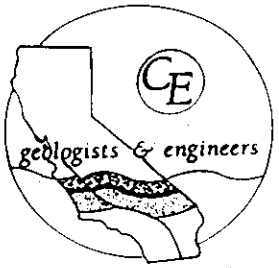
APPENDIX V

Groundwater Testing

California



Environmental

GROUNDWATER TESTING REPORT
Asphalt Paved Parking Lot
Lots 1-4 and 14-18
Tract 9768
Los Angeles, California

FOR

CASDEN PROPERTIES OPERATING PARTNERSHIP LP
9090 Wilshire Boulevard, 3rd Floor
Beverly Hills, CA 90211

Attention: Mr. Ron Mayhew

CE Job No. EP100-2075 March 2000

31119 Via Colinas, Suite 501 · Westlake Village, CA 91362 · (818) 991-1542 · (213) 485-0606 · FAX (818) 991-0739

TABLE OF CONTENTS

INTRODUCTION

The following report presents the findings of the soil screening and groundwater sampling performed at the subject site. The purpose of the study was preliminary characterization of soil and groundwater which will be generated during grading for a planned development.

The proposed development involves excavation of soil to a depth of approximately 35-40 feet below the existing ground surface (bgs). Soil may be transported offsite or reused for fill onsite. Dewatering may be required during construction. It is desired to dispose of wastewater from dewatering to the storm drain under a National Pollutant Discharge Elimination System (NPDES) permit or to the sanitary sewer under an industrial wastewater discharge permit.

The scope of work included:

- Observation and screening of geotechnical borings excavated by Jerry Kovacs and Associates (JKA).
- Observation of well installation in geotechnical borings.
- Collection of groundwater samples from two monitoring wells.
- Analysis of samples in a state certified laboratory operated by Columbia Analytical Services.
- Preparation of this report.

This report includes **GENERAL FINDINGS** and **CONCLUSIONS AND RECOMMENDATIONS** which together with the remainder of this report are subject to the **NOTICE** at the end of the report.

SUBSURFACE EXPLORATION

GEOTECHNICAL BORINGS

Two geotechnical borings were excavated on the subject property on January 10, 2000 by C and C Drilling under the direction of Jerry Kovacs and Associates. The borings were observed by California Environmental. The two borings were advanced to a maximum depth of 100 feet bgs using a hollow-stem auger drill rig with $6^1/_2$-inch diameter augers. The two borings were converted into monitored wells. C & C Drilling Company developed the wells. MW1 located in the northwestern portion of the parking area was constructed of 4 inch PVC casing, with 0.020-inch slots from 55-75 feet bgs. MW2 located in the southeastern portion of the subject property was constructed of 4 inch PVC casing, with 0.020-inch slots from 60-80 feet bgs. The filter pack is #3 sand from approximately 55-80 feet. The annular seal consists of hydrated bentonite chips from to the depth of the filter pack (55-60 feet).

SOIL SAMPLING

Soil samples were observed and monitored with a Photo Ionization Detector (PID). There was no evidence of contamination, therefore, no soil samples were submitted to the laboratory.

GROUNDWATER SAMPLING

Groundwater samples were collected from each monitoring well on January 24, 2000. A valid groundwater sample was not analyzed from MW-2 due to the very high silt content. MW-2 was compromised. C and C Drilling redeveloped MW2. MW2 was resampled on February 4, 2000.

The groundwater samples were collected by lowering a clean disposable polyethylene bailer down the well casing. The samples were decanted into 12 clean 40-ml VOA vials with teflon lined septa, poly one-liter containers and quart size glass containers. No headspace was allowed in the VOA vials. The groundwater samples were labeled and placed in chilled ice chests for transport to the laboratory. Chain-of Custody was maintained during transport and delivery of the samples to a state certified laboratory operated by Columbia Analytical Services.

CHEMICAL ANALYSES

GROUNDWATER

The samples were analyzed for petroleum hydrocarbons using EPA Method 8015M and for volatile organic compounds using EPA Method 8260, metals using the EPA 200 series methods and for general inorganic parameters using the appropriate EPA methods. The results of the analyses are shown in **TABLE I** below. The laboratory analysis is attached in **APPENDIX I**. Low levels of chloroform and carbon tetrachloride were detected in MW2.

TABLE I
Laboratory Analyses of Groundwater Samples

Parameter	Method	Units	Sample ID	
			MW1	MW2
Sample Date			1/10/00	2/4/00
Total Petroleum Hydrocarbon	8015M	mg/l	--	nd
Methyl tert-Butyl Ether (MtBE)	8260	µg/l	nd	nd
HVOC/VOC	8260	µg/l	nd	nd
Antimony	6010B	mg/l	nd	nd
Arsenic	7060A	mg/l	nd	0.020
Beryllium	6010B	mg/l	nd	nd
Cadmium	6010B	mg/L	nd	nd
Chromium	6010B	mg/l	nd	0.11
Copper	6010B	mg/l	nd	0.12
Lead	6010B	mg/l	nd	nd
Mercury	7060A	mg/l	nd	nd
Nickel	6010B	mg/l	nd	0.11
Selenium	7740	mg/L	nd	nd
Silver	6010B	mg/l	nd	nd
Thallium	6010B	mg/l	nd	nd
Zinc	6010B	mg/l	nd	0.60

