or corrosivity. Waste that is classified as either California hazardous or RCRA hazardous requires management as a hazardous waste.

The Department of Toxic Substances Control (DTSC) regulates and interprets hazardous waste laws in California. DTSC generally considers excavated or transported materials that exhibit "hazardous waste" characteristics to be a "waste" requiring proper management, treatment and disposal. Soil that contains lead above hazardous waste thresholds and is left in place would not be necessarily classified by DTSC as a "waste." The DTSC has provided site-specific determinations that "movement of wastes within an area of contamination does not constitute "land disposal" and, thus, does not trigger hazardous waste disposal requirements." Therefore, lead-impacted soil that is scarified in-place, moisture-conditioned and recompacted during roadway improvement activities might not be

considered a "waste." DTSC should be consulted to confirm waste classification. It is noted that in addition to DTSC regulations, health and safety requirements and other local agency requirements may also apply to the handling and disposal of lead-impacted soil.

# 2.2 Naturally Occurring Asbestos

The California Air Resources Board (CARB) has mitigation practices for construction, grading, quarrying, and surface mining operations that may disturb natural occurrences of asbestos outlined in Title 17 CCR, Section 93105. NOA potentially poses a health hazard when it becomes an airborne particulate. The roadway improvement activities proposed on the Site could disturb NOA-containing rock and soil, thereby potentially creating an airborne asbestos hazard. Mitigation practices can reduce the risk of exposure to asbestos-containing dust. The primary mitigation practice used for controlling exposure to potentially asbestos-containing dust is the implementation of engineering controls including wetting the materials being disturbed. If engineering controls do not adequately control exposure to potentially asbestos-containing dust, the use of personal protective equipment including wearing an approved high efficiency particulate air filter equipped respirator is required during construction activities. Asbestos dust control methods similar to those in Title 17 CCR, Section 93105 are outlined in Title 17 CCR, Section 93106 for airborne asbestos in road surfacing applications. Using surfacing material with 0.25% or more asbestos material is not permitted and wetting of the material or the application of a surface sealant is recommended to minimize disturbance of the asbestos material. Onsite reuse or disposal of NOA-containing materials is allowed by 17 CCR 93106 and 17 CCR 93105 if it is buried under at least 0.25 feet (ft) of material that contains less than 0.25% NOA.

# 2.3 Lead-Containing Paint

Yellow traffic stripe paint utilized by Caltrans may contain lead-chromate. The presence of elevated lead and chromium requires sampling and analytical testing of the paint stripe materials to determine appropriate health & safety procedures and proper management and disposal practices. Disposal of removed traffic stripe paint materials is dependent on the method utilized to remove these materials (i.e. focused stripe removal vs. pavement grinding).

# 3.0 SCOPE OF SERVICES

The scope of services requested by Caltrans in TO No. 22 included the collection of soil samples for analysis to determine lead and asbestos content; the collection of traffic stripe paint samples for analysis to determine lead and chromium content; the performance of a geologic assessment of the Site to help determine whether potentially asbestos-bearing soil or rocks are present, and the preparation of this report.

# 3.1 Pre-field Activities

- Conducted a Task Order Meeting on November 20, 2007, to discuss the TO scope of services. Caltrans Quality Assurance (QA) Manager Rajive Chadha and Geocon field manager Ian Stevenson attended the meeting. The purpose of the Task Order Meeting was to identify and observe the project boundaries and conditions and mark the project limits with white paint.
- Prepared a Health and Safety Plan dated November 21, 2007, to provide guidelines on the use of personal protective equipment and the health and safety procedures implemented during the field activities.
- Prepared a Workplan dated November 26, 2007, which describes the requested scope of services and quality assurance/quality control (QA/QC) sampling and laboratory procedures.
- Reviewed existing geological maps and studies of the Site and surrounding areas for information on the potential presence of NOA.
- Provided 48-hour notification to Underground Service Alert prior to job site mobilization.
- Retained the services of Creek Environmental Laboratories, Inc. (Creek), a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of samples.
- Retained the services of EMSL Inc., a Caltrans-approved and California-certified analytical laboratory, to perform the asbestos analyses of samples.

# 3.2 Field Activities

A preliminary geological reconnaissance was performed on November 20, 2007, by Ian Stevenson, a California, Professional Geologist (PG No. 8203) with experience in the assessment of NOA.

On November 26 and 27, 2007, we collected 107 soil samples for lead analysis from 37 direct-push borings and 3 hand-auger borings; 71 soil samples for asbestos analysis were collected from the direct push and hand auger borings; one rock chip sample for asbestos analysis; and 2 traffic stripe paint samples for LCP analysis were collected from the yellow median stripe.

Following sample collection, the borings were backfilled with the soil cuttings. Details of the field activities are presented in the following sections.

The sample locations were selected in the field by the Geocon field supervisor and Caltrans QA Manager. The locations of the borings were determined using a differential global positioning system (GPS) capable of providing a horizontal position with an error of no more than 3.3 ft. The approximate boring locations are depicted on Figures 2-1 and 2-2.

# 4.0 INVESTIGATIVE METHODS

# 4.1 ADL Investigation

We collected 107 soil samples for lead analysis from 37 direct-push borings (B1 through B15 and B21 through B42) and 3 hand-auger borings (B43 through B45) advanced on the Site. We advanced 15

direct-push borings and three hand-auger borings along the unpaved median of westbound ED-50 and 22 direct-push borings along the unpaved median of eastbound ED-50.

The position in latitude and longitude of each boring, as determined using the GPS, is identified on the Summary of Boring and Traffic Stripe Paint Sample Coordinates, Table 1. A Summary of Lead and Soil pH Analytical Results is presented in Table 2. The approximate soil boring locations are depicted on Figures 2-1 and 2-2.

The soil borings were advanced to an approximate maximum depth of 3.0 ft, using a direct-push rig or hand-auger. We collected the soil samples for lead analysis at general depths of 0.0 to 1.0 foot, 1.0 to 2.0 ft and 2.0 to 3.0 ft.

Borings were spaced at approximately 650 foot intervals along the unpaved median of ED-50. Borings were alternately drilled near the edge of pavement and approximately 15 ft into the median. Samples were generally composited by the laboratory four at a time by depth and proximity to edge of pavement.

Soil samples obtained from the direct-push borings were collected in cellulose thermoplastic (acetate) liners driven by the direct-push rig. After we collected a soil sample, the acetate liner that contained it was cut to separate the sample by depth, than the sample from a particular interval was opened and the soil sample was transferred to a Ziploc<sup>®</sup> re-sealable plastic bag. Samples collected by hand-auger were transferred directly from the hand-auger to a Ziploc<sup>®</sup> re-sealable plastic bag The soil samples were field homogenized within the sample bags and subsequently labeled, placed in a chilled cooler, and delivered to Creek for analytical testing accompanied by chain-of-custody (COC) documentation.

# 4.2 NOA Investigation

Prior to sample collection, Ian Stevenson conducted a reconnaissance assessment of the rock and soil types present on the Site. Geologic conditions and materials conducive to the possible formation of NOA were observed throughout the length of the Site.

Seventy-one soil samples were collected for asbestos analysis from 37 direct-push and three handauger borings from general depths of 0 to 1 foot and 2 to 3 ft. The samples for NOA analysis were collected from fifteen direct-push borings and three hand-auger borings advanced along the unpaved median of westbound ED-50, and 22 direct-push borings advanced along the unpaved median of eastbound ED-50. Samples were generally collected in groups to be composited by the laboratory by depth and approximate PM range. One rock chip sample was also collected from bedrock material in the median near Bass Lake Road. The results of asbestos analysis for six composite samples and one rock chip sample are presented in Table 3, Summary of Asbestos Analytical Results. The direct-push and hand-auger samples were composited by mile and depth. The samples collected for asbestos analysis were segregated by depth and composited into groups of two samples by post mile. Samples for asbestos analysis were taken as splits from the samples collected for lead analysis. Each split was transferred directly from the original Ziploc <sup>®</sup> re-sealable plastic bag to a second one-quart Ziploc<sup>®</sup> re-sealable plastic bag.

The individual sample bags were labeled with a sample identification number, and the date and time collected. Samples for asbestos analysis were delivered to EMSL for asbestos analysis under COC protocol.

# 4.3 Lead-Containing Paint Investigation

Two paint samples for lead and chromium analysis were collected from the yellow traffic stripe. One paint sample was collected from the east bound median stripe and one paint sample from the westbound median stripe. Samples were chipped from the pavement with a hammer and placed in a Ziploc<sup>®</sup> re-sealable plastic bag, labeled with sample identification, and the date and time of collection. Samples were delivered to Creek for analysis under COC protocol. Lead and chromium results are presented in Table 4, Summary of Traffic Stripe Paint Sample Analytical Results – Lead and Chromium.

# 4.4 Traffic Control

Caltrans maintenance provided an attenuator truck for traffic control during the field work.

# 4.5 Quality Assurance/Quality Control Procedures

QA/QC procedures were performed during the field exploration activities. These procedures included noting the general soil type for each boring on the field logs, the decontamination of sampling equipment before each sample was collected, and providing COC documentation for each sample submitted to the laboratory. The soil sampling equipment was cleansed between each boring by washing the equipment with an Alconox<sup>®</sup> solution followed by a double rinse with deionized water. The decontamination water was discharged to the ground surface within the Caltrans right-of-way, away from the roadway and storm drain inlets.

# 4.6 Laboratory Analyses

Prior to submitting the samples to the laboratory, the COC documentation was reviewed for accuracy and completeness. Reproductions of the laboratory reports and COC documentation are presented in Appendix B.

# 4.6.1 Aerially Deposited Lead Samples

The soil samples for lead analysis were analyzed by Creek on a 10-day turn-around-time (TAT) basis for the following analysis:

- One hundred and seven soil samples were analyzed as 33 composite samples for total lead following the United States Environmental Protection Agency (EPA) Test Method 6010B.
- Three randomly selected soil samples were analyzed for soil pH using EPA Test Method 9045.
- Four samples were analyzed for soluble (WET) lead following EPA Test Method 6020.

# 4.6.2 Naturally Occurring Asbestos Samples

Seventy-one samples and one rock chip sample were submitted to EMSL for asbestos fiber analysis by CARB Method 435 on a five-day or six to 10-day TAT basis. The CARB 435 preparation includes milling the sample to a -200 mesh size which also homogenizes the sample. EMSL analyzed the samples as follows:

- Seventy-one samples were analyzed as six composite samples by the polarized light microscopy (PLM) method for asbestos by CARB Method 435 (CARB 435). The analytical sensitivity of the PLM analysis was 0.25% by area.
- One of the composite samples submitted for PLM analysis was also analyzed for asbestos by the transmission electron microscopy method, EPA Test Method 600/R-93/116 (TEM), also referred to as the qualitative bulk fiber analysis "Point Count" Method. Caltrans requested a maximum lower detection limit for the TEM analysis of 0.25%; the analytical sensitivity of the TEM analysis was 0.01% by weight.
- One rock chip sample was analyzed by PLM for asbestos by CARB 435. The analytical sensitivity of the PLM analysis was 0.25% by area.

# 4.6.3 Lead-Containing Paint Samples

Two yellow median traffic stripe paint samples were analyzed by Creek on a 10-day TAT for total lead and chromium following EPA Test Method 6010B.

# 4.6.4 Laboratory QA/QC Procedures

QA/QC procedures were performed as applicable for each method of analysis with specificity for each analyte listed in the test method's QA/QC. QA/QC measures for the various metals analyses included the following:

- One method blank for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every ten samples, batch of samples or type of matrix, whichever was more frequent, with the spike made at ten times the detection limit or at the analyte level.

# 5.0 FIELD OBSERVATIONS AND INVESTIGATIVE RESULTS

# 5.1 Site Geology

We reviewed the California Geological Survey's (CGS) *Geologic Map of the Sacramento Quadrangle* (CGS 1987) prior to beginning the field work to gather information regarding the potential presence of NOA on the Site. The depicted geologic materials on or adjacent to the Site as shown on the *Sacramento Quadrangle* are primarily Jurassic Copper Hill Volcanics and Jurassic Metavolcanics. Minor Jurassic slates of the Salt Spring Slate formation are also mapped at the Site.

The El Dorado County Asbestos Review Areas Map was also reviewed. The area from White Rock/Latrobe Road to approximately 0.1 mile east of Silva Valley Parkway is within a *Quarter Mile Buffer Zone for More Likely to Contain Asbestos or Fault Line* area. The remainder of the Site is not mapped as an area likely to contain NOA.

Ian Stevenson performed a NOA assessment of the lithology of outcrops visible within the Caltrans right-of-way. The observed geology is consistent with that depicted on the *Sacramento Quadrangle*. One rock chip sample collected from bedrock within the median near Bass Lake Road consisted of metavolcanics. Visible outcrops on the shoulder and within the remainder of the median of ED-50 were observed to primarily consist of metavolcanics.

The soils encountered during the advancement of the direct-push and hand-auger borings were composed primarily of yellowish brown to reddish brown silty sand to silty sand with gravel. Groundwater was not encountered during the investigation.

# 5.2 ADL Soil Analytical Results

A summary of the soil analytical results are presented in Table 2. The laboratory reports and COC documentation are presented in Appendix B.

Total lead was detected in 27 of the 33 composite soil samples analyzed at concentrations ranging from 1.3 to 150 milligrams per kilogram (mg/kg). Four of the 33 composite soil samples had reported total lead concentrations greater than or equal to 50 mg/kg (ten times the STLC value for lead of 5.0 mg/l).

WET soluble lead was reported for each of the four composite soil samples analyzed at concentrations ranging from 2.2 to 9.6 mg/l. Two of the four soil samples had soluble (WET) lead concentrations greater than or equal to the STLC value for lead of 5.0 mg/l.

Soil pH values ranged from 7.0 to 7.1.

# 5.3 Statistical Evaluation for Lead Detected in Soil Samples

Statistical methods were applied to the total lead data to evaluate the upper confidence limits (UCLs) of the true means of the total lead concentrations for each sampling depth. The statistical methods used are discussed in a book entitled *Statistical Methods for Environmental Pollution Monitoring*, by Richard Gilbert; in an EPA *Technology Support Center Issue* document entitled, *The Lognormal Distribution in Environmental Applications*, by Ashok Singh et. al., dated December 1997; and in a book entitled *An Introduction to the Bootstrap*, by Bradley Efron and Robert J. Tibshirani.

# 5.3.1 Total Lead Distribution

The presence of non-detects and/or low concentrations in total lead data sets can strongly skew sample data towards low values. In these cases, the data are often lognormally distributed or non-parametric and classical statistical methods do not work properly since they assume that the data exhibit an underlying normal distribution. Consequently, it is necessary to apply the appropriate method when determining the UCLs on the true total lead means.

# 5.3.2 Calculating the UCLs for the True Mean

The upper one-sided 90% and 95% UCLs of the true mean are defined as the values that, when calculated repeatedly for randomly drawn subsets of site data equal or exceed the true mean 90% and 95% of the time, respectively. Statistical confidence limits are the classical tool for addressing uncertainties of a distribution mean. The UCLs of the true mean concentration are used as the mean concentrations because it is not possible to know the true mean due to the essentially infinite number of soil samples that could be collected from a site. The UCLs therefore account for uncertainties due to limited sampling data. As data become less limited at a site, uncertainties decrease and the UCLs move closer to the true mean.

Non-parametric bootstrap techniques used to calculate the UCLs are discussed in the previously referenced EPA document and in *An Introduction to the Bootstrap*. For those samples in which total lead was not detected at concentrations exceeding the laboratory method detection limit, a value equal to one-half of the detection limit was used in the UCL calculation. The average total lead concentration for the composite soil samples is 26.2 mg/kg. The average soluble (WET) lead concentration for the four composite soil samples is 5.6 mg/l. The bootstrap results are included in Appendix C. The calculated UCLs and statistical results are summarized in the table below:

SAMPLE INTERVAL (ft)	90% TOTAL LEAD UCL (mg/kg)	95% TOTAL LEAD UCL (mg/kg)	TOTAL LEAD MEAN (mg/kg)	MINIMUM VALUE (mg/kg)	MAXIMUM VALUE (mg/kg)
0 to 1.0	63.3	67.4	47.5	14	140
1.0 to 2.0	19.9	21.1	15.6	0.5	33

2.0 to 3.0 32.2 36.2 15.6	0.5 150
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# 5.3.3 Correlation of Total and Soluble Lead

Total and corresponding soluble (WET) lead concentrations are bivariate data with a linear structure. This linear structure should allow for the prediction of soluble lead (WET) concentrations based on the UCLs calculated above in Section 5.3.2.

To estimate the degree of interrelation between total and corresponding soluble (WET) lead values (*x* and *y*, respectively), the *correlation coefficient* [*r*] is used. The correlation coefficient is a ratio that ranges from +1 to -1. A *correlation coefficient* of +1 indicates a perfect direct relationship between two variables; a *correlation coefficient* of -1 indicates that one variable changes inversely with relation to the other. Between the two extremes is a spectrum of less-than-perfect relationships, including zero, which indicates the lack of any sort of linear relationship at all. The *correlation coefficient* was calculated for the four (*x*, *y*) data points (i.e., soil samples analyzed for both total lead [*x*] and soluble [WET] lead [*y*]) and equaled 0.8. A *correlation coefficient* greater than or equal to 0.8 is an acceptable indicator that a correlation exists.

For the *correlation coefficient* that indicates a linear relationship between total and soluble (WET) lead concentrations, it is possible to compute the line of dependence or a best-fit line between the two variables. A least squares method was used to find the equation of a best-fit line (regression line) by forcing the y-intercept equal to zero since that is a known point. The equation of the regression line was determined to be y = 0.0505(x), where x represents total lead concentrations and y represents predicted soluble lead (WET) concentrations.

This equation was used to estimate the expected WET soluble lead concentrations for the 90% UCLs calculated in Section 5.3.2. Regression analysis results and a scatter plot depicting the four (x, y) data points along with the regression line are included in Appendix C. The 90% UCL-predicted WET soluble lead concentrations are summarized in Table 5.

# 5.4 NOA Results

Six composite soil samples and one rock chip sample were analyzed by EMSL for asbestos by the PLM method using the CARB 435 sample preparation method. One composite soil sample was further analyzed by EMSL for asbestos by the TEM method and the CARB 435 sample preparation method. A summary of asbestos analytical results is presented on Table 3. A copy of the NOA laboratory reports and COC documentation are presented in Appendix B.

Five of the six soil samples submitted for asbestos analysis were reported to contain asbestos below the CARB regulatory action limit of 0.25%. Four samples were reported to contain <0.25% tremolite

asbestos by the PLM method. One sample reported as non detect by PLM was also analyzed by TEM and reported to contain <0.01 chrysotile asbestos. The rock chip sample analyzed for asbestos was reported as non-detect by the PLM method.

# 5.5 Lead-Containing Paint Sample Analytical Results

Two paint chip samples were collected from the yellow median traffic stripe within the project boundaries. Paint chip samples were analyzed for total lead and chromium. The analytical results of the LCP samples are summarized on Table 4. Laboratory reports and chain-of-custody documentation are presented in Appendix B.

Total lead and chromium were detected in both samples submitted for analysis. Total lead was reported at 4.6 and 450 mg/kg, less than the California hazardous waste threshold (TTLC) for lead of 1,000 mg/kg. Total chromium was reported at 4.1 and 180 mg/kg, less than the California hazardous waste threshold (TTLC) for lead of 2,500 mg/kg. Since the samples were only collected for screening purposes, WET analysis was not performed.

# 5.6 Asbestos Containing Materials – Review of Results from Previous Investigation

The Latrobe Road and Clarksville Road undercrossings were investigated for ACMs under previous Caltrans Contract Number 43A0012 and TO 03-3A7100. Six guardrail shim samples and five joint filler samples were collected from the Latrobe Road undercrossing. Six guardrail shim samples and four joint filler samples were collected from the Clarksville Road undercrossing. The guardrail shim samples collected from the Latrobe Road and Clarksville were reported to contain 70% chrysotile asbestos by EPA Test Method 600/m4-82-020, PLM. Joint filler samples were reported as non-detect for asbestos by EPA Test Method 600/m4-82-020, PLM. The February 2000, *Highway 50 Bridge Sites, Asbestos and Lead-Based Paint Survey Report*, is presented in Appendix A.

# 5.7 Review of Laboratory QA/QC

We reviewed the Creek analytical laboratory QA/QC provided with the laboratory reports. The Creek Laboratory Quality Control Results show that matrix spike recoveries are below recovery limits for samples 07-C15340, 07-C15375, and 07-C15394. The relative percent difference (RPD) for sample 07-C15376 is also above the RPD limit. The data show acceptable surrogate recoveries and non-detect results for the method blanks and acceptable recoveries for the LCS. Based on this limited data review, no additional qualifications of the data presented herein are necessary, and the data are of sufficient quality for the purposes of this report.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

# 6.1 Aerially Deposited Lead

Waste classifications are evaluated based on the 90% UCL of the lead content for the relevant excavation depths; this has historically been considered sufficient to satisfy a good faith effort by the EPA as discussed in SW-846. Risk assessment characterization is based on the 95% UCL of the lead content in the waste for the relevant depths; this is in accordance with the Risk Assessment Guidance for Superfund (RAGS) Volume 1 documentation for Exposure Assessment.

The following table summarizes the predicted soluble (WET) lead concentrations and the waste classification for excavated soil within this highway segment based on the calculated total lead UCLs and the relationship between total and soluble (WET) lead. The soluble (WET) lead calculations are summarized in Table 5.

Excavation Depth	90% UCL Total Lead (mg/kg)	90% UCL Predicted WET Lead (mg/l)	95% UCL Total Lead (mg/kg)	Waste Classification
0 to 1.0 ft	63.3	3.2	67.4	Non-hazardous
Underlying soil (1.0 to 3.0 ft)	26.1	1.3	28.7	Non-hazardous

90% UCL applicable for waste classification; 95% UCL applicable for risk assessment

Based on the above table, soil generated from excavations to depths between 0.0 and 3.0 ft would not be classified as a California hazardous waste since the 90% UCL-predicted soluble (WET) lead concentrations are less than the STLC for lead of 5.0 mg/l. Consequently, excavated soil could be reused or disposed of as non-hazardous soil with respect to lead content.

# 6.2 Yellow Traffic Stripe Paint Waste Classification/Disposal

The yellow traffic paint stripe was sampled per Caltrans' request since it may be removed from the underlying asphalt concrete by grinding or sand blasting, which would create a paint waste stream. The highest reported levels of total lead and total chromium for the yellow traffic stripe paint samples were 450 mg/kg and 180 mg/kg, respectively. Lead and chromium are present in the traffic stripe paint and the removal operation may result in the generation of a regulated waste. Prior to disposal, the paint waste stream should be resampled to confirm waste classification in accordance with specific disposal facility acceptance criteria since the total lead and chromium concentrations cannot be predicted and the paint samples were not analyzed for WET soluble lead and chromium.

# 6.2.1 Worker Protection

Per Caltrans requirements, the contractor(s) should prepare a project-specific Lead Compliance Plan (CCR Title 8, Section 1532.1, the "Lead in Construction" standard) to minimize worker exposure to lead-impacted soil. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-impacted soil.

Since material at the Site contains lead and/or chromium and according to Caltrans, removal of the yellow traffic stripe paint may produce toxic waste materials, we recommend that a health and safety plan be prepared to minimize worker exposure. The health and safety plan should include a discussion of the constituents of concern, routes of exposure, permissible exposure limits, and personal protective measures. The health and safety plan should be reviewed and signed by the onsite construction workers prior to any field activities. We also recommend that contractors on the Site grinding asphalt which has been coated with yellow paint prepare a dust control plan. The dust control plan should include dust mitigation and monitoring procedures.

# 6.3 Naturally Occurring Asbestos

The observed geology of the Site is indicative of a geologic environment where NOA minerals are likely to occur. Five of the six composite soil samples submitted for asbestos analysis were reported to contain tremolite and chrysotile asbestos below the regulatory limit of 0.25% by PLM or TEM. Although laboratory results are reported at less than 0.25% they are the result of composite samples and may not represent the asbestos content at specific locations. To minimize the aerial dispersion of NOA the use of engineering controls as described in Title 17 of the California Code of Regulations (CCR) Section 93105 will be required at the Site. Additionally, Caltrans requires the use of engineering controls including dust control/wet suppression for worker protection to minimize aerial dispersion of NOA fibers in planned work areas during excavation and grading activities at sites where NOA is present. However, since the average percent asbestos is less than 0.25% based on CARB 435 testing, soils generated from the site during construction may be reused onsite without restriction. Construction/maintenance activities involving these asbestos-containing materials may fall under regulatory jurisdiction of the California Division of the Occupational Safety and Health Administration (Cal-OSHA) under CCR Title 8 Section 5208. Since NOA was detected on the Site, Caltrans requires the use of engineering controls including dust control/wet suppression for worker protection to minimize aerial dispersion of NOA fibers in planned work areas during excavation and grading activities.

# 6.3.1 Asbestos Risk to Human Health

Currently, regulatory exposure limits and health hazard data are not available for NOA in soils. Federal regulations governing asbestos define it as the asbestiform variety of the amphibole minerals actinolite, amosite, anthophyllite, crocidolite, and tremolite, and the asbestiform variety of serpentine, chrysotile. Asbestos fibers occurring in industrial materials are considered by the National Institute for Occupational Safety and Health as potential occupational carcinogens. Prudence is recommended, therefore, in dealing with soils containing NOA. Engineering controls such as wet suppression should be utilized to minimize aerial dispersion of NOA fibers in planned work areas during excavation and construction activities. Under Title 8 Section 5208 of the CCR, disturbance of asbestos-containing materials requires wet working methods and possible respiratory protection and air monitoring. The CARB has established protocols outlined in Title 17, Section 93105 for the implementation of worker health, safety and monitoring plans for excavation, grading and transport of NOA-containing soils. The excavation contractor should consult Title 17, Section 93105 and contact Cal-OSHA to establish the appropriate regulatory protocol and actions necessary for excavation and/or disturbance of asbestos-containing soils.

# 6.4 Asbestos Containing Materials

The results of the ACM survey for the Latrobe Road and Clarkesville Road bridges is presented in the February 2000, *Highway 50 Bridge Sites, Asbestos and Lead-Based Paint Survey Report*, Appendix A. The guardrail shim samples collected from the Latrobe Road and Clarksville Road undercrossings were reported to contain 70% chrysotile asbestos. Guardrail shims are classified as Category I ACM (nonfriable/nonhazardous material) – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products. National Emissions Standards for Hazardous Air Pollutants regulations do not require that the Category I material identified during our survey be removed prior to demolition or treated as hazardous waste. However, the disturbance of the material is still covered by the Cal-OSHA for asbestos-related work (or a licensed and certified asbestos abatement contractor) perform demolition activities if the asbestos-containing sheet packing identified during our survey is left in-place during demolition. Contractors are responsible for segregating and characterizing waste streams prior to disposal, and for informing a receiving landfill of the contractor's intent to dispose of asbestos-containing waste.

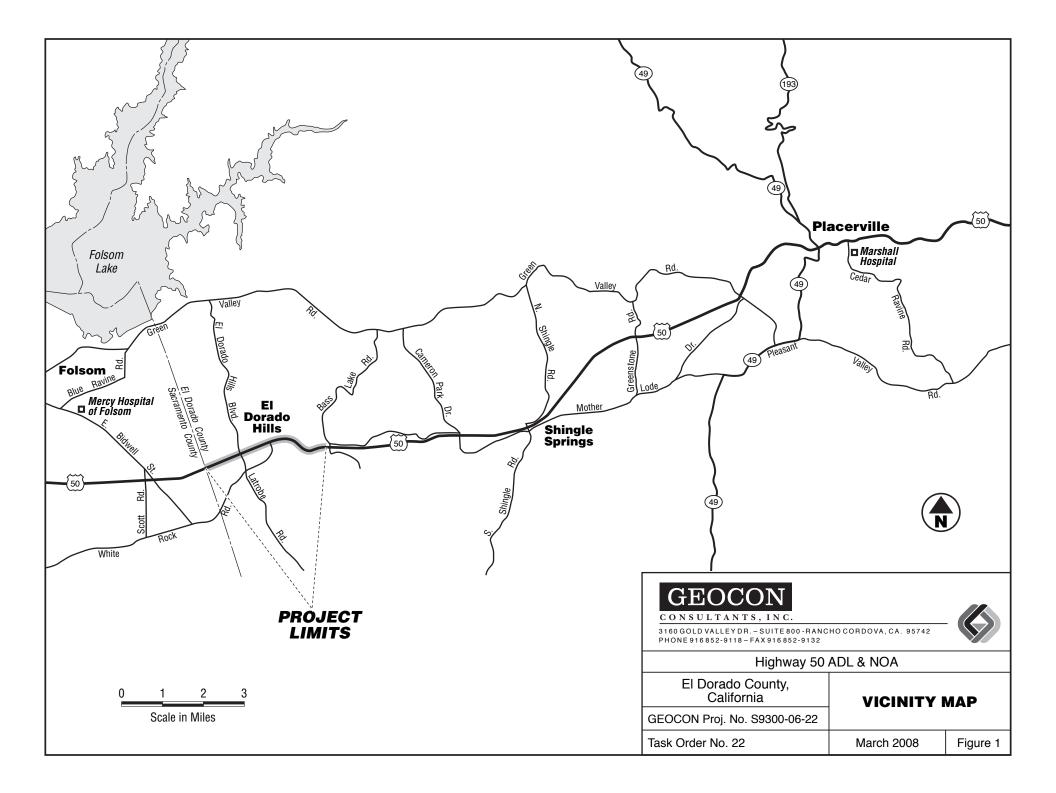
We also recommend the notification of contractors (that will be conducting renovation, demolition, or related activities) of the presence of asbestos in their areas (i.e., provide the contractor[s] with a copy of this report and a list of asbestos removed by asbestos abatement contractor[s] during subsequent abatement activities). Contractors should be instructed not to disturb asbestos during their work.

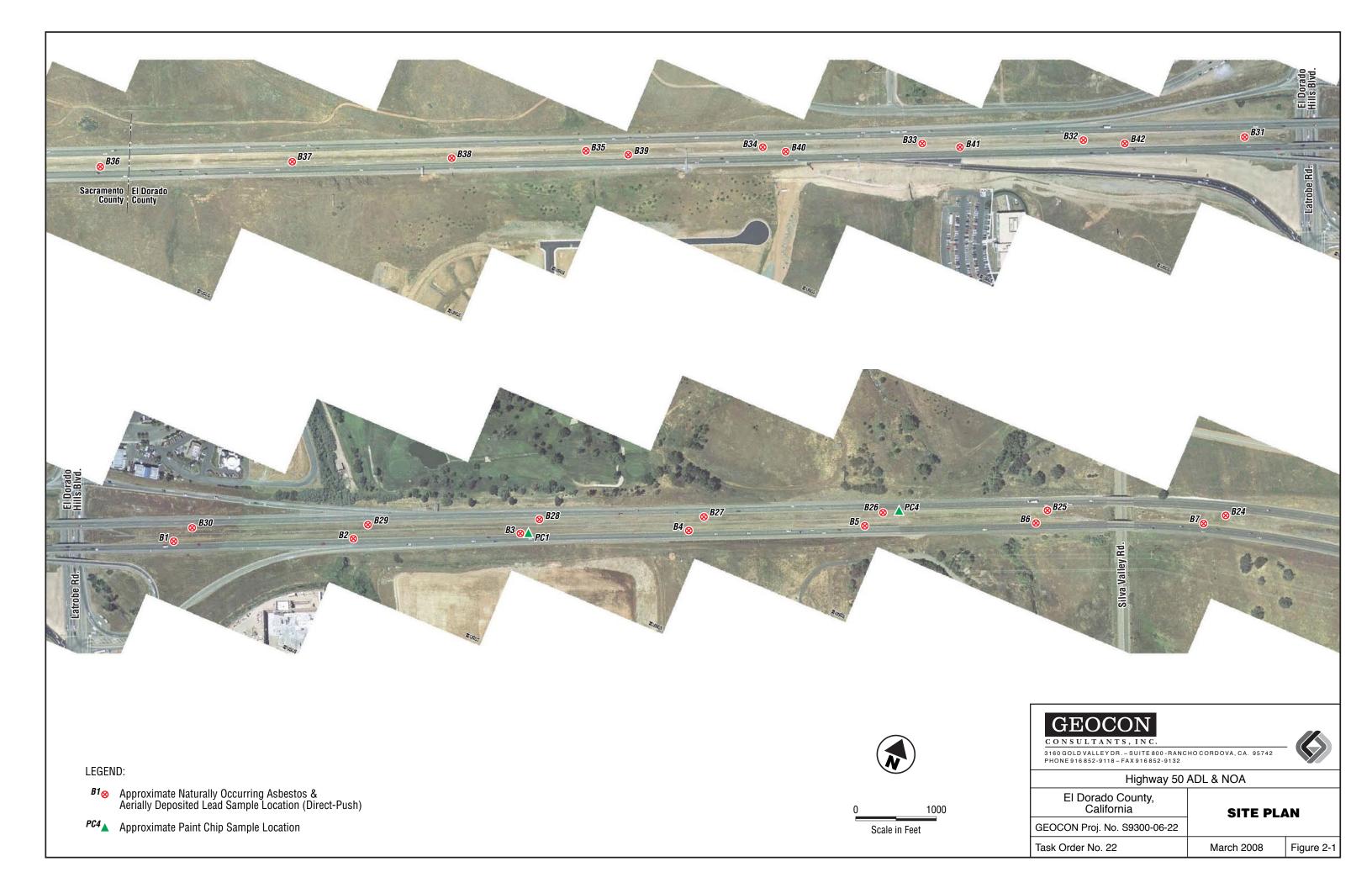
Written notification to EPA Region IX and the CARB is required ten working days prior to the commencement of *any* demolition activity (whether asbestos is present or not) and for renovation activities involving specified quantities of regulated asbestos-containing material. For notification instructions, please refer to the following internet link: *http://www.arb.ca.gov/enf/asbestos/asbestosform.htm.* In accordance with Title 8, CCR 341.9, written notification to the nearest Cal-OSHA district office is required at least 24 hours prior to certain asbestos-related work.

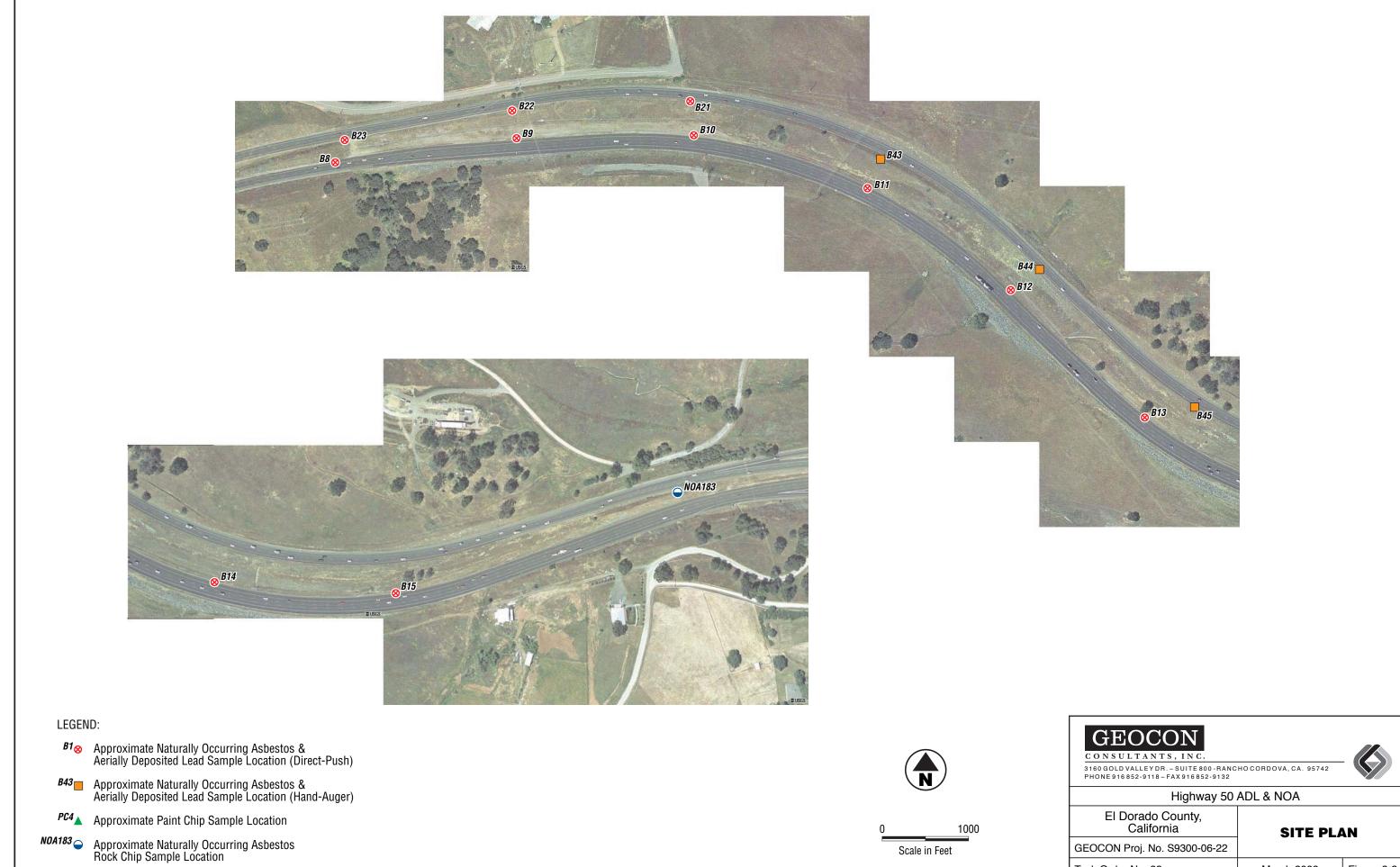
### 7.0 REPORT LIMITATIONS

This report has been prepared exclusively for Caltrans. The information contained herein is only valid as of the date of the report and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.







Task Order No. 22

March 2008

Figure 2-2

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### TABLE 1 SUMMARY OF SOIL BORING AND TRAFFIC STRIPE PAINT SAMPLE COORDINATES CALTRANS TASK ORDER NO. 22 HIGHWAY 50 POST MILE 0.16 TO 2.90 EL DORADO COUNTY, CALIFORNIA

BORING I.D.	LATITUDE	LONGITUDE
B1	38.653301420	-121.069279195
B2	38.654055065	-121.066956914
В3	38.654787741	-121.064797787
B4	38.655499187	-121.062619232
В5	38.656265961	-121.060352595
B6	38.656987568	-121.058126946
B7	38.657663254	-121.055948284
B8	38.658049369	-121.053441673
B9	38.658270229	-121.050987400
B10	38.658255877	-121.048595566
B11	38.657660308	-121.046264391
B12	38.656546274	-121.044362522
B13	38.655160561	-121.042595164
B14	38.654351898	-121.040570380
B15	38.654184993	-121.038123432
B21	38.658616753	-121.048638175
B22	38.658562884	-121.051043491
B23	38.658289127	-121.053308451
B24	38.657838424	-121.055700901
B25	38.657165575	-121.058049971
B26	38.656471597	-121.060182527
B27	38.655699526	-121.062491212
B28	38.655006696	-121.064630261
B29	38.654254611	-121.066835462
B30	38.653513728	-121.069108545
B31	38.652656030	-121.071448611
B32 ~	38.651952861	-121.073607201
B33	38.651238059	-121.075750505
B34	38.650537220	-121.077877206
B35	38.649753334	-121.080228595
B36	38.647549196	-121.086666701
B37	38.648406297	-121.084113818
B38	38.649112637	-121.081991848
B39	38.649885928	-121.079643362
B40	38.650584374	-121.077536819
B41	38.651362116	-121.075225478
B42	38.652088882	-121.073026862
B43	38.657964657	-121.046081051
B44	38.656766290	-121.043974731
B45	38.655271051	-121.041920246
PC 1	38.654787741	-121.064797787
PC 4	38.656549034	-121.059977372

### TABLE 2 SUMMARY OF LEAD AND SOIL pH ANALYTICAL RESULTS CALTRANS TASK ORDER NO. 22 HIGHWAY 50 POST MILE 0.16 TO 2.90 EL DORADO COUNTY, CALIFORNIA

SAMPLE I.D.	SAMPLE DATE	TOTAL LEAD (mg/kg)	SOLUBLE (WET) LEAD (mg/l)	SOIL pH
B1,3,5,7-0	11/26/2007	110	2.6	
B1,3,7-1	11/26/2007	<1.0		
B1,3,7-2	11/26/2007	2.3		
B2,4,6,8-0	11/26/2007	32		
B2,4,6,8-1	11/26/2007	<1.0	·	7.1
B2,4,6,8-2	11/26/2007	<1.0		
B9,11,13,15-0	11/26/2007	27	,	
B9,11,13,15-1	11/26/2007	17		
B9,11,13,15-2	11/26/2007	9.3	450	
B10,12,14-0	11/26/2007	73	2.2	
B10,12,14-1	11/26/2007	9.7		
B12,14-2	11/26/2007	150	9.6	
B21,23,25,27-0	11/26/2007	16	<i></i>	
B21,23,25,27-1	11/26/2007	3.9		·
B21,23,25,27-2	11/26/2007	1.3		7.0
B22,24,26,28-0	11/26/2007	31		
B22,26,28-1	11/26/2007	33		
B22,28-2	11/26/2007	4.1		
B29,31,33,35-0	11/26/2007	19		
B29,31,35-1	11/26/2007	23		
B31,35-2	11/26/2007	1.4		
B30,32,34-0	11/26/2007	36		7.0
B30,32,34-1	11/26/2007	23	·	
B30,32-2	11/26/2007	<1.0		
B36,37,38,39-0	11/26/2007	24		
B36,37,38,39-1	11/26/2007	32	- 57	
B36,37,38,39-2	11/26/2007	1.3	Lut	
B40,41,42-0	11/26/2007	14		
B40,41,42-1	11/26/2007	20		
B40,41,42-2	11/26/2007	<1.0		
B43,44,45-0	11/26/2007	140	8.0	
B43,44,45-1	11/26/2007	8.9		
B43-2	11/26/2007	<1.0		

Notes:

B1,3,5,7-0 - Composite sample identification consisting of discrete soil samples collected from

borings B1, B3, B5, and B7 at 0.0 foot depth

WET = Waste Extraction Test

mg/kg = Milligrams per kilogram

mg/l = Milligrams per liter

---- = Not analyzed

<1.0 = Less than the laboratory method reporting limit

Project No. S9300-06-22 March 10, 2008 Page 1 of 1

March 10, 2008	of 1	
March	Page 1 of 1	

		TA	TABLE 3		
	8	SUMMARY OF ASBEST CALTRANS TA HIGHWAY 50 PO EL DORADO CO	SUMMARY OF ASBESTOS ANALYTICAL RESULTS CALTRANS TASK ORDER NO. 22 HIGHWAY 50 POST MILE 0.16 TO 2.90 EL DORADO COUNTY, CALIFORNIA		
SAMPLE I.D.	SAMPLE LOCATION	SAMPLE TYPE	ANALYTICAL METHOD	ASBESTOS %	ASBESTOS TYPE
1 NOA 1	NOA31-0, NOA32-0, NOA33-0, NOA34-0, NOA35-0, NOA36-0, NOA37-0, NOA38-0, NOA39-0, NOA40-0, NOA41-0, NOA42-0	COMPOSITE	PLM .	<0.25	TREMOLITE
NOA 2	NOA31-2, NOA32-2, NOA35-2, NOA36-2, NOA37-2, NOA38-2, NOA39-2, NOA40-2, NOA41-2, NOA42-2	COMPOSITE	PLM	<0.25	TREMOLITE
NOA 3	NOA1-0, NOA2-0, NOA3-0, NOA4-0, NOA5-0, NOA6-0, NOA7-0, NOA24-0, NOA25-0, NOA26-0, NOA27-0, NOA28-0, NOA29-0, NOA30-0	COMPOSITE	PLM	<0.25	TREMOLITE
NOA 4	NOA1-2, NOA2-2, NOA3-2, NOA4-2, NOA6-2, NOA7-2, NOA25-2, NOA27-2, NOA28-2, NOA30-2	COMPOSITE	PLM	QN	ŪN
NOA 5	NOA8-0, NOA9-0, NOA10-0, NOA11-9, NOA12-0, NOA13-0, NOA14-0, NOA15-0, NOA21-0, NOA22-0, NOA23-0, NOA43-0, NOA44-0, NOA45-0	COMPOSITE	PLM	<0.25	TREMOLITE
NOA 6	NOA8-2, NOA9-2, NOA11-2, NOA12-2, NOA13-2, NOA14-2, NOA15-2, NOA21-2, NOA22-2, NOA23-2, NOA43-2	COMPOSITE	PLM/TEM	ND/<0.01	ND/CHRYSOTILE
NOA 183	BEDROCK OUTCROP IN MEDIAN NEAR BASS LAKE ROAD	ROCK CHIP	PLM	Q	QN

Notes:

PLM = Polarized Light Microscopy TEM = Transmission Electron Microscopy ND = None Detected <0.25/<0.01 = Less than the laboratory method reporting limit (PLM/TEM)

SU	HIGHWAY 5	TABLE 4 MPLE ANALYTICAL RESULTS - LEAI IS TASK ORDER NO. 22 10 POST MILE 0.16 TO 2.90 D COUNTY, CALIFORNIA	D AND CHROMIUM
SAMPLE I.D.	SAMPLE DATE	TOTAL LEAD (mg/kg)	CHROMIUM (mg/kg)
PC 1	11/26/2007	4.6	4.1
PC 4	11/27/2007	450	180

Notes:

PC 1 = Yellow traffic stripe paint sample identification

mg/kg = Milligrams per kilogram

### TABLE 5 SUMMARY OF STATISTICAL ANALYSIS CALTRANS TASK ORDER NO. 22 HIGHWAY 50 POST MILE 0.16 to 2.90 EL DORADO COUNTY, CALIFORNIA

### Total Lead UCLs (mg/kg)

Sample Interval	90% UCL	95% UCL
0 to 1.0 ft	63.3	67.4
1.0 to 2.0 ft	19.9	21.1
2.0 to 3.0 ft	32.2	36.2

**Excavation Scenarios** 

		90% UCL	95% UCL	
Excavation Depth	Total Lead (mg/kg)	Soluble (WET) Lead * (mg/l)	Total Lead	(mg/kj
0 to 1.0 ft	63.3	3.2	67.4	
Underlying Soil (1.0 to 3.0 ft)	26,1	1.3	28.7	
0 to 2.0 ft	41.6	2.1	44.3	
Underlying Soil (2.0 to 3.0 ft)	32.2	1.6	36.2	
0 to 3.0 ft	38.5	1.9	41.6	

Notes:

UCL = Upper Confidence Level (90% UCL applicable for waste classification; 95% UCL applicable for risk assessment) mg/kg = milligrams per kilogram

mg/l = milligrams per liter

\* = Soluble (WET) lead concentrations were predicted using slope of the regression line,

where y = predicted soluble (WET) lead and x = total lead

Regression Line Slope: y = 0.0505 x





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CONSULTANTS.