TABLE I
Laboratory Analyses of Groundwater Samples
(Continued)

Parameter	Method	Units	Sample ID	
			MW1	MW2
Sample Date			1/10/00	2/4/00
Biochemical Oxygen Demand (BOD)	405.1	mg/l	nd	nd
Oil and Grease	413.1	mg/l	nd	nd
Phenolics, Total	420.1	mg/l	nd	nd
Total Suspended Solids (TSS)	160.2	mg/L	30	14
Sulfide, Total	376.2	mg/l	nd	nd
Surfactants (MBAS)	425.1	mg/l	nd	nd
Turbidity	180.1	NTU	16	38
HVOC/VOCs	8021B	µg/l	--	nd
Chloroform	8021B	µg/l	--	1.3
Carbon tetrachloride	8021B	µg/l	--	1.4

GENERAL FINDINGS

The observations and groundwater sampling produced the following findings:

- There was no evidence of chemical impacts in the soil samples, therefore, no soil samples were submitted to the laboratory.
- Groundwater from MW1 contained no VOCs. Low levels of chloroform (1.3 µg/L) and carbon tetrachloride (1.4 µg/L) were detected in MW2.

CONCLUSIONS AND RECOMMENDATIONS

SOIL

Soil samples were observed and monitored with a PID. There was no visual or field screening evidence of contamination, therefore, no soil samples were submitted to the laboratory.

GROUNDWATER

The dewatering from this site may be discharged to the storm drain under a NPDES permit. The NPDES permit may require pretreatment, monitoring and reporting of the waste discharge.

This report is subject to the following **NOTICE**:

NOTICE

All properties are subject to some element of environmental risk and the risks cannot be eliminated. Industrial and commercial properties developed prior to modern environmental laws are especially risk prone to environmental hazards which include, but are not limited to, wastes which may be toxic, ignitable, corrosive or reactive. The potential for these environmental hazards to impact the use of the property can be reduced by the identification and mitigation of the hazards prior to development or redevelopment of the property. Due to the difficulty in locating underground wastes, in some cases, it is not always possible to ascertain that hazardous wastes are present on the property prior to development or purchase.

The subsurface conditions described herein have been ascertained from excavations on the site as indicated, and should in no way be construed to reflect variations which may occur between or beyond these excavations. The chemical laboratory testing described herein was performed by a state certified testing laboratory. The state certified testing laboratory assumes responsibility for the testing procedures used in their analysis.

This report is made and issued for your sole use and benefit, is not transferable, and represents conditions encountered as of the exploration date. No warranty, expressed or implied, is made or intended in connection with the above exploration, or by the furnishing of this report, or by any other oral or written statement.

Should you have any questions or desire any additional information, please contact the undersigned.

Respectfully submitted,

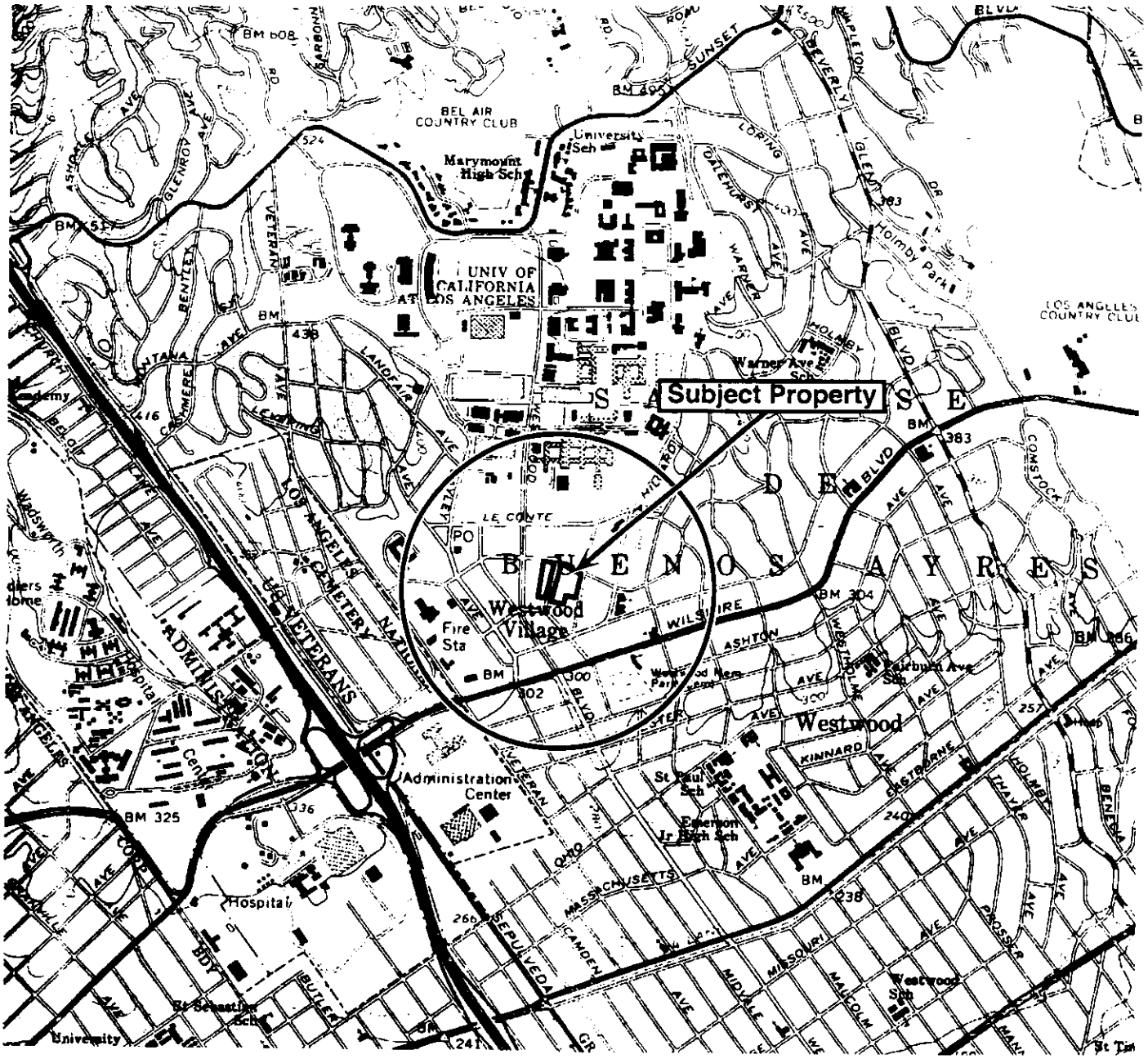
Charles I. Buckley
Certified Hydrogeologist No. 55
Registered Environmental Assessor

Christopher E. Rude
Environmental Scientist

REGISTERED GEOLOGIST
CHARLES I. BUCKLEY
No. 55
CERTIFIED HYDROGEOLOGIST
STATE OF CALIFORNIA

ILLUSTRATIONS

Vicinity Map
Plot Plan



REFERENCE: USGS 7.5' Beverly Hills Topographic Quadrangle, 1966 (Photorevised 1981)

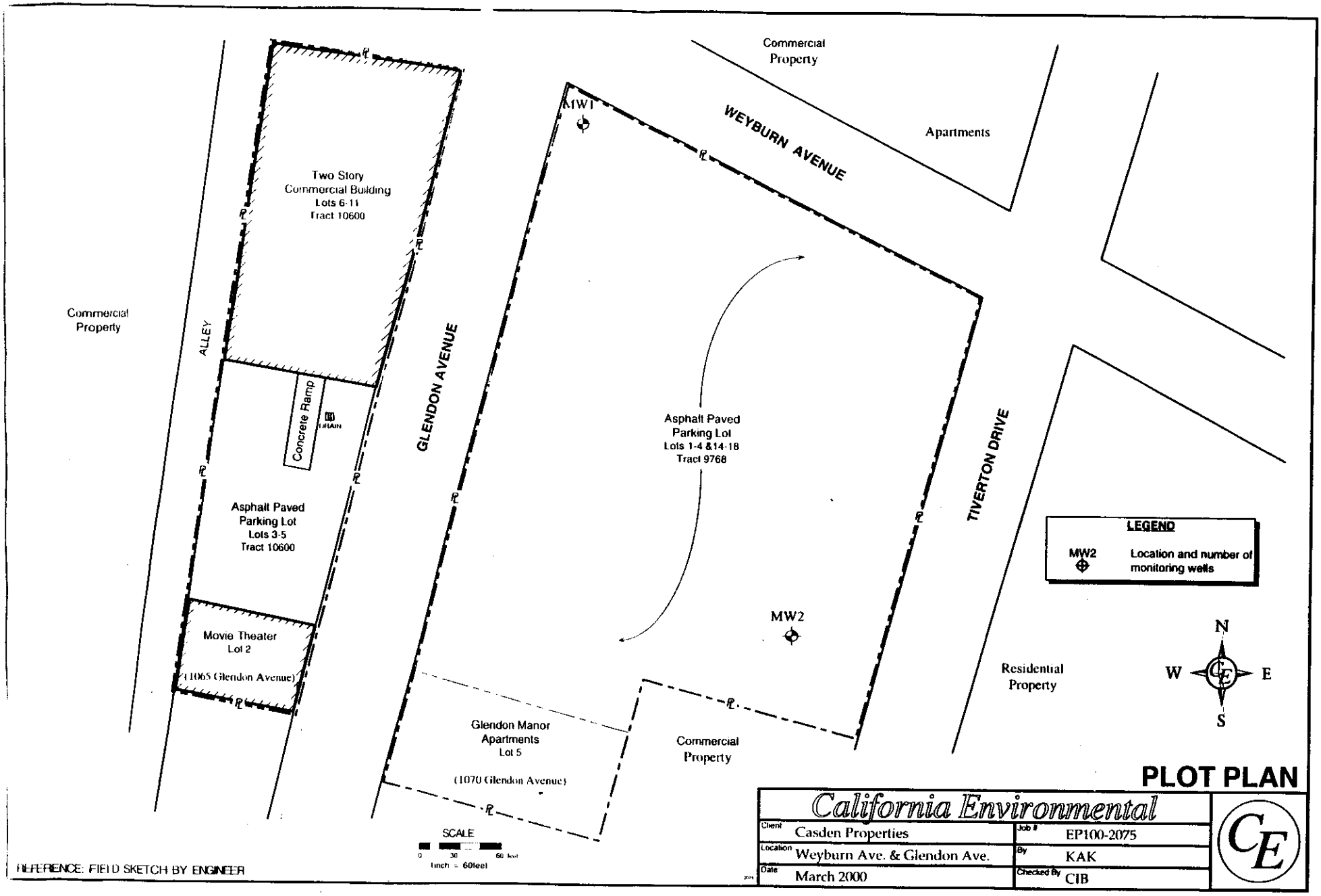
VICINITY MAP

Weyburn Avenue & Glendon Avenue
Westwood, California

Drawn By:	KAK	Job #	EP100-2075
Checked By:	CIB	Date:	March 2000

California Environmental

2075 vicin map



REFERENCE: FIELD SKETCH BY ENGINEER

PLOT PLAN

California Environmental

Client: Casden Properties	Job #: EP100-2075
Location: Weyburn Ave. & Glendon Ave.	By: KAK
Date: March 2000	Checked By: CIB

APPENDIX I

Laboratory Reports and Chain-of Custody Forms

APPENDIX I

Laboratory Reports and Chain-of Custody Forms

Columbia Analytical Services INC.
An Employee-Owned Company

February 15, 2000

Charles Buckley
California Environmental
31119 Via Colinas
Suite 501
Westlake Village, CA 91362

Re: Casden Westwood

Dear Charles :

Enclosed are the results of the sample submitted to our laboratory on January 24, 2000. The sample was sent to American Analytics for EPA Method 8260B. Please find their report (#A29613) attached. For your reference, these analyses have been assigned our service request number L2000295.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the sample analyzed. Columbia Analytical Services is not responsible for use of less than the complete report.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 1296A, expiration: August 31, 2000).

If you have any questions, please call me at (818) 587-5550, extension 310.

Respectfully submitted,

Columbia Analytical Services, Inc.

L. Ross Fenstermaker
Project Chemist

LRF/ss

000001

Columbia Analytical Services, Inc.

Acronyms

8015M	California DHS LUFT Method
A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
CRDL	Contract Required Detection Limit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
EQL	Estimated Qauntitation Limit
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U.S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl-*tert*-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	1/24/00
Sample Matrix:	Water	**Date Received:**	1/24/00

Hydrocarbon Scan / Fuel Characterization

Sample Name:	MW-1	Units:	mg/L (ppm)
Lab Code:	L2000295-001	Basis:	NA
Test Notes:	X5		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