GEOTECHNICAL DENVIRONMENTAL DE MATERIAL



Project No. S8225-06-76 February 3, 2000

Ms. Alicia Beyer California Department of Transportation District 3 North Region Hazardous Waste Office Post Office Box 911 Marysville, California 95901

Subject:

HIGHWAY 50 BRIDGE SITES LATROBE ROAD UC PM 0.9 CLARKSVILLE ROAD UC PM 1.7 BASS LAKE ROAD UC PM 3.23 CAMERON PARK UC PM 6.57 EL DORADO COUNTY, CALIFORNIA CONTRACT NO. 43A0012 TASK ORDER NO. 03-3A7100-CR ASBESTOS AND LEAD-BASED PAINT SURVEY REPORT

Dear Ms. Beyer:

In accordance with California Department of Transportation (Caltrans) Contract No. 43A0012 and Task Order (TO) No. 03-3A7100-CR, Geocon Environmental Consultants, Inc. is pleased to submit this Asbestos and Lead-Based Paint Survey Report for the subject bridge sites. This report summarizes the services performed by Geocon's subcontracted asbestos consultant, HB&T Environmental Inc., including a survey for asbestos containing materials (ACMs) and lead-based paint.

# PROJECT LOCATIONS AND PROPOSED IMPROVEMENTS

The project includes four bridges along Highway 50 in El Dorado County, California. The bridges include both eastbound and westbound undercrossing (UC) structures at Latrobe Road (Br. 25.71 R/L), Clarksville Road (Br. 25.72 R/L), Bass Lake Road (Br. 25-73 R/L), and Cameron Park (Br. 25-84 R/L). The approximate bridge locations are depicted on the attached Project Location Map, Figure 1.

Proposed construction will consist of widening the subject bridges approximately 4.9 meters to the inside in both westbound and eastbound directions. Construction will include removing and replacing joint seals, assemblies, guardrail bridge railings as required. The proposed work will be within the existing pavement limits and will be done from the top of the bridge. The approximate bridge structure boundaries are depicted on the attached Site Plans, Figures 2 through 5.

### PURPOSE AND PROJECT SCOPE

The purpose of the scope of work included in the TO Workplan prepared by Geocon dated November 15, 1999 was to survey the bridge structures to determine the potential presence and quantity of ACMs and lead-based paint within the proposed construction areas. Outlined below is a summary of the scope of services performed pursuant to the subject TO No. 03-3A7100-CR.

### **Pre-Field Activities**

- Conducted a TO meeting via telephone on November 2, 1999 with Ms. Alicia Beyer with Caltrans, Mr. John Juhrend with Geocon, and Mr. Tim Hoppe with HB&T to review the proposed scope of work. The project Completion Schedule and Notice To Proceed were subsequently signed by the Caltrans and Geocon project managers.
- Prepared an Asbestos Survey Workplan dated November 15, 1999, describing the requested scope of services, quality assurance/quality control (QA/QC), and sampling and laboratory procedures.
- Prepared a *Health and Safety Plan* dated November 12, 1999 to provide guidelines on the use of personal protective equipment and the health and safety procedures to be implemented during the survey activities.
- Retained the services of HB&T, a California licensed and Caltrans approved subcontractor to perform the asbestos surveys and analytical testing services. Mr. Tim Hoppe, a current Asbestos Hazard Emergency Response Act Certified Asbestos Consultant and California Department of Health Services certified lead-based paint sampler, performed the bridge surveys.

### **Field Activities**

Forty-one (at least 10 from each bridge) material samples were obtained from the bridge structures on December 3, 6 and 7, 1999. The samples were obtained from the joint seals, joint filler material and guardrail bearing-pad shims using a core drill. Painted bridge components were not observed during the bridge surveys and therefore paint chip samples were not obtained. QA/QC procedures were provided during the asbestos survey activities including providing chain-of-custody documentation for each sample transferred to the laboratory. The approximate sample locations are depicted on the attached Site Plans, Figures 2 through 5.

### Laboratory Analyses and Results

The bridge material samples were analyzed for asbestos type and content per Environmental Protection Agency Test Method 600/m4-82-020, polarized light microscopy. Caltrans requested standard ten-day turn-around-time laboratory analyses for bridge material samples collected pursuant to the subject TO No. 03-3A7100-CR.

Asbestos was detected in 18 guardrail bearing-pad shim samples (six per bridge) obtained from the Latrobe Road UC, Clarksville Road UC and Bass Lake Road UC at a concentration of 70% per sample. Asbestos was detected in five guardrail bearing-pad shim samples, and two sheet packing samples obtained from the Cameron Park UC at a concentration of 70% per sample. Asbestos was not detected in the remaining samples from these bridges. Copies of the laboratory reports and chain-of custody documentation are attached.

### CONCLUSIONS AND RECOMMENDATIONS

The existing guardrail bearing-pad shims at the Latrobe Road UC, Clarksville Road UC, Bass Lake Road UC and Cameron Park UC, will require removal and disposal by a licensed and certified asbestos abatement contractor in conjunction with the planned bridge renovation work. In addition, sheet packing observed at the Cameron Park UC will also require abatement. For preliminary planning purposes only, the asbestos content, ACM present condition, estimated quantity and approximate abatement costs for each bridge are shown below.

Location and Type	Sample	Asbestos	Present	Estimated	Estimated
	Numbers	Content	Condition	Quantity	Abatement
				(Square Meters,	Cost
				Square Feet)	
Latrobe Road UC	1-A, 1-B, 3-B,	70%	Fair, Non-	0.37 (3.9)	\$1,200
Guardrail Shim	4-B, 5-B, 6-B	Chrysotile	Friable,		
			Category II		
Clarksville Road UC	1-B, 2-B, 3-B,	70%	Fair, Non-	0.52 (5.6)	\$1,200
Guardrail Shim	4-B, 5-B, 6-B	Chrysotile	Friable,		
			Category II		
Bass Lake Road UC	5-B, 6-B, 7-B,	70%	Fair, Non-	0.68 (7.3)	\$1,200
Guardrail Shim	8-B, 9-B, 10-B	Chrysotile	Friable,		
			Category II		
Cameron Park UC	2-B, 5-B	70%	Fair, Non-	3.0 (32)	\$1,500
Sheet Packing		Chrysotile	Friable,		
Ŭ		·	Category II		
Cameron Park UC	4-B, 8-B, 9-B,	70%	Fair, Non-	0.7 (7.5)	\$1,200
Guardrail Shim	10-B, 11-B	Chrysotile	Friable,		
	,	-	Category II		

# TABLE 1SUMMARY OF ACM DATA

The cost estimates shown above are based on one mobilization to each bridge site, the prior removal of guardrail by others, and include permit fees.

### LIMITATIONS

The bridge surveys were conducted in conformance with generally accepted standards of practice for identifying and evaluating ACM in structures. However, ACM may exist in areas of the structure not sampled in conjunction with this TO.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or, the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

If there are any questions concerning the contents of this Report, or if Geocon may be of further service, please contact the undersigned at your convenience.

Sincerely,

GEOCON ENVIRONMENTAL CONSULTANTS, INC.

19 C. 142

Timothy C. Hoppe CAC No. 92-0106 DHS Lead Cert. No. 3968

Reviewed by:

John E. Juhrend, PE, CEG Project Manager

JEJ:sd

(5) Addressee

(1) HB&T, Mr. Tim Hoppe

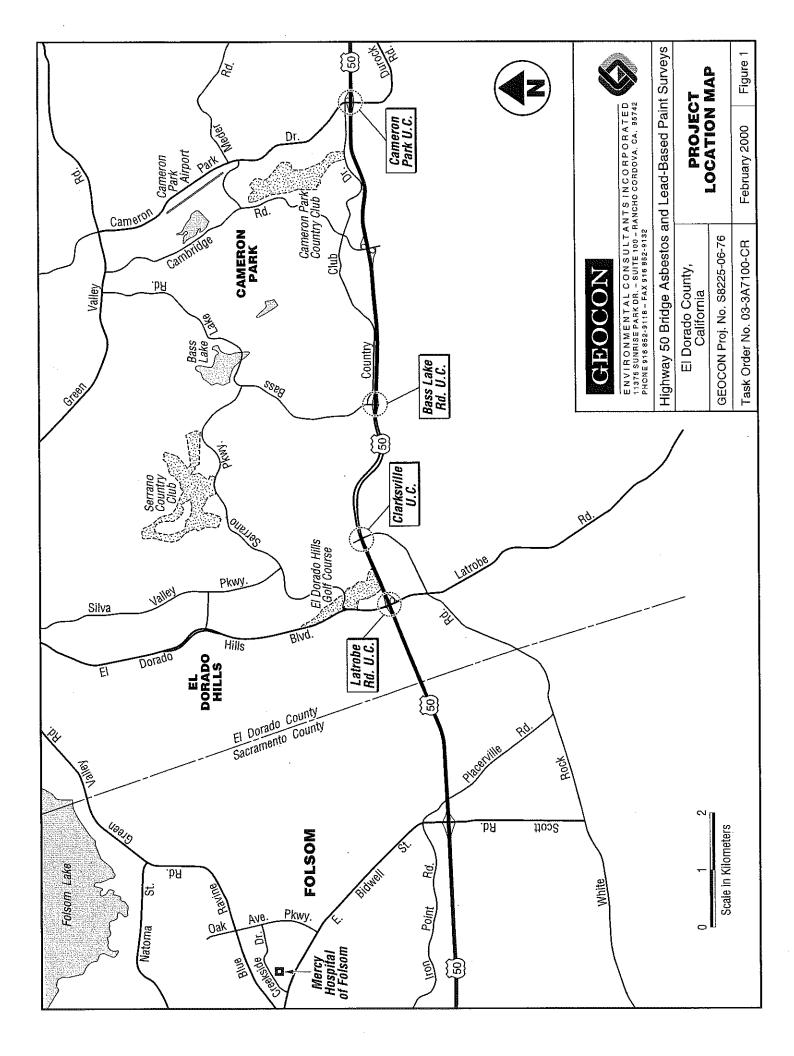
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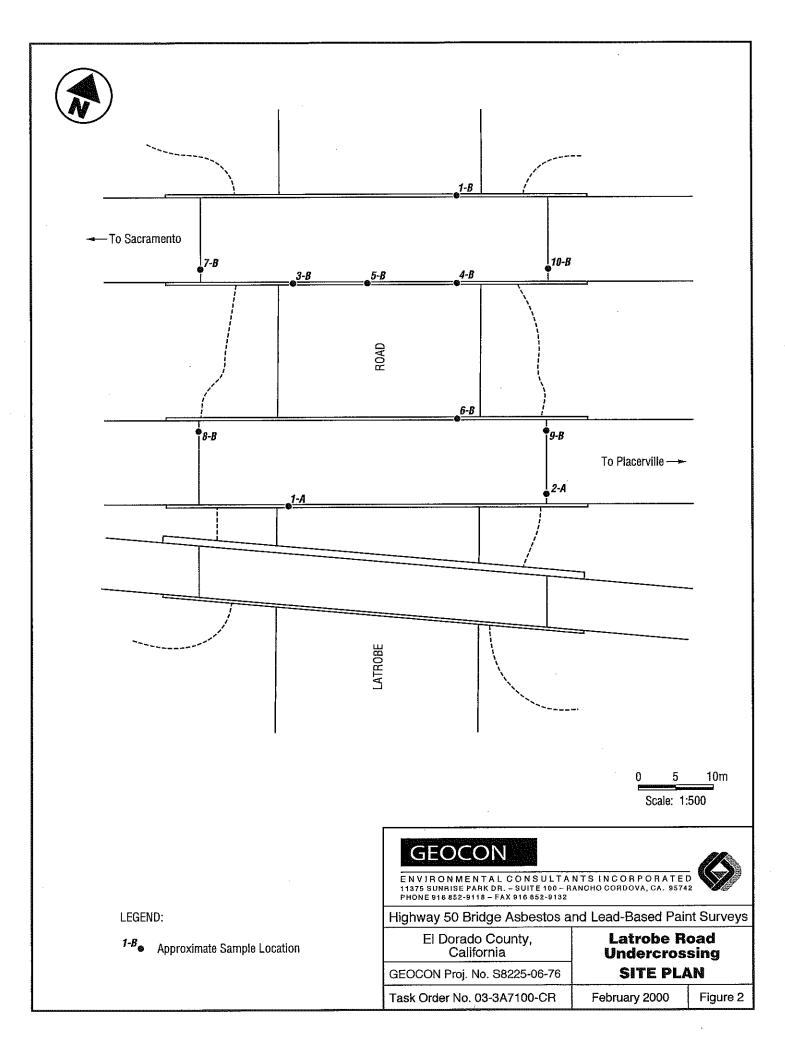
Figure 1, Project Location Map Figure 2, Latrobe Road UC Site Plan Figure 3, Clarksville Road UC Site Plan Figure 4, Bass Lake Road UC Site Plan Figure 5, Cameron Park UC Site Plan Table 1, Summary of Asbestos Analytical Data Laboratory Test Results and Chain of Custody

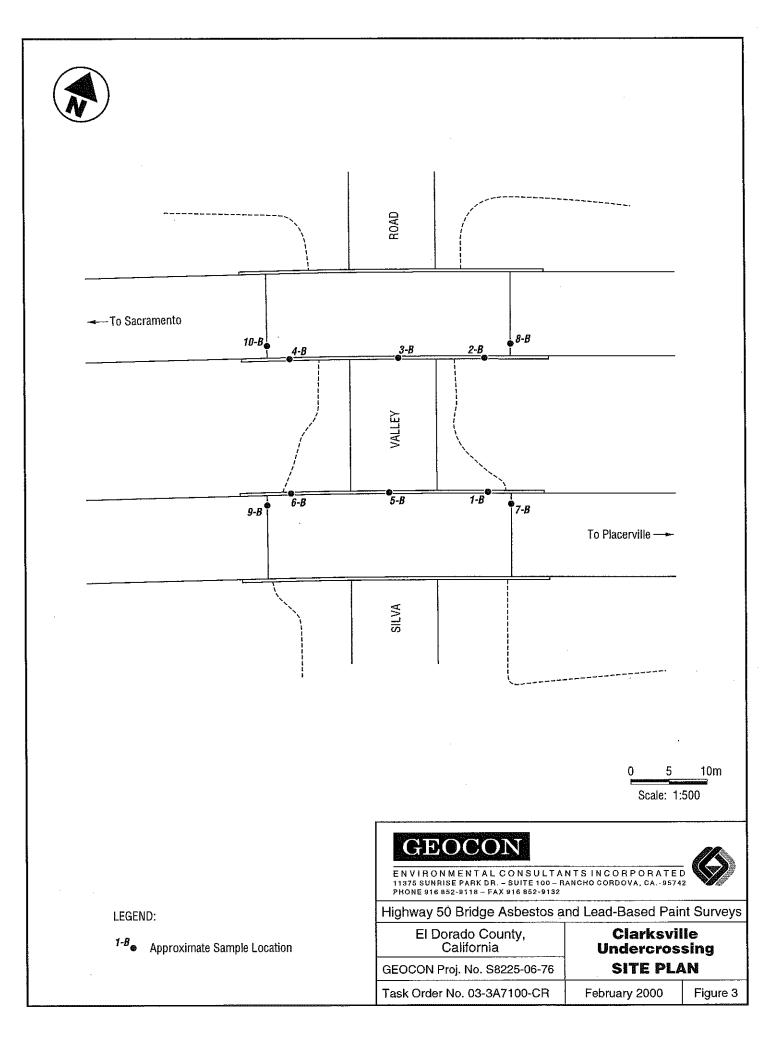
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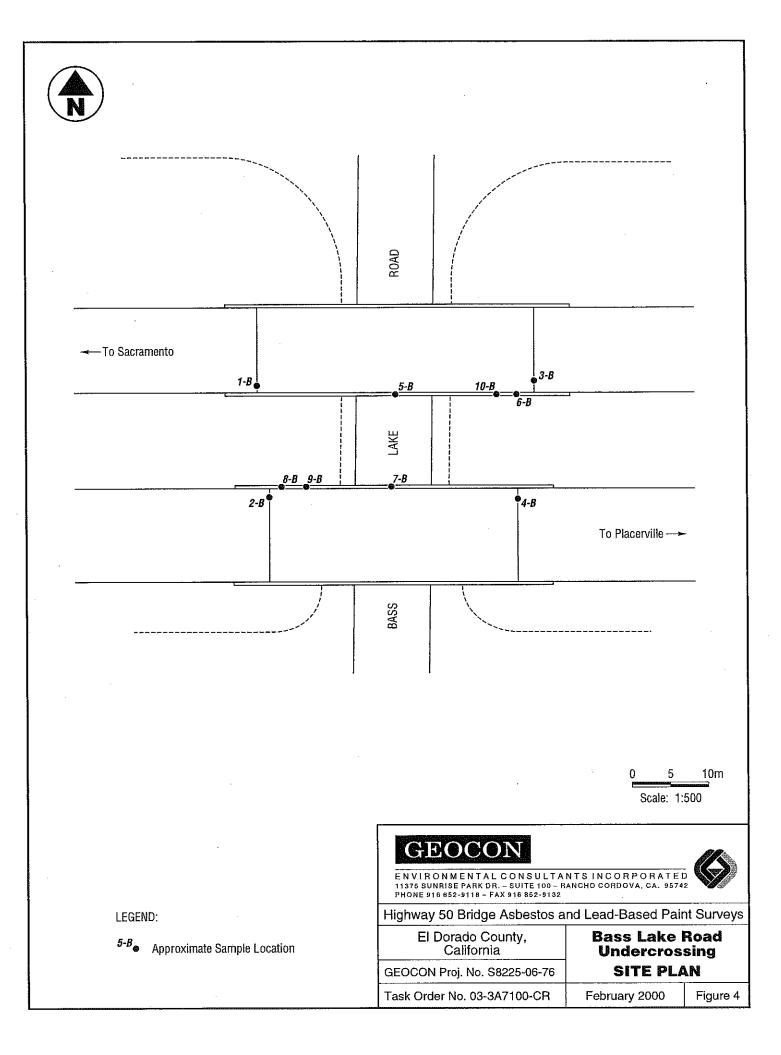
Project Engineer

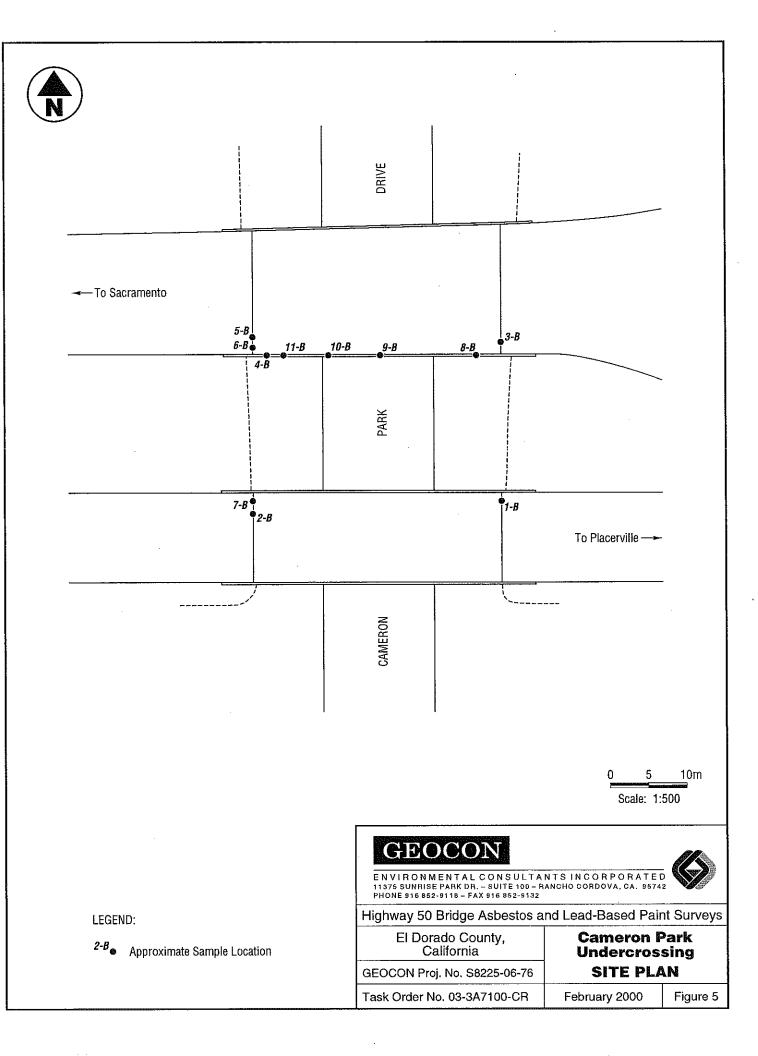












Project No. S8225-06-76 February 3, 2000 Page 1 of 2 TABLE 1 SUMMARY OF ASBESTOS ANALYTICAL DATA

ASBESTOS 8 g ĝ ĝ g Ð Ð ÊÊ Ð g 5 2 70 20 20 5 20 BROWN/BLACK JOINT FILLER GUARDRAIL SHIM, GRAY GUARDRAIL SHIM, GRAY GUARDRAIL SHIM, GRAY GUARDRAIL SHIM, GRAY MATERIAL DESCRIPTION GUARDRAIL SHIM, GRAY BROWN JOINT FILLER **BROWN JOINT FILLER** BROWN JOINT FILLER BROWN JOINT FILLER BROWN JOINT FILLER **BROWN JOINT FILLER** BROWN JOINT FILLER BROWN JOINT FILLER EL DORADO COUNTY, CALIFORNIA WEST END, WESTBOUND SIDE, INSIDE HIGHWAY 50 BRIDGE SITES WEST END, WESTBOUND SIDE, INSIDE WEST END, EASTBOUND SIDE, INSIDE WEST END, EASTBOUND SIDE, INSIDE WEST END, EASTBOUND SIDE, INSIDE EAST END, WESTBOUND SIDE, INSIDE EAST END, WESTBOUND SIDE, INSIDE EAST END, EASTBOUND SIDE, INSIDE WEST END, WESTBOUND SIDE, INSIDE EAST END, EASTBOUND SIDE, INSIDE **EAST END, WESTBOUND SIDE, INSIDE** WEST END, EASTBOUND SIDE, INSIDE EAST END, EASTBOUND SIDE, INSIDE EAST END, WESTBOUND SIDE, INSIDE VEST END, WESTBOUND SIDE, INSIDE WEST END, WESTBOUND SIDE INSIDE EAST END, EASTBOUND SIDE, INSIDE EAST END, WESTBOUND SIDE, INSIDE EAST END, EASTBOUND SIDE INSIDE EAST END, WESTBOUND SIDE INSIDE MIDDLE, WESTBOUND SIDE INSIDE MIDDLE, WESTBOUND SIDE INSIDE MIDDLE, WESTBOUND SIDE INSIDE MIDDLE, EASTBOUND SIDE, INSIDE S.W. GUARDRAIL, SOUTH BRUDGE N.E. GUARDRAIL, NORTH BRIDGE SOUTH BRIDGE BETWEEN SLABS SAMPLE LOCATION CLARKSVILLE RD. UC BASS LAKE RD. UC LATROBE RD. UC ATROBE RD. UC ATROBE RD. UC STRUCTURE SAMPLE 7-B [0-B 3-B S-B Ü. 4ų 2-A 3-B 4-B 5-B 6-B 8-B 9-B 10-B Ч-В 2-B ц Ц 4-B S-B 6-B 7-B 8-B 9-B 1-B 2-B 4-B 6-B

Project No. S8225-06-76 February 3, 2000 Page 2 of 2

TABLE 1 SUMMARY OF ASBESTOS ANALYTICAL DATA

:		EL DORADO COUNTY, CALIFORNIA		
SAMPLE I.D.	STRUCTURE	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS (%)
7-B	BASS LAKE RD. UC	MIDDLE, EASTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
8-B	BASS LAKE RD. UC	WEST END, EASTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
9 <b>-B</b>	BASS LAKE RD. UC	WEST END, EASTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
10-B	BASS LAKE RD. UC	EAST END, WESTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
1-B	CAMERON PARK UC	EAST END, EASTBOUND SIDE, INSIDE	BROWN JOINT FILLER	QN
2-B	CAMERON PARK UC	UNDER BRIDGE @ ABUTMENT, WEST END, E.B.	<b>GRAY SHEET PACKING</b>	70
3-B	CAMERON PARK UC	EAST END, WESTBOUND SIDE, INSIDE	BROWN JOINT FILLER	Q
4-B	CAMERON PARK UC	WEST END, WESTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY "UPPER"	70
5-B	CAMERON PARK UC	UNDER BRIDGE @ ABUTMENT, WEST END, W.B.	<b>GRAY SHEET PACKING</b>	70
6-B	CAMERON PARK UC	WEST END, WESTBOUND SIDE, INSIDE	BROWN JOINT FILLER	QN
7-B	CAMERON PARK UC	WEST END, EASTBOUND SIDE, INSIDE	BROWN JOINT FILLER	QN
8-B	CAMERON PARK UC	EAST END, WESTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
9-B	CAMERON PARK UC	MIDDLE, WESTBOUND SIDE INSIDE	GUARDRAIL SHIM, GRAY	70
10-B	CAMERON PARK UC	MIDDLE WEST, WESTBOUND SIDE, INSIDE	GUARDRAIL SHIM, GRAY	70
11-B	CAMERON PARK UC	WEST END. WESTBOUND SIDE. INSIDE	GUARDRAIL SHIM. GRAY	70

.



QuanTEM Set ID: 9912P103074 Date Received: December 8, 1999

Methodology: EPA 600/M4-82-020

Analyzed By: Joe Melton

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

Project: El Dorado County, CA Project Location: Cameron Park U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	1-B	homogeneous	brown joint filler,E-end,E-bd. inside	asbestos not present	cellulose 10%	
2	2-B	homogeneous	gray sheet packing,under,EB W-end	asbestos present chrysotile 70%	N/A	
3	3-B	homogeneous	brown joint filler,E-end,W-bd. inside	asbestos not present	N/A	
4	4-B	homogeneous	gray raii im"upper"W-end,E- inside	asbestos present chrysotile 70%	N/A	
5	5-B	homogeneous	gray sheet packing,under,WB W-end	asbestos present chrysotile 70%	<b>N/A</b>	
6	6-B	homoĝeneous	brown joint filler,W-end,W-bd. inside	asbestos not present	cellulose 10%	
7	7-B	homogeneous	brown joint filler,W-end,E-bd. inside	asbestos not present	cellulose 10%	
8	8-B	homogeneous	gray guard rail shim,E-end,W-bd. inside	asbestos present chrysotile 70%	N/A	

J. melta

Reviewed and Approved

December 8, 1999

` Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and FJ. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.



QuanTEM Set ID: 9912P103074 Date Received: December 8, 1999

Client: HB&T Environmental, Inc. Account Number: A103

Project: El Dorado County, CA Project Location: Cameron Park U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
9	9-B	homogeneous	gray guard rail shim,middle,W-bd. inside	asbestos present chrysotile 70%	N/A	· · · · · · · · · · · · · · · · · · ·
10	10-B	homogeneous	gray guard rail shìm,middle W,W-bd. inside	asbestos present chrysotile 70%	N/A	
11	11-B	homogeneous	gray guard rail shim,W-endW-bd. inside	asbestos present chrysotile 70%	N/A	

Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.

#### Analyzed By: Joe Melton Methodology: EPA 600/M4-82-020

# Polarized Light Microscopy Asbestos Analysis Report

Pageof	Image: Service
Asbestos Chain-of-Custody Form 2033 Horitage Park Drive, Oktahoma City, OK 73120 (800) 822-1650 (405) 755-7272 Fax (405) 755-2058	Compary Name. Hast Environmentel. Inc.       Compary Name. Hast Environmentel. Inc.       Project Location.       Pro

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QuanTEM Set ID: 9912P103071 Date Received: December 8, 1999

Methodology: EPA 600/M4-82-020

Analyzed By: Allen Clark

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

### Project: El Dorado County, CA Project Location: Bass Lake Rd. U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	1-B	homogeneous	brown joint filler, W-end, W-bd. inside	asbestos not present	N/A	
2	<b>2-B</b>	homogeneous	brown joint filler, W-end,E-bd, inside	asbestos not present	N/A	
3	3-B	homogeneous	brown joint filler, E-end,W-bd. inside	asbestos not present	N/A	
4	4-B	homogeneous	brown joint filler, E-end,E-bd. inside	asbestos not present	N/A	
5	5-B	homogeneous	gray guard rali shim, middle-W bd. side	asbestos present chrysotile 70%	N/A	
6	6-B	homogeneous	gray guard rail shim,E-end,W-bd. inside	asbestos present chrysotile 70%	N/A	
7	7-B	homogeneous	gray guard rail shim,middle,E-bd inside	asbestos present chrysotile 70%	N/A	
8	8-B	homogeneous	gray guard rail shim,W-end,E-bd inside	asbestos present chrysotile 70%	N/A	
9	9-B	homogeneous	gray guard rail shim,W-end,E-bd inside	asbestos present chrysotile 70%	N/A	

alle Chi

Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5μ" refer to the structures whose length is from 0.5μm to 4.9μm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.



QuanTEM Set ID: 9912P103071 Date Received: December 8, 1999

Methodology: EPA 600/M4-82-020

Analyzed By: Allen Clark

Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

Project: El Dorado County, CA Project Location: Bass Lake Rd. U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
10	10-B	homogeneous	gray guard rail shim,E-end,W-bd inside	asbestos present chrysotile 70%	N/A	

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Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory. HOS OLABINO SOFA



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Asbestos Chain-of-Custody Form 2033 Heritage Park Drive, Oklahoma City, OK 73120 (800) 822-1650 (405) 755-7272 Fax (405) 755-2058

Company Name: HB&T Environmental, Inc.

Bess Leve Rd. U.C. Project Location:

Project El Dovado Count Project Number: 3215,99

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I Analytical Service

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QuanTEM Set ID: 9912P103073 Date Received: December 8, 1999

### Analyzed By: Joe Melton Methodology: EPA 600/M4-82-020

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

Project: El Dorado County, CA Project Location: Clarksville Rd. U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	1-B	homogeneous	gray guardrail shim,E-end,E-bd. inside	asbestos present chrysotile 70%	N/A	
2	2-B	homogeneous	gray guardrail shim,E-end,W-bd. inside	asbestos present chrysotile 70%	N/A	
3	3-В	homogeneous	gray guardrail shim,middle,W-bd. inside	asbestos present chrysotile 70%	<b>N/A</b>	
4	<b>4</b> -B	homogeneous	gray guard rail shim,W-end,W-bd. inside	asbestos present chrysotile 70%	N/A	
5	5-B	homogeneous	gray guard rail shim,middle,E-bd. inside	asbestos present chrysotile 70%	N/A	
6	6-B	homogeneous	gray guard rail shim,W-end,E-bd. inside	asbestos present chrysotile 70%	N/A	
7	7-B	homogeneous	brown joint filler,E-end,E-bd. inside	asbestos not present	cellulose 10%	
8	_ 8-B	homogeneous	brown joint filler,E-end,W-bd. inside	asbestos not present	cellulose 10%	

Ja melt

Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.



QuanTEM Set ID: 9912P103073 Date Received: December 8, 1999

Analyzed By: Joe Melton Methodology: EPA 600/M4-82-020

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

### Project: El Dorado County, CA Project Location: Clarksville Rd. U.C. Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
9	9-B	homogeneous	brown joint filler,W-end,E-bd. inside	asbestos not present	cellulose 10%	
10	10-B	homogeneous	brown joint filler,W-end,W-bd. inside	asbestos not present	cellulose 10%	

**Reviewed and Approved** 

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.

E Analytical Service • Average elemence semples munit consist of 8 milds, 5 outsids, and 3. black samples corected on 0.45 micron 25mm MCE illiars with a minimum volume of 600 L Dust- Cuentative [ fibers / eq. om ] (ASTM D6766) Weeke Weter (EPA 800/4-83-043) X Bulk Anelysis (EPA coor-cor158) б Requested Buft - Quantitative [weight % ] [Cinatheig) Butk - Quettathe (Yes / No) (EPA 800/R-POM 18) Dust- Qualitative (Nes / No) Drinking Water (EPA 100.2) **Quentitutive Point Counting** Ar - AHERA clearance TEN PLIM AIT - MOSH 7402 PCW Page\_ <u>|4-10</u> 0072 HBCHN Telephone number. Report meeting lor, ja O Fox Number Other Other جاجدكنا u Sid Sed. ېن ۲ SH< Turber Asbestos Chain-of-Custody Form J (800) 822-1860 (405) 755-7272 Fax (405) 755-2058 2033 Heritage Park Drive, Oklahoma City, OK 73120 24 10 Commente El Darade County Ý Esthourd; Westhere We Home KST bain Hoeras ast bound Ne 5thour. lest hourd Ex Alaine Eathown The Dur Dere Due: **Umeround** Project Number. 3215.99 12.8.91 mone Volume / Anne (if applicable) TIMerDelle Eastend Fasterd Wegen le Steid KHEN Easten Last en )cf cha N'A Brendy 04 Project 4220 N. Santa Fe Ave.. Oklahoma City, OK 73105 (Mark package "HOLD FOR PICKUP) 1 2 2 2 2 Guardwil Shim, Bray Cdar / Description シゴ A Particular Sucina Voint ( Company Name: HB&T Environmental, Inc. N θ LABORATORIES 5 Į Clarksville Rd TmeiDele 5:00 year EI To Be Anetyzed ã Saturday FedEx Shipping: (Use for FedEx only) Sample ID Number Project Location: N N N 0 ļ  $\mathcal{L}'$ ) 10 ľ <u>~</u>~ 1 ł Pelingulahad By Relinquished By 12 2

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QuanTEM Set ID: 9912P103072 Date Received: December 8, 1999

Methodology: EPA 600/M4-82-020

Analyzed By: Joe Melton

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

### Project: El Dorado County, CA Project Location: Latrobe Rd. U.C Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	1-A	homogeneous	gray pad, SW guard rail, S bridge	asbestos present chrysotile 70%	N/A	
2	1-B	homogeneous	gray pad, NE guard rail, S bridge	asbestos present chrysotile 70%	N/A	
3	2-A	homogeneous	brown/black joint filler, S bridge	asbestos not present	cellulose 10%	
4	3-B	homogeneous	gray guardrail shim, W-end,W-bd. inside	asbestos present chrysotile 70%	N/A	
5	4-B	homogeneous	gray guardrail shim, E-end,W-bd. inside	asbestos present chrysotile 70%	N/A	
6	5-B	homogeneous	gray guardrail shim, middle,W-bd. inside	asbestos present chrysotile 70%	N/A	
7	6-B	homogeneous	gray guardrail shim,E-end,E-bd. inside	asbestos present chrysotile 70%	N/A	
8	7-B	homogeneous	brown joint filler, W-end,W-bd. inside	asbestos not present	cellulose 10%	
9	8-B	homogeneous	brown joint filler, W-end,E-bd. inside	asbestos not present	cellulose 10%	
10	9-B	homogeneous	brown joint filler, E-end,E-bd. inside	asbestos not present	cellulose 10%	

Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.

Page   of	J Analytical Service Requested TEM	Air - AHERA olearance*       Air - TEM       Air - TEM       Air - TEM       Air - NiCSH 7402       Buik - Guaitlative [Yes / No]       (EPA 600/R-32/116)       Buik - Quantilative [weight % ]       (ChaitPoid)       Duet - Quantilative [weight % ]       (ChaitPoid)       Duet - Quantilative [Yes / No]       Duet - Quantilative [FPA 600/4-83-043)       Other       AMERA clearance asimples with a minimum volume of 680 L.       Almate, 5 outatide, and 3 blank samples collected on 0.45 micron 25mm MCE filtera with a minimum volume of 680 L.       PLM       Nucer       Outer       PLM       NuCBH 7400       Outer	Other Report reaults to: Telephone number:
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QuanTEM Set ID: 9912P103072 Date Received: December 8, 1999

Analyzed By: Joe Melton Methodology: EPA 600/M4-82-020

# Polarized Light Microscopy Asbestos Analysis Report

Client: HB&T Environmental, Inc. Account Number: A103

Project: El Dorado County, CA Project Location: Latrobe Rd. U.C Project No.: 3215.99

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
11	10-B	homogeneous	brown joint filler, E-end,W-bd. inside	asbestos not present	celiulose 10%	

Reviewed and Approved

December 8, 1999

Date

Note: Structures denoted as being "<5µ" refer to the structures whose length is from 0.5µm to 4.9µm. QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. 1 (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report shall not be reproduced except in full, without the written approval of the laboratory.