C13 - C22 DRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
C23 - C32 HRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
Total Petroleum Hydrocarbons	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
Fuel Characterization	EPA 3510M	8015M					NA	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
X5	Quantified with diesel fuel.

Approved By: _____ **Date:** 2-14-00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Hydrocarbon Scan / Fuel Characterization

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	L200127-MB	Basis:	NA
Test Notes:	X5		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
C13 - C22 DRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
C23 - C32 HRO	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
Total Petroleum Hydrocarbons	EPA 3510M	8015M	0.5	1	1/27/00	1/27/00	ND	
Fuel Characterization	EPA 3510M	8015M					NA	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
X5	Quantified with diesel fuel.

Approved By: _____ **Date:** 2-14-00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	1/24/00
Sample Matrix:	Water	**Date Received:**	1/24/00

Inorganic Parameters

Sample Name: MW1
Lab Code: L2000295-001
Test Notes:

Basis: NA

Analyte	Units	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	10	1	NA	1/26-31/00	ND	
Oil and Grease	mg/L (ppm)	413.1	10	1	1/27/00	1/27/00	ND	
Phenolics, Total	mg/L (ppm)	420.1	0.1	1	NA	1/26/00	ND	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	10	1	NA	1/26/00	30	
Sulfide, Total	mg/L (ppm)	376.2	0.05	1	NA	1/26/00	ND	
Surfactants	mg/L (ppm)	425.1	0.1	1	1/26/00	1/26/00	ND	
Turbidity	NTU	180.1	0.1	1	NA	1/25/00	16	

Approved By: _____ Date: 2-14-00

1S44/021397p

000005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Inorganic Parameters

Sample Name: Method Blank
Lab Code: L200125-MB
Test Notes:

Basis NA

Analyte	Units	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	10	1	NA	1/26-31/00	ND	
Oil and Grease	mg/L (ppm)	413.1	10	1	1/27/00	1/27/00	ND	
Phenolics, Total	mg/L (ppm)	420.1	0.1	1	NA	1/26/00	ND	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	10	1	NA	1/26/00	ND	
Sulfide, Total	mg/L (ppm)	376.2	0.05	1	NA	1/26/00	ND	
Surfactants	mg/L (ppm)	425.1	0.1	1	1/26/00	1/26/00	ND	
Turbidity	NTU	180.1	0.1	1	NA	1/25/00	ND	

Approved By: _____ Date: 2-14-00

1S44/021397p

000006

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	1/24/00
Sample Matrix:	Water	**Date Received:**	1/24/00

Metals

Sample Name:	MW-1	Units:	mg/L (ppm)
Lab Code:	L2000295-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Digested	Date Analyzed	Result	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	1	1/27/00	2/1/00	ND	
Arsenic, Total	EPA 3020A	7060A	0.005	1	1/26/00	1/27/00	ND	
Beryllium, Total	EPA 3010A	6010B	0.005	1	1/27/00	2/1/00	ND	
Cadmium, Total	EPA 3010A	6010B	0.005	1	1/27/00	2/1/00	ND	
Chromium, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Copper, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Lead, Total	EPA 3010A	6010B	0.05	1	1/27/00	2/1/00	ND	
Mercury, Total	METHOD	7470A	0.0005	1	1/27/00	1/28/00	ND	
Nickel, Total	EPA 3010A	6010B	0.04	1	1/27/00	2/1/00	ND	
Selenium, Total	EPA 3020A	7740	0.005	1	1/26/00	1/27/00	0.007	
Silver, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Thallium, Total	EPA 3010A	6010B	0.1	1	1/27/00	2/1/00	ND	
Zinc, Total	EPA 3010A	6010B	0.02	1	1/27/00	2/1/00	0.02	

Approved By: _____ Date: 2-14-00

1S44/021397p

000007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Metals

Sample Name:	Method Blank	Units	mg/L (ppm)
Lab Code:	L200127-MB1	Basis	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Digested	Date Analyzed	Result	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	1	1/27/00	2/1/00	ND	
Arsenic, Total	EPA 3020A	7060A	0.005	1	1/26/00	1/27/00	ND	
Beryllium, Total	EPA 3010A	6010B	0.005	1	1/27/00	2/1/00	ND	
Cadmium, Total	EPA 3010A	6010B	0.005	1	1/27/00	2/1/00	ND	
Chromium, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Copper, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Lead, Total	EPA 3010A	6010B	0.05	1	1/27/00	2/1/00	ND	
Mercury, Total	METHOD	7470A	0.0005	1	1/27/00	1/28/00	ND	
Nickel, Total	EPA 3010A	6010B	0.04	1	1/27/00	2/1/00	ND	
Selenium, Total	EPA 3020A	7740	0.005	1	1/26/00	1/27/00	ND	
Silver, Total	EPA 3010A	6010B	0.01	1	1/27/00	2/1/00	ND	
Thallium, Total	EPA 3010A	6010B	0.1	1	1/27/00	2/1/00	ND	
Zinc, Total	EPA 3010A	6010B	0.02	1	1/27/00	2/1/00	ND	

Approved By: _____ Date: 2-14-00

1S44/021397p

000008

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Hydrocarbon Scan / Fuel Characterization

Prep Method:	EPA 3510M	Units:	PERCENT
Analysis Method:	8015M	Basis:	NA

Sample Name	Lab Code	Test Notes	Percent Recovery *p*-Terphenyl
MW-1	L2000295-001		94
Method Blank	L200127-MB		86
Batch QC	L2000344-004MS		103
Batch QC	L2000344-004DMS		114

CAS Acceptance Limits: 50-140

Approved By: _____ Date: 2-14-00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	1/27/00
		Date Analyzed:	1/27/00

Matrix Spike/Duplicate Matrix Spike Summary
Hydrocarbon Scan / Fuel Characterization

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	L2000344-004MS, L2000344-004DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Diesel	EPA 3510M	8015M	0.5	20.0	20.0	ND	18.9	17.4	94	87	41-136	8	

Approved By: _____ Date: 2-14-00

DMS/020597p
00295SOH.SS1 - DMS 2/14/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	1/27/00
		Date Analyzed:	1/27/00

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Inorganic Parameters

Sample Name: Duplicate Lab Control Sample
Lab Code: L200127-LCS, L200127-DLCS Basis: NA
Test Notes: OG1

			Percent Recovery								
		Analysis	True Value		Result				CAS Acceptance	Relative Percent	Result
Analyte	**Units**	**Method**	LCS	DLCS	LCS	DLCS	LCS	DLCS	Limits	**Difference**	**Notes**
Oil and Grease	mg/L (ppm)	413.1	78.7	78.7	86.1	86.6	109	110	80-110	<1	

OG1 Sample quantity was insufficient to perform MS and Duplicate MS. Three separate, replicate one liter samples are required to analyze sample and spikes.

Approved By: _____ **Date:** 2-14-00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/00

Matrix Spike/Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: MW1
Lab Code: L2000295-001MS, L2000295-001DMS Basis: NA
Test Notes:

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Accept.	Relative Percent	
Analyte	**Units**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Result Notes**
Phenolics, Total	mg/L (ppm)	420.1	0.1	0.500	0.500	ND	0.496	0.496	99	99	60-130	<1	

Approved By: _____ Date: 2-14-00

000012

DMS/020597p

00295WET.SA1 - DMS (2) 2/14/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/00

Matrix Spike/Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: MW1
Lab Code: L2000295-001MS, L2000295-001DMS Basis: NA
Test Notes:

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Accept.	Relative Percent	
Analyte	**Units**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Result Notes**
Sulfide, Total	mg/L (ppm)	376.2	0.05	0.557	0.557	ND	0.438	0.414	79	74	60-140	6	
Surfactants	mg/L (ppm)	425.1	0.1	0.500	0.500	ND	0.543	0.535	109	107	80-120	1	

000013

Approved By: _____ Date: 2-14-00

COLUMBIA ANALYTICAL SERVICES, INC.