APPENDIX

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15312 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampl Date	ed )Time	Matrix			
B1,3,5,7-0	Ian Stevenson		11/26	/07a	Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	110	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15313 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B1,3,7-1	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	Not Detected	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15314 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B1,3,7-2	Ian Stevensor	ian Stevenson			Solid		==================	
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	2.3	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15315 06247 Order: HWY 50 SI/S9300-06-22 Phase 1 Project: 11/29/07 Received: Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix 			
B2,4,6,8-0	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	32	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15316 Order: 06247 Project: Highway 50 SI/S9300-06-22 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date a		Matrix			
B2,4,6,8-1 Analyte	Ian Stevenson		11/26/0	11/26/07a				
	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
рН Lead	7.1 Not Detected	0.1 1	1 2	pH units mg/Kg	EPA 9045 EPA 6020	12/12/07 12/06/07	12/05/07	2447 2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15317 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matríx 			
B2,4,6,8-2	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	Not Detected	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15318 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B9,11,13,15-0 ====================================	Ian Stevenson	Ian Stevenson			Solid			
	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	27	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15319 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
39,11,13,15-1	Ian Stevenson	11/26/0	7a	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	17	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15320 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B9,11,13,15-2 Analyte	Ian Stevensor	Ian Stevenson			Solid			
	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	9.3	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15321 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled Date ລ		Matrix				
B10,12,14-0	Ian Stevenson	11/26/0	7a	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	73	 1 	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2382

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15322 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B10,12,14-1	Ian Stevenso	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	9.7	 1 	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15323 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ର 		Matrix			
======================================	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	 Method	Date Analyzed	Date Prepared	Batch
Lead	150	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15324 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By Itan Stevenson			Matrix			
B21,23,25,27-0	Ian Stevensor				Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	16	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15325 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ຝ		Matrix			
B21,23,25,27-1	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	3.9	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15326 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ଜ		Matrix			
B21,23,25,27-2	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
рН Lead	7.0 1.3	0.1 1	1 2	pH units mg/Kg	EPA 9045 EPA 6020	12/12/07 12/06/07	12/05/07	2447 2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15327 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description				Time	Matrix			
B22,24,26,28-0	Ian Stevensor	11/26/0	11/26/07a					
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	31	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15328 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled Date ຝີ		Matrix				
B22,26,28-1	Ian Stevenson	11/26/0	11/26/07ລ					
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	33	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15329 06247 Order: Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sampled By Date @ Time Matrix	========
Ian Stevenson         11/26/07a         Solid	2222222
Result DLR Dilution Units Method Date Date Factor Analyzed Prepare	Batch
4.1 1 2 mg/Kg EPA 6020 12/06/07 12/05/0	7 2385
4.1 1 2 mg/Kg EPA 6020 12/06/07	12/05/0

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15330 Order: 06247 HWY 50 SI/S9300-06-22 Phase 1 Project: Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By			Time	Matrix				
B29,31,33,35-0	Ian Stevenson	11/26/0	11/26/07a		<b>بو بو بو</b>				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch	
Lead	19	1	2	mg/Kg	ЕРА 6020	12/06/07	12/05/07	2385	

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15331 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sampled By	Sampled Date ລ		Matrix				
Ian Stevensor	Ian Stevenson			Solid			
Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
23	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2385
	Ian Stevensor Result	Ian Stevenson Result DLR	Sampled By Date a Ian Stevenson 11/26/0 Result DLR Dilution Factor	Sampled By Date @ Time Ian Stevenson 11/26/07@ Result DLR Dilution Units Factor	Sampled By     Date @ Time     Matrix       Ian Stevenson     11/26/07@     Solid       Result     DLR     Dilution     Units       Factor     Factor	Sampled By     Date @ Time     Matrix       Ian Stevenson     11/26/07@     Solid       Result     DLR     Dilution     Units       Factor     Analyzed	Sampled By     Date @ Time     Matrix       Ian Stevenson     11/26/07@     Solid       Result     DLR     Dilution     Units     Method     Date     Date       Factor     Analyzed     Prepared

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15332 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled Date ລ		Matrix				
B31,35-2	Ian Stevenson	11/26/0	7a	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	1.4	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15333 Order: 06247 HWY 50 SI/S9300-06-22 Phase 1 Project: Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date a		Matrix			
830,32,34-0	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
рН	7.0	0.1	1	pH units	EPA 9045	12/12/07		2447
Lead	36	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15334 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By			Time	Matrix			
B30,32,34-1	Ian Stevenson		11/26/0	7a	Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	23	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15335 Order: 06247 HWY 50 SI/S9300-06-22 Phase 1 Project: 11/29/07 Received: Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By  Ian Stevenson			Matrix				
B30,32-2	Ian Stevenson				Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch	
Lead	Not Detected	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387	

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15336 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ຝ		Matrix			
B36,37,38,39-0	Ian Stevenson	11/26/0	7a	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	24	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15337 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By = ==================================			Matrix			
B36,37,38,39-1 	Ian Stevensor				Solid			
	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	32	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15338 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By == =================================			Matrix			
B36,37,38,39-2	Ian Stevensor				Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	1.3	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15339 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled Date ລ		Matrix				
======================================	Ian Stevenson	11/26/0	11/26/07a					
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	14	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15340 06247 Order: Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By Da			Time	Matrix			
B40,41,42-1	Ian Stevenson	11/26/0	7a 	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	20	1	2	mg/Kg	EPA 6020	12/13/07	12/11/07	2510

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742

Log Number: 07-C15341 Order: 06247 HWY 50 SI/S9300-06-22 Phase 1 Project: 11/29/07 Received: Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By C			Matrix			
B40,41,42-2	Ian Stevenson	11/26/0	7a 	Solid			=======	
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	Not Detected	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2387

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15342 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

	Sampled By	Date 🗃	Time	Matrix				
B43,44,45-0	Ian Stevenson	11/26/0	7a	Solid				
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	140	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2389

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15343 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
======================================	Ian Stevenso	Ian Stevenson			Solid			
	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead	8.9	1 	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2389

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15344 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled Date ລ		Matrix				
B43-2	Ian Stevenson	Ian Stevenson			Solid			
Analyte	Result	DLR	Dilution Units Factor		Method	Date Analyzed	Date Prepared	Batch
Lead	Not Detected	1	2	mg/Kg	EPA 6020	12/06/07	12/05/07	2389

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15345 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

## REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By 			Matrix			
 PC-1 (Paint Chip)	Ian Stevenson				Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Chromium Lead	4.1 4.6	1 1	2 2	mg/Kg mg/Kg	EPA 6020 EPA 6020	12/12/07 12/06/07	12/11/07 12/05/07	2515 2389

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C15346 Order: 06247 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 11/29/07 Printed: 12/13/07

# REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By	Sampled By Ian Stevenson			Matrix			
PC-4 (Paint Chip)	Ian Stevenson				Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Chromium Lead	180 450	1	2 2	mg/Kg mg/Kg	EPA 6020 EPA 6020	12/12/07 12/06/07	12/11/07 12/05/07	2515 2389

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

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Quality Control Results

Page 36

Order No.: 06247 Laboratory Reagent Blank

Analyte	Method	Results	Units	Batch
Lead	EPA 6020	< 1	mg/Kg	2382
Lead	EPA 6020	< 1	mg/Kg	2385
Lead	EPA 6020	< 1	mg/Kg	2387
Lead	EPA 6020	< 1	mg/Kg	2389
Lead	EPA 6020	< 1	mg/Kg	2510
Lead	EPA 6020	< 1	mg/Kg	2510
Lead	EPA 6020	< 1	mg/Kg	2510
Lead	EPA 6020	< 1	mg/Kg	2510
Lead	EPA 6020	< 1	mg/Kg	2510

Laboratory Known Analysis (LCS)

Analyte	Method	Recovery	Spike Amount	Units Re	covery Limits	Batch
рН	EPA 9045	100%	7.0	pH units	90 - 110	2447
Chromium	EPA 6020	94%	73	mg/Kg	60 - 140	2515
Lead	EPA 6020	92%	130	mg/Kg	60 - 140	2382
Lead	EPA 6020	94%	130	mg/Kg	60 - 140	2510

Matrix Spike/Matrix Spike Duplicates

		MS	MSD	Matrix	Spike			RPD	
Analyte	Method	Rec.	Rec.	RPD Sample	Amount	Units	Recovery Limits	Limit	Batch
Chromium	EPA 6020	95%	95%	0 07-C15424	50	mg/Kg	60 - 140	30	2515
Lead	EPA 6020	78%		07-C15320	50	mg/Kg	60 - 140	30	2385
Lead	EPA 6020	86%		07-c15330	50	mg/Kg	60 - 140	30	2385
Lead	EPA 6020	51%		07-C15340	50	mg/Kg	60 - 140	30	2389
Lead	EPA 6020	70%		07-c15350	50	mg/Kg	60 - 140	30	2389
Lead	EPA 6020	51%		07-c15375	50	mg/Kg	60 - 140	30	2510
Lead	EPA 6020	82%		07-C15386	50	mg/Kg	60 - 140	30	2510
Lead	EPA 6020	31%		07-c15394	50	mg/Kg	60 - 140	30	2510
Lead	EPA 6020	59%		07-C15340	50	mg/Kg	60 - 140	30	2510

Sample Duplicate

Analyte	Method	Sample ID	Sample Value	Sample Duplicate	RPD	Units	RPD Limit	Batch
рН	EPA 9045	07-015360	6.9	6.9	0	p∦ units	10.	2447
Lead	EPA 6020	07-015321	73	62	16	mg/Kg	30.	2382
Lead	EPA 6020	07-015331	23	18	25	mg/Kg	30.	2385
Lead	EPA 6020	07-c15341	< 1	< 1	0	mg/Kg	30.	2387
Lead	EPA 6020	07-c15351	2.1	1.6	27	mg/Kg	30.	2389
Lead	EPA 6020	07-C15376	46	32	37	mg/Kg	30.	2510
Lead	EPA 6020	07-015385	< 1	< 1	0	mg/Kg	30.	2510
Lead	EPA 6020	07-c15393	32	32	2	mg/Kg	30.	2510

Creek Environmental Laboratories, Inc.	al Lab	oratories, I	inc.	Cha	Unam-ot-Cu	-Custody	
141 Suburban Road, Suite C-5, San Luis Obispo, CA 93401 phone (805)	401 phone (805)	545-9838 fax (805) 545-0107 www.creeklabs.com sales@creeklabs.com	7 www.creeklabs.com	sales@creeklab		Order # $Ub \neq 4/L$	
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Client Name Geocon Consultants	Contac	Contact – Ian Stevenson	Phone 916-852-9118	52-9118	Due Date: 24Hr 48Hi	r Other Normal TAT	
Address City City 3160 Gold Valley Drive #800 Rancho Cordova		State CA Zip CA 95742	Fax916-852-9132	1132	Cell 916-869-4308 Beeper	59-4308	
ay 50 SI/			PO#		Copies To:		
Bill to: (if different from above)	Address		City		State	Zip	
Sampler Name (Print) Ian Stevenson	Comments:	Phase I			Matrix Key: DW AQ = Aqueous	Matrix Key: DW = Drinking Water AQ = Aqueous SL = Soil/Solid	
Sample Description	Date/Time Sampled	Analysis	2	# of Matrix Bottles PI	Preservative / Type Bottles	ottles Creek Lab Sample #	
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				s \$4	-8-E	15319	
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Creek Environmental Laboratories,	al Labor	atories, lr	nc.	じ	Chain-of-Custoc	it-Cu	stody
141 Suburban Road, Suite C-5, San Luis Obispo, CA 93401 phone (805) 545-9838 fax (805) 545-0107 www.creekiabs.com sales@creekiabs.com	3401 phone (805) 545-9	)838 fax (805) 545-0107	www.creeklabs.com	sales@creel	dabs.com Or Or	Order #	11790
<ul> <li>Please Print in Pen</li> </ul>					107,	7	3 day
Client Name Geocon Consultants	Contact – la	- lan Stevenson	Phone 916-852-9118	352-9118	Due Date: 24Hr 48	ate: 48Hr Other	Normal TAP
Address City 3160 Gold Vallev Drive #800 Rancho Cordov	State va CA	CA Zip 95742	Fax916-852-9132	9132	Cell 916 Beeper	Cell 916-869-4308 Beeper	
Project Name/Number Highway 50 SI/S9300-06-22			FO#		Copies To:	:0	
Bill to: (if different from above)	Address		City		State	Zip	
Sampler Name (Print) Ian Stevenson	Comments: Dues	46 Z Z			Matrix M AQ = Ac	(ey: DW = D queous SL	<b>Matrix Key:</b> DW = Drinking Water AQ = Aqueous SL = Soil/Solid
Camula Description	Date/Time Sampled Ar	Analvsis		# of Matrix Bottles	Prese	oe Bottles Cre	Creek Lab Sample #
	1	Total lead 60	20B	s S	hore to		5321
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Creek Environmental Lab		oratori	oratories, Inc.	-		Che	lin-(	Chain-of-Custoc	ustody
141 Suburban Road, Suite C-5, San Luis Obispo, CA 93401 phone (805)		i45-9838 fax (80	545-9838 fax (805) 545-0107 www.creeklabs.com sales@creeklabs.com	sreeklabs.com	sales@	creeklat	s.com	Order #	+ 06247
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Client Name Geocon Consultants	Contact -	– Ian Stevenson	Ľ	Phone 916-852-9118	152-911	8	Due Date: 24Hr 48I	ate: 48Hr Other	r (Normal TAT
Address City 3160 Gold Valley Drive #800 Rancho Cordova		State CA 2 CA 9	Zip 95742	Fax916-852-9132	9132		Cell 91 Beeper	6-869	
Project Name/Number Highway 50 SI/S9300-06-22				PO#			Copies To:	s To:	
Bill to: (if different from above)	Address		City				State	Zip	
Sampler Name (Print) Ian Stevenson	Comments:	Ause I			_		Matrix AQ =	Matrix Key: DW = AQ = Aqueous SI	= Drinking Water SL = Soil/Solid
Sample Description	Date/Time Sampled	Analysis		-	# of Matrix Bottles		Preservative / Type Bottles		Creek Lab Sample #
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B30,32 - 2					S	3		42	15335
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Creek Environmental Labo	al Lab	oratories, Inc.	Inc.	. :	S	lain-C	Of-C	ustody	
141 Suburban Road, Suite C-5, San Luis Obispo, CA 93401 phone (805) 545-9838 fax (805) 545-0107 www.creeklabs.com sales@creeklabs.com	1401 phone (805)	545-9838 fax (805) 545-0	)107 www.cre	eklabs.com sal	les@creekl	abs.com	Order is $d_0 \mathcal{F} \iota$	s@creektabs.com Order # $U_{\beta} \mathcal{I}^{4} I$	
Client Name Gencon Consultants	Contact -	t – Ian Stevenson	<b>d</b>	Phone 916-852-9118	-9118	Due Date:	ate: 48Hr Other		
Address City City 3160 Gold Valley Drive #800 Rancho Cordova		State CA Zip CA 95742		Fax916-852-9132	32	ه ما	Cell 916-869-4308 Beeper		-
IY 50 SI/				PO#		Copies To:	To:		
Bill to: (if different from above)	Address		City			State	<u>Zip</u>		
Sampler Name (Print) Ian Stevenson	Comments:	Phase 1				Matrix   AQ = A	Key: DW = queous S	Matrix Key: DW = Drinking Water AQ = Aqueous SL = Soil/Solid	
Samule Description	Date/Time Sampled	Analvsis		Mat	# of Matrix Bottles	Preservative / Ty		Creek Lab Sample #	
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141 SUBURBAN ROAD, SUITE C-5 • SAN LUIS OBISPO, CA 93401 • (805) 545-9838 • FAX (805) 545-0107

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C16193 Order: 06615 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 12/17/07 Printed: 12/31/07

Page 1

#### REPORT OF ANALYTICAL RESULTS

Sampled By		Sampled Date ລ		Matrix		********	
	(#80053555###)	11/26/0	7a	Solid			
Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
2.6	0.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024
	Esene outerseeneese Result	eren outerarenderen eren eren eren eren eren eren e	Sampled By Date @ 11/26/0 Result DLR Dilution Factor	Sampled By Date @ Time 	Sampled By Date @ Time Matrix	Sampled By Date @ Time Matrix T1/26/07@ Solid Result DLR Dilution Units Method Date Factor Analyzed	Sampled By     Date D Time     Matrix       11/26/07D     Solid       Result     DLR     Dilution     Units     Method     Date     Date       Factor     Analyzed     Prepared

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng

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141 SUBURBAN ROAD, SUITE C-5 • SAN LUIS OBISPO, CA 93401 • (805) 545-9838 • FAX (805) 545-0107

Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C16194 Order: 06615 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 12/17/07 Printed: 12/31/07

Page 2

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#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date @ `		Matrix			
B10, 12, 14-0 (15321)			11/26/0	70 2055555555555	Solid			10=====
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead, STLC extract	2.2	0.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

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Lab Director, Michael Ng

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Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C16195 Order: 06615 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 12/17/07 Printed: 12/31/07

Page 3

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date ລ		Matrix			
B12,14-2 (15323)			11/26/0	7a 	Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead, STLC extract	9.6	0.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C16196 Order: 06615 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 12/17/07 Printed: 12/31/07

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date a		Matrix		****	:====33
B43,44,45-0 (15342)			11/26/0	70	Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead, STLC extract	8.0	0.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

Page 4



Page 5 Log Number: 07-C16197 Ian Stevenson 06615 Order: Geocon Consultants HWY 50 SI/S9300-06-22 Phase 1 Project: 3160 Gold Valley Drive #800 Received: 12/17/07 Rancho Cordova, CA 95742 Printed: 12/31/07 REPORT OF ANALYTICAL RESULTS Sampled Date @ Time Matrix Sampled By Sample Description \*\*\*\* ======= Solid 11/27/07a B50,52,54,56-0 (15352) Method Date Date Batch Units DLR Dilution Result Analyte Prepared Analyzed Factor EPA 6020 12/27/07 12/26/07 3024 mg∕i 2.2 0.04 1 Lead, STLC extract -------> \_\_ \_\_\_\_ DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

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Lab Director, Michael Ng



Ian Stevenson Geocon Consultants 3160 Golf Valley Drive Rancho Cordeva, CA 99		O P	og Number rder: roject: eceived:	06615 HWY 50	SI/S9300-06	-22 Phase	e 1	
Kalicho cordeva, ca 3.	5/ 72		rinted:	12/31/				
	REPOR	RT OF ANA	LYTICAL R	ESULTS				
Sample Description	Sampled By	، من النا الذكر الذكر الذكر المراجع م	Sampled Date a 1	ime 	Matrix			
B59,61,63,65-0 (15361)			11/27/07		Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date Prepared	Batch
Lead, STLC extract	6.0	9.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024
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DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Page 6

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Lab Director, Michael Ng

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						Page 7	1.1.1
Ian Stevenson		Log Number:	07-C16	5199		-	200
Geocon Consultants		Order:	06615				
3160 Gold Valley Drive #	¥800	Project:	HWY 50	SI/S9300-06-	-22 Phase	ə 1	
Rancho Cordova, CA 9574	42	Received:	12//17/	07			
		Printed:	12/31/	07			
		. /	1				
	REP	ORT OF ANALYTICAL RE	SULTS				
		Sampled					
Sample Description	Sampled By	Sampled Date ລ Ti	me	Matrix			
Sample Description 366,68,70,72-0 (15364)	Sampled By	<i>.</i>		Matrix  Solid		iszacan cent	
366,68,70,72-0 (15364)		Date @ Til 		Solid	Date		Batch
	Sampled By	Date a Til			Date Analyzed	Date Prepared	Batch

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng



Ian Stevenson Geocon Consultants 3160 Gold Valley Drive #800 Rancho Cordova, CA 95742 Log Number: 07-C16200 Order: 06615 Project: HWY 50 SI/S9300-06-22 Phase 1 Received: 12/17/07 Printed: 12/31/07

Page 8

#### REPORT OF ANALYTICAL RESULTS

Sample Description	Sampled By		Sampled Date @ T	īme	Matrix	*******		
B-93,95,97,99-0 (15387)			11/27/07	0	Solid			
Analyte	Result	DLR	Dilution Factor	Units	Method	Date Analyzed	Date · Prepared	Batch
Lead, STLC extract	2.9	0.04	1	mg/L	EPA 6020	12/27/07	12/26/07	3024

DLR = Detection Limit for Reporting. Results of "Not Detected" are below DLR.

CREEK ENVIRONMENTAL LABORATORIES

Lab Director, Michael Ng

N Stevenson
20# 29300-06-22
City State Zip
Matrix Key: DW = Drinking Water AQ = Aqueous SL = Soil/Solid
# of Analysis Preservative / Type Bottles
STLE PS BL 1 BUSS
5:00 pm FLLANN JUSY WENSLOR Laboratories, Inc.
Bample Condition & Temp Intact W.N. Custody Sealed: Y.N.
Address Iments: Intime An An An An An An An An An An An An An A

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**EMSL** Analytical, Inc

2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577 Phone: (510) 895-3675 Fax: (510) 895-3680 Email: <u>milpitaslab@emsi.com</u>



C	an Stevenson Geocon Consultants 3160 Gold Valley Dr.			Customer ID: Customer PO: Received:	GECN80 S9300-06-22 11/30/07 9:00 AM
	Suite 800 Rancho Cordova, CA	95742	2	EMSL Order:	090707082
Fax: Project:	(916) 852-9132 S9300-06-22, Highway 50 \$	Phone:	(916) 852-9118	EMSL Proj: Analysis Date: Report Date:	03A1368 12/7/2007 12/7/2007

## PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				Non-Asbestos		Asbestos	
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type	
NOA1 COMPOSITE: NOA31-0,32-0,33- 0,34-0,35-0,36-0 090707082-0001	37-0,38-0,39-0,40- 0,41-0,42-0	Brown Non-Fibrous			100.00% Non-fibrous (other)	<0.25% Tremolite	
NOA2 COMPOSITE: NOA31-2,32-2,35- 2,36-2,37-2,38-2 090707082-0002	39-2,40-2,41-2,42-2	Homogeneous Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	<0.25% Tremolite	
NOA3 COMPOSITE: NOA1-0,2-0,3-0,4- 0,5-0,6-0,7-0 090707082-0003	24-0,25-0,26-0,27- 0,28-0,29-0,30-0	Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	<0.25% Tremolite	
NOA4 COMPOSITE: NOA1-2,2-2,3-2,4- 2,6-2,7-2 090707082-0004	25-2,27-2,28-2,30-2	Brown Non-Fibrous			100.00% Non-fibrous (other)	None Detected	
NOA5 COMPOSITE: NOA8-0,9-0,10- 0,11-0,12-0,13-0 090707082-0005	14-0,15-0,21-0,22- 0,23-0,43-0,44-0,45-0	Homogeneous Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	<0.25% Tremolite	
Analyst(s)		_			Baojia Ke, Laborator	v Manager	

	EMSL Analytic 2235 Polvorosa Av Phone: (510) 895-3675	ve , Suite 230, San Lear	adro, CA 94577 ail: <u>milpítaslab@emsl.com</u>		
Attn: lan Ste	venson		Customer ID:	GECN80	
	n Consultants		Customer PO:	S9300-06-22	
Suite 8	old Valley Dr. 00		Received: EMSL Order:	11/30/07 9:00 AM 090707082	
	o Cordova, CA 9	5742			
		Phone: (916) 852-9118	EMSL Proj:	03A1368	
Project: S9300-	06-22, Highway 50 SI		Analysis Date: Report Date:	12/7/2007 12/7/2007	
Sample	435 Prep (Mill	ing) Level A for 0 Appearance	.25% Target Anal <u>Non-Asb</u> % Fibrous	vestos % Non-Fibrous	<u>Asbestos</u> % Type
NOA6 COMPOSITE: NOA8-2,9-2,11- 2,12-2,13-2,14-2	15-2,21-2,22-2,23- 2,43-2	Brown Non-Fibrous		100.00% Non-fibrous (other)	None Detected
990707082-0006		Homogeneous			
		_	-	Jagh-	
and the second states a				Baojia Ke, Laboratory or other approved sig	
product certification, ap Some samples may co	to the samples listed above an oproval, or endorsement by NV intain asbestos fibers below th	LAP, NIST, or any agency of the fede	aral government. EMSL is not respon	I. This report must not be used by the client nsible for sample collection activities or me none detected or less than the limit of detec	thod limitations.

## **EMSL** Analytical, Inc.

2235 Polvorosa Drive, Suite 230, San Leandro, CA 94577 + (510) 895-3675 + sanleandrolab@emsl.com

Client:	Geocon Consultan	ts	EMSL Reference:	090707082
	3160 Gold Valley E	Drive		
	Suite 800		4	
	Rancho Cordova, (	CA 95742	Date Received:	11/30/07
Attention:	lan Stevenson		Date Analyzed:	12/07/07
Fax:	(916) 852-9132	Phone: (916) 852-9118	Date Reported:	12/07/07
Project:	\$9300-06-22, High	iway 50 SI		

Asbestos Analysis of Soil Samples via Modified EPA 600/R-93/116 Method Utilizing Analytical Electron Microscopy (Section 2.5.5.2) with CARB 435 Prep (Milling) Level C for 0.01% Target Analytical Sensitivity

Client Sample ID	EMSL Sample ID	Asbestos Type(s)	# of Asbestos Structures Detected	Analytical Sensitivity %	Asbestos Weight %	Comments
NOA6 COMPOSIT E: NOA8- 2,9-2,11- 2,12-2,13- 2,14-2	090707082-0006	Chrysotile	6	0.01	< 0.01	

pproved EMSL Signatory

EME

EMSL maintains liability limited to cost of analysis. This method requires the laboratory to analyze the sample until the first fiber found compromises 5% of the total mass. Due to the size and mass of different asbestos fibers, the analytical sensitivity will vary between samples and may prevent the laboratory from achieving the target sensitivity on all samples. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL is not responsible for sample collection activities or analytical method limitations. Interpretation and use of results are the responsibility of the client.

90707082 Page 1 of 2



# Chain of Custody

# **Asbestos Lab Services**

EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895-3675 (888) 455-3675 Fax: (510) 895-3680 http://www.emsl.com

Please print all information legibly.

Company:	Geocon Consultants	Bill To:	Geocon Consultants
Address1:	3160 Gold Valley Drive #800	Address1:	3160 Gold Valley Drive #800
Address2:		Address2:	
City, State:	Rancho Cordova, CA	City, State:	Rancho Cordova, CA
Zip/Post Code:	95754	Zip/Post Code	2: 95754
Country:	an a	Country:	
Contact Name:	Ian Stevenson	Attn:	Ian Stevenson
Phone:	916-852-9118	Phone:	916-852-9118
Fax:	916-852-9132	Fax:	916-852-9132
Email:	stevenson@geoconinc.com	Email:	stevenson@geoconinc.com
EMSL Rep:		P.O. Number	
Project Name/Num	iber: Highway 50 SI	59300-0	6-22

MATRIX			TURNAROUND				
🗍 Air	Soil	🗌 Micro-Vac	🗌 3 Hours	🗌 6 Hours	Same Day or 12 Hours*	24 Hours (1 day)	
🗌 Bulk	Drinking Water		2 days)	72 Hours (3 days)	96 Hours (4 days)	120 Hours (5 days)	
Wipe	Wastewater		144+ hours	s (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

\*12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

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PCM - Air		TEM WATER
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	□ NYS 198.2
PLM - Bulk	TEM BULK	TEM Microvac/Wipe
$\Box$ EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	XRD
□ NIOSH 9002:		Asbestos
EMSL Standard Addition:	PLM Soil	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	OTHER
Quantitative	EMSL MSD 9000 Method fibers/gram	x CARB 435
		See following pages for Level
iop and >		for Level

Page 2 of 2

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		<b>Chain of Custody</b>	EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave	
	V.	Asbestos Lab Services	San Leandro, CA 94577 Phone: (510) 895- 3675 (888) 455-3675 Fax: (510) 895-3680	
	lease print all information		http://www.emsl.com Total Samples #: <u>6</u>	
(	Client Sample # (s)		_	
]	Relinquished:	Au Date: 11/28/07	Time: <u>/2.30</u>	
]	Received: URS	Date:	Time:	
J	Relinquished:	Date: 1//30	Time: <u>Mamups</u>	
	Received:	Date:	Time:	-
1		Composite As Indicated.		. 1
1	SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)	Level
é				A
	NOA	NOA31-0, NOA32-0, NOA33-0		
:		NOA 34-0, NOA 35-0, NOA 36-6		
		NO4 37-0, NOA38-0, NOA39-0		
		NOA40-0, NOA41-0, NOA42-0		-
-				- 1º
V	NOA 2	NOA31-2, NOA32-2, NOA35-2,		AE
		NOA 36-2, NOA 37-2, NOA 38-2,		
		NOA 39-2, NOA 40-2, NOA 41-2,		
		NOA 42-2		4
				╺ <del>┨</del> ╶╴
3	NOA 3	NOAL-O, NOA2-O, NOA3-O, NOA4-C		4
	anne anna an a	NOA 5-0, NOA 6-0, NOA 7-0, NOA 24	-0	
		NOA 25-0, NOA 26-0, NOA 27-0, NOA2	8-0	
		NOA 29-0, NOA 30-0		

-

		9070708	2	
	EMSL	Chain of Custody	EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave	
	•	Asbestos Lab Services	San Leandro, CA 94577 Phone: (510) 895- 3675 (888) 455-3675 Fax: (510) 895-3680 http://www.emsl.com	
	Please print all information Client Sample # (s)		Total Samples #: <u>6</u>	
	Relinquished:	Fr Date: 1/28/07	Time: <u>/230</u>	
	Received: QPS	>Date:	Time:	
	Relinquished	Date: 11/30	Time: <u>Manups</u>	
	Received:	Date: Date:	, Time:	
	SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)	Level
Y	NOA 4	NOA1-2, NOA2-2, NOA3-2, NOA4-9,		A
		NOAG-2, NOAT-2, NOA 25-2,		
		NOA27-2, NOA28-2, NOA30-2		
C	NOA 5	NOA8-0, NOA9-0, NOA10-0, NOA11-0, NOA12-0, NOA13-0,		4
		NOAIL-O, NOA12-O, NOA13-O,		
		NOA14-0, NOA15-0, NOA21-0		
		NOA 22-0, NOA 23-0, NOA 43-0		
		NOA44-0, NOA45-0		
_		0		
Ą	NOA 6	NOA8-2, NOA8-2, NOA11-2, NOA2	2	A/c
	anna an	NOA 13-2, NOA 14-2, NOA 15-2, NOA 21.	-2	
	Participanti de la construcción de	NOA22-2, NOA23-2, NOA43-2		
	energen and pagement of the second			

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Attn:	lan Stevenson				
			Customer ID:	GECN80	
	Geocon Consulta	nts	Customer PO:	S9300-06-22	
	3160 Gold Valley I	Dr.	Received:	01/22/08 11:30 AM	<i>j</i>
	Suite 800		EMSL Order:	090800637	
	Rancho Cordova,	CA 95742			
Fax:	(916) 852-9132	Phone: (916) 852-9118	EMSL Proj:	S9300-06-**	
Proiec	t: S9300-06-22, Highway	50 SL Phase 2	•		
i iojec	. 33300-00-22, mgmaay	, 00 01, 1 Hase 2	Analysis Date:	2/4/2008	
			Report Date:	2/4/2008	

### PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				Non	Asbestos	<u>Asbestos</u>
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Туре
NOA1	NOA16-0, 17-0, 18-0,	Gray			100.00% Non-fibrous (other)	None Detected
COMPOSITE	19-0, 20-0, 182-0, 181-0	Non-Fibrous				
090800637-0001	181-0	Homogeneous			and the second se	
NOA2	NOA18-2, 20-2, 182-	Yellow		*****	/100.00% Non-fibrous (other)	None Detected
COMPOSITE	2, 181-2	Non-Fibrous		/		None Deleoled
090800637-0002						
		Homogeneous	<u> </u>		100.00% Non-fibrous (other)	
NOA3	NOA50-0, 51-0, 52-0, 177-0, 178-0, 179-0,	Brown				None Detected
COMPOSITE 090800637-0003	180-0	Non-Fibrous		No and Contraction of		
030000007-0000		Homogeneous				
NOA4	NOA50-2, 51-2, 52-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	177-2, 178-2, 179-2,	Non-Fibrous	•			
090800637-0004	180-2	Homogeneous				
NOA5	NOA53-0, 54-0, 55-0,				100.00% Non-fibrous (other)	None Detected
COMPOSITE	56-0, 174-0, 175-0,	Non-Fibrous				None Detected
090800637-0005	176-0					
		Hømogeneous				
NOA6	NOA55-2, 176-2	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE 090800637-0006		Non-Fibrous				
090800037-0000		Homogeneous				
NOA7	NOA57-0, 58-0, 59-0,	Tan			100.00% Non-fibrous (other)	None Detected
COMPOSITE	60-0, 61-0, 170-0,	Non-Fibrous				
090800637-0007	171-0. 172	Homogonoous				
NOAR	NOA57-2, 58-2, 170-	Homogeneous Tan			100.00% Non-fibrous (other)	Nana Detected
NOA8 COMPOSITE	2, 171-2, 172-2, 173-2	Non-Fibrous				None Detected
090800637-0008	, , .	Non-i bious				
		Homogeneous			106m2	
					N (	
					25	
Ahalyst(s)		_				
Jason Mcgriff (11)					Baojia Ke, Laborator	
Yulia Grozman (8)					or other approved s	signatory
certification, approval, or samples may contain as	r and areamonf by MVLAP_NIST	, or any agency of the federal ( on limit of PLM, EMSL recomm	novernment.	EMSL is not respons	proval. This report must not be used by the clier ible for sample collection activities or method lin ne detected or less than the limit of detection un	ntations, some



#### EMSL Analytical, Inc 2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577 Phone: (510) 895-3675 Fax: (510) 895-3680 Email: milpitaslab@emsl.com

Attn:	lan Stevenson Geocon Consultan 3160 Gold Valley D Suite 800 Rancho Cordova, 6	)r.	Customer ID: Customer PO: Received: EMSL Order:	GECN80 S9300-06-22 01/22/08 11:30 AM 090800637
Fax: Projec	(916) 852-9132 t: S9300-06-22, Highway	Phone: (916) 852-9118 50 SI, Phase 2	EMSL Proj: Analysis Date: Report Date:	S9300-06-** 2/4/2008 2/4/2008

## PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity <u>Non-Asbestos</u> <u>Asbes</u>

				<u></u>	<u>śbestos</u>	<u>Asbestos</u>
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type
NOA9	NOA62-0, 63-0, 64-0,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	167-0, 168-0, 169-0	Non-Fibrous				
090800637-0009		Homogeneous				
NOA10	NOA62-2, 63-2, 64-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	167-2, 168-2, 169-2	Non-Fibrous				
090800637-0010		Homogeneous				
NOA11	NOA65-0, 66-0, 67-0,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	68-0, 162-0, 163-0,	Non-Fibrous				
090800637-0011	164-0. 16	Homogeneous				
NOA12	NOA66-2, 67-2, 68-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	162-2, 163-2, 164-2,	Non-Fibrous				
090800637-0012	165-2.1	Hampforgaug				
NOA13	NOA69-0, 70-0, 71-0,	Homogeneous Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	72-0, 154-0,155-	Non-Fibrous				Noue Defected
090800637-0013	0.160-0.161-0	Non i brodo				
		Homogeneous				
NOA14	NOA69-2, 70-2, 71-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	72-2, 154-2, 156-2, 161-2	Non-Fibrous				
090800637-0014		Homogeneous				
NOA15	NOA73-0, 74-0, 75-0,	Brown	•		100.00% Non-fibrous (other)	None Detected
COMPOSITE	76-0, 151-0, 152-0,	Non-Fibrous				
090800637-0015	157-0	Homogeneous				
NOA16	NOA73-2, 74-2, 75-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	76-2, 151-2, 153-2	Non-Fibrous			. ,	None Selected
090800637-0016						
		Homogeneous				
					A/	
Analyst(s)					12,5	
		***				
Jason Mcgriff (11)					Baojia Ke, Laboratory or other approved sig	
Yulia Grozman (8)					or other approved sig	gnatory
			41- Z dl 1.20	EMC) la unitan	up). This enough crust not he used by the alloyd	lo claim product
certification approval of	r endorsement by NVLAP, NIST	<ol> <li>or any agency of the federal.</li> </ol>	aovernment. El	MSL is not responsible	eval. This report must not be used by the client of or sample collection activities or method limit	ations. Some
samples may contain as	bestos fibers below the resoluti es received in good condition u	on limit of PLM. EMSL recomm	ends that samp	ples reported as none	detected or less than the limit of detection unde	ergo additional
analysis via rew.odmpi	concentred in good contaition d	nees outermas notas.				

PLMPointCount-1

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Attn:	lan Stevenson		Customer ID:	GECN80	
	<b>Geocon Consultar</b>	nts	Customer PO:	S9300-06-22	******
	3160 Gold Valley	Dr.	Received:	01/22/08 11:30 AM	Free Contraction of C
	Suite 800		EMSL Order:	090800637	
	Rancho Cordova,	CA 95742			
Fax:	(916) 852-9132	Phone: (916) 852-9118	EMSL Proj:	S9300-06-**	
Project	: S9300-06-22, Highway	50 SI, Phase 2	Analysis Date:	2/4/2008	
			Report Date:	2/4/2008	

## PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				No	n-Asbestos	<u>Asbestos</u>
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Туре
NOA17	NOA77-0, 78-0, 79-0,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE 090800637-0017	80-0, 147-0,148- 0.149-0.150-0	Non-Fibrous		/		
		Homogeneous				
NOA18	NOA72-2, 78-2, 79-2,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE 090800637-0018	80-2, 147-2,148- 2.149-2.150-2	Non-Fibrous				
		Homogeneous	/			
NOA19	NOA81-0, 82-0, 83-0,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE 090800637-0019	84-0,142-0,143-0,144- 0.146-0	Notin Ibrodo				
	i n mut	Homogeneous	/			
NOA20	NOA81-2, 82-2, 83-2,	Tan			100.00% Non-fibrous (other)	None Detected
COMPOSITE 090800637-0020	84-2, 192-2,193- 2,144-2,146-2	Non-Fibrous				
090800037-0020		Homogeneous				
NOA21	NOA85-0, 86-0, 87-0,	Tan			100.00% Non-fibrous (other)	None Detected
COMPOSITE	88-0, 138-0,139-	Non-Fibrous				
090800637-0021	0.140-0.141-0	hamaaaaa				
	NOA-85-2, 86-2, 87-	Homogeneous			100.00% Non-fibrous (other)	
NOA22 COMPOSITE	2, 88-2,182-2,138-	Tan Non-Fibrous				None Detected
090800637-0022	2.140-2.141-2	NULTINIOUS				
		Homogeneous				
NOA23	NOA89-0, 90-0, 91-0,	Brown			100.00% Non-fibrous (other)	None Detected
COMPOSITE	134-0, 135-0, 136-0, 137-0	Non-Fibrous				
090800637-0023	1.37-0	Homogeneous				
VOA24	NOA89-2, 91-2, 134-	Yellow			100.00% Non-fibrous (other)	<0.25% Chrysotile
COMPOSITE	2, 136-2, 137-2	Non-Fibrous				-
090800637-0024		11				
	***	Homogeneous				
					0 /-	
Analyst(s)		_			13 cm	•
Jason Mcgriff (11)					Baojia Ke, Laborato	
Yulia Grozman (8)					or other approved	signatory

samples may contain as bestos fibers below the resolution limit of PLMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM.Samples received in good condition unless otherwise noted. EMSL Analytical, Inc



2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577 Phone: (510) 895-3675 Fax: (510) 895-3680 Email: <u>milpitaslab@emsl.com</u>

Attn: Ian Stevenson GECN80 Customer ID: **Geocon Consultants** Customer PO: \$9300-06-22 3160 Gold Valley Dr. Received: 01/22/08 11:30 AM EMSL Order: 090800637 Suite 800 Rancho Cordova, CA 95742 Fax: (916) 852-9132 Phone: (916) 852-9118 S9300-06-\*\* EMSL Proj: Project: \$9300-06-22, Highway 50 SI, Phase 2 2/4/2008 Analysis Date: Report Date: 2/4/2008

### PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				<u>Non-A</u>	Asbestos	<u>Asbestos</u>
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Туре
NOA25 COMPOSITE 090800637-0025	NOA46-0, 47-0, 48-0, 49-0	Brown Non-Fibrous Homogeneous	and the second second second second	and the second	100.00% Non-fibrous (other)	None Detected
NOA26 COMPOSITE 090800637-0026	NOA46-2, 47-2, 48-2, 49-2	Yellow Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected
NOA27 COMPOSITE 090800637-0027	NOA187-0, 188-9, 189-0, 190-9	Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected
NOA28 COMPOSITE 090800837-0028	NOA187-2, 188-2, 189-2, 190-2	Gray Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected
NOA183 090800637-0029	Rock chip	Grayish Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected

Analyst(s)

Jason Mcgriff (11) Yulia Grozman (8)

Baojia Ke, Laboratory Manager or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM.Samples received in good condition unless otherwise noted.

THIS IS THE LAST PAGE OF THE REPORT.

# Chain of Custody

# **Asbestos Lab Services**

EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895-3675 (888) 455-3675 Fax: (510) 895-3680 http://www.emsl.com

90800637

Please print all information legibly,

Company	George	Consultants	Ril	To: Geo	con Consultants	etti shiri
Company: Address1:		d Valley Drive #8			) Gold Valley Drive	#800
Address1: Address2:	3100-001	u valley Drive #6		Iress2:	Oold Valley Drive	# <b>U</b> 00
City, State:	Rancho (	ordova, CA		a na grand	cho Cordova, CA	
Zip/Post Code:	95754			Post Code: 957:		
Country:	93734			untry:		······································
Contact Name:	Ian Steve	nson	Att		Stevenson	<u> </u>
Phone:	916-852-	9118	Pho	one: 916	852-9118	
Fax:	916-852-	9132	Fav	c: 916-	-852-9132	
Email:	stevensor	@geoconinc.com	Em	ail: stev	enson@geoconinc.co	m
EMSL Rep:			P.C	). Number:		
Project Name/N	umber: Hidra	un 50.5T	59300-0	16-22 F	luse Z	
	0	1				
	MATRIX			TURN	AROUND	
🗌 Air 🤅	4Soil	🖾 Micro-Vac	3 Hours	6 Hours	Same Day or 12 Hours*	24 Hours (1 day)
🗍 Bulk 🛛	Drinking Water		48 Hours (2 days)	72 Hours (3 days)	96 Hours (4 days)	120 Hours (5 days)
Wipe Wastewater			144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

\*12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

		TIRKS AN A TIPD
PCM - Air		TEM WATER
NIOSH 7400(A) Issue 2: August 1994	AHERA 40 CFR, Part 763 Subpart E	EPA 100.1
OSHA w/TWA	NIOSH 7402	EPA 100.2
Other:	EPA Level II	NYS 198.2
PLM - Bulk	TEM BULK	TEM Microvac/Wipe
EPA 600/R-93/116	Drop Mount (Qualitative)	ASTM D 5755-95 (quantative method)
EPA Point Count	Chatfield SOP - 1988-02	Wipe Qualitative
NY Stratified Point Count	TEM NOB (Gravimetric) NYS 198.4	
PLM NOB (Gravimetric) NYS 198.1	EMSL Standard Addition:	XRD
NIOSH 9002:		Asbestos
EMSL Standard Addition:	PLM Soil	Silica NIOSH 7500
SEM Air or Bulk	EPA Protocol Qualitative	
Qualitative	EPA Protocol Quantitative	OTHER
Quantitative at EMSL Analytical, Inc.	EMSL MSD 9000 Method fibers/gram	X CARB 435
By the M. D.B. Hader		See following pages
Date 1/229Do W 3Qempn	<b>イヤ</b> レ	Scefellering pages for level.