QA QC Report

Client: California Environmental
Project: Casden Westwood
Sample Matrix: Water

Service Request: L2000295
Date Collected: NA
Date Received: NA
Date Digested: 1/27/00
Date Analyzed: 2/1/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Lab Code: L2000290-001MS, L2000290-001DMS
Test Notes:

Units: mg L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	5.00	5.00	ND	4.73	4.65	95	93	75-125	2	
Beryllium, Total	EPA 3010A	6010B	0.005	5.00	5.00	ND	0.0916	0.0897	2	2	75-125	2	
Cadmium, Total	EPA 3010A	6010B	0.005	0.100	0.100	ND	0.0944	0.0922	94	92	75-125	2	
Chromium, Total	EPA 3010A	6010B	0.01	0.500	0.500	ND	0.460	0.454	92	91	75-125	1	
Copper, Total	EPA 3010A	6010B	0.01	0.500	0.500	ND	0.466	0.456	93	91	75-125	2	
Lead, Total	EPA 3010A	6010B	0.05	5.00	5.00	ND	4.45	4.38	89	88	75-125	2	
Nickel, Total	EPA 3010A	6010B	0.04	0.500	0.500	ND	0.473	0.468	95	94	75-125	1	
Silver, Total	EPA 3010A	6010B	0.01	0.100	0.100	ND	0.0761	0.0778	76	78	75-125	2	
Thallium, Total		6010B	0.1	5.00	5.00	ND	4.44	4.43	89	89	75-125	<1	
Zinc, Total	EPA 3010A	6010B	0.02	0.500	0.500	0.266	0.726	0.713	92	89	75-125	2	

Approved By: _____ Date: 2-14-00

000014

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Digested:	1/26/00
		Date Analyzed:	1/27/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	L2000250-008MS, L2000250-008DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Arsenic, Total	EPA 3020A	7060A	0.005	0.0400	0.0400	ND	0.0364	0.0367	91	92	75-125	<1	
Selenium, Total	EPA 3020A	7740	0.005	0.0400	0.0400	ND	0.0304	0.0302	76	76	75-125	1	

Approved By: _____ Date: 2-14-00

000015

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000295
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Digested:	1/27/00
		Date Analyzed:	1/28/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	L2000285-001MS, L2000285-001DMS	Basis:	NA
Test Notes:			

									Percent Recovery				
	Prep	Analysis		Spike Level		Sample	Spike Result				CAS Acceptance	Relative Percent	Result
Analyte	Method	Method	MRL	MS	DMS	Result	MS	DMS	MS	DMS	Limits	Difference	Notes
Mercury, Total	METHOD	7470A	0.0005	0.00500	0.00500	ND	0.00116	0.00122	23	24	75-125	5	A5

A5 Outside of acceptance limits. The LCS was acceptable (106%); therefore, data was approved.

Approved By: _____ Date: 2-14-00

DMS/020597p

00295ICP.CG1 - DMS (3) 2/14/00

L2000295

Columbia Analytical Services[inc]

6925 Canoga Avenue • Canoga Park, CA 91303 • (818) 587-5550 • Fax (818) 587-5555

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 1/24/00 PAGE 1 OF 1

PROJECT NAME CASDEN WESTWOOD #

PROJECT MANAGER GB

COMPANY/ADDRESS CALIF ENV.

3119 Via Colinas 501

Westlake Village PHONE 991 1542

SAMPLERS SIGNATURE [signature]

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TPH Gas/BTEX 8015/8020/602	TPH/8015 Modified Diesel ☐ FC ☐ Gasoline ☐	BTEX 602/8020 Full list + MTBE	Total Petroleum Hydrocarbons EPA 418.1	Halogenated Volatiles 601/8010	Volatile Organics GC/MS 624/8240/8260	Base Neutral Acid Organic GC/MS 625/8270	CAM Metals 6010/7000	TSS / Oil & Grease	Turb + BOD	Sulfides + phenols	MBAS + metals (priority pollutants)				REMARKS
MW1	1/24	1600	(1)	WATER	12		X	X						X	X	X	X				
~~MW-2~~	~~1/24~~	~~1?30~~	~~(2)~~	~~WATER~~	~~12~~		X	X						X	X	X	X				MW-2 CANCELLED per Chris Rude 1-25

Annotations: (3) (3) 8260 per Chris Rude 1-25-00; (2) priority pollutants

RELINQUISHED BY:	RECEIVED BY:
Signature [signature]	Signature [signature]
Printed Name CHRIS RUDE	Printed Name Eric Nielsen
Firm CE	Firm CAS
Date/Time 1/24/00 1720	Date/Time 1-24-00 1720

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 5 day
___ Standard
___ Other (Specify)
___ Provide Verbal Preliminary Results
Requested Report Date ______

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ RWQCB

INVOICE INFORMATION:
P.O.# ______
Bill To ______

SAMPLE RECEIPT:
Shipping VIA
Shipping #
Condition
Lab No

RELINQUISHED BY:	RECEIVED BY:
Signature	Signature
Printed Name	Printed Name
Firm	Firm
Date/Time	Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:
For NPDES Permit Application
- Groundwater Discharge

DISTRIBUTION: WHITE ...