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	Plase 2	167
	Chain of Custody	EMSL Analytical, Inc.
EMSL	Chain of Custody	Suite 230 2235 Polvorosa Ave
	Asbestos Lab Services	San Leandro,
		CA 94577 Phone: (510) 895-
		3675 (888) 455-3675 Fax: (510) 895-3680
Please print all informat	ion legibly.	http://www.emsl.com
Client Sample # (s) 📈	04 134-183, NOA191 - 194, NOA 187-190	Total Samples #: <u>29 (185)</u>
Relinquished: 4	Bal Date: 1/22/08	Time: 0934
Received:	Date: 12.208	Time: 11-30an P/V
		Time:
Relinquished:	.Date:	
Received:	Date:	Time:
SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
SAMPLE NUMBER		
NOA I	NOA 16-0, NOA 17-0, NOA 18-0, NOA	
	19-0, NOA 20-0, NOA 182-0, NO	4 9-0
		2 a word water
NOA 2	NOA 18-2, NOA 20/- 2, NOAK	2-2 NOA 181-2
NOA 3	NOA 50-0, NOA 51-0, NOA 52-0	2
	NOR 177-0, WOA 178-0, NOA 179-0	
		4
NOAY	NOA/50-2, NOA51-2, NOA52-2	
	NOA177-2, NOA178-2, NOA179-2	1041812-2
	<u> </u>	
	MARZO MAEM-D MAEE-D	4
NOA 5 /	NOA53-0 NOA54-0 NOA55-0	
	NOA56-0, NOA 174-0, NOA 175-0	>
	NOA 176-0	

## 90800637

Chain	of	Custody

EMS

# Asbestos Lab Services

EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895-3675 (888) 455-3675 Fax: (510) 895-3680

lease print all information	a legibly.	http://www.emsl.com	
Client Sample # (s)	134-183 , NOA187- 194	Total Samples #: 29/185	
Relinquished:	Date: 1/22/08	Time: <u>0934</u>	
Received:	Date: 122 09	Time: 11:30 am	
Relinquished:	Date:	Time:	
Received:	Date:	Time:	
SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	YOLUME (if applicable)	Level
			Level A-
NCA 6	NOA 55-2, NOA176-2		
NOA 7	NOA 57-0, ACA 58-0, NOA 59-0		4
	NOA 60-0, NOA 61-0, NOA 170-0	<b>&gt;</b>	
	NOA171-0, NOA172-0, NOA173-0		
NOA 8	NOA 57-2, NOA 58-2, NOA 170-2	2	4
	NOA171-2, 4004172-2, NUA173-2		
			alaa ah ah aha
NOA 9	NOA/62-0, NOA 63-0, NOA 64-0		4
	NOA167-0 NOA168-0 NOA169		
NOA 10	NOA 62-2 NOA 63-2, NOA 64-2	terne en el surgi per la terne el la compañía de la compañía. A compañía de la comp	A
	NOA 167-2, NOA 168-2, NOA 169-2		

Page 2 of 2

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EMSL	<b>Chain of Custody</b>	EMSL Analytical, Inc. Suite 230	
	Asbestos Lab Services	2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895- 3675 (888) 455-3675 Fax: (510) 895-3680	
Please print all information		http://www.emsl.com	
Client Sample # (s)	134-153, NDA187 - 194	Total Samples #: 29/185	
Relinquished:	Date: 1/2-2/08	Time: <u>0934</u>	•
Received:	Date: 72703	Time: 11:30 cm P	W
Relinquisbed:	Date:	Time:	* 1
Received:	Date:	Time:	
SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)	nol
NOA II	NOA 65-0, NOA 66-0; NOA 67-0/		A
	NOA 68-0, NOA 162-0, NOA 163-0,		
	NDA 164-0, NOA165-0, NOA165-0		
			· · · · · · ·
NOA12	NOA 66-2, NOA 67-2, NOA 68-2,		<b>A</b> -
	NOA 66-2, NOA 67-2, NOA 68-2, NOA 162-2, NOA 163-2, NOA 164-2		
	NOA 165-2 NOA 166-2.		
NOAI3	10469-0, NOA 70-0, NOATI-0		A
	NOA 72-0, NOA 154-0, UCA 155-0		
	NOA 160-0 NOA 161-0		
L			
NOA 14	NO4 69-2, NO470-2, NOA 71-2, NOA 72-2		A
	NOA 154-2, NOA 155-2, NOA 161-2		

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stody Services (22/p) (22/p) (22/p) (22/06) (2	2 36 F htt Total Sample Time: Time: Time: VOLUMI	SL Analytical, Inc. Suite 230 2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895- 575 (888) 455-3675 Fax: (510) 895-3680 tp://www.emsl.com es #: <u>Z9/185</u> 2334 :30am PU E. (ff applicable)	) A
Services	36 F htt Total Sample Time: Time: Time: VOLUMI	2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895- 675 (888) 455-3675 Fax: (510) 895-3680 tp://www.emsl.com es #: <u>29/185</u> 934 :30an PU	) A
22/08 72 083	F htt Total Sample Time: Time: Time: VOLUMI	CA 94577 Phone: (510) 895- 575 (888) 455-3675 Fax: (510) 895-3680 tp://www.emsl.com es #: <u>29/185</u> <u>934</u> :30an PU	) A
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, NOA 79-2	2		PT.
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)	-0 , NOA 79-2	- O, NOA 148- O - D , NOA 79 - 2 2, NOA 148- 2,	-D , NOA 79-2

Page 2 of 2

	90800	- <i>6</i>
EMSL	Chain of Custody	EMSL Analytical, Inc. Suite 230 2235 Polvorosa Ave
	Asbestos Lab Services	San Leandro, CA 94577
		Phone: (510) 895- 3675 (888) 455-3675 Fax: (510) 895-3680
lease print all inform	ation legibly. 104134-183_NUA 187 <u>194</u>	http://www.emsl.com Total Samples #: <u>29/185</u>
elinquished: 4	Int 1	Time: 0834
eceived:	My Date: 1-22 09	Time: 11:30 am Ph
elinquished:	Date:	Time:
eceived:	Date:	Time:
		VOLUME (if applicable)
SAMPLE NUMBI	ER SAMPLE DESCRIPTION/LOCATION	VOLOME (II applicable) Ze
NOLIS	NOA 8170, NOA 82-0, NOA 83-	0
	10+84-0 104 142-0, 10A 143-0	
	MUK 81-0, MUK 142-0, MOK 143-0	
	NOA 144-0, NOA 145-0, NOA/146-	0
52		
NOA 20	NOA81-2, NOA 82-2, NOA 83-2	
	NOA 84-2, NOA 142-2, NOA 143-2	
	NOA 144-2, NOA 145-2, NOA 146-	
NOA 21	NOA \$5-0, MA86-0, NOA 87-	
	NOA 88-0, NOA 138-0, NOA 135	2-0
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NOA 22	NOA85-2, NOA86-2, NOA87-2, NOA 98-	2
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EMSL	Chain of Custody	EMSL Analytical, Inc. Suite 230
lease print all information	Asbestos Lab Services	2235 Polvorosa Ave San Leandro, CA 94577 Phone: (510) 895- 3675 (888) 455-3675 Fax: (510) 895-3680 http://www.emsl.com
-	134-183, 104,187 - 194	Total Samples #: 29/185
Relinquished:	Date: 1/22/08	Time: <u>0934</u>
leceived:	M Date: 122 0P3	Time: 1130an Plu
Kelinguished:	Date:	Time:
Received:	Date:	Time:
SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
NOA 23	NOA89-0, NOA 90-0, NOA 91-0	VOLUME (if applicable)
	NOA 134-0, NOA 135-0, NOA 136-0	
	NOA137-0	
NOA24	10489-2, NO491-2, NO4134-2,	4
Alexandra de la contra da la cont	NOA136-2, NOA 137-2.	
NDA 25	NOA 46-0 NOA 47-0 NOA 48-0	
	10449-0	
NOA26	NOA46-2 NOA47-2, NOA48-2	
	10149-2	

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MSL	<b>Chain of Custody</b>	EMSL Analytical, Inc. Suite 230
	Asbestos Lab Services	2235 Polvorosa Ave San Leandro,
	Aspestos Lab Services	CA 94577 Phone: (510) 895-
		3675 (888) 455-3675 Fax: (510) 895-3680
ase print all inform		http://www.emsl.com Total Samples #: <u>29/185</u>
	124-133, NOX187 - 194	Time: <u>0934</u>
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SAMPLE NUMBI	ER SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
	inter a uniperstand 100-F	4
10A 27	10A 187-0, NOA 185-0, NOA 189-E	
	10/ 190-0	
		4
Not 28	10A 197-2, 10A 188-2, 10A 189-	
	10A190-2	
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APPENDIX

C

### DESCRIPTION OF DATA SET

Project Name:Highway 50 Site Investigation PM 0.16 to 2.9Project No.:S9300-06-22Sample Depth:0.0 ft

### DATA SET STATISTICS

Number of Valid Samples	11
Number of Unique Samples	11
Minimum	14
Maximum	140
Mean	47.45454545
Median	31
Standard Deviation	42.0199087
Variance	1765.672727
Coefficient of Variation	0.885477003
Skewness	1.534095394
Mean of log data	3.5678
Standard Deviation of log data	0.763582571
90% Non-parametric UCLs	
Standard Bootstrap UCL	63.25181789
95% Non-parametric UCLs	
Standard Bootstrap UCL	67.43784671

### DESCRIPTION OF DATA SET

Project Name:Highway 50 Site Investigation PM 0.16 to 2.9Project No.:S9300-06-22Sample Depth:1.0 ft

### DATA SET STATISTICS

Number of Valid Samples	11
Number of Unique Samples	9
Minimum	0.5
Maximum	33
Mean	15.59090909
Median	17
Standard Deviation	11.726760
Variance	137.516909
Coefficient of Variation	0.752154
Skewness	0.122871
Mean of log data	2.135912
Standard Deviation of log data	1.532065
90% Non-parametric UCLs	
Standard Bootstrap UCL	19.87158985
95% Non-parametric UCLs	
Standard Bootstrap UCL	21.10698716

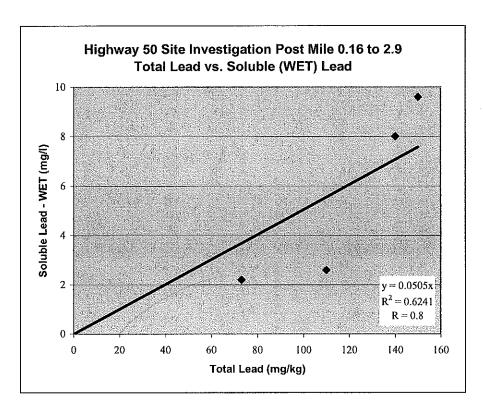
## **DESCRIPTION OF DATA SET**

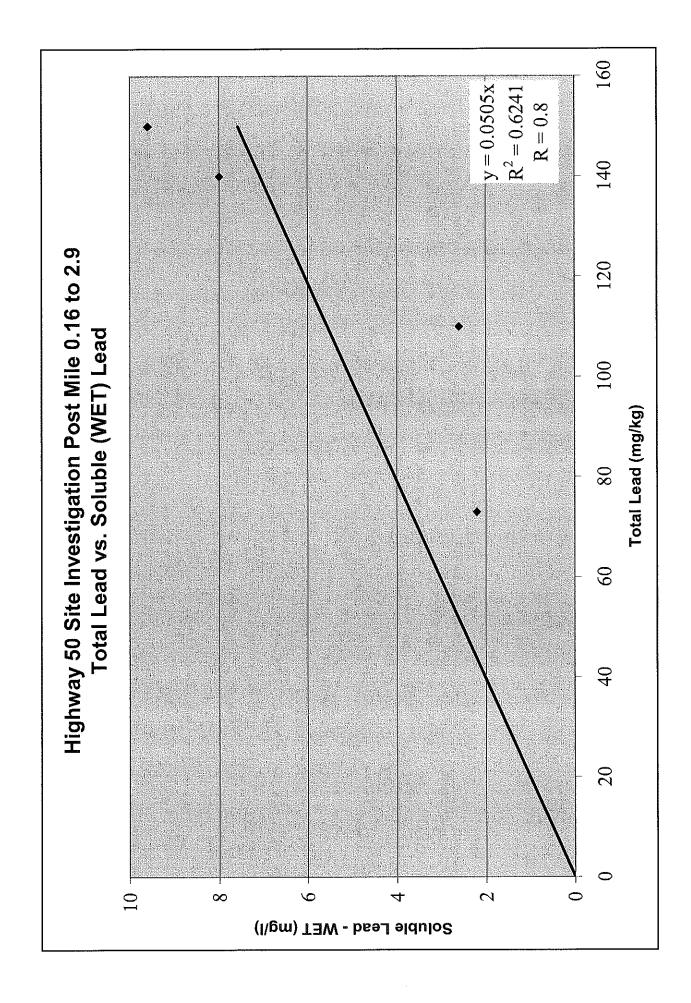
Project Name:Highway 50 Site Investigation PM 0.16 to 2.9Project No.:S9300-06-22Sample Depth:2.0 ft

### DATA SET STATISTICS

Number of Valid Samples	11
Number of Unique Samples	7
Minimum	0.5
Maximum	150
Mean	15.60909091
Median	1.3
Standard Deviation	44.648459
Variance	1993.484909
Coefficient of Variation	2.860414
Skewness	3.296433
Mean of log data	0.688469
Standard Deviation of log data	1.724032
90% Non-parametric UCLs	
Standard Bootstrap UCL	32.15017033
95% Non-parametric UCLs	
Standard Bootstrap UCL	36.22642172

Sample ID	Total Lead	WET Lead
B10,12,14-0	73	2.2
B1,3,5,7-0	110	2.6
B43,44,45-0	140	8.0
B12,14-2	150	9.6





# Appendix B

Caltrans Meeting Notes



# Silva Valley ADL Meeting Notes 12/2/10

Present: Derek Minnema – MTCo Mark Melani – Caltrans District 3 Jeff Patton – BCI Dave Buck – BCI

This meeting was held to review ADL data from the Silva Valley project and determine a course of action in view of the following findings:

- Samples from the project area west of the proposed Silva Valley Overcrossing have generally low levels of lead and soil from this area should not have restrictions for use on the project except for a lead compliance plan.
- Eight sample locations from the area east of the proposed Silva Valley Overcrossing have total lead and/or soluble lead results above the hazardous waste thresholds (1000 mg/kg total; 5mg/l soluble). ADL variance will most likely need to be invoked for use of this soil on the project. Caltrans needs additional assessment in this area to provide adequate data to invoke the ADL soil management variance.
- One sample (ADL-28A) exceeded the federal threshold for hazardous waste based on TCLP result over 5mg/l. Since this would require Class 1 disposal as a RCRA waste, Mark recommended this location be resampled as well as bracketed by 3 step-out samples located about 10 feet away from the original in a triangular pattern. It may turn out that ADL-28A is an anomaly due to inclusion of foreign material (such as lead based paint particle or a localized spill) and does not indicate a significant soil management issue.

Approximately 20 proposed additional sample locations were marked on the plans. Four of these involve resampling and step-out samples at the ADL-28 location. The remainder of the locations are spread throughout the proposed zone of soil disturbance in the general area of the 8 original sample locations with elevated lead.

Samples will be obtained from three depths at each proposed location (the same procedure as used in the original sampling). The sample depths should be kept the same as the originals if we want to be able to combine data for statistical purposes.

Field investigation will also include a limited assessment of soil/rock properties. Specifically if the sampled material is composed largely of rock fragments it may be more accurate to model the total and soluble lead concentrations based on a mass correction that assumes rock fragments are not a significant source of soluble lead.

Statistical analysis of the data will be performed based on the existing and new data. It may be possible to designate some of the data points as outliers in the final analysis.

A brief workplan will be prepared for Caltrans review prior to starting field work.

BCI will prepare a cost proposal for the additional work for presentation to MTCo and the County.

# Appendix C

# Summary of Analytical Results



		cation Data D 83)*		Total lead (mg/kg)		Solu	ible Lead (W (mg/L)	ΈT)	Solub	le Lead (WE (mg/L)	CT-DI)	TCLP (mg/l)		рН	
Boring	Latitude	Longitude	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs
ADL-1	38.6582	-121.0546	102	7.9	5.1	2.1	-	-	<0.010	-	-	-	-	-	-
ADL-2	38.6580	-121.0559	24.8	22.3	<1.0	-	-	_	_	_	_	-	_	-	_
ADL-3	38.6574	-121.0577	49.4	10.5	5.8	-	-	-	-	-	-	-	_	-	_
ADL-4	38.6571	-121.0587	190	12.3	1.6	0.3	-	-	< 0.010	-	-	-	-	-	-
ADL-5	38.6561	-121.0615	ND	<1.0	8.0	-	-	-	-	-	-	-	_	-	-
ADL-6	38.6558	-121.0626	5.6	11.4	NS	-	-	-	-	-	-	-	-	-	-
ADL-7	38.6554	-121.0637	36.9	3.2	18.6	-	-	-	-	-	-	-	-	-	-
ADL-8	38.6551	-121.0648	14.9	<1.0	5.3	-	-	-	-	-	-	-	-	-	-
ADL-9	38.6545	-121.0653	6.3	9.3	<1.0	-	_	-	_	-	-	-	-	-	_
ADL-10	38.6548	-121.0642	7.0	10.2	26.9	-	_	-	_	-		-	-	-	
ADL-11	38.6547	-121.0659	3.8	<1.0	17.6	-	_	-	-	-	-	-	-	-	-
ADL-12	38.6575	-121.0463	101	8.5	6.5	< 0.2	-	_	-	-	-	-	-	-	_
ADL-13	38.6574	-121.0446	184	147	NS	0.5	1.7	_	0.021	< 0.010	-	-	6.29	-	_
ADL-14	38.6582	-121.0462	170	12.9	2.9	<mark>5.5</mark>	-	-	< 0.010	-	-	-	-	-	-
ADL-15	38.6587	-121.0478	55.5	114	11.7	1.4	1.7	-	-	< 0.010	-	-	-	6.34	-
ADL-16	38.6588	-121.0491	2100	124	10.2	<mark>17.8</mark>	3.6	-	< 0.010	< 0.010	-	2.0	-	-	-
ADL-17	38.6587	-121.0506	4.3	<1.0	4.7	-	-	-	-	-	-	-	7.43	-	-
ADL-18	38.6586	-121.0522	6.7	5.2	13.1	-	-	-	-	-	-	-	-	-	-
ADL-19	38.6584	-121.0531	181	4.7	31.5	<mark>5.7</mark>	-	-	< 0.010	-	-	-	-	7.45	-
ADL-20	38.6562	-121.0601	185	311	<1.0	4.2	<mark>5.2</mark>	-	-	< 0.010	-	-	-	7.26	-
ADL-21	38.6569	-121.0582	83.9	650	5.1	0.8	<mark>9.2</mark>	-	-	0.016	-	-	-	-	-
ADL-22	38.6574	-121.0565	13.1	37.5	116	-	-	< 0.2	-	-	< 0.010	-	-	-	-
ADL-23	38.6577	-121.0551	13.4	46.5	5.2	-	-	-	-	-	-	-	6.86	-	-
ADL 24	38.6578	-121.0541	43.6	647	127	-	<mark>6.1</mark>	3.0	-	< 0.010	< 0.010	-	-	-	-
ADL-25	38.6580	-121.0529	284	4.5	2.5	<mark>13.3</mark>	-	-	0.065	-	-	-	-	7.53	-
ADL-26	38.6581	-121.0512	1510	46.6	7.7	<mark>38.3</mark>	-	-	0.109	-	-	1.9	-	-	-
ADL-27	38.6581	-121.0501	712	88.7	2.8	<mark>29.6</mark>	2.5	-	0.049	-	-	-	6.06	-	-
ADL-28	38.6581	-121.0487	1540	15.6	4.2	<mark>59.8</mark>	-	-	0.074	-	-	<mark>7. 4</mark>	-	-	-
ADL-29	38.6578	-121.0474	15.7	413	18.3	-	<mark>7.0</mark>	-	-	0.011	-	-	6.65	-	-
ADL-30	38.6552	-121.0631	6.5	NS	NS	-	-	-	-	-	-	-	-	-	-
ADL-31	38.6556	-121.0618	6.0	NS	NS	-	-	-	-	-	-	-	-	-	-
ADL-32	38.6567	-121.0598	91.1	NS	NS	1.0	-	-	-	-	-	-	-	-	-

## Summary of ADL Analytical Results

		cation Data D 83)*		Total lead (mg/kg)		Solu	ıble Lead (W (mg/L)	/ET)	Solub	le Lead (WE (mg/L)	CT-DI)	TCLP (mg/l)		рН	
Boring	Latitude	Longitude	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs	A 0"-6" bgs	A 0"-6" bgs	B 12"-18" bgs	C 24"-30" bgs
ADL-33	38.6586	-121.0539	<3.0	<3.0	<3.0	-	-	-	-	-	-	-	-	-	-
ADL-34	38.6584	-121.0536	66	18	NS	< 0.1	-	-	-	-	-	-	6.6	-	-
ADL-35	38.6585	-121.0526	74	13	NS	< 0.1	-	-	-	-	-	-	-	_	-
ADL-36	38.6587	-121.0507	480	21	NS	2.6	-	-	-	-	-	-	-	-	-
ADL-37	38.6588	-121.0500	220	19	NS	0.31	-	-	-	-	-	-	-	_	-
ADL-38	38.6588	-121.0485	260	61	40	0.12	-	-	-	-	-	-	-	-	-
ADL-39	38.6585	-121.0471	330	40	39	0.53	-	-	-	-	-	-	-	-	-
ADL-40	38.6577	-121.0548	26	23	NS	-	-	-	-	-	-	-	-	-	-
ADL-41	38.6577	-121.0536	5.2	<3.0	NS	-	-	-	-	-	-	-	-	8.1	-
ADL-42	38.6576	-121.0533	7.3	<3.0	<3.0	-	-	-	-	-	-	-	-	-	-
ADL-43	38.6581	-121.0487	92	34	140	0.70	-	0.16	-	-	-	-	-	-	-
ADL-44	38.6591	-121.0487	130	74	48	1.9	-	-	-	-	-	-	-	-	-
ADL-45	38.6581	-121.0487	90	37	NS	0.34	-	-	-	-	-	-	-	7.1	-
ADL-46	38.6581	-121.0488	360	35	NS	1.5	-	-	-	-	-	-	-	-	-
ADL-47	38.6581	-121.0494	20	24	NS	-	-	-	-	-	-	-	6.7	-	-
ADL-48	38.6581	-121.0503	120	42	NS	0.63	-	-	-	-	-	-	-	-	-
ADL-49	38.6580	-121.0514	21	3.9	NS	-	-	-	-	-	-	-	-	-	-
ADL-50	38.6580	-121.0520	160	7.7	NS	1.5	-	-	-	-	-	-	6.2	-	-
ADL-51	38.6579	-121.0533	58	13	NS	< 0.1	-	-	-	-	-	-	-	-	-

#### **Summary of ADL Analytical Results**

Notes: **Bold** = total lead exceeds 50mg/kg (10 times the STLC of 5mg/L) *Italics* = WET lead/TCLP lead greater than STLC (5 mg/l)

NS = no sample collected due to hard rock conditions Blank cells (-) indicate sample not tested for this parameter

bgs = below ground surface. \*GPS data obtained using Magellan Meridian equipment

# Appendix D

## Analytical Laboratory Reports (on CD)



## EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

03 August 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1007107

Enclosed are the results of analyses for samples received by the laboratory on 07/21/10 11:15. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem En	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	10034	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	08/03/10 13:30

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-1A	1007107-01	Soil	07/19/10 14:05	07/21/10 11:15
ADL-1B	1007107-02	Soil	07/19/10 14:20	07/21/10 11:15
ADL-1C	1007107-03	Soil	07/19/10 14:25	07/21/10 11:15
ADL-2A	1007107-04	Soil	07/19/10 14:40	07/21/10 11:15
ADL-2B	1007107-05	Soil	07/19/10 14:45	07/21/10 11:15
ADL-2C	1007107-06	Soil	07/19/10 14:50	07/21/10 11:15
ADL-3A	1007107-07	Soil	07/19/10 15:15	07/21/10 11:15
ADL-3B	1007107-08	Soil	07/19/10 15:20	07/21/10 11:15
ADL-3C	1007107-09	Soil	07/19/10 15:25	07/21/10 11:15
ADL-4A	1007107-10	Soil	07/19/10 16:10	07/21/10 11:15
ADL-4B	1007107-11	Soil	07/19/10 16:15	07/21/10 11:15
ADL-4C	1007107-12	Soil	07/19/10 16:20	07/21/10 11:15

Excelchem Environmental Lab.

ð

Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	
			ADL-1A 107-01 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	RIES	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	-
			ADL-1B 107-02 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES 7.9	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	
			ADL-1C 107-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE: Lead	<u>8</u> 5.1	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	-
			ADL-2A 107-04 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	
			ADL-2B 107-05 (So	pil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEF Lead	RIES 22.3	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	s				
Blackburn		Project:	Silva V	/alley					
11521 Blocker Dr, Suite 110		Project Number:	10034				Date Reported:		
Auburn, CA 95603		Project Manager:	Dave H	Buck			08/03/10	0 13:30	
			ADL-2C						
		1007.	107-06 (So	)11)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	
			ADL-3A 107-07 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	CRIES 49.4	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	
			ADL-3B 107-08 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	IES 10.5	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 10034	alley	Date Re	anorted:		
Auburn, CA 95603		Project Manager:	Dave H	Buck			08/03/10	•
			ADL-3C 107-09 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI	FDIES							
Lead	5.8	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	-
			ADL-4A 107-10 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	RIES 190	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

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Laboratory Representative

	Excelchem E	nvironm	ental Lab	S			
	Project: Project Number: Project Manager:	10034	5			Date Re 08/03/10	
	-		il)				
Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
	1.0	malka	ATC0212	07/20/10	07/20/10		
	Result	Project: Project Number: Project Manager: A 1007 Result Reporting Limit	Project: Silva V Project Number: 10034 Project Manager: Dave E ADL-4B 1007107-11 (So Result Limit Units	Project: Silva Valley Project Number: 10034 Project Manager: Dave Buck ADL-4B 1007107-11 (Soil) Result Reporting Limit Units Batch	Project Number: 10034 Project Manager: Dave Buck ADL-4B 1007107-11 (Soil) Result Reporting Units Batch Prepared	Project: Silva Valley Project Number: 10034 Project Manager: Dave Buck ADL-4B 1007107-11 (Soil) Result Reporting Date Date Analyzed HES	Project: Silva Valley Project Number: 10034 Date Re Project Manager: Dave Buck 08/03/10 ADL-4B 1007107-11 (Soil) Result Reporting Units Batch Prepared Analyzed Method HES

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 10034 Dave F	5			Date Re 08/03/10	•
			ADL-4C 107-12 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	IES 1.6	1.0	mg/kg	ATG0212	07/29/10	07/30/10	EPA 6010B	

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Laboratory Representative

	Excelchem En	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	10034	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	08/03/10 13:30

#### METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATG0212 - EPA 6010B										
Blank (ATG0212-BLK1)				Prepared: 0	07/29/10 A	nalyzed: 07	/30/10			
Lead	ND	1.0	mg/kg							
LCS (ATG0212-BS1)				Prepared: 0	07/29/10 A	nalyzed: 07	/30/10			
Lead	101	1.0	mg/kg	100		101	80-120			
LCS Dup (ATG0212-BSD1)				Prepared: 0	07/29/10 A	nalyzed: 07	/30/10			
Lead	101	1.0	mg/kg	100		101	80-120	0.329	25	
Matrix Spike (ATG0212-MS1)		Source: 1007057	7-01	Prepared: 0	07/29/10 A	nalyzed: 07	//30/10			
Lead	93.9	1.0	mg/kg	100	2.61	91.3	75-125			
Matrix Spike Dup (ATG0212-MSD1)		Source: 1007057	7-01	Prepared: 0	07/29/10 A	nalyzed: 07	//30/10			
Lead	86.4	1.0	mg/kg	100	2.61	83.8	75-125	8.35	25	

Excelchem Environmental Lab.

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Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:10034Date Reported:Auburn, CA 95603Project Manager:Dave Buck08/03/10 13:30

#### **Notes and Definitions**

ND Analyte not detected at reporting limit.

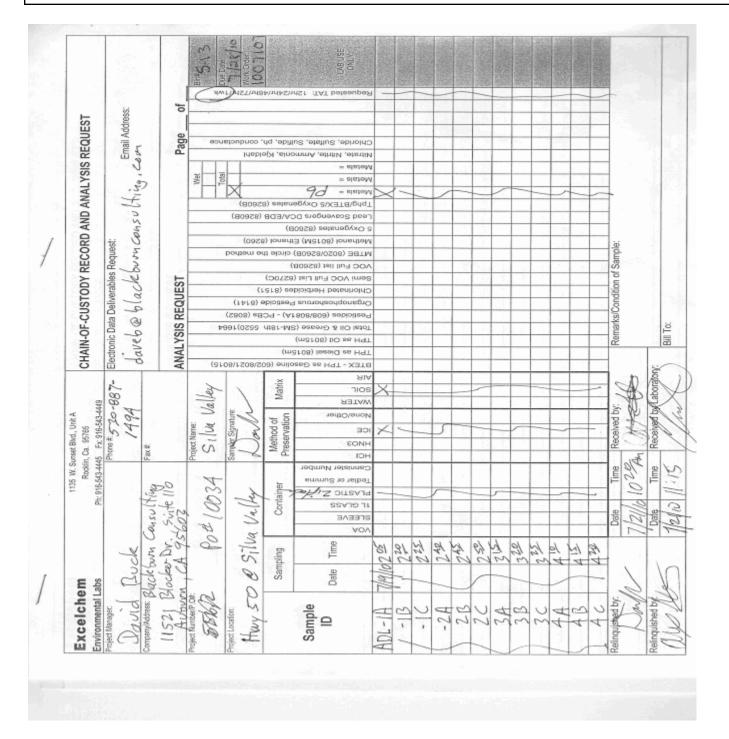
NR Not reported

Excelchem Environmental Lab.

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Laboratory Representative

	Excelchem En	ivironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	10034	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	08/03/10 13:30



Laboratory Representative

		Exc	elchem Env	ironme	ntal La	abs				
ckburn		Projec	et:	Silva Va	lley					
21 Blocker Dr, Suite 110		Projec	et Number:	10034						Date Reported:
burn, CA 95603		5	et Manager:	Dave Bu	ick					08/03/10 13:30
Sample Integrity				WOR	K OF	DE	R _	100	7017	-
Date Received:	21/10									
Section 1 - Sample Arr	ival Info.									
Sample Transport: C	ONTRAC U	PS US	PS Walk-In	EXC	ELCHE	EM Co	uriei	r⊃ Fed	I-Ex Other:_	
Transported In Ice		Hand								
Describe type of pack	-				acking			Paper		
Has chilling process	begun?	N	_						/ Ambient	/ On Ice
Temperature of Sar	mples (°C):	0	Ic	e Chest	Tempe	ratur	e(s)	(°C): _	~ 2	
Was temperature In I	Range?: 🕅	) N								
Section 2 - Bottle/Ana	lysis Info.			Yes	No	N/A			Comments	
Did all bottles arrive un	broken and int	act?		X	- - -					
Did all bottle labels agre Were correct containers	ee with COC?	ets reque	ested?	×						
Ware correct preservatio	ons used for th	e tests re	quested?			X	-			
Was a sufficient amoun	t of sample set	it for test	s indicated?	X			-			
Were bubbles present in V	OA Vials?: (Ve	olatile Me	thods Only)	1		$\rightarrow$				
Section 3 - COC Info.							Com	pleted		
	Completed	Container		-			Yes	No	Comme	nts
Was COC Received	1 KI	Commenter	Analysis Rea	quested			X			
Date Sampled	×.		Samples arrive	d within he	olding tim	ne	×			
Time Sampled	7		Any hold tin		than 72	hrs	~	X		
Sample ID	1		Client Name				÷			
Rush TAT	×		Address/Tel	ephone 7	÷		~			
Section 4 - Comments	s / Discrepanc	ies								
Was Client notified of			No N/A	-	1	Notifi	ed b	y:		
Explanations / Comme	nts:									
										014
									es Labeled by:	any
								Labels Bin #s:	reviewed by:	XLS
									canned/Attache	ed by: an
			~	-						mp.t.
		Inte	d have 9	XX					Date/Time:	112111
	Form	complete	a by:	<u></u>	-					
	Form	complete	d by:							11:15

 $\geq$ 

## EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

03 September 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1008143

Enclosed are the results of analyses for samples received by the laboratory on 08/25/10 10:50. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem Er	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2/10043	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	09/03/10 12:22

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-5 A	1008143-01	Soil	08/23/10 13:21	08/25/10 10:50
ADL-5 B	1008143-02	Soil	08/23/10 13:27	08/25/10 10:50
ADL-5 C	1008143-03	Soil	08/23/10 13:29	08/25/10 10:50
ADL-6 A	1008143-04	Soil	08/23/10 13:44	08/25/10 10:50
ADL-6 B	1008143-05	Soil	08/23/10 13:51	08/25/10 10:50
ADL-7 A	1008143-06	Soil	08/23/10 14:15	08/25/10 10:50
ADL-7 B	1008143-07	Soil	08/23/10 14:23	08/25/10 10:50
ADL-7 C	1008143-08	Soil	08/23/10 14:25	08/25/10 10:50
ADL-8 A	1008143-09	Soil	08/23/10 14:38	08/25/10 10:50
ADL-8 B	1008143-10	Soil	08/23/10 14:44	08/25/10 10:50
ADL-8 C	1008143-11	Soil	08/23/10 14:46	08/25/10 10:50
ADL-9 A	1008143-12	Soil	08/24/10 08:57	08/25/10 10:50
ADL-9 B	1008143-13	Soil	08/24/10 09:04	08/25/10 10:50
ADL-9 C	1008143-14	Soil	08/24/10 09:06	08/25/10 10:50
ADL-10 A	1008143-15	Soil	08/24/10 09:28	08/25/10 10:50
ADL-10 B	1008143-16	Soil	08/24/10 09:32	08/25/10 10:50
ADL-10 C	1008143-17	Soil	08/24/10 09:34	08/25/10 10:50
ADL-11 A	1008143-18	Soil	08/24/10 14:31	08/25/10 10:50
ADL-11 B	1008143-19	Soil	08/24/10 14:42	08/25/10 10:50
ADL-11 C	1008143-20	Soil	08/24/10 14:43	08/25/10 10:50

Excelchem Environmental Lab.

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	1
			ADL-5 A 143-01 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	RIES	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.2/1	0043			Date Reported:	
Auburn, CA 95603						09/03/10	0 12:22	
			ADL-5 B 143-02 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			ADL-5 C 143-03 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	IES 8.0	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			ADL-6 A 143-04 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES 5.6	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			ADL-6 B 143-05 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	ERIES 11.4	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			DL-7 A 143-06 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEI Lead	RIES 36.9	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S				
Blackburn	Project:		Silva Valley						
11521 Blocker Dr, Suite 110		Project Number:	556.2/				Date Reported:		
Auburn, CA 95603		Project Manager:	Dave Buck				09/03/10 12:22		
			ADL-7 B 143-07 (So	oil)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
METALS BY 6000/7000 SEI	RIES								
lead	3.2	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B		

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	10043			Date Re 09/03/10	
			ADL-7 C 143-08 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEI Lead	RIES 18.6	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			ADL-8 A 143-09 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	ERIES 14.9	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Ro 09/03/10	
			DL-8 B 143-10 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE Lead	E <b>S</b> ND	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.2/1	0043	Date Reported			
Auburn, CA 95603								
			ADL-8 C 143-11 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SERI	ES							
lead	5.3	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2/	10043			Date Re	eported:
Auburn, CA 95603 Project Manager: Dave Buck							09/03/10	0 12:22
			ADL-9 A 143-12 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 S	ERIES							
Jead	6.3	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s				
Blackburn		Project:	Silva V	alley					
11521 Blocker Dr, Suite 110		Project Number:	556.2/1	0043			Date Reported:		
Auburn, CA 95603									
			ADL-9 B 143-13 (So	il)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
1ETALS BY 6000/7000 SER	IES								
ead	9.3	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B		

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/2 Dave F	0043			Date Ro 09/03/10	
			DL-9 C 143-14 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE	E <b>S</b>	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave F	0043			Date Re 09/03/10	
			DL-10 A 143-15 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES 7.0	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave F	0043			Date Re 09/03/10	
			DL-10 B 143-16 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI Lead	ERIES 10.2	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	.0043			Date Re 09/03/10	
			DL-10 C 143-17 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES 26.9	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave F	.0043			Date Re 09/03/10	
			DL-11 A 143-18 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEI Lead	RIES 3.8	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave E	0043			Date Re 09/03/10	
			DL-11 B 143-19 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	IES ND	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2/1 Dave F	0043			Date Re 09/03/10	
		A	DL-11 C 143-20 (So				05/05/10	
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	CRIES 17.6	1.0	mg/kg	ATI0012	08/26/10	09/01/10	EPA 6010B	

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Laboratory Representative

	Excelchem En	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2/10043	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	09/03/10 12:22

### METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0012 - EPA 6010B										
Blank (ATI0012-BLK1)				Prepared: 0	08/26/10 A	nalyzed: 09	/01/10			
Lead	ND	1.0	mg/kg							
LCS (ATI0012-BS1)				Prepared: 08/26/10 Analyzed: 09/01/10						
Lead	96.2	1.0	mg/kg	100		96.2	80-120			
LCS Dup (ATI0012-BSD1)				Prepared: 0	pared: 08/26/10 Analyzed: 09/01/10					
Lead	97.0	1.0	mg/kg	100		97.0	80-120	0.776	25	
Matrix Spike (ATI0012-MS1)		Source: 1008143	3-02	Prepared: 08/26/10 Analyzed: 09/01/10			/01/10			
Lead	109	1.0	mg/kg	100	ND	109	75-125			
Matrix Spike Dup (ATI0012-MSD1)		Source: 1008143	3-02	Prepared: 0	08/26/10 A	nalyzed: 09	/01/10			
Lead	97.6	1.0	mg/kg	100	ND	97.6	75-125	11.3	25	

Excelchem Environmental Lab.

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Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:556.2/10043Auburn, CA 95603Project Manager:Dave Buck09/03/10 12:22

#### **Notes and Definitions**

ND Analyte not detected at reporting limit.

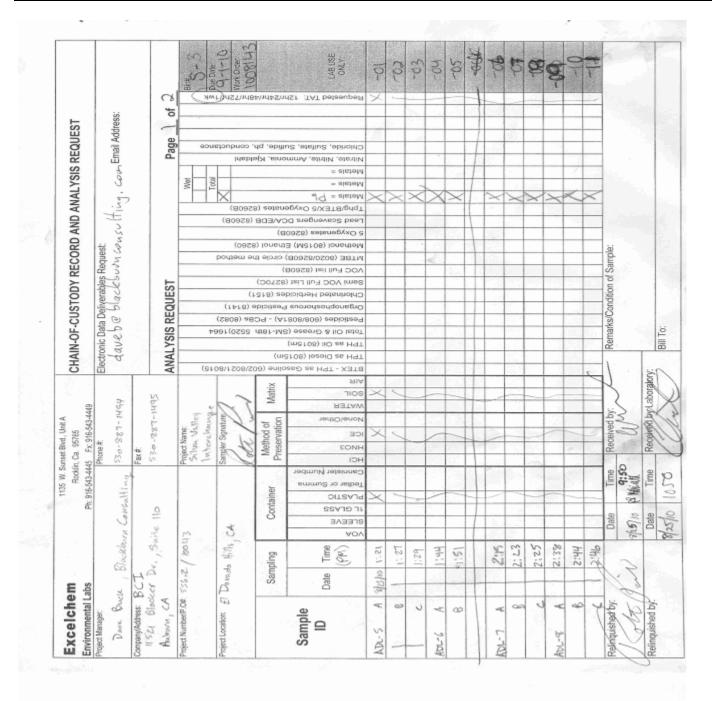
NR Not reported

Excelchem Environmental Lab.

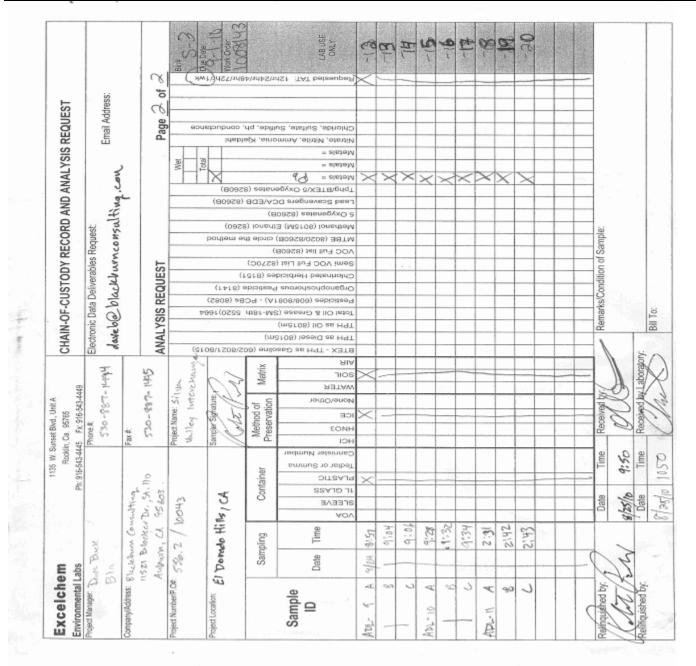
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Laboratory Representative

	Excelchem Er	ivironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2/10043	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	09/03/10 12:22



	Excelchem Er	ivironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2/10043	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	09/03/10 12:22



Excelchem Environmental Lab.

		vironmental Labs			
sburn	Project:	Silva Valley			
1 Blocker Dr, Suite 110	Project Number:	556.2/10043			Date Reported:
rn, CA 95603	Project Manager:	Dave Buck			09/03/10 12:22
· · · · · · · · · · · · · · · · · · ·		1			1.0211
Sample Integrity		WORK ORI	DER	100	8143
Date Received: 8/25/10	2				
Section 1 - Sample Arrival Int	ю.				
Sample Transport: ONTRA	C UPS USPS Walk-	In EXCELCHEM	Couri	er} Fe	d-Ex Other:
Transported In: /Ice Chest	Box Hand			• •	
Describe type of packing mat	erials: Bubble Wrap F	oam Packing Pe	anuts	Pape	er Other: ILEE
Has chilling process begun?	Y N Samp	les Received: Ch	illed to	Touch	/ Ambient / On Ic
Temperature of Samples (*	C): I	ce Chest Temperat	ture(s)	(°C):	0
Was temperature In Range?:	Ŷ N				
Section 2 - Bottle/Analysis Inf					
Section 2 - Doute Analysis Int		Yes No	N/A		Comments
Did all bottles arrive unbroken a		X			
Did all bottle labels agree with O		X			
Were correct containers used for		X			
Were correct preservations used Was a sufficient amount of same			×		
Were bubbles present in VOA Vials			×		
Section 3 - COC Info.					
Complete Yes	No Container			bleted	Comment
Was COC Received	Analysis Re	quested	Yes	No	Comments
Date Sampled		d within holding time	1x		
Time Sampled		nes less than 72 hrs		×	
Sample ID 🛛 🔀	Client Name	•	×		
Rush TAT	Address/Tel	ephone #	1X		
Section 4 - Comments / Discre	noncies	_			
Was Client notified of discrepan	2	Not	ified by	/: ·	
Explanations / Comments:					
sale france of the formation of the first of					
2					
					s Labeled by:
			L B	abels re in #s:	S-3
			L B	abels re in #s: OC Sca	anned/Attached by:
Fo	rm completed by:	tes det	L B	abels re in #s: OC Sca	S-3

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## EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

01 October 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1009096

Enclosed are the results of analyses for samples received by the laboratory on 09/16/10 10:30. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem Environmental Labs						
Blackbu	rn	Project:	Silva Valley				
11521 E	Blocker Dr, Suite 110	Project Number:	P.0.#10043	Date Reported:			
Auburn	CA 95603	Project Manager:	Dave Buck	10/01/10 14:55			

#### ANALYTICAL REPORT FOR SAMPLES

NDL-12B         1009096-02         Soil         09/13/10 01:45         09/16/10 10:3           NDL-12C         1009096-03         Soil         09/13/10 01:45         09/16/10 10:3           NDL-13A         1009096-05         Soil         09/14/10 21:00         09/16/10 10:3           NDL-13B         1009096-06         Soil         09/14/10 21:24         09/16/10 10:3           NDL-14A         1009096-07         Soil         09/14/10 21:37         09/16/10 10:3           NDL-14B         1009096-08         Soil         09/14/10 21:37         09/16/10 10:3           NDL-14B         1009096-09         Soil         09/14/10 21:37         09/16/10 10:3           NDL-15A         1009096-10         Soil         09/14/10 22:33         09/16/10 10:3           NDL-15B         1009096-11         Soil         09/14/10 22:41         09/16/10 10:3           NDL-15C         1009096-12         Soil         09/14/10 22:37         09/16/10 10:3           NDL-16B         1009096-13         Soil         09/14/10 23:37         09/16/10 10:3           NDL-16C         1009096-16         Soil         09/15/10 00:15         09/16/10 10:3           NDL-16B         1009096-17         Soil         09/15/10 00:15         09/16/10 10:3	Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NDL-12C         1009096-03         Soil         09/13/10 01:45         09/16/10 103           NDL-13A         1009096-04         Soil         09/14/10 20:47         09/16/10 103           NDL-13B         1009096-05         Soil         09/14/10 21:40         09/16/10 103           NDL-14A         1009096-06         Soil         09/14/10 21:35         09/16/10 103           NDL-14B         1009096-07         Soil         09/14/10 21:37         09/16/10 103           NDL-14C         1009096-08         Soil         09/14/10 21:37         09/16/10 103           NDL-15A         1009096-09         Soil         09/14/10 22:33         09/16/10 103           NDL-15B         1009096-10         Soil         09/14/10 22:41         09/16/10 103           NDL-15C         1009096-12         Soil         09/14/10 22:43         09/16/10 103           NDL-16B         1009096-13         Soil         09/14/10 23:35         09/16/10 103           NDL-17A         1009096-14         Soil         09/15/10 00:35         09/16/10 103           NDL-17B         1009096-17         Soil         09/15/10 00:15         09/16/10 103           NDL-17B         1009096-18         Soil         09/15/10 00:33         09/16/10 103	ADL-12A	1009096-01	Soil	09/13/10 01:38	09/16/10 10:30
NDL-13A         1009096-04         Soil         09/14/10 20:47         09/16/10 10:3           NDL-13B         1009096-05         Soil         09/14/10 21:00         09/16/10 10:3           NDL-13B         1009096-06         Soil         09/14/10 21:24         09/16/10 10:3           NDL-14A         1009096-07         Soil         09/14/10 21:35         09/16/10 10:3           NDL-14B         1009096-08         Soil         09/14/10 21:37         09/16/10 10:3           NDL-15A         1009096-09         Soil         09/14/10 22:33         09/16/10 10:3           NDL-15B         1009096-10         Soil         09/14/10 22:41         09/16/10 10:3           NDL-15C         1009096-11         Soil         09/14/10 22:43         09/16/10 10:3           NDL-16A         1009096-12         Soil         09/14/10 23:35         09/16/10 10:3           NDL-16B         1009096-13         Soil         09/14/10 23:37         09/16/10 10:3           NDL-17A         1009096-15         Soil         09/15/10 00:15         09/16/10 10:3           NDL-17B         1009096-16         Soil         09/15/10 00:15         09/16/10 10:3           NDL-17B         1009096-17         Soil         09/15/10 00:13         09/16/10 10:3	ADL-12B	1009096-02	Soil	09/13/10 01:40	09/16/10 10:30
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ADL-14A       1009096-06       Soil       09/14/10 21:24       09/16/10 10.3         ADL-14B       1009096-07       Soil       09/14/10 21:35       09/16/10 10.3         ADL-14C       1009096-08       Soil       09/14/10 21:37       09/16/10 10.3         ADL-15A       1009096-09       Soil       09/14/10 22:33       09/16/10 10.3         ADL-15B       1009096-10       Soil       09/14/10 22:41       09/16/10 10.3         ADL-15C       1009096-11       Soil       09/14/10 23:26       09/16/10 10.3         ADL-16B       1009096-12       Soil       09/14/10 23:35       09/16/10 10.3         ADL-16C       1009096-13       Soil       09/14/10 23:37       09/16/10 10.3         ADL-16C       1009096-15       Soil       09/15/10 00:05       09/16/10 10.3         ADL-17A       1009096-16       Soil       09/15/10 00:13       09/16/10 10.3         ADL-17B       1009096-17       Soil       09/15/10 00:13       09/16/10 10.3         ADL-17C       1009096-18       Soil       09/15/10 00:13       09/16/10 10.3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10.3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16	ADL-13A	1009096-04	Soil	09/14/10 20:47	09/16/10 10:30
ADL-14B       1009096-07       Soil       09/14/10 21:35       09/16/10 10:3         ADL-14C       1009096-08       Soil       09/14/10 21:37       09/16/10 10:3         ADL-15A       1009096-09       Soil       09/14/10 22:33       09/16/10 10:3         ADL-15B       1009096-10       Soil       09/14/10 22:41       09/16/10 10:3         ADL-15C       1009096-11       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16A       1009096-12       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16B       1009096-13       Soil       09/14/10 23:37       09/16/10 10:3         ADL-16C       1009096-15       Soil       09/15/10 00:05       09/16/10 10:3         ADL-17A       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17B       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-17C       1009096-18       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18B       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:48       09/16	ADL-13B	1009096-05	Soil	09/14/10 21:00	09/16/10 10:30
ADL-14C       1009096-08       Soil       09/14/10 21:37       09/16/10 10:3         ADL-15A       1009096-09       Soil       09/14/10 22:33       09/16/10 10:3         ADL-15B       1009096-10       Soil       09/14/10 22:41       09/16/10 10:3         ADL-15C       1009096-11       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16A       1009096-12       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16B       1009096-13       Soil       09/14/10 23:37       09/16/10 10:3         ADL-16C       1009096-14       Soil       09/14/10 23:37       09/16/10 10:3         ADL-17A       1009096-15       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-16       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18B       1009096-18       Soil       09/15/10 00:15       09/16/10 10:3         ADL-17C       1009096-18       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18B       1009096-20       Soil       09/15/10 00:33       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16	ADL-14A	1009096-06	Soil	09/14/10 21:24	09/16/10 10:30
ADL-15A       1009096-09       Soil       09/14/10 22:33       09/16/10 10:33         ADL-15B       1009096-10       Soil       09/14/10 22:41       09/16/10 10:33         ADL-15C       1009096-11       Soil       09/14/10 23:26       09/16/10 10:33         ADL-16A       1009096-12       Soil       09/14/10 23:35       09/16/10 10:33         ADL-16B       1009096-13       Soil       09/14/10 23:35       09/16/10 10:33         ADL-17C       1009096-15       Soil       09/15/10 00:13       09/16/10 10:33         ADL-17C       1009096-16       Soil       09/15/10 00:15       09/16/10 10:33         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:33         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:33         ADL-18A       1009096-19       Soil       09/15/10 00:33       09/16/10 10:33         ADL-18B       1009096-20       Soil       09/15/10 00:35       09/16/10 10:33         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:33         ADL-19B       1009096-22       Soil       09/15/10 00:43       09/16/10 10:33	ADL-14B	1009096-07	Soil	09/14/10 21:35	09/16/10 10:30
ADL-15B       1009096-10       Soil       09/14/10 22:41       09/16/10 10:3         ADL-15C       1009096-11       Soil       09/14/10 22:43       09/16/10 10:3         ADL-16A       1009096-12       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16B       1009096-13       Soil       09/14/10 23:35       09/16/10 10:3         ADL-16C       1009096-14       Soil       09/14/10 23:37       09/16/10 10:3         ADL-17A       1009096-15       Soil       09/15/10 00:05       09/16/10 10:3         ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-18       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18B       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-18B       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19A       1009096-22       Soil       09/15/10 00:43       09/16/10 10:3	ADL-14C	1009096-08	Soil	09/14/10 21:37	09/16/10 10:30
ADL-162       1009096-11       Soil       09/14/10 22:43       09/16/10 10:3         ADL-16A       1009096-12       Soil       09/14/10 23:26       09/16/10 10:3         ADL-16B       1009096-13       Soil       09/14/10 23:35       09/16/10 10:3         ADL-16C       1009096-14       Soil       09/14/10 23:37       09/16/10 10:3         ADL-17A       1009096-15       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-19       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-20       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18B       1009096-21       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:43       09/16/10 10:3	ADL-15A	1009096-09	Soil	09/14/10 22:33	09/16/10 10:30
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ADL-16B       1009096-13       Soil       09/14/10 23:35       09/16/10 10:33         ADL-16C       1009096-14       Soil       09/14/10 23:37       09/16/10 10:33         ADL-17A       1009096-15       Soil       09/15/10 00:05       09/16/10 10:33         ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:33         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:33         ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:33         ADL-18B       1009096-20       Soil       09/15/10 00:35       09/16/10 10:33         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:33         ADL-19A       1009096-22       Soil       09/15/10 00:43       09/16/10 10:33	ADL-15C	1009096-11	Soil	09/14/10 22:43	09/16/10 10:30
ADL-16C       1009096-14       Soil       09/14/10 23:37       09/16/10 10:3         ADL-17A       1009096-15       Soil       09/15/10 00:05       09/16/10 10:3         ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:35       09/16/10 10:3         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:48       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:3	ADL-16A	1009096-12	Soil	09/14/10 23:26	09/16/10 10:30
ADL-17A       1009096-15       Soil       09/15/10 00:05       09/16/10 10:3         ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19B       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3	ADL-16B	1009096-13	Soil	09/14/10 23:35	09/16/10 10:30
ADL-17B       1009096-16       Soil       09/15/10 00:13       09/16/10 10:3         ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3	ADL-16C	1009096-14	Soil	09/14/10 23:37	09/16/10 10:30
ADL-17C       1009096-17       Soil       09/15/10 00:15       09/16/10 10:3         ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:3	ADL-17A	1009096-15	Soil	09/15/10 00:05	09/16/10 10:30
ADL-18A       1009096-18       Soil       09/15/10 00:23       09/16/10 10:3         ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:3         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:3	ADL-17B	1009096-16	Soil	09/15/10 00:13	09/16/10 10:30
ADL-18B       1009096-19       Soil       09/15/10 00:33       09/16/10 10:33         ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:33         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:33         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:33	ADL-17C	1009096-17	Soil	09/15/10 00:15	09/16/10 10:30
ADL-18C       1009096-20       Soil       09/15/10 00:35       09/16/10 10:3         ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:3	ADL-18A	1009096-18	Soil	09/15/10 00:23	09/16/10 10:30
ADL-19A       1009096-21       Soil       09/15/10 00:43       09/16/10 10:3         ADL-19B       1009096-22       Soil       09/15/10 00:48       09/16/10 10:3	ADL-18B	1009096-19	Soil	09/15/10 00:33	09/16/10 10:30
ADL-19B 1009096-22 Soil 09/15/10 00:48 09/16/10 10:3	ADL-18C	1009096-20	Soil	09/15/10 00:35	09/16/10 10:30
	ADL-19A	1009096-21	Soil	09/15/10 00:43	09/16/10 10:30
ADL-19C 1009096-23 Soil 09/15/10 00:50 09/16/10 10:3	ADL-19B	1009096-22	Soil	09/15/10 00:48	09/16/10 10:30
	ADL-19C	1009096-23	Soil	09/15/10 00:50	09/16/10 10:30

Excelchem Environmental Lab.

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn	Project:	Silva V	alley					
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603						10/01/10	0 14:55	
			DL-12A 096-01 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
/IETALS BY 6000/7000 SER	IES							
lead	101	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603		Project Manager: Dave Buck				10/01/10 14:55		
			DL-12B 096-02 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
lead	8.5	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603		Project Manager: Dave Buck				10/01/10 14:55		
			DL-12C 096-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	RIES							
lead	6.5	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem <b>F</b>	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave B	043			Date R 10/01/1	eported: 0 14:55
		-	ADL-13A 9096-04 (Soi	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 S	ERIES	1.0		4710214	00/05/10	00/05/10		
Wet Chemistry	184	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	
рН	6.29	0.100	pH Units	ATI0131	09/16/10	09/17/10	EPA 9045	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S				
Blackburn		Project: Project Number:	Silva Valley						
Auburn, CA 95603	521 Blocker Dr, Suite 110		P.0.#10 Dave E			Date Reported: 10/01/10 14:55			
Aubuili, CA 93003		Project Manager:	Dave	SUCK			10/01/10	14.33	
		1009	096-05 (So	oil)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
/IETALS BY 6000/7000 S	ERIES								
lead	147	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B		

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#1	0043			Date Reported:	
Auburn, CA 95603	purn, CA 95603 Project Manager: Dave Buck 10/0							
			DL-14A 096-06 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEI	RIES							
lead	170	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project:	Silva V P.0.#10	5			D-t- D	
Auburn, CA 95603		Project Number: Project Manager:	Dave E				Date Re 10/01/10	
		1009	096-07 (So	oil)				
<b></b>								
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI	ERIES							
lead	12.9	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#1	0043	Date Re	eported:		
Auburn, CA 95603								
			DL-14C 096-08 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEI	RIES							
Lead	2.9	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project:	Silva V	2				. 1
Auburn, CA 95603								
			DL-15A 096-09 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 S	ERIES							
lead	55.5	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem <b>F</b>	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave B	043			Date R 10/01/1	eported: 0 14:55
			ADL-15B 9096-10 (Soi	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE Lead	RIES 114	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	
Wet Chemistry pH	6.34	0.100	pH Units	ATI0131	09/16/10	09/17/10	EPA 9045	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V P.0.#10	5			Date Re	ported:
Auburn, CA 95603		Project Manager:	Dave F		10/01/10 14:55			
			DL-15C 096-11 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave E	0043			Date Re 10/01/10	•
			DL-16A 096-12 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER Lead	IES 2100	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	2				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043	Date Re	eported:		
Auburn, CA 95603	burn, CA 95603 Project Manager: Dave Buck 1							
			DL-16B 096-13 (So	vil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
Lead	124	1.0	mg/kg	ATI0214	09/25/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V P.0.#10	2			Date Re	enorted:
Auburn, CA 95603		Project Manager:	Dave E		10/01/10			
			DL-16C 096-14 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE								
Jead	10.2	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem <b>F</b>	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave B	043			Date R 10/01/1	eported: 0 14:55
			ADL-17A 9096-15 (Soi	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES 4.3	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	
Wet Chemistry pH	7.43	0.100	pH Units	ATI0131	09/16/10	09/17/10	EPA 9045	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	8			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave F	0043			Date Re 10/01/10	
			DL-17B 096-16 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES ND	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603	n, CA 95603 Project Manager: Dave Buck 10/0							0 14:55
			DL-17C 096-17 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
lead	4.7	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#1	0043			Date Re	eported:
Auburn, CA 95603		Project Manager: Dave Buck						) 14:55
			DL-18A 096-18 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
lead	6.7	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#1	0043			Date Re	eported:
Auburn, CA 95603		Project Manager: Dave Buck						) 14:55
			DL-18B 096-19 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE	CS							
Lead	5.2	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave F	0043			Date Re 10/01/10	
			DL-18C 096-20 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE Lead	ES 13.1	1.0	mg/kg	ATI0214	09/25/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603	uburn, CA 95603 Project Manager: Dave Buck							) 14:55
			DL-19A 096-21 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
lead	181	1.0	mg/kg	ATI0211	09/22/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem <b>F</b>	Environm	ental Lab	S				
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V P.0.#10 Dave B	043			Date R 10/01/1	eported: 0 14:55	
ADL-19B 1009096-22 (Soil)									
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
METALS BY 6000/7000 SERIES           Lead         4.7         1.0         mg/kg         ATI0211         09/22/10         09/25/10         EPA 6010B									
Wet Chemistry pH	7.45	0.100	pH Units	ATI0131	09/16/10	09/17/10	EPA 9045		

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	P.0.#10	0043			Date Re	eported:
Auburn, CA 95603	Project Manager: Dave Buck						10/01/10 14:55	
			DL-19C 096-23 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SER	IES							
Lead	31.5	1.0	mg/kg	ATI0211	09/22/10	09/25/10	EPA 6010B	

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Laboratory Representative

Excelchem Environmental Labs						
Blackburn	Project:	Silva Valley				
11521 Blocker Dr, Suite 110	Project Number:	P.0.#10043	Date Reported:			
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 14:55			

## METALS BY 6000/7000 SERIES - Quality Control

		D		<b>S</b> 1	S		%/DEC		RPD	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	Limit	Notes
Batch ATI0211 - EPA 6010B										
Blank (ATI0211-BLK1)				Prepared:	09/22/10 A	nalyzed: 09	/24/10			
Lead	ND	1.0	mg/kg							
LCS (ATI0211-BS1)				Prepared:	09/22/10 A	nalyzed: 09	/24/10			
Lead	104	1.0	mg/kg	100		104	80-120			
LCS Dup (ATI0211-BSD1)				Prepared:	09/22/10 A	nalyzed: 09	0/24/10			
Lead	104	1.0	mg/kg	100		104	80-120	0.293	25	
Matrix Spike (ATI0211-MS1)		Source: 100912	0-01	Prepared:	09/22/10 A	nalyzed: 09	0/24/10			
Lead	107	1.0	mg/kg	100	8.62	98.8	75-125			
Matrix Spike Dup (ATI0211-MSD1)		Source: 100912	0-01	Prepared:	09/22/10 A	nalyzed: 09	/24/10			
Lead	103	1.0	mg/kg	100	8.62	94.3	75-125	4.35	25	
Batch ATI0214 - EPA 6010B										
Blank (ATI0214-BLK1)				Prepared:	09/25/10 A	nalyzed: 09	0/27/10			
Lead	ND	1.0	mg/kg							
LCS (ATI0214-BS1)				Prepared:	09/25/10 A	nalyzed: 09	/27/10			
Lead	92.9	1.0	mg/kg	100		92.9	80-120			
LCS Dup (ATI0214-BSD1)				Prepared:	09/25/10 A	nalyzed: 09	/27/10			
Lead	88.3	1.0	mg/kg	100		88.3	80-120	5.13	25	
Matrix Spike (ATI0214-MS1)		Source: 100909	6-01	Prepared:	09/25/10 A	nalyzed: 09	/30/10			
Lead	178	1.0	mg/kg	100	101	77.1	75-125			

Excelchem Environmental Lab.

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		Excelchem	Enviro	nmental I	Labs					
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Р.(	va Valley ).#10043 we Buck					Date Rep 10/01/10	
	ME	FALS BY 6000/7	7000 SEI	RIES - Qu	ality Cor	itrol				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0214 - EPA 6010B										
Matrix Spike Dup (ATI0214-MSD1)		Source: 1009096-	01	Prepared: 0	9/25/10 A	nalyzed: 09	/27/10			
Lead	201	1.0	mg/kg	100	101	100	75-125	12.1	25	

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Laboratory Representative

		Excelchem	Enviro	nmental I	Labs					
Blackburn		Project:		va Valley						
11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project Number: Project Manager		.#10043 ve Buck					Date Rep 10/01/10	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0131 - EPA 9045										
Duplicate (ATI0131-DUP1)		Source: 1009096-	-10	Prepared: 0	09/16/10 A	nalyzed: 09	/17/10			

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Laboratory Representative

	vironmental Labs		
Blackburn	Project:	Silva Valley	Date Reported: 10/01/10 14:55
11521 Blocker Dr, Suite 110	Project Number:	P.0.#10043	
Auburn, CA 95603	Project Manager:	Dave Buck	

#### **Notes and Definitions**

ND Analyte not detected at reporting limit.

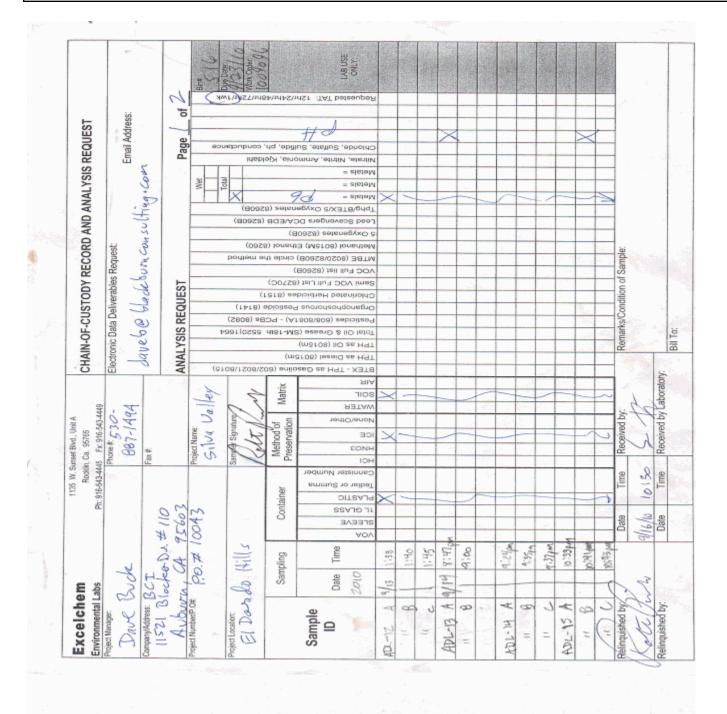
NR Not reported

Excelchem Environmental Lab.

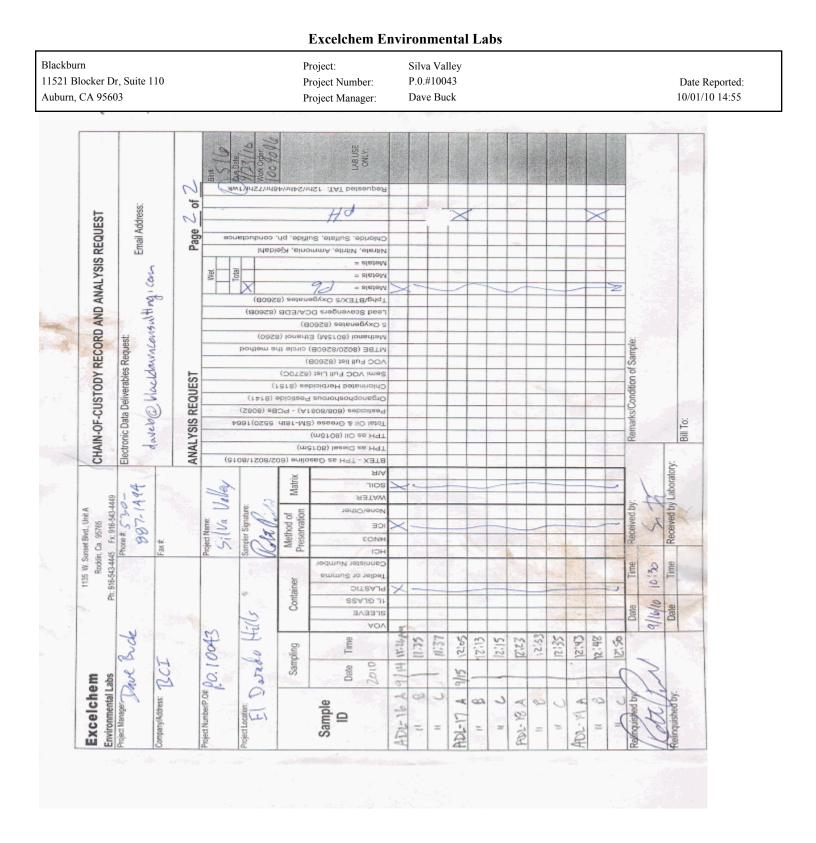
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Laboratory Representative

Excelchem Environmental Labs						
Blackburn	Project:	Silva Valley				
11521 Blocker Dr, Suite 110	Project Number:	P.0.#10043	Date Reported:			
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 14:55			



Laboratory Representative



Laboratory Representative

v			Project:		ilva Valley					
Sample Integrity       WORK ORDER _ 100 90 %         Date B2ccived:	·		5							Date Reporte
Date E20cived:       ////////////////////////////////////	A 95603		Project Mar	nager: D	ave Buck					10/01/10 14:5
Section 1 - Sample Arrival Info.         Sample Transport: ONTRAC UPS USPS Walk-In         Transported In: (cc Chest) Box Hand         Describe type of packing materials: Bubble Wrap Form Packing Peanuts Paper Other: []         Has chilling process begun? N       Sample Received: Chilled to Touch / Ambient (O         Temperature of Samples (°C):       Ice Chest Temperature(s) (°C):         Was temperature In Range?:       N         Section 2 - Bottle/Analysis Info.       Ice Chest Temperature(s) (°C):         Did all bottle labels agree with COC?       Ka 95 met bootHill         Were correct containers used for the tests requested?       Ka 95 met bootHill         Were bubbles present in VOA Vials?: (Volatile Methods Only)       Xain (Comments)         Section 3 - COC Info.       Completed Infe from Yes No         Was COC Received       Infe from Yes No         Yes No       Completed Infe from Yes No         Was COC Received Valla?: (Volatile Methods Only)       Xain (Comments No         Sampled Taraspid Taraspid Infe from Yes No       Completed Infe from Yes No         Was COC Info.       Comments / Discrepancies         Was COC Received       Sample schemed with holding time         Taraspid Taraspid Taraspid Infe from Yes No       Completed Infe from Yes No         Yes No       Completed Infe from Yes No       Samples scheme to Yes No	10	<b>ty</b> 4/16/1	0		WOF	K OI	RDEF	<u>100</u>	9096	-
Sample Transport: ONTRAC UPS USPS Walk-In       EXCELCHEM Courier       Fed-Ex       Other:		Arrivel Info.								
Jumple Instruction       Jose Chest       Box       Hand         Describe type of packing materials:       Bubble Wrap       Form       Packing Peanuts       Paper       Other:       Jule         Has chilling process begun?       N       Samples Received:       Chilled to Touch / Ambient / O         Temperature of Samples (°C):			UPS US	PS Walk-l	In EXC	ELCH	EM Cou	rier Fe	d-Ex Other:	
Describe type of packing materials:       Bubble Wrap       Form       Packing Peanuts       Paper       Other:       MM         Has chilling process begun?       N       Samples Received:       Chilled to Touch / Ambient / O         Temperature of Samples (*C):       Ice       Ice       Chest Temperature(s) (*C):       Ice         Was temperature In Range?:       N       N       N       Section 2 - Bottle/Analysis Info.       Ice       Chest Temperature(s) (*C):       Ice         Did all bottle sarrive unbroken and intact?       Vis       N       N       Recy C       Did all bottle sarrive unbroken and intact?         Did all bottle sarrive unbroken and intact?       Vis       N       Recy C       Bd dys       Ice       I		Part of the second seco			-					
Has chilling process begun?       N       Samples Received: Chilled to Touch / Ambient (O         Temperature of Samples (°C):       Ice Chest Temperature(s) (°C):       Ice         Was temperature In Range?:       N       Ice Chest Temperature(s) (°C):       Ice         Did all bottles arrive unbroken and intact?       Ves       NA       Comments         Did all bottles arrive unbroken and intact?       Key       Key       Key         Did all bottles arrive unbroken and intact?       Key       Key       Key         Were correct containers used for the tests requested?       Key       Key       Key         Were correct preservations used for the tests requested?       Key       Key       Key         Were bubbles present in VOA Vials?: (Volastile Methods Only)       Key       Key       Key         Section 3 - COC Info.       Completed       Analysis Requested       Key       Key         Mas COC Received       Yes       No       Comments       Key       Key       Key         Sampled       Analysis Requested       Yes       No       Comments       Key       Key<				Wrap F	oam	Packing	Peanuts	Pap	er Other:	11/
Temperature of Samples (°C):       Ice       Chest Temperature(s) (°C):       Ice         Was temperature In Range?:       N       N         Section 2 - Bottle/Analysis Info.         Ves       No         NA         Section 2 - Bottle/Analysis Info.         Ves       No         Did all bottle arrive unbroken and intact?         Did all bottle arrive unbroken and intact?       Section 2 - Bottle/Analysis Info.         Were correct containers used for the tests requested?       X       X         Were correct containers used for the tests requested?       X       X         Were correct containers used for the tests requested?       X       X         Was a sufficient amount of sample sent for tests indicated?       X       X         Was a sufficient amount of sample sent for tests indicated?       Yes       No         Was COC Received       Infe From       Completed       Yes       No         Time Sampled       X       Container       Yes       No       Comments         Rush TAT       Address/Telephone #       X       Infe From       X       Infe From       X       X       Infe From       X       X       X       Infe From       X       X		-	S						/ Ambient	10
Was temperature In Range?:       N         Section 2 - Bottle/Analysis Info.       Yes       N/A       Comments         Did all bottles arrive unbroken and intact?       Bd gs       het       bd gg       het       be Ht/A         Were correct containers used for the tests requested?       X       Key g       be Ht/A       Were correct containers used for the tests requested?       X       Key g       Het       be Ht/A         Were correct containers used for the tests requested?       X       Key g       Key g       het       be Ht/A         Were correct preservations used for the tests requested?       X       Key g       Key g       Key g       het       be Ht/A         Was a sufficient amount of sample sent for tests indicated?       X       Key g			4.				rature(	s) (°C):	3	
Section 2 - Bottle/Analysis Info.       Yes       No       N/A       Comments         Did all bottles arrive unbroken and intact?       Did all bottle labels agree with COC?       X       BddgS       hot bottle         Were correct containers used for the tests requested?       X       BddgS       hot bottle         Were correct containers used for the tests requested?       X       BddgS       hot bottle         Were correct preservations used for the tests indicated?       X       Image: Section 3 - COC Info.       Completed       Test No       Completed       Test No       No         Were bubbles present in VOA Vials?: (Volatile Methods Only)       X			A							
Ves       No       N/A       Comments         Did all bottle labels agree with COC?       X       B age       B age       b att         Were correct containers used for the tests requested?       X       B age       b att       b att         Were correct preservations used for the tests requested?       X       B age       b att       b att         Were correct preservations used for the tests indicated?       X       B age       b att       b att         Were bubbles present in VOA Vials?: (Volatile Methods Oaly)       X       Completed       f att       f att         Section 3 - COC Info.       Completed       Info From       Completed       f att       f att         Vas COC Received       Yes       No       Container       Yes       No       Comments         Mas COC Received       X       Analysis Requested       Yes       No       Comments         Sampled       X       Any hold times leses than 72 hrs       Xes       <	was temperature 1	in Ranger;	I) N							
Did all bottles arrive unbroken and intact?       X       Bays         Did all bottle labels agree with COC?       Bays       Bays       Batter bottle         Were correct ontainers used for the tests requested?       X       Bays       Batter       bottle         Were correct preservations used for the tests requested?       X       Batter       bottle         Were correct preservations used for the tests requested?       X       Batter       bottle         Was a sufficient amount of sample sent for tests indicated?       X       Batter       bottle         Were correct on Vials?: (Volatile Methods Only)       X       Batter	Section 2 - Bottle/A	nalysis Info.								
Did all bottle labels agree with COC?       Bd 95 met bettle         Were correct containers used for the tests requested?       X         Was a sufficient amount of sample sent for tests indicated?       X         Were bubbles present in VOA Vials?: (Volattile Methods Only)       X         Section 3 - COC Info.       Completed         Yes       No         Was COC Received       Analysis Requested         Was COC Received       Analysis Requested         Mass COC Received       Analysis Requested         Was Coc Received       Samples Iss than 72 hrs         Sample ID       X       Client Name         Rush TAT       Address/Telephone #         Was Client notified of discrepancies       Yes         Was Client notified of discrepancies:       Yes         Was Coc Received by:       Samples Labeled by:		1			Yes	No	N/A	1	1	
Were correct containers used for the tests requested?       X       X         Were correct preservations used for the tests indicated?       X       X         Was aufficient amount of sample sent for tests indicated?       X       X         Were bubbles present in VOA Vials?: (Volatile Methods Only)       X       X         Section 3 - COC Info.       Completed       Infe From       Completed         Vas COC Received       X       Analysis Requested       X         Date Sampled       Samples arrived within holding time       X       X         Date Sampled       Analy hold times less than 72 hrs       X       X         Sample ID       X       Client Name       X       X         Rush TAT       Address/Telephone #       X       X       X         Explanations / Comments:       Samples Labeled by:       Sf         Labels reviewed by:       Sf       K       K         COC Received       X       Notified by:       Sf         Sample ID       X       Notified by:       Sf         Section 4 - Comments / Discrepancies       No       Notified by:       Sf         Labels reviewed by:       Sf       Samples Labeled by:       Sf         Labels reviewed by:       Sf       COC					1		1-0-	Ras		ottl
Were correct preservations used for the tests requested?       X         Was a sufficient amount of sample sent for tests indicated?       X         Were correct preservations used for the tests indicated?       X         Were correct preservations used for the tests indicated?       X         Were correct preservations used for the tests indicated?       X         Were correct preservations used for the tests indicated?       X         Were correct preservations used for the tests indicated?       X         Were correct preservations?       Completed         Section 3 - COC Info.       Completed         Yes       No Container       Yes         Was COC Received       Analysis Requested       X         Date Sampled       Analysis arrived within holding time       X         Time Sampled       Analysis less than 72 hrs       X         Rush TAT       Address/Telephone #       X         Section 4 - Comments / Discrepancies       Yes       Notified by:         Explanations / Comments:       X       X         Samples Labeled by:       Yes       M         Samples Labeled by:       Yes       Yes         Notified serviewed by:       Yes       Yes         Samples Labeled by:       Yes       Yes         Sampl	Did all bottle labels a	are used for the	e tests reque	sted?	X			1 and		
Was a sufficient amount of sample sent for tests indicated?       X         Were bubbles present in VOA Vials?: (Volatile Methods Only)         Section 3 - COC Info,         Completed       Infe From         Yes       No         Container       Yes         Was COC Received       Analysis Requested         Time Sampled       Analysis Requested         Sampled       Any hold times less than 72 hrs         Sample ID       Client Name         Rush TAT       Address/Telephone #         Section 4 - Comments / Discrepancies       Was Over Notified by:         Explanations / Comments:       Samples Labeled by:         Samples Labeled by:       SAM	Were correct preserv	ations used for	the tests red	juested?	10		X			
Were bubbles present in VOA Vials?: (Volatile Methods Only) <ul> <li>Section 3 - COC Info.</li> <li>Completed info From</li> <li>Yes No</li> <li>Container</li> <li>Analysis Requested</li> <li>Yes No</li> <li>Comments</li> </ul> Was COC Received         Analysis Requested         Yes No         Comments           Date Sampled         Analysis Requested         Yes No         Comments           Sample ID         Any hold times less than 72 hrs         Yes         Yes           Rush TAT         Address/Telephone #         Image: Comments         Image: Comments         Image: Comments           Section 4 - Comments / Discrepancies         Yes         No         N/A         Notified by:         Image: Comments           Explanations / Comments:         Image: Comments:         Image: Comments         Image: Comments         Image: Comments           Samples Labeled by:         Yes         No         N/A         Notified by:         Image: Comments	Was a sufficient amo	unt of sample	sent for tests	s indicated?	X		-			
Section 3 - COC Info.       Completed       Infe From       Completed       Infe From       Yes       No       Comments         Was COC Received       Yes       No       Container       Yes       No       Comments         Date Sampled       Samples arrived within holding time       X       X       X       X         Time Sampled       Analysis Requested       X       X       X       X         Sample ID       X       Container       X       X       X       X         Rush TAT       X       Address/Telephone #       X       X       X       X         Was Client notified of discrepancies:       Yes       No       N/A       Notified by:       X       X         Explanations / Comments:       X       X       X       X       X       X       X         Samples Labeled by:       Yes       No       N/A       Notified by:       Yes       Yes         X	Were bubbles present it	n VOA Vials?: (	Volatile Me	thods Only)		1.1.1	X			
Completed       Infe From       Completed         Yes       No       Container       Yes       No       Comments         Was COC Received       X       Analysis Requested       Yes       No       Comments         Date Sampled       X       Samples arrived within holding time       X       Image: Sample Sampl								1. S.		
Yes       No       Container       Yes       No       Comments         Was COC Received       X       Analysis Requested       X       Image: Samples arrived within holding time       X       Image: Samples arrived within holding timage: Sa	Section 3 - COC In	fo.								
Was COC Received       X       Analysis Requested         Date Sampled       Samples arrived within holding time       X         Time Sampled       Any hold times less than 72 hrs       X         Sample ID       X       Client Name         Rush TAT       Address/Telephone #       X         Section 4 - Comments / Discrepancies       X       Notified by:         Explanations / Comments:       Yes       No         Samples Labeled by:       SA         Samples Labeled by:       SA         Bin #s:       S / 6         COC Scanned/Attached by:       S									Comme	ate.
Date Sampled       Samples arrived within holding time       X         Time Sampled       Any hold times less than 72 hrs       X         Sample ID       X       Client Name         Rush TAT       Address/Telephone #         Section 4 - Comments / Discrepancies         Was Client notified of discrepancies:       Yes         Was Client notified of discrepancies:       Yes         Explanations / Comments:	West COC Resident	and the second se	Contininer	Analysis Re	anestad		the second s	the second se	Contable	10
Time Sampled       X       Any hold times less than 72 hrs         Sample ID       X       Client Name         Rush TAT       Address/Telephone #         Section 4 - Comments / Discrepancies         Was Client notified of discrepancies:       Yes         Was Client notified of discrepancies:       Yes         Explanations / Comments:       Samples Labeled by:         Section 4 - Comments / Discrepancies:       Yes         Was Client notified of discrepancies:       Yes         Samples Labeled by:       Samples Labeled by:         Samples Labeled by:       SAMPLES reviewed by:         Samples Labeled by:       SAMPLES reviewed by:         Bin #s:       SIMPLES reviewed by:         Score Scanned/Attached by:       Samples Labeled by:		-121-				olding tin				
Sample ID       X       Client Name         Rush TAT       Address/Telephone #         Section 4 - Comments / Discrepancies         Was Client notified of discrepancies:       Yes         Was Client notified of discrepancies:       Yes         Explanations / Comments:		-F						X		
Rush TAT       Address/Telephone #         Section 4 - Comments / Discrepancies         Was Client notified of discrepancies:       Yes       No         Explanations / Comments:         Samples Labeled by:       Samples Labeled by:       State         Bin #s:       S / 6       COC Scanned/Attached by:       State							X	-		
Section 4 - Comments / Discrepancies         Was Client notified of discrepancies:       Yes       No         Explanations / Comments:         Samples Labeled by:       5/         Labels reviewed by:       5/         Bin #s:       5 / 6         COC Scanned/Attached by:       5		X	-	Address/Te	lephone #	ŧ	X			
Was Client notified of discrepancies:       Yes       No       Notified by:         Explanations / Comments:	Truck I I I									
Explanations / Comments:	Section 4 - Commer	nts / Discrepa	ncies							
Samples Labeled by: 5 A Labels reviewed by: 5 A Bin #s: 5 / 6 COC Scanned/Attached by: 5	Was Client notified of	of discrepancie	s: Yes	No N/A	5		Notified	by:		
Labels reviewed by: <u>Full</u> Bin #s: <u>S / 6</u> COC Scanned/Attached by: <u>s</u>	Explanations / Comm	nents:						-		
Labels reviewed by: <u>Full</u> Bin #s: <u>S / 6</u> COC Scanned/Attached by: <u>s</u>	^	1.			-					
Labels reviewed by: <u>Full</u> Bin #s: <u>S / 6</u> COC Scanned/Attached by: <u>s</u>		-								
Labels reviewed by: <u>Full</u> Bin #s: <u>S / 6</u> COC Scanned/Attached by: <u>s</u>					-					
Labels reviewed by: <u>Full</u> Bin #s: <u>S / 6</u> COC Scanned/Attached by: <u>s</u>								Samel	es I abalad bur	SP
Bin #s: <u>5 / 6 /</u> COC Scanned/Attached by: <u>≤</u>								Labels	reviewed by:	KM-
- COC Scanned/Attached by: ≤								Bin #e	516	1007
Form completed by: Date/Time: 9/16/1								COCS	canned/Attached	i by: _
Parter Time: 1/191			completed	by:	12			1	Date/Time	116/1
		Form			12 10 6				L'atter Line. 7	1 4 4 13
		Form	Completed							
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# EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

01 October 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1009133

Enclosed are the results of analyses for samples received by the laboratory on 09/22/10 09:31. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem Er	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 15:57

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-20A	1009133-01	Soil	09/21/10 00:27	09/22/10 09:31
ADL-20B	1009133-02	Soil	09/21/10 00:30	09/22/10 09:31
ADL-20C	1009133-03	Soil	09/21/10 00:40	09/22/10 09:31
ADL-21A	1009133-04	Soil	09/21/10 01:59	09/22/10 09:31
ADL-21B	1009133-05	Soil	09/21/10 02:03	09/22/10 09:31
ADL-21C	1009133-06	Soil	09/21/10 02:05	09/22/10 09:31
ADL-22A	1009133-07	Soil	09/21/10 02:15	09/22/10 09:31
ADL-22B	1009133-08	Soil	09/21/10 02:21	09/22/10 09:31
ADL-22C	1009133-09	Soil	09/21/10 02:23	09/22/10 09:31
ADL-23A	1009133-10	Soil	09/21/10 02:34	09/22/10 09:31
ADL-23B	1009133-11	Soil	09/21/10 02:45	09/22/10 09:31
ADL-23C	1009133-12	Soil	09/21/10 02:47	09/22/10 09:31
ADL-24A	1009133-13	Soil	09/21/10 02:58	09/22/10 09:31
ADL-24B	1009133-14	Soil	09/21/10 03:03	09/22/10 09:31
ADL-24C	1009133-15	Soil	09/21/10 03:05	09/22/10 09:31
ADL-25A	1009133-16	Soil	09/21/10 03:19	09/22/10 09:31
ADL-25B	1009133-17	Soil	09/21/10 03:33	09/22/10 09:31
ADL-25C	1009133-18	Soil	09/21/10 03:35	09/22/10 09:31
ADL-26A	1009133-19	Soil	09/21/10 04:38	09/22/10 09:31
ADL-26B	1009133-20	Soil	09/21/10 04:45	09/22/10 09:31
ADL-26C	1009133-21	Soil	09/21/10 04:47	09/22/10 09:31
ADL-27A	1009133-22	Soil	09/21/10 04:54	09/22/10 09:31
ADL-27B	1009133-23	Soil	09/21/10 05:00	09/22/10 09:31
ADL-27C	1009133-24	Soil	09/21/10 05:02	09/22/10 09:31
ADL-28A	1009133-25	Soil	09/21/10 05:11	09/22/10 09:31
ADL-28B	1009133-26	Soil	09/21/10 05:25	09/22/10 09:31
ADL-28C	1009133-27	Soil	09/21/10 05:27	09/22/10 09:31
ADL-29A	1009133-28	Soil	09/21/10 05:43	09/22/10 09:31
ADL-29B	1009133-29	Soil	09/21/10 05:48	09/22/10 09:31

Excelchem Environmental Lab.