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Columbia Analytical Services
Project No.: N/A
Project Name: L2000295
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A29613
Date Received: 01/25/00
Date Reported: 01/27/00
Units: ug/L

Date Sampled:	**01/24/00**	
Date Analyzed:	**01/20/00**	
AA ID No.:	**101238**	
Client ID No.:	**MW1**	**MRL**
Compounds:		
Acetone	<5	5
Benzene	<0.5	0.5
Bromobenzene	<0.5	0.5
Bromochloromethane	<0.5	0.5
Bromodichloromethane	<0.5	0.5
Bromoform	<0.5	0.5
Bromomethane	<0.5	0.5
2-Butanone	<5	5
Butylbenzene	<0.5	0.5
Carbon disulfide	<0.5	0.5
Carbon tetrachloride	<0.5	0.5
Chlorobenzene	<0.5	0.5
Chloroethane	<0.5	0.5
Chloroform	<0.5	0.5
Chloromethane	<0.5	0.5
2-Chlorotoluene	<0.5	0.5
4-Chlorotoluene	<0.5	0.5
1,2-Dibromo-3-chloropropane	<1	1
Dibromochloromethane	<0.5	0.5
1,2-Dibromoethane	<0.5	0.5
Dibromomethane	<0.5	0.5
1,2-Dichlorobenzene	<0.5	0.5
1,3-Dichlorobenzene	<0.5	0.5
1,4-Dichlorobenzene	<0.5	0.5
Dichlorodifluoromethane	<0.5	0.5

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Columbia Analytical Services
Project No.: N/A
Project Name: L2000295
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A29613
Date Received: 01/25/00
Date Reported: 01/27/00
Units: ug/L

Date Sampled:	**01/24/00**	
Date Analyzed:	**01/20/00**	
AA ID No.:	**101238**	
Client ID No.:	**MW1**	**MRL**
Compounds:		
1,1-Dichloroethane	<0.5	0.5
1,2-Dichloroethane	<0.5	0.5
1,2-Dichloroethene-(cis)	<0.5	0.5
1,2-Dichloroethene-(trans)	<0.5	0.5
1,1-Dichloroethene	<0.5	0.5
1,2-Dichloropropane	<0.5	0.5
1,3-Dichloropropane	<0.5	0.5
2,2-Dichloropropane	<0.5	0.5
1,3-Dichloropropene-(cis)	<0.5	0.5
1,3-Dichloropropene-(trans)	<0.5	0.5
1,1-Dichloropropene	<0.5	0.5
Ethylbenzene	<0.5	0.5
Hexachlorobutadiene	<1	1
2-Hexanone	<5	5
Isopropylbenzene	<0.5	0.5
Isopropyltoluene	<1	1
Methyl tert-Butyl Ether	<5	5
4-Methyl-2-pentanone	<5	5
Methylene chloride	<5	5
Naphthalene	<2	2
Propylbenzene	<0.5	0.5
Styrene	<0.5	0.5
1,1,1,2-Tetrachloroethane	<0.5	0.5
1,1,2,2-Tetrachloroethane	<0.5	0.5
Tetrachloroethene	<0.5	0.5

George Havalias
Laboratory Director

000019

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Columbia Analytical Services
Project No.: N/A
Project Name: L2000295
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A29613
Date Received: 01/25/00
Date Reported: 01/27/00
Units: ug/L

Date Sampled:	**01/24/00**	
Date Analyzed:	**01/20/00**	
AA ID No.:	**101238**	
Client ID No.:	**MW1**	**MRL**
Compounds:		
Toluene	<0.5	0.5
1,2,3-Trichlorobenzene	<0.5	0.5
1,2,4-Trichlorobenzene	<0.5	0.5
1,1,1-Trichloroethane	<0.5	0.5
1,1,2-Trichloroethane	<0.5	0.5
Trichloroethene	<0.5	0.5
Trichlorofluoromethane	<0.5	0.5
1,2,3-Trichloropropane	<0.5	0.5
1,2,4-Trimethylbenzene	<0.5	0.5
1,3,5-Trimethylbenzene	<0.5	0.5
Vinyl chloride	<0.5	0.5
m,p-Xylenes	<1	1
o-Xylene	<0.5	0.5
sec-Butylbenzene	<0.5	0.5
tert-Butylbenzene	<0.5	0.5

MRL: Method Reporting Limit

George Havalias
Laboratory Director

000020

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: Columbia Analytical Services
Project Name: L2000295
Method: EPA 8260B
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No.: 101238
Project No.: N/A
AA Project No.: A29613
Date Analyzed: 01/20/00
Date Reported: 01/27/00

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept.Rec. Range (%)
Bromoform	37.84	189	37.88	189	0	45 - 169
Chlorobenzene	35.10	176	35.68	178	1	37 - 160
Chloroform	42.60	213	43.82	219	3	51 - 138
1,1-Dichloroethane	41.96	210	43.72	219	4	54 - 155
1,1-Dichloroethene	42.62	213	44.14	221	4	2 - 234
Isopropyltoluene	35.66	178	36.10	181	2	50 - 150
Propylbenzene	35.52	178	36.86	184	3	50 - 150
Tetrachloroethene	32.80	164	33.66	168	2	64 - 148
Toluene	32.80	164	34.64	173	5	47 - 150
1,3,5-Trimethylbenzene	36.28	181	37.54	188	4	50 - 150
Vinyl chloride	43.90	220	46.24	231	5	2 - 251

clu for

George Havalias
Laboratory Director

000021

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

Columbia Analytical Services, Inc.
6925 Canoga Avenue • Canoga Park, CA 91303 • (818) 587-5550 • Fax (818) 587-5555