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 15:57

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-29C	1009133-30	Soil	09/21/10 05:50	09/22/10 09:31

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem Ei						
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110	)	Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave B	Buck			10/01/10	0 15:57
		A	DL-20A					
		10091	133-01 (So	oil)				
Analyte	Result	Reporting Limit	133-01 (So Units	<b>bil)</b> Batch	Date Prepared	Date Analyzed	Method	Notes
Analyte 1ETALS BY 6000/7000 S		Reporting		, 			Method	Notes

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Laboratory Representative

		Excelchem E	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.3 Dave B	2			Date Ro 10/01/10	eported: ) 15:57
			ADL-20B 9133-02 (Sol	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI	ES							
Lead	311	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	
Wet Chemistry								
рН	7.26	0.100	pH Units	ATI0219	09/27/10	09/27/10	EPA 9045	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number:	Silva V 556.3 Dave F	5			Date Re 10/01/10	
Aubum, CA 75005			DL-20C 133-03 (So				10/01/10	, 15.57
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI Lead	ES ND	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave E	Buck			10/01/10	) 15:57
			DL-21A 133-04 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE	RIES							
Lead	83.9	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.3	alley			Date Re	enorted:
Auburn, CA 95603		Project Manager:	Dave E	Buck			10/01/10	-
			DL-21B 133-05 (So	vil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE	RIES							
Lead	650	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave H	Buck			10/01/10	) 15:57
			DL-21C 133-06 (So	vil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE								
lead	5.1	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	ported:
Auburn, CA 95603		Project Manager:	Dave E	luck			10/01/10	0 15:57
			DL-22A 133-07 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE	RIES							
lead	13.1	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave Buck					) 15:57
			DL-22B 133-08 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE	CRIES							
lead	37.5	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:						) 15:57
			DL-22C 133-09 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE	RIES							
lead	116	1.0	mg/kg	ATI0215	09/24/10	09/27/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.3 Dave B	2			Date Ro 10/01/10	eported: 0 15:57
			ADL-23A 9133-10 (Soi	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI	ERIES							
Lead	13.4	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	
Wet Chemistry								
pH	6.86	0.100	pH Units	ATI0219	09/27/10	09/27/10	EPA 9045	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S				
Blackburn		Project:	Silva V	/alley					
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	ported:	
Auburn, CA 95603		Project Manager:	Dave E	Dave Buck 10/0					
			DL-23B 133-11 (So	oil)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
METALS BY 6000/7000 SI	ERIES								

Laboratory Representative

		Excelchem E	nvironm	ental Lab	\$			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave H	Buck	10/01/10 15:57			
			DL-23C 133-12 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SE	RIES							
lead	5.2	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110	)	Project Number:	556.3				Date Re	ported:
Auburn, CA 95603		Project Manager:	Dave E	Buck	10/01/10	15:57		
			DL-24A 133-13 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Analyte			Units	Batch			Method	Notes

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:						) 15:57
			DL-24B 133-14 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI	EDIEG							

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:						) 15:57
			DL-24C 133-15 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE	RIES							
Jead	127	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave E	Buck	10/01/10 15:57			
			DL-25A 133-16 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 SEF	RIES							
Lead	284	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem <b>F</b>	Environm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.3 Dave B	2			Date R 10/01/1	eported: 0 15:57
			ADL-25B 9133-17 (Soi	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERII	ES							
Lead	4.5	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	
Wet Chemistry								
рН	7.53	0.100	pH Units	ATI0219	09/27/10	09/27/10	EPA 9045	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project:	Silva V 556.3	alley				<i>.</i> 1
Auburn, CA 95603		Project Number: Project Manager:	Dave E	Buck			Date Re 10/01/10	
			DL-25C 133-18 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI Lead	ERIES							

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave H	Buck	10/01/10	0 15:57		
			DL-26A 133-19 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERI								
lead	1510	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva Valley 556.3				Date Reported:	
Auburn, CA 95603		Project Manager:	Dave Buck				10/01/10 15:57	
			DL-26B 133-20 (So	vil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE	RIES							
Lead	46.6	1.0	mg/kg	ATI0215	09/24/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	\$			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager: Dave Buck						) 15:57
			DL-26C 133-21 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
1ETALS BY 6000/7000 S								
ead	7.7	1.0	mg/kg	ATI0216	09/24/10	09/25/10	EPA 6010B	

Laboratory Representative

		Excelch	em Environn	nental Lab	S				
ourn		Project:	Silva	Valley					
Blocke	er Dr, Suite 110	Project Num	nber: 556.3				Date Re	ported:	
n, CA 9	95603	Project Man	Project Manager: Dave Buck 10/01/10 1						
			ADL-27A 1009133-22 (S	-					
lyte	R	Repo esult Lin		Batch	Date Prepared	Date Analyzed	Method	Notes	
ALS BY	Y 6000/7000 SERIES	12 14		4.710217	00/24/10	00/25/10			
	71 71	12 1.0	) m	g/kg	g/kg ATI0216	g/kg ATI0216 09/24/10	g/kg ATI0216 09/24/10 09/25/10	g/kg ATI0216 09/24/10 09/25/10 EPA 6010B	

Laboratory Representative

		Excelchem E	nvironm	ental Lab	S				
Blackburn		Project:	Silva V	alley					
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:	
Auburn, CA 95603		Project Manager: Dave Buck 10/01/10							
			DL-27B 133-23 (So	il)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
1ETALS BY 6000/7000 SE	RIES								
lead	88.7	1.0	mg/kg	ATI0216	09/24/10	09/25/10	EPA 6010B		

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S				
Blackburn		Project:	Silva V	alley					
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:	
Auburn, CA 95603								10 15:57	
			DL-27C 133-24 (So	vil)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
AETALS BY 6000/7000 S	SERIES								
lead	2.8	1.0							

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	8			
Blackburn		Project:	Silva V	alley				
1521 Blocker Dr, Suite 110	)	Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave E	Buck			) 15:57	
			DL-28A 133-25 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Analyte 1ETALS BY 6000/7000 \$			Units	Batch			Method	Notes

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.3	alley			Date Re	eported:
Auburn, CA 95603	Project Manager:	Dave E	Buck		10/01/10 15:57			
			DL-28B 133-26 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SEF								
Lead	15.6	1.0	mg/kg	ATI0216	09/24/10	09/25/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project:	Silva V 556.3	/alley				. 1
Auburn, CA 95603		Project Number: Project Manager:	Dave E	Buck		Date Reported: 10/01/10 15:57		
		1009	133-27 (So	oil)				
		1009	133-27 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SE	RIES							
lead	4.2	1.0	mg/kg	ATI0216	09/24/10	09/25/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem <b>E</b>	Environm	ental Lab	\$			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.3 Dave B	2			Date Ro 10/01/10	
			ADL-29A 9133-28 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIE	ES							
Lead	15.7	1.0	mg/kg	ATI0216	09/24/10	09/25/10	EPA 6010B	
Wet Chemistry								
рН	6.65	0.100	pH Units	ATI0219	09/27/10	09/27/10	EPA 9045	

 $\geq$ 

Laboratory Representative

Blackburn		Project:	Silva V	alley							
11521 Blocker Dr, Suite 110	)	Project Number:	556.3				Date Re	eported:			
Auburn, CA 95603		Project Manager:	Dave B	Buck	10/01/10 15::						
		Α	DL-29B								
		10091	133-29 (So	il)							
Analyte	Result	1009 Reporting Limit	133-29 (So Units	il) Batch	Date Prepared	Date Analyzed	Method	Notes			
Analyte		Reporting	、 	, 			Method	Notes			

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Laboratory Representative

		Excelchem Er	nvironm	ental Lab	8			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110	1	Project Number:	556.3				Date Re	ported:
Auburn, CA 95603		Project Manager: Dave Buck					10/01/10	0 15:57
			DL-29C 133-30 (So	il)				
					<b>D</b> :			
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Analyte <b>IETALS BY 6000/7000 S</b>			Units	Batch			Method	Notes

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Laboratory Representative

	Excelchem Environmental Labs							
Blackburn	Project:	Silva Valley						
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:					
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 15:57					

### METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0215 - EPA 6010B										
Blank (ATI0215-BLK1)				Prepared: (	09/24/10 A	nalyzed: 10	/01/10			
Lead	ND	1.0	mg/kg							
LCS (ATI0215-BS1)				Prepared: (	09/24/10 A	nalyzed: 09	0/25/10			
Lead	95.3	1.0	mg/kg	100		95.3	80-120			
LCS Dup (ATI0215-BSD1)				Prepared: (	09/24/10 A	nalyzed: 09	0/25/10			
Lead	103	1.0	mg/kg	100		103	80-120	7.26	25	
Matrix Spike (ATI0215-MS1)		Source: 100913.	3-01	Prepared: (	09/24/10 A	nalyzed: 09	0/29/10			
Lead	291	1.0	mg/kg	100	185	106	75-125			
Matrix Spike Dup (ATI0215-MSD1)		Source: 100913.	3-01	Prepared: (	09/24/10 A	nalyzed: 09	/30/10			
Lead	306	1.0	mg/kg	100	185	122	75-125	5.07	25	
Batch ATI0216 - EPA 6010B										
Blank (ATI0216-BLK1)				Prepared: (	09/24/10 A	nalyzed: 09	0/27/10			
Lead	ND	1.0	mg/kg							
LCS (ATI0216-BS1)				Prepared: (	09/24/10 A	nalyzed: 09	/27/10			
Lead	98.5	1.0	mg/kg	100		98.5	80-120			
LCS Dup (ATI0216-BSD1)				Prepared: (	09/24/10 A	nalyzed: 09	0/27/10			
Lead	101	1.0	mg/kg	100		101	80-120	2.99	25	
Matrix Spike (ATI0216-MS1)		Source: 100913.	3-21	Prepared: (	09/24/10 A	nalyzed: 09	/29/10			
Lead	105	1.0	mg/kg	100	7.66	96.9	75-125			

Excelchem Environmental Lab.

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Excelchem Environmental Labs										
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	55	lva Valley 6.3 ive Buck					Date Rep 10/01/10	
METALS BY 6000/7000 SERIES - Quality Control										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0216 - EPA 6010B										
Matrix Spike Dup (ATI0216-MSD1)		Source: 1009133-2	21	Prepared: 0	9/24/10 A	nalyzed: 09	/29/10			
Lead	105	1.0	mg/kg	100	7.66	97.1	75-125	0.127	25	

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Laboratory Representative

		Excelchem	n Enviro	nmental l	Labs					
Blackburn		Project:	Sil	va Valley						
11521 Blocker Dr, Suite 110		Project Number	: 55	6.3					Date Rep	orted:
Auburn, CA 95603		Project Manager	r: Da	ve Buck					10/01/10	15:57
		Wet Chem	istry - Q	uality Con	itrol					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATI0219 - EPA 9045										
Duplicate (ATI0219-DUP1)		Source: 1009133	-02	Prepared &	Analyzed:	09/27/10				
pH										

 $\geq$ 

Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:556.3Date Reported:Auburn, CA 95603Project Manager:Dave Buck10/01/10 15:57

#### **Notes and Definitions**

ND Analyte not detected at reporting limit.

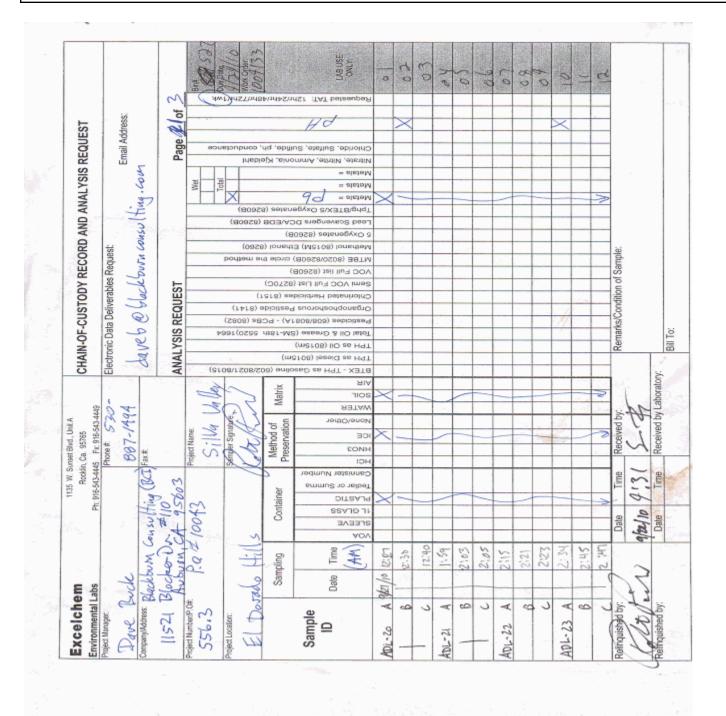
NR Not reported

Excelchem Environmental Lab.

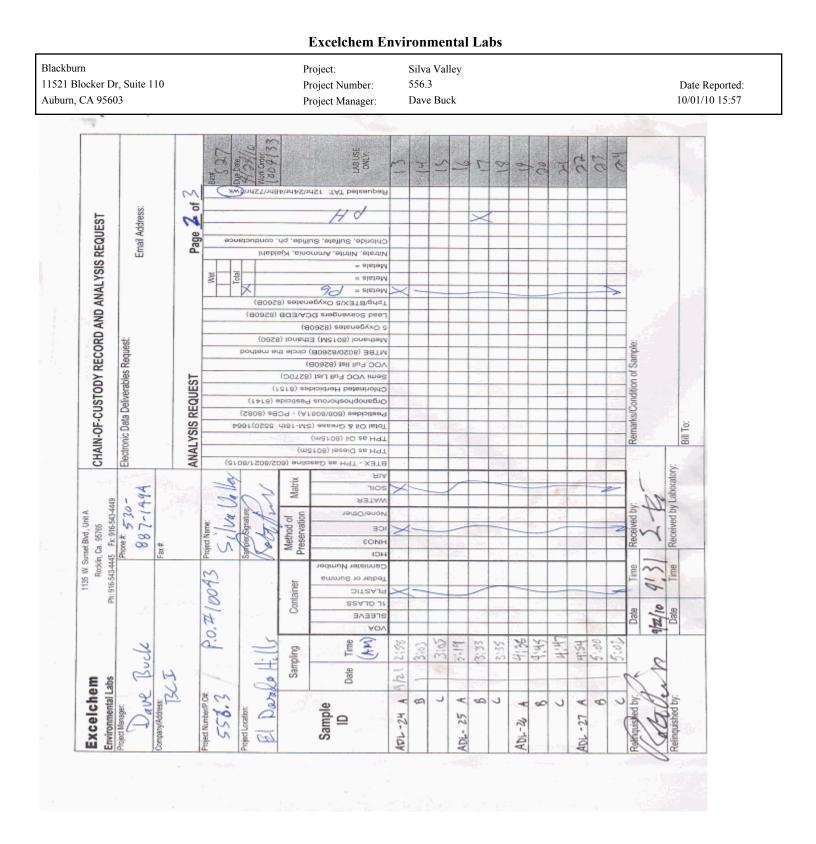
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Laboratory Representative

Excelchem Environmental Labs							
Blackburn	Project:	Silva Valley					
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:				
Auburn, CA 95603	10/01/10 15:57						

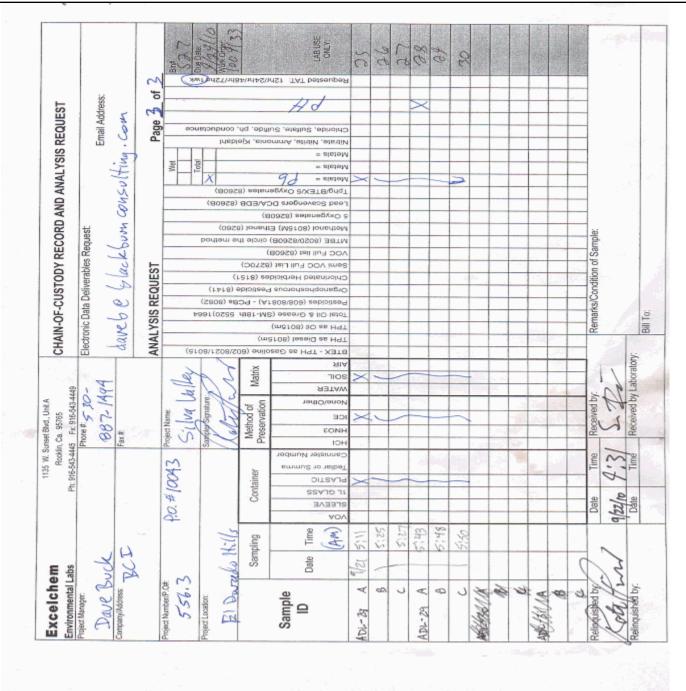


Laboratory Representative



Laboratory Representative

Excelchem Environmental Labs								
Blackburn	Project:	Silva Valley						
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:					
Auburn, CA 95603	Project Manager:	Dave Buck	10/01/10 15:57					



Excelchem	Environmental	Labs
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ourn		Project:		ilva Valle	У			
Blocker Dr, Suite 110		Project Nu		56.3				Date Reported
n, CA 95603		Project Ma	nager: D	ave Buck	-			10/01/10 15:5
Sample Integrity				WOR	KOR	DER	100	9(33
Date Ricceived: 9		~						
		0	-					1
Section 1 - Sample Arr	rival Info.			1 =			-	and the second
Sample Transport: (	ONTRAC	UPS USP	S Walk-In	EXC	ELCHEN	1 Couri	ér Feo	d-Ex Other:
Transported In: See	Chest B	ox Hand						114
Describe type of pack	king materia	ls: Bubble	Wrap Fo	ami . P	Packing Pe	anuts	Pape	r Other:
Has chilling process		2 N	Sample	s Receiv	ved: Ch	illed to	Touch	/ Ambient / On
Temperature of Sar		:7	Ic	e Chest	Tempera	ture(s)	) (°C): _	$\underline{a}$
		3						
Was temperature In I	Range?:	Y (N)						
Section 2 - Bottle/Ana	bueis Info							
				Yes	No	N/A		Comments
Did all bottles arrive un	broken and	intact?		X		X	129	5
Did all bottle labels agr	ee with COO	27	tad?	T				
Were correct containers Were correct preservation	s used for the	the tests reques	nested?	1-2		X		
Was a sufficient amoun	ons used for	sent for tests	indicated?	X		-		
Were bubbles present in V	IOA Viale?: (	Volatile Meti	hods Only)			$\times$		
1 Were buobles present in v	YOA VIAIS			4	the second se	and a second second		
Section 3 - COC Info.							and an and a	
	Completed	Infe From					nplesed	Comments
Section 3 - COC Info.	Completed Yes No	Container		quested		Cor Yes		Comments
Section 3 - COC Info. Was COC Received	Completed	Container	Analysis Ree Samples arrived	d within he		Ye		Comments
Section 3 - COC Info. Was COC Received Date Sampled	Completed Yes No	Container	Analysis Ree Samples arrive Any hold tin	d within he		Ye		Comments
Section 3 - COC Info. Was COC Received	Completed Yes No	Container	Analysis Red Samples arrived Any hold tim Client Name	d within he nes less t	than 72 hr	Ye	s No	Comments
Section 3 - COC Info. Was COC Received Date Sampled Time Sampled	Completed Yes No	Container	Analysis Ree Samples arrive Any hold tin	d within he nes less t	than 72 hr	Ye	s No	Comments
Section 3 - COC Info. Was COC Received Date Sampled Time Sampled Sample ID	Completed Yes No	Container	Analysis Red Samples arrived Any hold tim Client Name	d within he nes less t	than 72 hr	Ye	s No	Comments
Section 3 - COC Info. Was COC Received Date Sampled Time Sampled Sample ID Rush TAT	Completed Yes No X	Container	Analysis Red Samples arrived Any hold tim Client Name	d within he nes less t	than 72 hr	Ye	s No	Comments
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	Comments
Section 3 - COC Info. Was COC Received Date Sampled Time Sampled Sample ID Rush TAT	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Red Samples arrived Any hold tim Client Name	d within he nes less t	than 72 hr	Ye	X	Comments
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	Comments
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	Comments
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	Comments
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	X	
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	by:	
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	by:	es Labeled by:
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yei X S X	by:	es Labeled by:
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	by: Sample Labels r Bin #s:	es Labeled by:
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrived Any hold tin Client Name Address/Tel	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	by: Sample Labels r Bin #s:	es Labeled by:
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by: reviewed by: SAT
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by:
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by: reviewed by: SAT
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by: reviewed by: SAT
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by: reviewed by: SAT
Section 3 - COC Info, Was COC Received Date Sampled Time Sampled Sample ID Rush TAT Section 4 - Comments Was Client notified of a	Completed Yes No X X X X X X X X X X X X X X X X X X X	ncies	Analysis Rec Samples arrive Any hold tin Client Name Address/Tel No TN/A	d within he nes less t	than 72 hr	Yes S S S S S S S S S S S S S S S S S S S	Sample Labels I Bin #s: COC Sc	es Labeled by: reviewed by: SAT

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# EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

04 October 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1009175

Enclosed are the results of analyses for samples received by the laboratory on 09/28/10 12:30. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/04/10 15:44

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-30A	1009175-01	Soil	09/24/10 11:30	09/28/10 12:30
ADL-31A	1009175-02	Soil	09/24/10 12:00	09/28/10 12:30
ADL-32A	1009175-03	Soil	09/24/10 12:20	09/28/10 12:30

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave H	Buck			10/04/10	) 15:44
			DL-30A 175-01 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 S	ERIES							
Lead	6.5	1.0	mg/kg	ATJ0008	09/29/10	10/01/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave H	Buck			10/04/10	) 15:44
			DL-31A 175-02 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SI	ERIES							
Lead	6.0	1.0	mg/kg	ATJ0008	09/29/10	10/01/10	EPA 6010B	

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	alley				
11521 Blocker Dr, Suite 110		Project Number:	556.3				Date Re	eported:
Auburn, CA 95603		Project Manager:	Project Manager: Dave Buck					
			DL-32A 175-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Analyte METALS BY 6000/7000 S Jead			Units mg/kg	Batch			Method EPA 6010B	Notes

Laboratory Representative

Excelchem Environmental Labs							
Blackburn	Project:	Silva Valley					
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:				
Auburn, CA 95603	Project Manager:	Dave Buck	10/04/10 15:44				

### METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATJ0008 - EPA 6010B										
Blank (ATJ0008-BLK1)				Prepared: 0	9/29/10 A	nalyzed: 10	/01/10			
Lead	ND	1.0	mg/kg							
LCS (ATJ0008-BS1)				Prepared: 0	9/29/10 A	nalyzed: 10	/01/10			
Lead	101	1.0	mg/kg	100		101	80-120			
LCS Dup (ATJ0008-BSD1)				Prepared: 0	9/29/10 A	nalyzed: 10	/01/10			
Lead	102	1.0	mg/kg	100		102	80-120	1.40	25	
Matrix Spike (ATJ0008-MS1)		Source: 1009175	5-01	Prepared: 0	9/29/10 A	nalyzed: 10	/01/10			
Lead	101	1.0	mg/kg	100	6.55	94.3	75-125			
Matrix Spike Dup (ATJ0008-MSD1)		Source: 1009175	5-01	Prepared: 0	9/29/10 A	nalyzed: 10	/01/10			
Lead	90.6	1.0	mg/kg	100	6.55	84.0	75-125	10.7	25	

Excelchem Environmental Lab.

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Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:556.3Date Reported:Auburn, CA 95603Project Manager:Dave Buck10/04/10 15:44

#### **Notes and Definitions**

ND Analyte not detected at reporting limit.

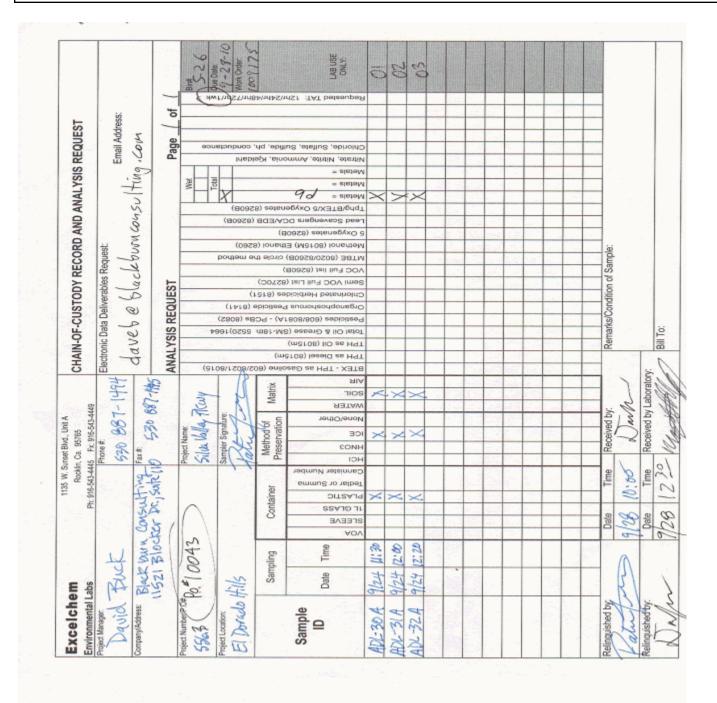
NR Not reported

Excelchem Environmental Lab.

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Laboratory Representative

	Excelchem Env	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.3	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/04/10 15:44



Laboratory Representative

		Excelchem E	nvironmental Labs		
ckburn 521 Blocker Dr, Suite 110 burn, CA 95603		Project: Project Number: Project Manager:	Silva Valley 556.3 Dave Buck		Date Reported: 10/04/10 15:44
Sample Integ	rity				
Date Received:	9-28		WORK O	RDER	1009175
Section 1 - Sample	Arrival Info				
Sample Transpor Transported In: Describe type of Has chilling proce Temperature of	Ice Chest packing mater	Box Hand ials: Bubble Wrap	Form Packing Samples Received: C	Peanuts Chilled to Te	Paper Other: V/2
Was temperature I		N N	Ice Chest Temper	rature(s) (°(	C):
Section 2 - Bottle/Ar	alysis Info.				
Did all bottles arrive u Did all bottle labels ag Were correct contained Were correct preservat Was a sufficient amou Were bubbles present in	ree with COC rs used for the tions used for	?? tests requested? the tests requested?	Yes No	N/A	Comments
Were bubbles present in Section 3 - COC Info.	ren viaisn (	olatile Methods Only	0	2	
Section 3 - COC Info.	Completed	Info From			
Was COC Received	Yes No	Container	-	Completed	
Date Sampled	X	Analysis 1	Requested	Yes No	Comments
Time Sampled	X	Any hold	ived within holding time	X	
Sample ID	X	Client Nar	times less than 72 hrs	X	
Rush TAT		Address/T	elephone #	X	
Section 4 - Comments	/ Discrepanci	es			
Was Client notified of di	screpancies:	Yes No N/	Notif	ied by:	
Explanations / Comment	s:				
	-				
			-		
	Form con	apleted by: 6		Labels re Bin #s:	s Labeled by: <u>RS</u> eviewed by: <u>FF</u> <u>S 26</u> anned/Attached by: <u>RS</u>
	a of the Con	apieted by:	All		Date/Time: 9/28/10
		1			13:01

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Laboratory Representative

# EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

19 October 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1010027

Enclosed are the results of analyses for samples received by the laboratory on 10/05/10 16:24. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem Env	ironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/19/10 17:33

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-1A	1010027-01	Soil	07/19/10 14:05	10/05/10 16:24
ADL-4A	1010027-02	Soil	07/19/10 16:10	10/05/10 16:24
ADL-12A	1010027-03	Soil	09/13/10 01:38	10/05/10 16:24
ADL-13A	1010027-04	Soil	09/14/10 20:47	10/05/10 16:24
ADL-13B	1010027-05	Soil	09/14/10 21:00	10/05/10 16:24
ADL-14A	1010027-06	Soil	09/14/10 21:24	10/05/10 16:24
ADL-15A	1010027-07	Soil	09/14/10 22:33	10/05/10 16:24
ADL-15B	1010027-08	Soil	09/14/10 22:41	10/05/10 16:24
ADL-16A	1010027-09	Soil	09/14/10 23:26	10/05/10 16:24
ADL-16B	1010027-10	Soil	09/14/10 23:35	10/05/10 16:24
ADL-19A	1010027-11	Soil	09/15/10 12:43	10/05/10 16:24
ADL-20A	1010027-12	Soil	09/21/10 00:27	10/05/10 16:24
ADL-20B	1010027-13	Soil	09/21/10 00:38	10/05/10 16:24
ADL-21A	1010027-14	Soil	09/21/10 01:59	10/05/10 16:24
ADL-21B	1010027-15	Soil	09/21/10 02:03	10/05/10 16:24
ADL-22C	1010027-16	Soil	09/21/10 02:23	10/05/10 16:24
ADL-24B	1010027-17	Soil	09/21/10 03:03	10/05/10 16:24
ADL-24C	1010027-18	Soil	09/21/10 03:05	10/05/10 16:24
ADL-25A	1010027-19	Soil	09/21/10 03:19	10/05/10 16:24
ADL-26A	1010027-20	Soil	09/21/10 04:38	10/05/10 16:24
ADL-27A	1010027-21	Soil	09/21/10 04:54	10/05/10 16:24
ADL-27B	1010027-22	Soil	09/21/10 05:00	10/05/10 16:24
ADL-28A	1010027-23	Soil	09/21/10 05:11	10/05/10 16:24
ADL-29B	1010027-24	Soil	09/21/10 05:48	10/05/10 16:24
ADL-32A	1010027-25	Soil	09/24/10 12:20	10/05/10 16:24

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			ADL-1A 027-01 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	2.1	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			ADL-4A 027-02 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	0.3	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	/alley			Date Ro	anorted:
Auburn, CA 95603		Project Manager:	Dave I	Buck			10/19/10	
			DL-12A 027-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	ND	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	1
			DL-13A 027-04 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	0.5	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			DL-13B 027-05 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	1.7	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	5			Date Ro 10/19/10	eported: 0 17:33
			DL-14A 027-06 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	5.5	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn		Project:	Silva V	/alley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave I	Buck			10/19/10	) 17:33
			DL-15A 027-07 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis								
Lead	1.4	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	2			Date Ro 10/19/10	eported: 0 17:33
			DL-15B 027-08 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	1.7	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			DL-16A 027-09 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	17.8	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	
			DL-16B 027-10 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	3.6	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave H	2			Date Ro 10/19/10	eported: 0 17:33
			DL-19A 027-11 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	5.7	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave H	5			Date Re 10/19/10	
			DL-20A )27-12 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	4.2	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			DL-20B 027-13 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	5.2	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	
			DL-21A 027-14 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	0.8	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	2			Date Ro 10/19/10	eported: 0 17:33
			DL-21B 027-15 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	9.2	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	8			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	Valley			Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave I	Buck			10/19/10	-
			DL-22C 027-16 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis	ND	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	2			Date Ro 10/19/10	eported: ) 17:33
			DL-24B )27-17 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	6.1	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	2			Date Ro 10/19/10	eported: 0 17:33
			DL-24C 027-18 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	3.0	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	alley			Data B	mortodi
Auburn, CA 95603		Project Number: Project Manager:	Dave F	Buck			Date Re 10/19/10	-
			DL-25A )27-19 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	13.3	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	alley			Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave I	Buck			10/19/10	) 17:33
			DL-26A 027-20 (So	vil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	38.3	0.2	mg/L	ATJ0148	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem H	Environm	ental Lab	\$			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave B	5			Date Ro 10/19/10	
			ADL-27A 0027-21 (So	il)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis								
Lead	29.6	0.2	mg/L	ATJ0149	10/15/10	10/19/10	EPA 6010B	
Wet Chemistry								
pH	6.06	0.100	pH Units	ATJ0076	10/08/10	10/11/10	EPA 9045	O-13

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	/alley			Date Re	enorted:
Auburn, CA 95603		Project Manager:	Dave I	Buck			10/19/10	-
			DL-27B 027-22 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	2.5	0.2	mg/L	ATJ0149	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Re 10/19/10	
		A	DL-28A 027-23 (So					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	59.8	0.2	mg/L	ATJ0149	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave F	5			Date Ro 10/19/10	eported: 0 17:33
			DL-29B 027-24 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis Lead	7.0	0.2	mg/L	ATJ0149	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	5			Date Re	-
Auburn, CA 95603		Project Manager:	Dave H	Buck			10/19/10	) 17:33
			DL-32A 027-25 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
STLC analysis								
Lead	1.0	0.2	mg/L	ATJ0149	10/15/10	10/19/10	EPA 6010B	

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Laboratory Representative

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/19/10 17:33

## **STLC analysis - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATJ0148 - EPA 6010B										
Blank (ATJ0148-BLK1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	ND	0.2	mg/L							
LCS (ATJ0148-BS1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	20.8	0.2	mg/L	20.0		104	80-120			
LCS Dup (ATJ0148-BSD1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	19.7	0.2	mg/L	20.0		98.3	80-120	5.39	25	
Matrix Spike (ATJ0148-MS1)		Source: 101002'	7-01	Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	23.0	0.2	mg/L	20.0	2.07	105	75-125			
Matrix Spike Dup (ATJ0148-MSD1)		Source: 101002	7-01	Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	23.5	0.2	mg/L	20.0	2.07	107	75-125	2.24	25	
Batch ATJ0149 - EPA 6010B										
Blank (ATJ0149-BLK1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	ND	0.2	mg/L			-				
LCS (ATJ0149-BS1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	20.9	0.2	mg/L	20.0		105	80-120			
LCS Dup (ATJ0149-BSD1)				Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	20.5	0.2	mg/L	20.0		102	80-120	2.19	25	
Matrix Spike (ATJ0149-MS1)		Source: 101002'	7-25	Prepared:	10/15/10 A	nalyzed: 10	)/19/10			
Lead	21.9	0.2	mg/L	20.0	1.01	104	75-125			

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem	Enviro	nmental l	Labs					
Blackburn 11521 Blocker Dr, Suite 110		Project:		va Valley 6.2					Data Ban	ortodi
Auburn, CA 95603		Project Number: Project Manager:		we Buck					Date Rep 10/19/10	
		STLC anal		v						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATJ0149 - EPA 6010B										
Matrix Spike Dup (ATJ0149-MSD1)		Source: 1010027-2	25	Prepared: 1	10/15/10 A	nalyzed: 10	/19/10			
Lead	22.1	0.2	mg/L	20.0	1.01	106	75-125	1.27	25	

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Laboratory Representative

		Excelchem	<b>Enviro</b>	nmental l	Labs					
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number Project Manager	: 556	va Valley 5.2 ve Buck					Date Rep 10/19/10	
		Wet Chem	listry - Qu	uality Con	itrol					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATJ0076 - EPA 9045										
Duplicate (ATJ0076-DUP1)		Source: 1010027	-21	Prepared: 1	0/08/10 A	nalyzed: 10	/11/10			
pH	6.06	0.100	pH Units		6.06			0.00	20	

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Laboratory Representative

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/19/10 17:33

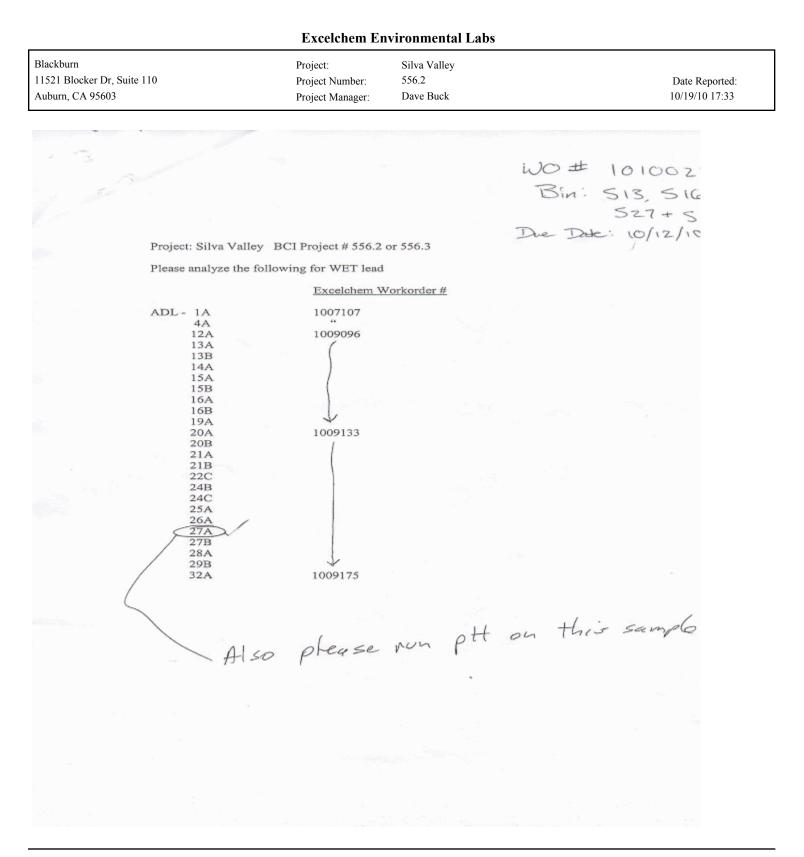
#### **Notes and Definitions**

- O-13 This analysis was requested outside of the EPA recommended hold time. It was performed as soon as possible.
- ND Analyte not detected at reporting limit.
- NR Not reported

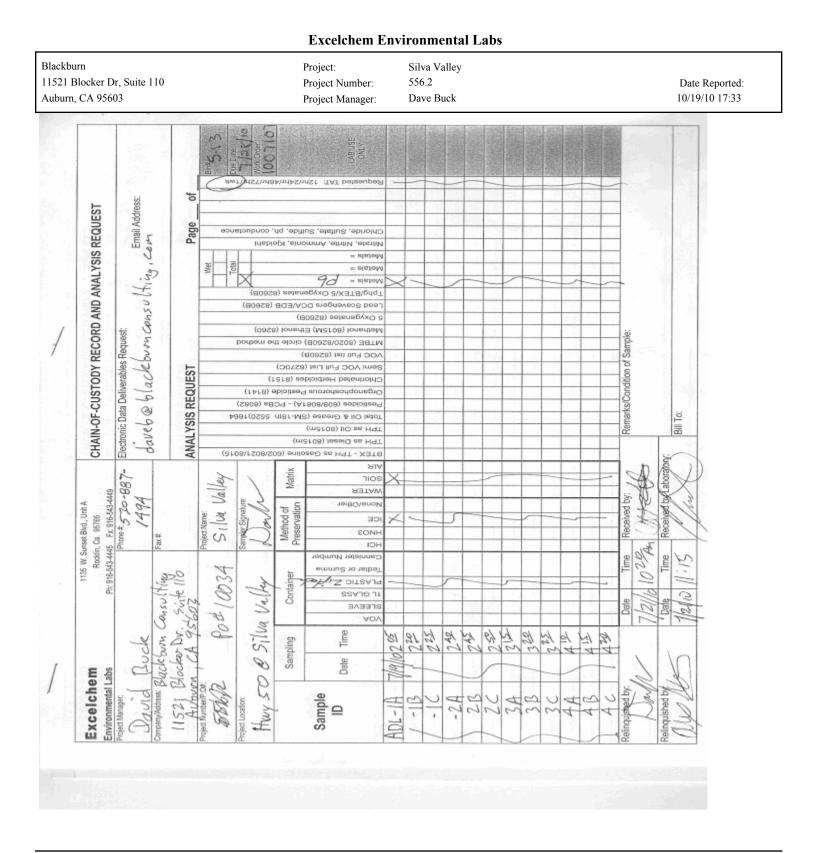
Excelchem Environmental Lab.

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Laboratory Representative



Laboratory Representative

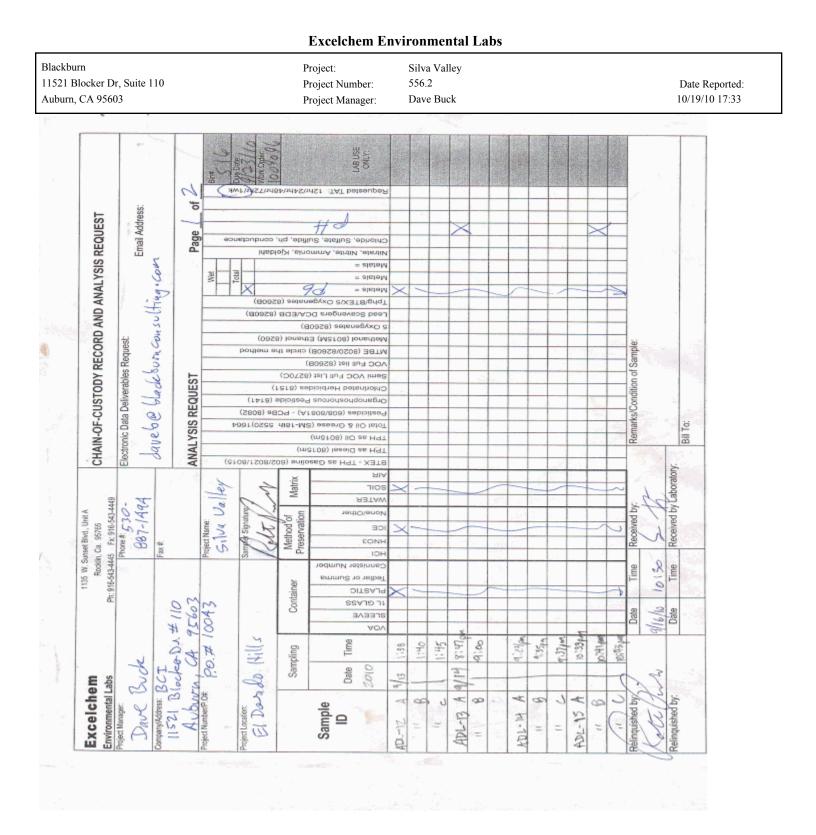


Excelchem Environmental Lab.

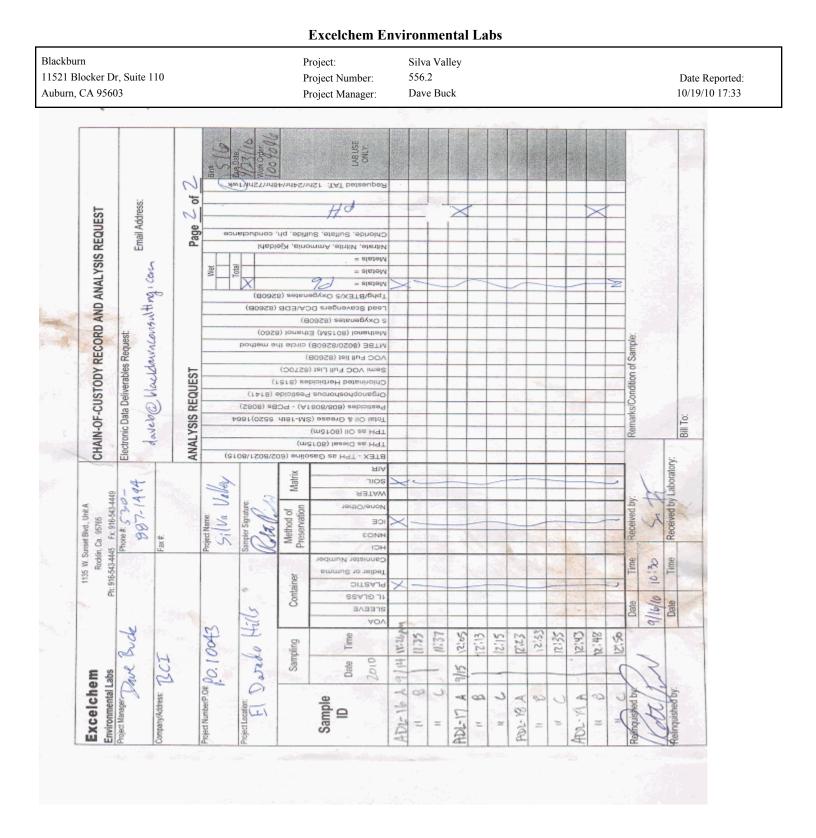
Laboratory Representative

		Exc	celchem Env	ironme	ntal L	abs				
eckburn		Projec	et:	Silva Va	lley					
21 Blocker Dr, Suite 110		Projec	et Number:	556.2						Date Reported:
burn, CA 95603		5	et Manager:	Dave Bu	ck					10/19/10 17:33
Sample Integrity				WOR	K OF	<b>UDE</b>	R_	100	7017	
Date Received:	21/10									
Section 1 - Sample Arr	ival Info.									
Sample Transport: C	ONTRAC UI	PS US	PS Walk-In	EXC	ELCHE	EM C	ourie	r Fee	I-Ex Other:	
Transported In Ice		Hand						D	Other: 12	e.
Describe type of pack	-				acking			Paper		
Has chilling process	begun?	N	_						/ Ambient	On let
Temperature of Sar	nples (°C):	0	Ic	e Chest	Tempe	eratur	e(s)	(°C): _	~2	
Was temperature In I	Range?: 🕅	N								
Section 2 - Bottle/Ana				Yes	No	N/4			Comments	
Did all bottles arrive un	broken and inta	act?		×			-			
Did all bottle labels agre Were correct containers	ee with COC?	sts reque	ested?	×						
Ware correct preservatio	ons used for the	e tests re	quested?			X	-			
Was a sufficient amoun	t of sample ser	it for test	ts indicated?	$\sim$		-	-			
Were bubbles present in V	OA Vials?: (Vo	latile Me	ethods Only)	1			- 1			
Section 3 - COC Info.							Com	pleted		
		nfo From Container					Yes	No	Comment	8
Was COC Received			Analysis Re	quested			X			
Date Sampled	1		Samples arrive	d within he	biding tin	har	~	X		
Time Sampled	7		Any hold tin Client Name		nan 72	nrs	X	1		
Sample ID	1		Address/Tel		1		->			
Rush TAT	×		Address/Tel	opnone -			~			
Section 4 - Comments	/ Discrepanc	ies								
Was Client notified of	discrepancies:	Yes	No N/A			Notif	ied b	y:		
Explanations / Comme	nts:									
	-									
								Labels Bin #s:		AB
				-				COC S	canned/Attached	by: and
	Form o	complete	ed by: 2	X	1				Date/Time:	4/21/1
										11:15

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Laboratory Representative

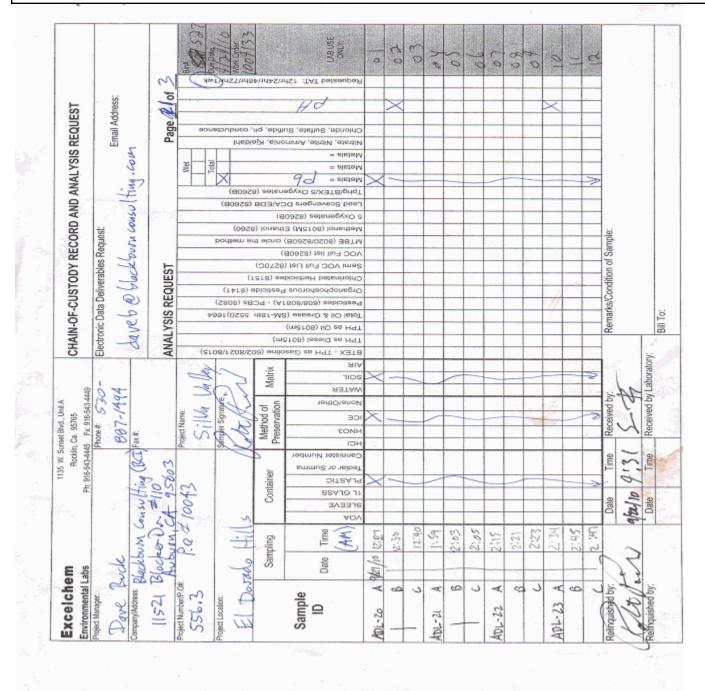


Laboratory Representative

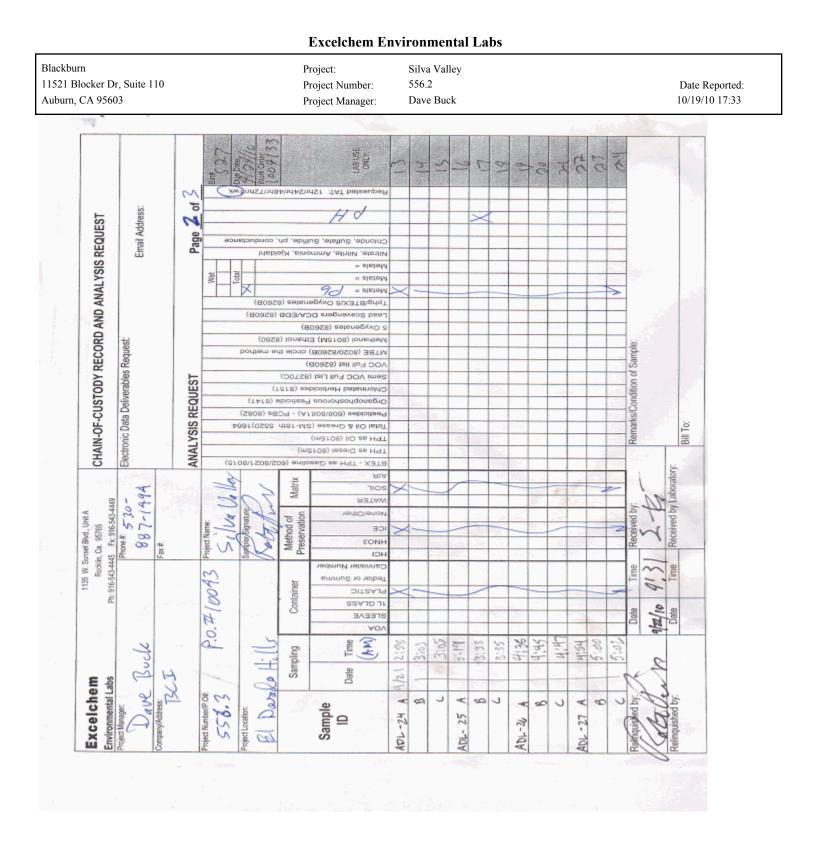
Sample Integrity	Project Manager:	-				Date Report	
Sample Interrity	Floject Manager.	Dave Buck				10/19/10 17:	
Date Received:	to	WOF	K O	RDEF	100	4096	
Section 1 - Sample Arrival Inf	0.						
Sample Transport: ONTRA							
Transported In: (Ice Chest)	Box Hand						
Describe type of packing mat	erials: Bubble Wrap	Foam	Packing	Peanuts	Pape	or Other: N/	
Has chilling process begun?		ples Rece	ived:	Chilled t	o Touch	/ Ambient / O	
Temperature of Samples (	c):le	Ice Chest	Tempe	erature(	;) (°C):	3	
Was temperature In Range?:	N N						
Section 2 - Bottle/Analysis Inf	0.	Yes	No	N/A		Comments	
Did all bottles arrive unbroken a	nd intact?			X	1	Sag S	
Did all bottle labels agree with (	COC?			- 4 c	Bag	5 not bottle	
Were correct containers used for	the tests requested?	X					
Were correct preservations used	for the tests requested?			X			
Was a sufficient amount of same	ple sent for tests indicated?			1			
Were bubbles present in VOA Vial	s?: (Volatile Methods Only)				1		
			1.				
Section 3 - COC Info.	ted Infe From			Č.	mplesed		
Comple Yes	No Container			Ye		Comments	
Was COC Received	Analysis F	Requested		2	$\leq$		
Date Sampled	Samples arri	ved within h	olding tin	1c			
Time Sampled	Any hold t		than 72	hrs	X		
Sample ID X	Client Nar	ne		X	-		
Rush TAT	X Address/T	elephone	#				
Section 4 - Comments / Discre	pancies						
		-					
Was Client notified of discrepan	cies: Yes No N/	A)		Notified	by:		
Evaluations (Comments	-						
Explanations / Comments:							
~							
	-						
-							
					Samula	es Labeled by:	
					Labala	reviewed by: Kab	
					Bin #s:	SIG THE A	
					COC S	anned/Attached by: <	
					COC SC	anned Anached by: <	
10	orm completed by:	5 12	5		Т	Date/Time: 9/16/1	
F	orm completed by:	4 60				Late/110e: 17/19/1	

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Excelchem Environmental Labs				
	Blackburn	Project:	Silva Valley	
	11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
	Auburn, CA 95603	Project Manager:	Dave Buck	10/19/10 17:33

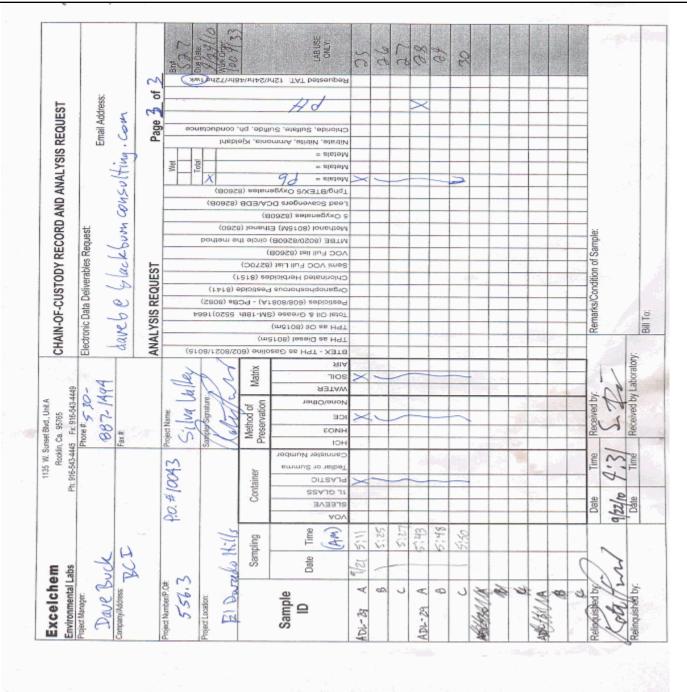


Laboratory Representative



Laboratory Representative

Excelchem Environmental Labs						
Blackburn	Project:	Silva Valley				
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:			
Auburn, CA 95603	Project Manager:	Dave Buck	10/19/10 17:33			

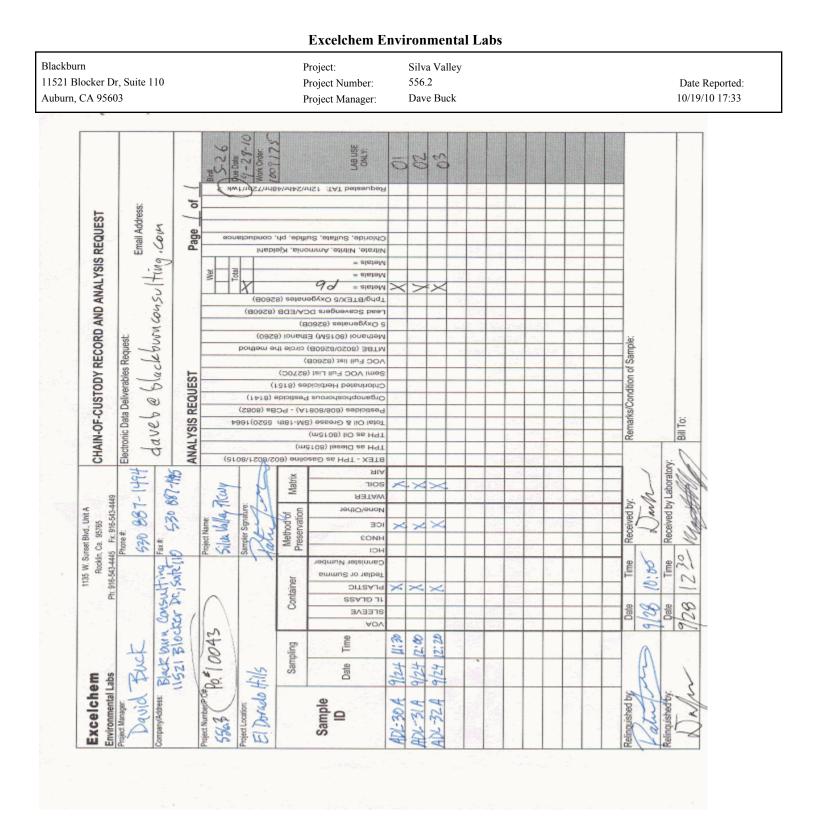


Laboratory Representative

Excelchem	Environmental	Labs
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ackburn		Project:	Si	lva Valle	v			
521 Blocker Dr, Suite 110		Project N	umber: 55	56.2				Date Reported
burn, CA 95603		Project M		ave Buck	E			10/19/10 17:33
Sample Integrity Date Efficiency Section 1 - Sample Ar Sample Transport:	1/22/10	JPS US			ELCHEN			-Ex Other:
Transported In: To Describe type of pac Has chilling process	king materials	: Bubble		am F	Packing P ved: C		Paper o Touch	
Temperature of Sa Was temperature In	mples (°C): _	:7 (R)	Ice	Chest	Temper	ature(s	e) (°C):	2
Section 2 - Bottle/Ans	lysis Info.			Yes	No	N/A		Comments
Did all bottles arrive un	broken and in	tact?				X	1293	5
Did all bottle labels agr	ee with COC?		eted?	F				
Were correct container Were correct preservat	s used for the t	tests reque	opested?	1-4		X		
Was a sufficient amount	ons used for u	ne tests re	s indicated?	X		-		
Were bubbles present in Section 3 - COC Info		Infe From Container				Co Ye	mplesed	Comments
Was COC Received	1XII		Analysis Req				$\leq$	
Date Sampled			Samples arrived			the second se		
Time Sampled	X		Any hold tim Client Name		than 72 h		X	
Sample ID	X		Address/Tele			<u> </u>		
Rush TAT Section 4 - Comment Was Client notified of			No TVA	5	N	lotified	by:	-
Explanations / Comme								
Explanations / Comme	1113.							
	-							
							Labels re Bin #s:	s Labeled by: eviewed by: S A anned/Attached by:
	Form	completee	i by:	125			1	Date/Time: 9/22/10
	1 orm							16

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			vironmental Labs		
ckburn 21 Blocker Dr, Suite 110	F	Project: Project Number:	Silva Valley 556.2		Date Reported:
ourn, CA 95603		roject Manager:	Dave Buck		10/19/10 17:33
Date Received	grity		WORK O	RDER 1009	175
Section 1 - Sample					
Transported In:	Ice Chest Box		Ik-In EXCELCHE	SM Courier Fed-Ex O	ther:
	packing materials:	Hand			
Has chilling proc	ess begun?		Foam Packing I		r://2
	Samples (°C):	N Sau	mples Received: C	hilled to Touch / Ambi	ent Or
Was temperature		N	Ice Chest Temper	ature(s) (°C):	
Section 2 Date					
Section 2 - Bottle/A		-			
Did all bottles arrive a	unbroken and intact	?		N/A Comment	
Were correct containe	gree with COC?				
Were correct preserva Was a sufficient amou	tions used for the tests	requested?			
Was a sufficient amou Were bubbles present in	nt of sample sent for	sts requested?	X		
Were bubbles present in	VOA Vials?: (Volati	le Methods Only)			
Section 3 - COC Info		(interview of the second secon	1	~	
coe mia	Completed Info Fi				
Was COC Received	Yes No Conta			Completed	
Date Sampled	X	Analysis Re	quested	Yes No Comm	ents
Time Sampled	×	Samples arrive	d within holding time	X	
Sample ID	12	Any hold tir	nes less than 70 L		
Rush TAT		Chent Name		XA	
		Address/Tel	ephone #	A	
Section 4 - Comments	/ Discrepancies				
Was Client notified of d		No N/A	Notifi	ied by:	
Explanations / Commen	ts:				
3					
		4		Samples Labeled by:	25
		1 1		Labels reviewed by:	FF
				Bin #s: 5 26	
				- COC Scanned/Attached	by: RS
	Form complete	ed by:	All	2	
		2		Date/Time: 9	128/10
		· · · ·	-		13:01

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Laboratory Representative

# EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

27 October 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603 RE: Silva Valley

Workorder number:1010131

Enclosed are the results of analyses for samples received by the laboratory on 10/21/10 12:41. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/27/10 16:24

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-16A	1010131-01	Soil	09/14/10 23:26	10/21/10 12:41
ADL-21B	1010131-02	Soil	09/21/10 02:03	10/21/10 12:41
ADL-26A	1010131-03	Soil	09/21/10 04:38	10/21/10 12:41
ADL-28A	1010131-04	Soil	09/21/10 05:11	10/21/10 12:41

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	2			Date Re 10/27/10	
			DL-16A 131-01 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis								

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	/alley			Date Re	norted:
Auburn, CA 95603		Project Manager:	Dave I	Buck	10/27/10 16:24			
			DL-21B 131-02 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	16.3	10.0	ug/l	ATJ0238	10/25/10	10/26/10	EPA 6010B	

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Laboratory Representative

		Excelchem Er	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	2			Date Re 10/27/10	
			DL-26A 131-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	109	10.0	ug/l	ATJ0238	10/25/10	10/26/10	EPA 6010B	

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Laboratory Representative

		Excelchem Er	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	2			Date Re 10/27/10	
			DL-28A 131-04 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	73.9	10.0	ug/l	ATJ0238	10/25/10	10/26/10	EPA 6010B	

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Laboratory Representative

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	10/27/10 16:24

# WET-DI analysis - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATJ0238 - EPA 6010B										
Blank (ATJ0238-BLK1)				Prepared: 1	0/25/10 A	nalyzed: 10	/26/10			
Lead	ND	10.0	ug/l							
LCS (ATJ0238-BS1)				Prepared: 1	0/25/10 A	nalyzed: 10	/26/10			
Lead	991	10.0	ug/l	1000		99.1	80-120			
LCS Dup (ATJ0238-BSD1)				Prepared: 1	0/25/10 A	nalyzed: 10	/26/10			
Lead	1020	10.0	ug/l	1000		102	80-120	2.94	25	
Matrix Spike (ATJ0238-MS1)		Source: 1010131	-01	Prepared: 1	0/25/10 A	nalyzed: 10	/26/10			
Lead	1070	10.0	ug/l	1000	7.17	107	75-125			
Matrix Spike Dup (ATJ0238-MSD1)		Source: 1010131	-01	Prepared: 1	0/25/10 A	nalyzed: 10	/26/10			
Lead	1030	10.0	ug/l	1000	7.17	103	75-125	3.83	25	

Excelchem Environmental Lab.

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Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:556.2Date Reported:Auburn, CA 95603Project Manager:Dave Buck10/27/10 16:24

## **Notes and Definitions**

ND Analyte not detected at reporting limit.

NR Not reported

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs						
Blackburn	Project:	Silva Valley				
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:			
Auburn, CA 95603	Project Manager:	Dave Buck	10/27/10 16:24			

	213			STA	
	Excele	hem Env	ironmental Labs	Work	Order: 11 52
Bläckburn	Project:	item isner	Silva Valley	Der: 1	0/28/10
11521 Blocker Dr. Suite 110 Auburn, CA 95603	Project Nu Project Ma		556.2 Dave Buck		Date Reported: 10/19/10 17:33
	ANALYTICA	L REPORT	F FOR SAMPLES		
Sample ID	Laboratory ID	Matrix		Date Sampled	Date Receiv
ADL-IA	1010027-01	Soil		07/19/10 14:05	10/05/10 16
ADL-4A	1010027-02	Soil		07/19/10 16:10	10/05/10 16
ADL-12A	1010027-03	Soil		09/13/10 01:38	10/05/10 16
ADL-13A	1010027-04	Soil		09/14/10 20:47	10/05/10 16
ADL-13B	1010027-05	Soil		09/14/10 21:00	10/05/10 16
ADL-14A	1010027-06	Soil		09/14/10 21:24	10/05/10 16
ADL-15A	1010027-07	Soil		09/14/10 22:33	10/05/10 16
ADL-15B	1010027-08	Soil		09/14/10 22:41	10/05/10 16
ADL-16A	1010027-09	Soil	516	09/14/10 23:26	10/05/10 16
ADL-16B	1010027-10	Soil		09/14/10 23:35	10/05/10 16
ADL-19A	1010027-11	Soil		09/15/10 12:43	10/05/10 16
ADL-20A	1010027-12	Soil		09/21/10 00:27	10/05/10 16
ADL-20B	1010027-13	Soil		09/21/10 00:38	10/05/10 16
ADL-21A	1010027-14	Soil		09/21/10 01:59	10/05/10 16
ADL-21B	1010027-15	Soil	527	09/21/10 02:03	10/05/10 16
ADL-22C	1010027-16	Soil		09/21/10 02:23	10/05/10 16
ADL-24B	1010027-17	Soil		09/21/10 03:03	10/05/10 16
ADL-24C	1010027-18	Soil		09/21/10 03:05	10/05/10 16
ADL-25A	1010027-19	Soil		09/21/10.03:19	10/05/10 16
ADL-26A	1010027-20	Soil		09/21/10 04:38	10/05/10 16
ADL-27A	1010027-21	Soil		09/21/10 04:54	10/05/10 16
ADL-27B	1010027-22	Soil		09/21/10 05:00	10/05/10 16:
ADL-28A	1010027-23	Soil		09/21/10/05:11	10/05/10 16
ADL-29B	1010027-24	Soil		09/21/10 05:48	10/05/10 16
ADL-32A	1010027-25	Soil		09/24/10 12:20	10/05/10 16:
R . T	I WET	lead			
	it wei	1 Carr			
Excelchem Environmental Lab.		The	tody document. This analytical re	examples analysed in accordonce w pori must be reproduced in its entir	who.
Laboratory Deservation			Day	In Iopy	10
Laboratory Representative			6 48 A	· · · · · · · · · · ·	Page
		Receive	d: Sautter K	2 10/22/10	)
				0	

kburn			Project:	Silv	a Valley				
1 Blocker Dr, Suite 110			Project Number:	556.	-				Date Reported
ırn, CA 95603			Project Manager:		e Buck				10/27/10 16:24
	e fan feferen en fan ste	e felfention en anglese en an	a an		11 - 14 - 17 - 1				
Sample Integri	-	<i>r</i>		wo	RK O	RDER	10	10131	
Date Received:	10/21	10	<u>84</u> -						
Section 1 - Sample /	Arrival I	nfo.	ready inh		,				
		AC UP	S USPS Walk-	In EX	CELCH	EM Cour	ier Fe	d-Ex Other:	
Transported In:	Ice Ches	t Box	Hand NA						
			Bubble Wrap F	oam	Packing	Peanuts	Pape	r Other: NON	E.
Has chilling proce				les Rece	ived:	Chilled to	o Touch	/ Ambient / C	On Ice
Temperature of S	Samples	(°C):	(p 1	ce Ches	t Tempe	erature(s	) (°C): _		
Was temperature I	n Range'	?: 🕐	N						
Section 2 - Bottle/An	alysis In	nfo.				-			
Did all bottles arrive	unbroken	and intact	t?	Yes	No	N/A		Comments	
Did all bottle labels a	gree with	COC?		. <					
Were correct contained				×					
Were correct preserva Was a sufficient amon				X		X			
Were bubbles present in				1		×			
				1		1. G. I			
Section 3 - COC Inf	o. Comp	leted Info	From			Con	pleted		
	Yes		stainer			Yes		Comments	
Was COC Received	12		Analysis Re Samples arrive		oldine tim	· ×			
Date Sampled Time Sampled	10		Any hold tir			- 17	X		
Sample ID	10		Client Name				1		
Rush TAT		X	Address/Tel		#	- 5			
			111001000110					-	-
Section 4 - Commen	ts / Disc	repancies							
Was Client notified o	f discrep	ancies:	Yes No NA		1	Notified b	y:		
Explanations / Comm	ents:								
							Complex	Teheled hus	23
								Labeled by:	
							Bin #s:		
								anned/Attached by: _	BB
		Form com	pleted by: Sau	Alo	K	3	I	Date/Time: 10/21/	10 12
					1				

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# EXCELCHEM Environmental Labs

1135 W Sunset Boulevard Suite A Rocklin, CA 95765 Phone# 916-543-4445 Fax# 916-543-4449



ELAP Certificate No. : 2119

10 November 2010 Dave Buck Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603

RE: Silva Valley

Workorder number:1011019

Enclosed are the results of analyses for samples received by the laboratory on 11/02/10 16:10. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

John Somers, Lab Director

	Excelchem Er	vironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	11/10/10 14:29

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-1A	1011019-01	Soil	07/19/10 14:05	11/02/10 16:10
ADL-4A	1011019-02	Soil	07/19/10 16:10	11/02/10 16:10
ADL-13A	1011019-03	Soil	09/14/10 20:47	11/02/10 16:10
ADL-13B	1011019-04	Soil	09/14/10 21:00	11/02/10 16:10
ADL-14A	1011019-05	Soil	09/14/10 21:24	11/02/10 16:10
ADL-15B	1011019-06	Soil	09/14/10 22:41	11/02/10 16:10
ADL-16B	1011019-07	Soil	09/14/10 23:35	11/02/10 16:10
ADL-19A	1011019-08	Soil	09/15/10 12:43	11/02/10 16:10
ADL-20B	1011019-09	Soil	09/21/10 00:38	11/02/10 16:10
ADL-22C	1011019-10	Soil	09/21/10 02:23	11/02/10 16:10
ADL-24B	1011019-11	Soil	09/21/10 03:03	11/02/10 16:10
ADL-24C	1011019-12	Soil	09/21/10 03:05	11/02/10 16:10
ADL-25A	1011019-13	Soil	09/21/10 03:19	11/02/10 16:10
ADL-27A	1011019-14	Soil	09/21/10 04:54	11/02/10 16:10
ADL-29B	1011019-15	Soil	09/21/10 05:48	11/02/10 16:10
ADL-16A	1011019-16	Soil	09/14/10 23:26	11/02/10 16:10
ADL-26A	1011019-17	Soil	09/21/10 04:38	11/02/10 16:10
ADL-28A	1011019-18	Soil	09/21/10 05:11	11/02/10 16:10

Excelchem Environmental Lab.

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Laboratory Representative

		Excelchem E	nvironn	iental Lab	S				
Blackburn		Project:	Silva V	Valley					
11521 Blocker Dr, Suite 110		Project Number:	-				Date Reported:		
Auburn, CA 95603	Project Manager: Dave Buck						11/10/10 14:29		
			ADL-1A 019-01 (Se	oil)					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes	
WET-DI analysis									
lead	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B		

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Laboratory Representative

		Excelchem Ei	nvironn	nental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	0 14:29
			ADL-4A 019-02 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	ivironm	iental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	2			Date Re 11/10/10	
			DL-13A )19-03 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	20.1	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironn	iental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	) 14:29
			DL-13B 019-04 (S	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis								

 $\geq$ 

Laboratory Representative

		Excelchem Ei	ivironn	iental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	) 14:29
			DL-14A )19-05 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem E	nvironn	nental Lab	s			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva 556.2	2			Date Re	
Auburn, CA 95603			Dave 1				11/10/10	) 14:29
		10110	019-06 (S	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis								
Lead	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

 $\geq$ 

Laboratory Representative

		Excelchem Ei	nvironn	nental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	0 14:29
			DL-16B )19-07 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironn	nental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	0 14:29
			DL-19A )19-08 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironn	nental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project:	Silva V 556.2	Valley			D-t- D	
Auburn, CA 95603		Project Number: Project Manager:	Dave 1	Buck			Date Re 11/10/10	
			DL-20B )19-09 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	iental Lab	<b>S</b>			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	0 14:29
			DL-22C 019-10 (S					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	ivironn	nental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	0 14:29
			DL-24B )19-11 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironn	iental Lab	S			
Blackburn		Project:	Silva	Valley				
11521 Blocker Dr, Suite 110		Project Number:	556.2				Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave	Buck			11/10/10	) 14:29
			DL-24C 019-12 (Se					
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis								
lead	ND	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	iental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	2			Date Re 11/10/10	
			DL-25A )19-13 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	65.2	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem Er	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	Valley			Date Re	eported:
Auburn, CA 95603		Project Manager:	Dave 1	Buck			11/10/10	) 14:29
			DL-27A 019-14 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
VET-DI analysis	40.0	10.0			11/00/10			
lead	48.8	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

Laboratory Representative

		Excelchem Ei	nvironn	iental Lab	8			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	Valley			Date Re	enorted:
Auburn, CA 95603		Project Manager:	Dave 1	Buck			11/10/10	
			DL-29B 019-15 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
WET-DI analysis Lead	11.1	10.0	ug/l	ATK0055	11/08/10	11/09/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	<b>S</b>			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	5			Date Re 11/10/10	-
			DL-16A 019-16 (Se	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
TCLP analysis Lead	2.0	0.2	mg/L	ATK0035	11/03/10	11/04/10	EPA 6010B	

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Laboratory Representative

		Excelchem E	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110		Project: Project Number:	Silva V 556.2	/alley			Date Re	enorted:
Auburn, CA 95603		Project Manager:	Dave I	Buck			11/10/10	•
			DL-26A 019-17 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
TCLP analysis Lead	1.9	0.2	mg/L	ATK0035	11/03/10	11/04/10	EPA 6010B	

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Laboratory Representative

		Excelchem Ei	nvironm	ental Lab	S			
Blackburn 11521 Blocker Dr, Suite 110 Auburn, CA 95603		Project: Project Number: Project Manager:	Silva V 556.2 Dave I	5			Date Re 11/10/10	eported: ) 14:29
			DL-28A )19-18 (So	oil)				
Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
TCLP analysis Lead	7.4	0.2	mg/L	ATK0035	11/03/10	11/04/10	EPA 6010B	

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Laboratory Representative

Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	11/10/10 14:29

# WET-DI analysis - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATK0055 - EPA 6010B										
Blank (ATK0055-BLK1)				Prepared: 1	1/08/10 A	nalyzed: 11	/09/10			
Lead	ND	10.0	ug/l							
LCS (ATK0055-BS1)				Prepared: 1	1/08/10 A	nalyzed: 11	/09/10			
Lead	1030	10.0	ug/l	1000		103	80-120			
LCS Dup (ATK0055-BSD1)				Prepared: 1	1/08/10 A	nalyzed: 11	/09/10			
Lead	1090	10.0	ug/l	1000		109	80-120	5.26	25	
Matrix Spike (ATK0055-MS1)		Source: 1011019	-01	Prepared: 1	1/08/10 A	nalyzed: 11	/09/10			
Lead	1060	10.0	ug/l	1000	6.24	105	75-125			
Matrix Spike Dup (ATK0055-MSD1)		Source: 1011019	-01	Prepared: 1	1/08/10 A	nalyzed: 11	/09/10			
Lead	1020	10.0	ug/l	1000	6.24	102	75-125	3.30	25	

Excelchem Environmental Lab.

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Laboratory Representative

	Excelchem Env	rironmental Labs	
Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	11/10/10 14:29

# **TCLP analysis - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ATK0035 - EPA 6010B										
Blank (ATK0035-BLK1)				Prepared:	11/03/10 A	nalyzed: 11	/04/10			
Lead	ND	0.2	mg/L							
LCS (ATK0035-BS1)				Prepared:	11/03/10 A	nalyzed: 11	/04/10			
Lead	21.7	0.2	mg/L	20.0		108	80-120			
LCS Dup (ATK0035-BSD1)				Prepared:	11/03/10 A	nalyzed: 11	/04/10			
Lead	21.3	0.2	mg/L	20.0		106	80-120	1.91	25	
Matrix Spike (ATK0035-MS1)		Source: 1011019	9-16	Prepared:	11/03/10 A	nalyzed: 11	/04/10			
Lead	22.4	0.2	mg/L	20.0	1.95	102	75-125			
Matrix Spike Dup (ATK0035-MSD1)		Source: 1011019	9-16	Prepared:	11/03/10 A	nalyzed: 11	/04/10			
Lead	22.3	0.2	mg/L	20.0	1.95	102	75-125	0.490	25	

Excelchem Environmental Lab.

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Laboratory Representative

# Excelchem Environmental LabsBlackburnProject:Silva Valley11521 Blocker Dr, Suite 110Project Number:556.2Date Reported:Auburn, CA 95603Project Manager:Dave Buck11/10/10 14:29

## **Notes and Definitions**

ND Analyte not detected at reporting limit.

NR Not reported

Excelchem Environmental Lab.

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Laboratory Representative

<b>Excelchem Environmental Labs</b>
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Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	11/10/10 14:29

			Wor	K Ord	ler.
				101	1019
			B	in: 516	,527,5
Project: Silva Valle	ey BCI Project	# 556.2 or 556.3	Du	e: 11/0	$\frac{1019}{3}$ $\frac{1019}{3}$
Analyze the follow	ving for WET-I	DI lead:		/	
	Original Exc	elchem Workord	er #		
ADL - 1A 4A	1007107				
13A	1009096				
13B 14A	(				
15B 16B	2				
19A	2				
20B	1009133				
22C 24B	(				
24C 25A					
27A 29B	- 5				
296	_				
Analyze the follow	ving for TCLP	(lead):			
Analyze the lonov					
ADL - 16A	1009096				
ADL - 16A 26A	1009096 1009133				
ADL - 16A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				
ADL - 16A 26A	1009133				

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Blackburn	Project:	Silva Valley	
11521 Blocker Dr, Suite 110	Project Number:	556.2	Date Reported:
Auburn, CA 95603	Project Manager:	Dave Buck	11/10/10 14:29

#### Excelchem Frontdesk

From:	Dave Buck [daveb@blackburnconsulting.com]	
Sent:	Tuesday, November 02, 2010 1:51 PM	
To:	Excelchem Frontdesk	
Subject	t: Silva Valley - Additional Analyses	
Please n	run the attached analyses, standard TAT. This will be billed to our P.O. # 10043.	
Thanks		
	uck, P.G., C.E.G	
	Project Manager	
	urn Consulting	
0.0	(530) 887-1494 Fax: (530) 887-1495	
	daveb@blackburnconsulting.com	
11521 B	Blocker Dr., Suite 110 Auburn, CA 95603 lackburnconsulting.com	

11/2/2010

Excelchem Environmental Lab.

Laboratory Representative

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Page 1 of 1

SunStar — Laboratories, Inc. 25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

18 November 2011

Dave Buck Blackburn Consulting 11521 Blocker Dr #110 Auburn, CA 95603 RE: Silva Valley

Enclosed are the results of analyses for samples received by the laboratory on 11/11/11 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wordy Hsia

Wendy Hsiao For Daniel Chavez Project Manager



25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-33A	T111684-01	Soil	11/07/11 09:30	11/11/11 09:00
ADL-33B	T111684-02	Soil	11/07/11 09:40	11/11/11 09:00
ADL-33C	T111684-03	Soil	11/07/11 09:50	11/11/11 09:00
ADL-34A	T111684-04	Soil	11/07/11 10:00	11/11/11 09:00
ADL-34B	T111684-05	Soil	11/07/11 10:05	11/11/11 09:00
ADL-35A	T111684-06	Soil	11/07/11 10:15	11/11/11 09:00
ADL-35B	T111684-07	Soil	11/07/11 10:30	11/11/11 09:00
ADL-36A	T111684-08	Soil	11/07/11 11:15	11/11/11 09:00
ADL-36B	T111684-09	Soil	11/07/11 11:25	11/11/11 09:00
ADL-37A	T111684-10	Soil	11/07/11 11:35	11/11/11 09:00
ADL-37B	T111684-11	Soil	11/07/11 11:50	11/11/11 09:00
ADL-38A	T111684-12	Soil	11/07/11 12:35	11/11/11 09:00
ADL-38B	T111684-13	Soil	11/07/11 12:40	11/11/11 09:00
ADL-38C	T111684-14	Soil	11/07/11 13:00	11/11/11 09:00
ADL-39A	T111684-15	Soil	11/07/11 13:10	11/11/11 09:00
ADL-39B	T111684-16	Soil	11/07/11 13:20	11/11/11 09:00
ADL-39C	T111684-17	Soil	11/07/11 13:30	11/11/11 09:00
ADL-40A	T111684-18	Soil	11/07/11 14:00	11/11/11 09:00
ADL-40B	T111684-19	Soil	11/07/11 14:20	11/11/11 09:00
ADL-41A	T111684-20	Soil	11/07/11 14:30	11/11/11 09:00
ADL-41B	T111684-21	Soil	11/07/11 14:40	11/11/11 09:00
ADL-42A	T111684-22	Soil	11/07/11 14:45	11/11/11 09:00
ADL-42B	T111684-23	Soil	11/07/11 14:50	11/11/11 09:00
ADL-42C	T111684-24	Soil	11/07/11 15:00	11/11/11 09:00
ADL-43A	T111684-25	Soil	11/09/11 09:30	11/11/11 09:00
ADL-43B	T111684-26	Soil	11/09/11 09:40	11/11/11 09:00

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25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-43C	T111684-27	Soil	11/09/11 09:45	11/11/11 09:00
ADL-44A	T111684-28	Soil	11/09/11 09:50	11/11/11 09:00
ADL-44B	T111684-29	Soil	11/09/11 10:00	11/11/11 09:00
ADL-44C	T111684-30	Soil	11/09/11 10:10	11/11/11 09:00
ADL-45A	T111684-31	Soil	11/09/11 10:15	11/11/11 09:00
ADL-45B	T111684-32	Soil	11/09/11 10:20	11/11/11 09:00
ADL-46A	T111684-33	Soil	11/09/11 10:30	11/11/11 09:00
ADL-46B	T111684-34	Soil	11/09/11 10:40	11/11/11 09:00
ADL-47A	T111684-35	Soil	11/09/11 11:00	11/11/11 09:00
ADL-47B	T111684-36	Soil	11/09/11 11:05	11/11/11 09:00
ADL-48A	T111684-37	Soil	11/09/11 11:30	11/11/11 09:00
ADL-48B	T111684-38	Soil	11/09/11 11:35	11/11/11 09:00
ADL-49A	T111684-39	Soil	11/09/11 11:50	11/11/11 09:00
ADL-49B	T111684-40	Soil	11/09/11 12:00	11/11/11 09:00
ADL-50A	T111684-41	Soil	11/09/11 12:30	11/11/11 09:00
ADL-50B	T111684-42	Soil	11/09/11 12:40	11/11/11 09:00
ADL-51A	T111684-43	Soil	11/09/11 12:50	11/11/11 09:00
ADL-51B	T111684-44	Soil	11/09/11 13:00	11/11/11 09:00

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-33A 584-01 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	ND	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-33B 584-02 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	ND	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-33C 584-03 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	ND	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck								
		ADL-34A T111684-04 (S								
Analyte	Result	Reporting Limit Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Sı	InStar Laborator	ries, Inc.							
Metals by EPA 6010B										
Lead	66	3.0 mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	_		
<b>Conventional Chemistry Param</b>	eters by APHA/EPA/A	STM Methods								
рН	6.6	0.2 pH Units	1	1111125	11/11/11	11/11/11	EPA 9045B			

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-34B 84-05 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	18	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-35A 584-06 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	74	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-35B 84-07 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	13	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-36A 584-08 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	480	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-36B 684-09 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	21	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-37A 584-10 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	220	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-37B 84-11 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	19	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-38A 84-12 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	260	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck								: 9:33
			DL-38B 84-13 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	61	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

Lead

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-38C 584-14 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	40	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-39A 84-15 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	330	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13									
ADL-39B T111684-16 (Soil)											
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	S	unStar L	aborator	ries, Inc.							
Metals by EPA 6010B											
Lead	40	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B			

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-39C 84-17 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	39	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-40A 584-18 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	26	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-40B 84-19 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	23	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-41A 584-20 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	5.2	3.0	mg/kg	1	1111119	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							l: 3:33	
			DL-41B 84-21 (So	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	S	unStar La	boratori	ies, Inc.						
Metals by EPA 6010B										
Lead	ND	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B		
<b>Conventional Chemistry Parameter</b>	l Chemistry Parameters by APHA/EPA/ASTM Methods									
рН	8.1	EPA 9045B								

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-42A 584-22 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	7.3	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-42B 584-23 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ies, Inc.					
Metals by EPA 6010B									
Lead	ND	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-42C 584-24 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	ND	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Pro	<b>Reported</b> 11/18/11 13							
			DL-43A 84-25 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	92	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pr Prc	<b>Reported</b> 11/18/11 13							
			DL-43B 84-26 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	34	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-43C 84-27 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	140	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-44A 584-28 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	130	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-44B 84-29 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	74	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro	<b>Reported</b> 11/18/11 13							
			DL-44C 84-30 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	48	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

Lead

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro	<b>Reported</b> 11/18/11 13							
			DL-45A 84-31 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	90	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

Lead

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck								
		ADL-4 T111684-3								
Analyte	Result	Reporting Limit Un	ts Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Si	unStar Labora	atories, Inc.							
Metals by EPA 6010B										
Lead	37	3.0 mg/	kg 1	1111120	11/11/11	11/15/11	EPA 6010B			
<b>Conventional Chemistry Parame</b>	ters by APHA/EPA/A	ASTM Metho	ls							
рН	7.1	0.2 pH U	nits 1	1111125	11/11/11	11/11/11	EPA 9045B			

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro	<b>Reported</b> 11/18/11 13							
			DL-46A 584-33 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	360	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

Lead

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-46B 84-34 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	35	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

Lead

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Blackburn Consulting		Project	: Silva Val	lley						
11521 Blocker Dr #110	Pro	ject Number:	: 556.3					Reported	l:	
Auburn CA, 95603	Proj	ect Manager:	: Dave Buc	ck				11/18/11 13:33		
		ADI	L-47A							
		T111684	4-35 (Soil)	)						
Analyte	Result	Reporting Limit	Units D	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Si	unStar Lab	oratories	, Inc.						
Metals by EPA 6010B										
Lead	20	3.0 r	ng/kg	1	1111120	11/11/11	11/15/11	EPA 6010B		
<b>Conventional Chemistry Param</b>	eters by APHA/EPA/A	ASTM Met	hods							
рН	6.7	0.2 pH	H Units	1	1111125	11/11/11	11/11/11	EPA 9045B		

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Pro Pro	<b>Reported</b> 11/18/11 13							
			DL-47B 84-36 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	24	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-48A 84-37 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	120	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-48B 84-38 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	42	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-49A 584-39 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	21	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-49B 84-40 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	3.9	3.0	mg/kg	1	1111120	11/11/11	11/15/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje ject Numb ect Manag		2				<b>Reporte</b> 11/18/11 1	
			DL-50A 84-41 (Se	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	160	3.0	mg/kg	1	1111202	11/12/11	11/14/11	EPA 6010B	
<b>Conventional Chemistry Parame</b>	eters by APHA/EPA/A	ASTM M	ethods						
рН	6.2	0.2	pH Units	1	1111125	11/11/11	11/11/11	EPA 9045B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-50B 84-42 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ies, Inc.					
Metals by EPA 6010B									
Lead	7.7	3.0	mg/kg	1	1111202	11/12/11	11/14/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-51A 84-43 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aboratoi	ries, Inc.					
Metals by EPA 6010B									
Lead	58	3.0	mg/kg	1	1111202	11/12/11	11/14/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb ject Manag		2				<b>Reported</b> 11/18/11 13	
			DL-51B 84-44 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar L	aborator	ries, Inc.					
Metals by EPA 6010B									
Lead	13	3.0	mg/kg	1	1111202	11/12/11	11/14/11	EPA 6010B	

SunStar Laboratories, Inc.

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Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

# Metals by EPA 6010B - Quality Control

## SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111119 - EPA 3051	Result	Emilt	Onto	Level	result	Juice	Linits	N D	Linit	110103
Blank (1111119-BLK1)				Prenared.	11/11/11	Analyzed	· 11/15/11			
Lead	ND	3.0	mg/kg	Tiepureu.	11/11/11	7 mary 200				
LCS (1111119-BS1)				Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	113	3.0	mg/kg	100		113	75-125			
Matrix Spike (1111119-MS1)	Sou	rce: T11168	64-01	Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	104	3.0	mg/kg	100	ND	104	75-125			
Matrix Spike Dup (1111119-MSD1)	Sou	rce: T11168	84-01	Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	105	3.0	mg/kg	100	ND	105	75-125	1.43	20	
Batch 1111120 - EPA 3051										
Blank (1111120-BLK1)				Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	ND	3.0	mg/kg							
LCS (1111120-BS1)				Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	114	3.0	mg/kg	100		114	75-125			
Matrix Spike (1111120-MS1)	Sou	rce: T11168	84-21	Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	113	3.0	mg/kg	100	ND	113	75-125			
Matrix Spike Dup (1111120-MSD1)	Sou	rce: T11168	84-21	Prepared:	11/11/11	Analyzed	: 11/15/11			
Lead	105	3.0	mg/kg	100	ND	105	75-125	7.42	20	
Batch 1111202 - EPA 3051										
Blank (1111202-BLK1)				Prepared:	11/12/11	Analyzed	: 11/14/11			
Lead	ND	3.0	mg/kg							

SunStar Laboratories, Inc.

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Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project Nur Project Mar		5.3					<b>Reporte</b> 11/18/11	
		ls by EPA SunStar ]				ol				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

|--|

LCS (1111202-BS1)	Prepared: 11/12/11 Analyzed: 11/14/11									
Lead	117	3.0	mg/kg	100		117	75-125			
Matrix Spike (1111202-MS1)	Source: T111639-04 F		Prepared: 11/12/11 Analyzed: 1			: 11/14/11				
Lead	115	3.0	mg/kg	100	10.8	104	75-125			
Matrix Spike Dup (1111202-MSD1)	Source: T111639-04		Prepared:	11/12/11	Analyzed					
Lead	119	3.0	mg/kg	100	10.8	108	75-125	3.39	20	

SunStar Laboratories, Inc.

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



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

### Conventional Chemistry Parameters by APHA/EPA/ASTM Methods - Quality Control

## SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1111125 - General Preparation										
Blank (1111125-BLK1)				Prepared a	& Analyze	d: 11/11/1	1			
рН	8.26	0.2	pH Units							
Duplicate (1111125-DUP1)	Source: T111684-04		Prepared a	& Analyze	d: 11/11/1	1				
pH	6.62	0.2	pH Units		6.62			0.00	20	

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



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

## **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

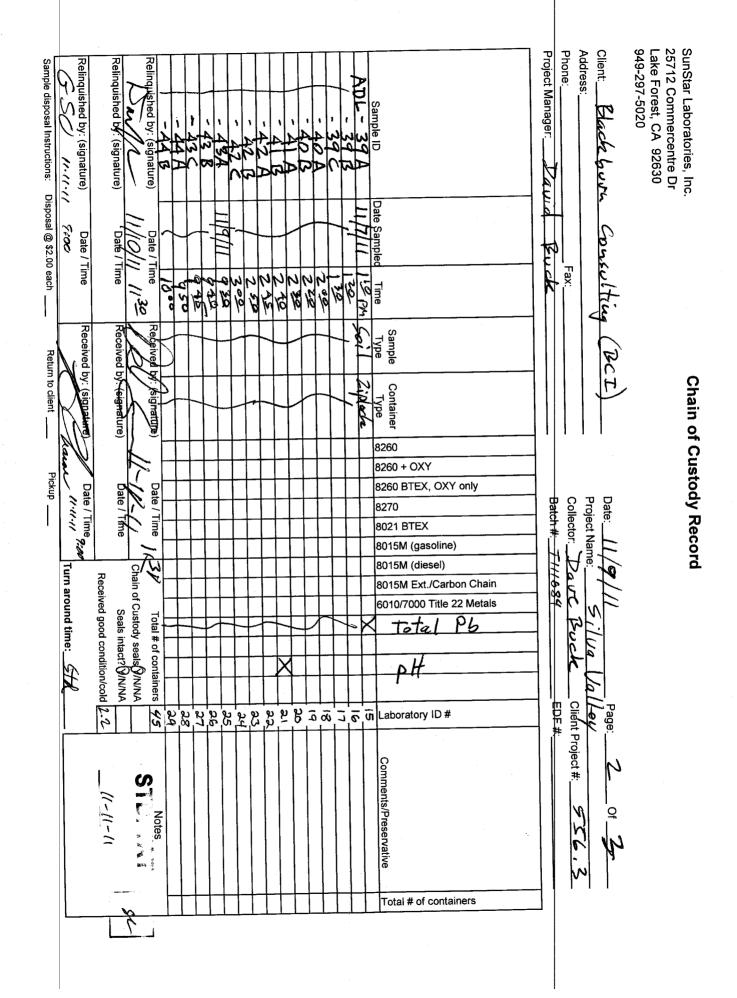
NR Not Reported

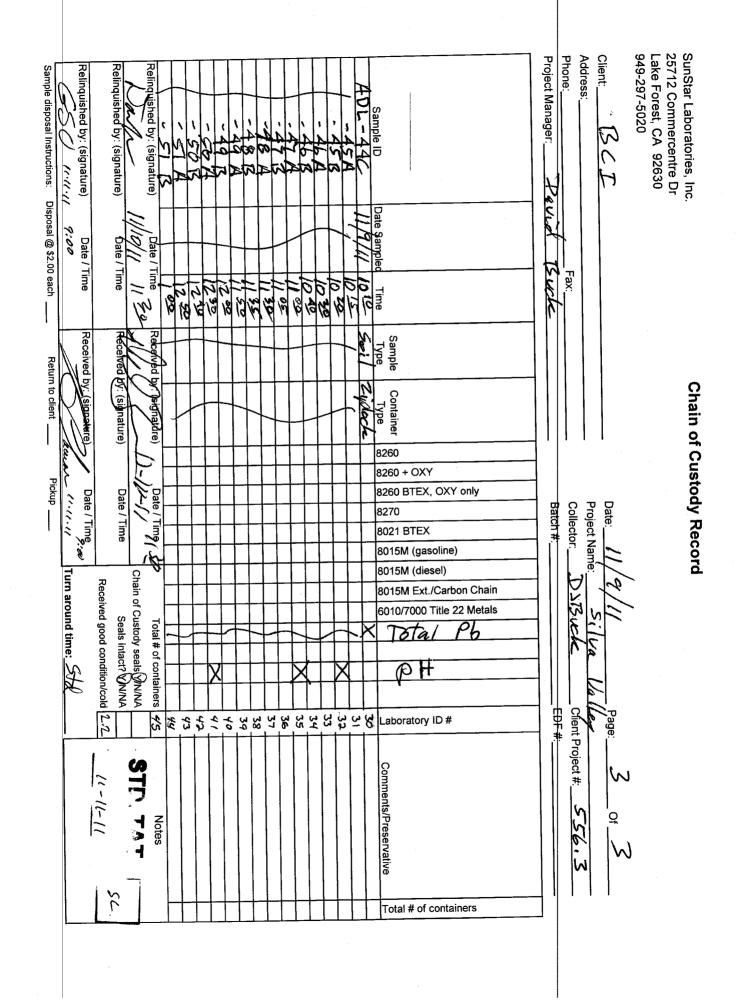
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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949-297-5020 25712 Commercentre Dr Lake Forest, CA 92630 SunStar Laboratories, Inc. Address: Client: Phone: 530-887-1494 Project Manager: Relinquished by: (signature) Relinquished by: (signature) Relinquished by: (signature) Sample disposal Instructions: Disposal @ \$2.00 each 3 ADL -600 Bluckeburg Sample ID 5 いて 38 Rense Hold samples for further testing after initial test results. 11-11-11 Davie Block Date Samplec 1-7-11 Ker Dr # 9:00 DASU Date / Time Buck Date / Time Date / I Ime Ø Fax 1/ 11 24 Received by: () Time thing 1110 Received by: (signature) Received by: 50: Sample Type Auburn, CA 95603 Return to client BCT **Chain of Custody Record** Ziplad Container (signature (signature) Type Pau 8260 8260 + OXY Pickup \_ 8260 BTEX, OXY only Date / Time Date / Time Date / Time 11-11-11 Project Name: Date: 11-7- 1-1 Batch #:\_\_\_\_\_\_\_6\_84 Collector: Dave 8270 8021 BTEX K 8015M (gasoline) Turn around time: Sandard Chain of Custody seals (M/NA Seals intact? WN/NA 8015M (diesel) Received good condition/cold 2.2 8015M Ext./Carbon Chain 51110 6010/7000 Title 22 Metals Total # of containers ρ 10 For involcing : Pot 10199 Tota 5004 9045 O lalles Client Project #: Page: 45 EDF # 0 ā Ā 4 7 Laboratory ID # S Comments/Preservative 11-11-11 556. Notes R Total # of containers





SunStar Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE	Page 1 of
SAMPLE RECEIVING REVIEW SHEET	
BATCH #	
Client Name: BLACKBURN CONSULTING Project: SILUA VALLEY	
Received by: <u>Baran</u> Date/Time Received: <u>JULICE</u>	9:00
Delivered by : Client SunStar Courier GSO FedEx Other	
Total number of coolers received Temp criteria = $6^{\circ}C > 0^{\circ}C$ (no frozen	containers)
Temperature: cooler #1 $2.4$ °C +/- the CF (- 0.2°C) = $2.2$ °C corrected temperature	
cooler #2°C +/- the CF (- 0.2°C) =°C corrected temperature	
cooler #3°C +/- the CF (- $0.2^{\circ}$ C) =°C corrected temperature	
Samples outside temp. but received on ice, w/in 6 hours of final sampling. XYes No	,* □N/A
Custody Seals Intact on Cooler/Sample	•* □N/A
Sample Containers Intact	*
Sample labels match COC ID's	)*
Total number of containers received match COC	)*
Proper containers received for analyses requested on COC	)*
Proper preservative indicated on COC/containers for analyses requested Yes No	o* ∅N/A
Complete shipment received in good condition with correct temperatures, containers, labels, v preservatives and within method specified holding times. $\bigvee$ Yes $\Box$ No*	olumes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and	late <u>BC //////</u>
Comments:	

SunStar — Laboratories, Inc. 25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

29 November 2011

Dave Buck Blackburn Consulting 11521 Blocker Dr #110 Auburn, CA 95603 RE: Silva Valley

Enclosed are the results of analyses for samples received by the laboratory on 11/11/11 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wordy Flsia

Wendy Hsiao Project Manager



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/29/11 14:48

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-34A	T111684-04	Soil	11/07/11 10:00	11/11/11 09:00
ADL-35A	T111684-06	Soil	11/07/11 10:15	11/11/11 09:00
ADL-36A	T111684-08	Soil	11/07/11 11:15	11/11/11 09:00
ADL-37A	T111684-10	Soil	11/07/11 11:35	11/11/11 09:00
ADL-38A	T111684-12	Soil	11/07/11 12:35	11/11/11 09:00
ADL-39A	T111684-15	Soil	11/07/11 13:10	11/11/11 09:00
ADL-43A	T111684-25	Soil	11/09/11 09:30	11/11/11 09:00
ADL-43C	T111684-27	Soil	11/09/11 09:45	11/11/11 09:00
ADL-44A	T111684-28	Soil	11/09/11 09:50	11/11/11 09:00
ADL-45A	T111684-31	Soil	11/09/11 10:15	11/11/11 09:00
ADL-46A	T111684-33	Soil	11/09/11 10:30	11/11/11 09:00
ADL-48A	T111684-37	Soil	11/09/11 11:30	11/11/11 09:00
ADL-50A	T111684-41	Soil	11/09/11 12:30	11/11/11 09:00
ADL-51A	T111684-43	Soil	11/09/11 12:50	11/11/11 09:00

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							<b>d:</b> 4:48
			DL-34A 84-04 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	:	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	ND	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							<b>l:</b> 4:48
			DL-35A 84-06 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	1	SunStar L	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	ND	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							<b>1:</b> 4:48
			DL-36A 84-08 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	:	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	2.6	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							<b>1:</b> 4:48
			DL-37A 84-10 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	1	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	0.31	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck							<b>l:</b> 4:48
			DL-38A 84-12 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	SunStar L	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	0.12	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje roject Numb oject Manag		3				<b>Reported</b> 11/29/11 14	
			DL-39A 84-15 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	£	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	0.53	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb oject Manag		3				<b>Reported</b> 11/29/11 14	
			DL-43A 84-25 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	0.70	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603	Project: Silva Valley Project Number: 556.3 Project Manager: Dave Buck								<b>l:</b> 4:48
			DL-43C 84-27 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	0.16	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje Project Numb Project Manag		2				<b>Reported</b> 11/29/11 14	
			DL-44A 84-28 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	1.9	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb oject Manag		3				<b>Reporteo</b> 11/29/11 14	
			DL-45A 84-31 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	0.34	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje roject Numb oject Manag		5				<b>Reported</b> 11/29/11 14	
			DL-46A 84-33 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	:	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Ser	ies Methods								
Lead	1.5	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje oject Numb oject Manag		3				<b>Reported</b> 11/29/11 14	
			DL-48A 84-37 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	0.63	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje Project Numb Project Manag		2				<b>Reported</b> 11/29/11 14	
			DL-50A 84-41 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
STLC Metals by 6000/7000 Series	es Methods								
Lead	1.5	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting 11521 Blocker Dr #110 Auburn CA, 95603		Proje roject Numb oject Manag		5				<b>Reported</b> 11/29/11 14	
			DL-51A 84-43 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	1	SunStar L	aborato	ries, Inc.					
STLC Metals by 6000/7000 Seri	es Methods								
Lead	ND	0.10	mg/l	1	1112110	11/21/11	11/29/11	STLC EPA 6010	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/29/11 14:48

#### STLC Metals by 6000/7000 Series Methods - Quality Control

## SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1112110 - STLC Leachate										
Blank (1112110-BLK1)				Prepared:	11/21/11	Analyzed	: 11/29/11			
Lead	ND	0.10	mg/l							
LCS (1112110-BS1)				Prepared:	11/21/11	Analyzed	: 11/29/11			
Lead	0.859	0.10	mg/l	1.00		85.9	75-125			
Matrix Spike (1112110-MS1)	Sou	ce: T11168	4-04	Prepared:	11/21/11	Analyzed	: 11/29/11			
Lead	1.11	0.10	mg/l	1.00	0.0530	105	75-125			
Matrix Spike Dup (1112110-MSD1)	Sou	ce: T11168	4-04	Prepared:	11/21/11	Analyzed	: 11/29/11			
Lead	1.06	0.10	mg/l	1.00	0.0530	101	75-125	4.10	30	

SunStar Laboratories, Inc.

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Wendy Hsiao, Project Manager



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/29/11 14:48

## **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-33A	T111684-01	Soil	11/07/11 09:30	11/11/11 09:00
ADL-33B	T111684-02	Soil	11/07/11 09:40	11/11/11 09:00
ADL-33C	T111684-03	Soil	11/07/11 09:50	11/11/11 09:00
ADL-34A	T111684-04	Soil	11/07/11 10:00	11/11/11 09:00
ADL-34B	T111684-05	Soil	11/07/11 10:05	11/11/11 09:00
ADL-35A	T111684-06	Soil	11/07/11 10:15	11/11/11 09:00
ADL-35B	T111684-07	Soil	11/07/11 10:30	11/11/11 09:00
ADL-36A	T111684-08	Soil	11/07/11 11:15	11/11/11 09:00
ADL-36B	T111684-09	Soil	11/07/11 11:25	11/11/11 09:00
ADL-37A	T111684-10	Soil	11/07/11 11:35	11/11/11 09:00
ADL-37B	T111684-11	Soil	11/07/11 11:50	11/11/11 09:00
ADL-38A	T111684-12	Soil	11/07/11 12:35	11/11/11 09:00
ADL-38B	T111684-13	Soil	11/07/11 12:40	11/11/11 09:00
ADL-38C	T111684-14	Soil	11/07/11 13:00	11/11/11 09:00
ADL-39A	T111684-15	Soil	11/07/11 13:10	11/11/11 09:00
ADL-39B	T111684-16	Soil	11/07/11 13:20	11/11/11 09:00
ADL-39C	T111684-17	Soil	11/07/11 13:30	11/11/11 09:00
ADL-40A	T111684-18	Soil	11/07/11 14:00	11/11/11 09:00
ADL-40B	T111684-19	Soil	11/07/11 14:20	11/11/11 09:00
ADL-41A	T111684-20	Soil	11/07/11 14:30	11/11/11 09:00
ADL-41B	T111684-21	Soil	11/07/11 14:40	11/11/11 09:00
ADL-42A	T111684-22	Soil	11/07/11 14:45	11/11/11 09:00
ADL-42B	T111684-23	Soil	11/07/11 14:50	11/11/11 09:00
ADL-42C	T111684-24	Soil	11/07/11 15:00	11/11/11 09:00
ADL-43A	T111684-25	Soil	11/09/11 09:30	11/11/11 09:00
ADL-43B	T111684-26	Soil	11/09/11 09:40	11/11/11 09:00

SunStar Laboratories, Inc.

Wordy Flsia



Blackburn Consulting	Project: Silva Valley	
11521 Blocker Dr #110	Project Number: 556.3	Reported:
Auburn CA, 95603	Project Manager: Dave Buck	11/18/11 13:33

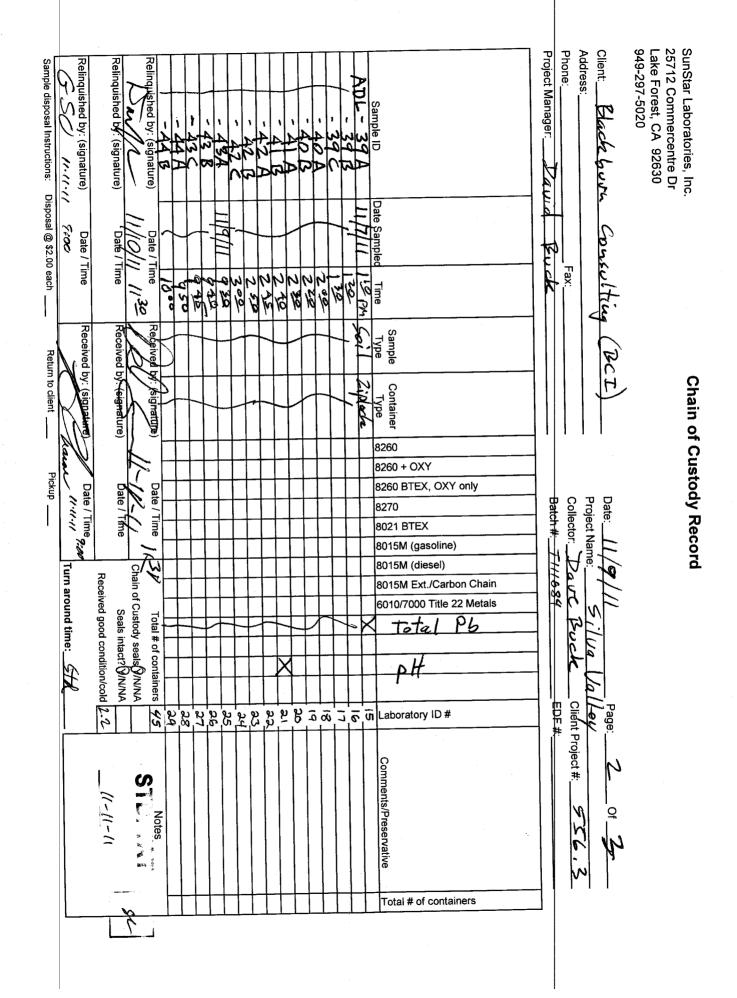
#### ANALYTICAL REPORT FOR SAMPLES

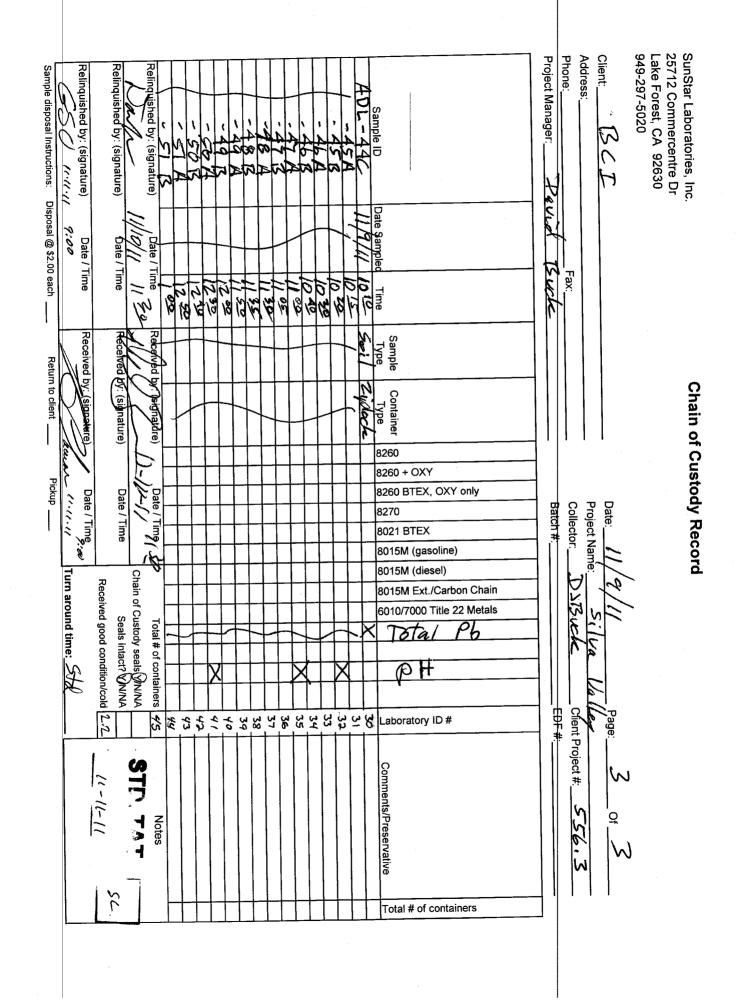
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ADL-43C	T111684-27	Soil	11/09/11 09:45	11/11/11 09:00
ADL-44A	T111684-28	Soil	11/09/11 09:50	11/11/11 09:00
ADL-44B	T111684-29	Soil	11/09/11 10:00	11/11/11 09:00
ADL-44C	T111684-30	Soil	11/09/11 10:10	11/11/11 09:00
ADL-45A	T111684-31	Soil	11/09/11 10:15	11/11/11 09:00
ADL-45B	T111684-32	Soil	11/09/11 10:20	11/11/11 09:00
ADL-46A	T111684-33	Soil	11/09/11 10:30	11/11/11 09:00
ADL-46B	T111684-34	Soil	11/09/11 10:40	11/11/11 09:00
ADL-47A	T111684-35	Soil	11/09/11 11:00	11/11/11 09:00
ADL-47B	T111684-36	Soil	11/09/11 11:05	11/11/11 09:00
ADL-48A	T111684-37	Soil	11/09/11 11:30	11/11/11 09:00
ADL-48B	T111684-38	Soil	11/09/11 11:35	11/11/11 09:00
ADL-49A	T111684-39	Soil	11/09/11 11:50	11/11/11 09:00
ADL-49B	T111684-40	Soil	11/09/11 12:00	11/11/11 09:00
A <mark>DL-50A</mark>	T111684-41	Soil	11/09/11 12:30	11/11/11 09:00
ADL-50B	T111684-42	Soil	11/09/11 12:40	11/11/11 09:00
ADL-51A	T111684-43	Soil	11/09/11 12:50	11/11/11 09:00
ADL-51B	T111684-44	Soil	11/09/11 13:00	11/11/11 09:00

SunStar Laboratories, Inc.

Wordy Flsia

949-297-5020 25712 Commercentre Dr Lake Forest, CA 92630 SunStar Laboratories, Inc. Address: Client: Phone: 530-887-1494 Project Manager: Relinquished by: (signature) Relinquished by: (signature) Relinquished by: (signature) Sample disposal Instructions: Disposal @ \$2.00 each 3 ADL -600 Bluckeburg Sample ID 5 いて 38 Rense Hold samples for further testing after initial test results. 11-11-11 Davie Block Date Samplec 1-7-11 Ker Dr # 9:00 DASU Date / Time Buck Date / Time Date / I Ime Ø Fax 1/ 11 24 Received by: () Time thing 1110 Received by: (signature) Received by: 50: Sample Type Auburn, CA 95603 Return to client BCT **Chain of Custody Record** Ziplad Container (signature (signature) Type Pau 8260 8260 + OXY Pickup \_ 8260 BTEX, OXY only Date / Time Date / Time Date / Time 11-11-11 Project Name: Date: 11-7- 1-1 Batch #:\_\_\_\_\_\_\_6\_84 Collector: Dave 8270 8021 BTEX K 8015M (gasoline) Turn around time: Sandard Chain of Custody seals (M/NA Seals intact? WN/NA 8015M (diesel) Received good condition/cold 2.2 8015M Ext./Carbon Chain 51110 6010/7000 Title 22 Metals Total # of containers ρ 10 For involcing : Pot 10199 Tota 5004 9045 O 1a/1-es Client Project #: Page: 45 EDF # 0 ā Ā 4 7 Laboratory ID # S Comments/Preservative 11-11-11 556. Notes R Total # of containers





SunStar Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE	Page 1 of
SAMPLE RECEIVING REVIEW SHEET	
ВАТСН #	
Client Name: BLACKBURN CONSULTING Project: SILVA VALLEY	
Received by: <u>Brunn</u> Date/Time Received: <u>Junual</u>	9:00
Delivered by : Client SunStar Courier GSO FedEx Other	
Total number of coolers received Temp criteria = $6^{\circ}C > 0^{\circ}C$ (no frozen	containers)
Temperature: cooler #1 _2.4 °C +/- the CF (- 0.2°C) = _2.2 °C corrected temperature	
cooler #2°C +/- the CF (- 0.2°C) =°C corrected temperature	
cooler #3°C +/- the CF (- 0.2°C) =°C corrected temperature	
Samples outside temp. but received on ice, w/in 6 hours of final sampling. Yes No	)* □N/A
Custody Seals Intact on Cooler/Sample	o* □N/A
Sample Containers Intact	)*
Sample labels match COC ID's	)*
Total number of containers received match COC	)*
Proper containers received for analyses requested on COC	)*
Proper preservative indicated on COC/containers for analyses requested Yes N	o* ∅N/A
Complete shipment received in good condition with correct temperatures, containers, labels, v preservatives and within method specified holding times. $\bigvee$ Yes $\Box$ No*	olumes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and	late <u>BC //·//·//</u>
Comments:	

# Appendix E

ADL Variance





California Environmental Protection Agency Department of Toxic Substances Control

# VARIANCE

Applicant Names:

State of California Department of Transportation (Caltrans) 1120 N Street Sacramento, California 95814 Variance No. V09HQSCD006

Effective Date: July 1, 2009

Expiration Date: July 1, 2014

Modification History:

Pursuant to California Health and Safety Code, Section 25143, the Department of Toxic Substances Control hereby issues the attached Variance consisting of 9 pages to the Department of Transportation.

Beverly Rikala Team Leader, Operating Facilities Team Department of Toxic Substances Control

6/30/09 Date:

VARIANCE

## 1. INTRODUCTION.

a) Pursuant to Health and Safety Code, section 25143, the California Department of Toxic Substances Control (DTSC) grants this variance to the applicant below for waste considered to be hazardous solely because of its lead concentrations and as further specified herein.

b) DTSC hereby grants this variance only from the requirements specified herein and only in accordance with all terms and conditions specified herein.

#### 2. IDENTIFYING INFORMATION.

APPLICANT/OWNER/OPERATOR

State of California Department of Transportation, (Caltrans) All Districts

#### 3. <u>TYPE OF VARIANCE</u>.

Generation, Manifest, Transportation, Storage and Disposal.

#### 4. ISSUANCE AND EXPIRATION DATES.

DATE ISSUED: July 1, 2009 EXPIRATION DATE: July 1, 2014

- 5. <u>APPLICABLE STATUTES AND REGULATIONS</u>. The hazardous waste that is the subject of this variance is fully regulated under Health and Safety Code, section 25100, et seq. and California Code of Regulations, title 22, division 4.5 except as specifically identified in Section 8 of this variance.
- 6. <u>DEFINITION</u>. For purposes of this variance, "lead-contaminated soil(s)" shall mean soil that meets the criteria for hazardous waste but contains less than 3397 mg/kg total lead and is hazardous primarily because of aerially-deposited lead contamination associated with exhaust emissions from the operation of motor vehicles.
- 7. <u>FINDINGS/DETERMINATIONS</u>. DTSC has determined that the variance applicant meets the requirements set forth in Health and Safety Code, section 25143 for a variance from specific regulatory requirements as outlined in Section 8 of this variance. The specific determinations and findings made by DTSC are as follows:

a) Caltrans intends to excavate, stockpile, transport, bury and cover large volumes of soil associated with highway construction projects. In the more urbanized highway corridors around the State this soil is contaminated with lead, primarily due to historic emissions from automobile exhausts. In situ sampling and laboratory testing has shown that some of the soil contains concentrations of lead in excess of State regulatory thresholds, and thus any generated waste from disturbance of the soil would be regulated as hazardous waste. Such soil contains a Total Threshold Limit Concentration (TTLC) of 1000 milligrams per kilogram (mg/kg) or more lead and/or it meets or exceeds the Soluble Threshold Limit Concentration (STLC) for lead of 5 milligrams per liter (mg/l). A Human Health Risk Assessment prepared for this variance concludes that soil contaminated with elevated concentrations of lead can be managed in a way that presents no significant risk to human health.

b) The lead-contaminated soil will be placed only in Caltrans' right-of-way. Depending on concentration levels, the wastes will be covered with a minimum thickness of one (1) foot of non-hazardous soil or asphalt/concrete cover and will always be at least five (5) feet above the highest groundwater elevation. Caltrans will assure that proper health and safety procedures will be followed for workers, including any persons engaged in maintenance work in areas where the waste has been buried and covered.

c) DTSC finds and requires that the lead-contaminated soil excavated, stockpiled, transported, buried and covered pursuant to this variance is a non-RCRA hazardous waste, and that the waste management activity is insignificant as a potential hazard to human health and safety and the environment, when managed in accordance with the conditions, limitations and other requirements specified in this variance.

#### 8. PROVISIONS WAIVED.

Provided Caltrans meets the terms and conditions of this variance, DTSC waives the hazardous waste management requirements of Health and Safety Code, Chapter 6.5 and California Code of Regulations, title 22 for the lead-contaminated soil that Caltrans reuses in projects that would require Caltrans to obtain a permit for a disposal facility and any other generator requirements that concern the transportation, manifesting, storage and land disposal of hazardous waste.

### SPECIFIC CONDITIONS, LIMITATIONS AND OTHER REQUIREMENTS.

In order for the provisions discussed in section 8 to be waived, lead-contaminated soil must not exceed the contaminant concentrations discussed below and Caltrans management practices must meet all the following conditions:

a) Caltrans implementation of this variance shall comply with all applicable state laws and regulations for water quality control, water quality control plans, waste discharge requirements (including storm water permits), and others issued by the State Water Resources Control Board (SWRCB) and/or a California Regional Water Quality Control Board (RWQCB). Caltrans shall provide written notification to the appropriate RWQCB at least 30 days prior to advertisement for bids of projects that involve invocation of this variance, or as otherwise negotiated with the SWRCB or appropriate RWQCB.

b) The waivers in this variance shall only be applied to lead-contaminated soil that is not a RCRA hazardous waste and is hazardous primarily because of aerially-

deposited lead contamination associated with exhaust emissions from the operation of motor vehicles. The variance is not applicable to any other hazardous waste.

c) Soil containing 1.5 mg/l extractable lead or less (based on a modified waste extraction test using deionized water as the extractant) and 1411 mg/kg or less total lead may be used as fill provided that the lead-contaminated soil is placed a minimum of five (5) feet above the maximum historic water table elevation and covered with at least one (1) foot of nonhazardous soil that will be maintained by Caltrans to prevent future erosion.

d) Soil containing 150 mg/L extractable lead or less (based on a modified waste extraction test using deionized water as the extractant) and 3397 mg/kg or less total lead may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum historic water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans.

e) Lead-contaminated soil with a pH less than 5.5 but greater than 5.0 shall only be used as fill material under the paved portion of the roadway. Lead-contaminated soil with a pH at or less than 5.0 shall be managed as a hazardous waste.

f) For each project that has the potential to generate waste by disturbing leadcontaminated soil (as defined in 6), Caltrans shall conduct sampling and analysis to adequately characterize the soils containing aerially deposited lead in the areas of planned excavation along the project route. Such sampling and analysis shall include the Toxicity Characteristic Leaching Procedure (TCLP) as prescribed by the United States Environmental Protection Agency to determine whether concentrations of contaminants in soil exceed federal criteria for classification as a hazardous waste.

g) Lead-contaminated soil managed pursuant to this variance shall not be moved outside the designated corridor boundaries (see paragraph t) below. All leadcontaminated soil not buried and covered within the same Caltrans corridor where it originated is not eligible for management under this variance and shall be managed as a hazardous waste.

h) Lead-contaminated soil managed pursuant to this variance shall not be placed in areas where it would become in contact with groundwater or surface water (such as streams and rivers).

i) Lead-contaminated soil managed pursuant to this variance shall be buried and covered only in locations that are protected from erosion that may result from storm water run-on and run-off.

j) The lead-contaminated soil shall be buried and covered in a manner that will prevent accidental or deliberate breach of the asphalt, concrete, and/or cover soil.

k) The presence of lead-contaminated soil shall be incorporated into the projects' asbuilt drawings. The as-built drawings shall be annotated with the location, representative analytical data, and volume of lead-contaminated soil. The as-built drawings shall also state the depth of the cover. These as-built drawings shall be retained by Caltrans.

I) Caltrans shall ensure that no other hazardous wastes, other than the leadcontaminated hazardous waste soil, are placed in the burial areas.

m) Lead-contaminated soil shall not be buried within ten (10) feet of culverts or locations subject to frequent worker exposure.

n) Excavated lead-contaminated soil not placed into the designated area (fill area, roadbed area) by the end of the working day shall be stockpiled and covered with sheets of polyethylene or at least one foot of non-hazardous soil. The lead-contaminated soil, while stockpiled or under transport, shall be protected from contacting surface water and from being dislodged or transported by wind or storm water. The stockpile covers shall be inspected at least once a week and within 24 hours after rainstorms. If the lead-contaminated soil is stockpiled for more than 4 days from the time of excavation, Caltrans shall restrict public access to the stockpile by using barriers that meet the safety requirements of the construction zone. The lead-contaminated soil shall be stockpiled for no more than 90 days from the time the soil is first excavated. If the contaminated soil is stockpiled beyond the 90 day limit Caltrans shall:

1. notify DTSC in writing of the 90 day exceedance and expected date of removal;

2. perform weekly inspections of the stockpiled material to ensure that there is adequate protection from run-on, runoff, public access, and wind dispersion; and

3. notify DTSC on weekly basis of the stockpile status until the stockpile is removed.

The lead-contaminated soil shall be stockpiled for no more than 180 days from the time the soil is first excavated.

o) Caltrans shall ensure that all stockpiling of lead-contaminated soil remains within the project area of the specified corridor. Stockpiling of lead-contaminated soil within the specified corridor, but outside the project area, is prohibited.

p) Caltrans shall conduct confirmatory sampling of any stockpile area in areas not known or expected to contain lead-contaminated soil after removal of the leadcontaminated soil to ensure that contamination has not been left behind or has not migrated from the stockpiled material to the surrounding soils.

q) Caltrans shall stockpile lead-contaminated soil only on high ground (i.e. no sump areas or low points) so that stockpiled soil will not come in contact with surface

#### water run-on or run-off.

r) Caltrans shall not stockpile lead-contaminated soil in environmentally and ecologically sensitive areas.

s) Caltrans shall ensure that storm/rain run-off that has come into contact with stockpiled lead-contaminated soil will not flow to storm drains, inlets, or waters of the State.

t) Caltrans may dispose of the lead-contaminated soil only within the operating rightof-way of an existing highway, as defined in Streets and Highways Code, section 23. Caltrans may move lead-contaminated soil from one Caltrans project to another Caltrans project only if the lead-contaminated soil remains within the same designated corridor.

Caltrans shall record any movement of lead-contaminated soil by using a bill of lading. The bill of lading must contain: 1) the US DOT description including shipping name, hazard class and ID number; 2) handling codes; 3) quantity of material; 4) volume of material; 5) date of shipment; 6) origin and destination of shipment; and 7) any specific handling instructions. The bill of lading shall be referenced in and kept on file with the project's as-built drawings. The lead-contaminated soil must be kept covered during transportation.

u) For each specific corridor where this variance is to be implemented, all of the following information shall be submitted in writing to DTSC at least five (5) days before construction of any project begins:

1. plan drawing designating the boundaries of the corridor where leadcontaminated soils will be excavated, stockpiled, buried and covered;

2. a list of the Caltrans projects that the corridor encompasses;

3. a list of Caltrans contractors that will be conducting any phase of work on any project affected by this variance;

4. duration of corridor construction;

5. location where sampling and analytical data used to make lead concentration level determinations are kept (e.g. a particular Caltrans project file);

6. name and phone number (including area code) of project resident engineer and project manager;

7. location where Caltrans and contractor health and safety plan and records are kept;

8. location of project special provisions (including page or section number) for soil excavation, transportation, stockpile, burial and placement of cover material;

9. location of project drawings (including drawing page number) for soil excavation, burial and placement of cover in plan and cross section (for example, "The project plans are located at the resident engineer's office located at 5th and Main Streets, City of Fresno, See pages xxxxx of contract xxxx");

10. updated information if a Caltrans project within the corridor is added, changed or deleted; and

11. type of environmental document prepared for each project, date of adoption, document title, Clearing House number and where the document is available for review. A copy of the Caltrans Categorical Exemption, Categorical Exclusion Form, or if filed, the Notice of Exemption for any project shall be submitted to the DTSC Headquarters Project Manager.

v) Changes in location of lead-contaminated soil placement, quantities or protection measures (field changes) shall be noted in the resident engineer's project log within five (5) days of the field change.

w) Caltrans shall ensure that field changes are in compliance with the requirements of this variance.

x) Operational procedures described in the California Environmental Quality Act (CEQA) Special Initial Study shall be followed by Caltrans for activities conducted under this variance.

y) Caltrans shall implement appropriate health and safety procedures to protect its employees and the public, and to prevent or minimize exposure to potentially hazardous wastes. A project-specific health and safety plan must be prepared and implemented. The monitoring and exposure standards shall be based on construction standards for exposure to lead in California Code of Regulations, title 8, section 1532.1.

z) Caltrans shall provide a district Coordinator for this variance. This Coordinator will be the primary point of contact for information flowing to, or received from, DTSC regarding any matter or submission under this variance. Caltrans shall promptly notify DTSC of the name of Coordinator and any change in the Coordinator.

aa) Caltrans shall conduct regular inspections, consistent with Caltrans' Maintenance Division's current Pavement Inspection and Slope Inspection programs, of the locations where lead-contaminated soil has been buried and/or covered pursuant to this variance. If site inspection reveals deterioration of cover so that conditions in the variance are not met, Caltrans shall repair or replace the cover. bb) Caltrans shall develop and implement a record keeping mechanisms to record and retain permanent records of all locations where lead-contaminated soil has been buried per this variance. The records shall be made available to DTSC.

cc) If areas subject to the terms of this variance are sold, relinquished or abandoned (including roadways), all future property owners shall be notified in writing in advance by Caltrans of the requirements of this variance, and Caltrans shall provide the owner with a copy of the variance. A copy of such a notice shall be sent to DTSC and contain the corridor location and project. Caltrans shall also disclose to DTSC and the new owner the location of areas where lead-contaminated soil has been buried. Future property owners shall be subject to the same requirements as Caltrans.

dd) For the purposes of informing the public about instances where the variance is implemented, Caltrans shall:

1. maintain current fact sheets at all Caltrans resident engineer offices and the Caltrans District office. Caltrans shall make the fact sheets available to anyone expressing an interest in variance-related work.

2. maintain a binder(s) containing copies of all reports submitted to DTSC at the District office. Caltrans shall ensure that the binders are readily accessible to the public.

3. carry out the following actions when it identifies additional projects:

(A) notify the public via a display advertisement in a newspaper of general circulation in that area.

(B) update and distribute the fact sheet to the mailing list and repository locations.

ee) Lead-contaminated soil may be buried only in areas where access is limited or where lead-contaminated soil is covered and contained by a pavement structure.

ff) Dust containing lead-contaminated soil must be controlled. Water or dust palliative may be applied to control dust. If visible dust migration occurs, all excavation, stockpiling and truck loading and burying must be stopped. The granting of this variance confers no relief on Caltrans from compliance with the laws, regulations and requirements enforced by any local air district or the California Air Resources Board.

gg) Sampling and analysis is required to show the lead-contaminated soil meets the variance criteria. All sampling and analysis must be conducted in accordance with the appropriate methods specified in U.S. EPA SW-846.

hh) DTSC retains the right to require Caltrans or any future owner to remove, and properly dispose of, lead-contaminated soil in the event DTSC determines it is necessary for protection of public health, safety or the environment.

ii) DTSC finds that some projects involving lead-contaminated soil are joint projects between Caltrans and other government entities. In these joint projects, Caltrans may not be the lead agency implementing the project although Caltrans is still involved if the project occurs on its right-of-way.

Caltrans may invoke this variance for joint projects where Caltrans and local government entity are involved provided that 1) the project is within the Caltrans Right-of-Way; 2) Caltrans reviews/ oversees all phases of the project including design, contracting, environmental assessment, construction, operation, and maintenance; and 3) Caltrans oversees the project to verify all variance conditions are complied with. Caltrans will be fully responsible for the variance notification and implementation in these joint projects.

jj) All correspondence shall be directed to the following office:

Hazardous Waste Permitting Department of Toxic Substances Control 8800 Cal Center Drive Sacramento, CA 95826

Attn: Caltrans Lead Variance Notification Unit

#### 10. DISCLAIMER.

a) The issuance of this variance does not relieve Caltrans of the responsibility for compliance with Health and Safety Code, chapter 6.5, or the regulations adopted thereunder, and any other laws and regulations other than those specifically identified in Section 8 of this variance. Caltrans is subject to all terms and conditions herein. The granting of this variance confers no relief from compliance with any federal, State or local requirements other than those specifically provided herein.

b) The issuance of this variance does not release Caltrans from any liability associated with the handling of hazardous waste, except as specifically provided herein and subject to all terms and conditions of this variance.

- 11. <u>VARIANCE MODIFICATION OR REVOCATION</u>. This variance is subject to review at the discretion of DTSC and may be modified or revoked by DTSC upon change of ownership and at any other time pursuant to Health and Safety Code, section 25143.
- 12. <u>CEQA DETERMINATION</u>. DTSC adopted a Negative Declaration on June 30, 2009.

Approved:

6/30/09

Date

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Beverly Rikala Operating Facilities Team Department of Toxic Substances Control