DATE 1-25-00 PAGE 1 OF 1

PROJECT NAME L200295 #
PROJECT MANAGER L. Ross FENSTERMAKER
COMPANY/ADDRESS COLUMBIA ANALYTICAL SERVICES
PHONE
SAMPLERS SIGNATURE

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TPH Gas/BTEX 8015/8020/602	TPH/8015 Modified Diesel ☐ FC ☐ Gasoline ☐	BTEX 602/8020	Total Petroleum Hydrocarbons EPA 418.1	Halogenated Volatiles 601/8010	Volatile Organics GC/MS 624/8240/8260 + MTBE	Base Neutral Acid Organic GC/MS 625/8270	CAM Metals 6010/7000	REMARKS
MW1	1/24/00	1600	101238	WATER	3						X			
~~MW2~~	1/24/00	1456		WATER							X			MW-2 CANCELLED MT 1-25-00
A29613														

000022

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name Barry Beasley
Firm CAS
Date/Time 1-25-00

RELINQUISHED BY:
Signature
Printed Name Barry Beasley
Firm CAS
Date/Time 1-25-00 14:33

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time 1-25-00 14:33

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 5 day
X Standard
X Other (Specify)
___ Provide Verbal Preliminary Results
Requested Report Date 1/27

REPORT REQUIREMENTS
X I. Routine Report
X II. Report (includes DUP.MS. MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ RWQCB

INVOICE INFORMATION:
P.O.# L200295
Bill To

SAMPLE RECEIPT:
Shipping VIA:
Shipping #:
Condition:
Lab No:

SPECIAL INSTRUCTIONS/COMMENTS: TO AMERICAN ANALYTICS

DISTRIBUTION: WHITE - return to originator; YELLOW - lab

400-05

March 2, 2000

Charles Buckley
California Environmental
31119 Via Colinas
Suite 501
Westlake Village, CA 91362

Re: Casden Westwood

Dear Charles:

Enclosed are the results of the sample submitted to our laboratory on February 4, 2000. For your reference, these analyses have been assigned our service request number L2000456.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the sample analyzed. Columbia Analytical Services is not responsible for use of less than the complete report.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 1296A, expiration: August 31, 2000).

If you have any questions, please call me at (818) 587-5550, extension 310.

Respectfully submitted,

Columbia Analytical Services, Inc.

L. Ross Fenstermaker
Project Chemist

LRF/ss

001

Columbia Analytical Services, Inc.

Acronyms

8015M	California DHS LUFT Method
A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
CRDL	Contract Required Detection Limit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
EQL	Estimated Qauntitation Limit
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U.S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl-*tert*-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	2/4/00
Sample Matrix:	Water	**Date Received:**	2/4/00

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	MW-2	Units:	ug/L (ppb)
Lab Code:	L2000456-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	2	1	NA	2/13/00	ND	
Chloromethane	EPA 5030	8021B	2	1	NA	2/13/00	ND	
Vinyl Chloride	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Bromomethane	EPA 5030	8021B	2	1	NA	2/13/00	ND	
Chloroethane	EPA 5030	8021B	2	1	NA	2/13/00	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	2	1	NA	2/13/00	ND	
1,1-Dichloroethene	EPA 5030	8021B	2	1	NA	2/13/00	ND	
Methylene Chloride	EPA 5030	8021B	2	1	NA	2/13/00	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
1,1-Dichloroethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Chloroform	EPA 5030	8021B	0.5	1	NA	2/13/00	1.3	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	1	1	NA	2/13/00	ND	
Carbon Tetrachloride	EPA 5030	8021B	0.5	1	NA	2/13/00	1.4	
Benzene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
1,2-Dichloroethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Trichloroethene (TCE)	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
1,2-Dichloropropane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Bromodichloromethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	5	1	NA	2/13/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Dibromochloromethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Chlorobenzene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
Total Xylenes	EPA 5030	8021B	1	1	NA	2/13/00	ND	
Bromoform	EPA 5030	8021B	2	1	NA	2/13/00	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	0.5	1	NA	2/13/00	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/13/00	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/13/00	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/13/00	ND	
Methyl tert-Butyl Ether	EPA 5030	8021B	10	1	NA	2/13/00	ND	

Approved By: _____ Date: 3-2-00

1544/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L200045(
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	Method Blank	Units:	ug/L (ppb)
Lab Code:	L200212-MB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	2	1	NA	2/12/00	ND	
Chloromethane	EPA 5030	8021B	2	1	NA	2/12/00	ND	
Vinyl Chloride	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Bromomethane	EPA 5030	8021B	2	1	NA	2/12/00	ND	
Chloroethane	EPA 5030	8021B	2	1	NA	2/12/00	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	2	1	NA	2/12/00	ND	
1,1-Dichloroethene	EPA 5030	8021B	2	1	NA	2/12/00	ND	
Methylene Chloride	EPA 5030	8021B	2	1	NA	2/12/00	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,1-Dichloroethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Chloroform	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	1	1	NA	2/12/00	ND	
Carbon Tetrachloride	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Benzene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,2-Dichloroethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Trichloroethene (TCE)	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,2-Dichloropropane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Bromodichloromethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	5	1	NA	2/12/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Dibromochloromethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Chlorobenzene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
Total Xylenes	EPA 5030	8021B	1	1	NA	2/12/00	ND	
Bromoform	EPA 5030	8021B	2	1	NA	2/12/00	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	0.5	1	NA	2/12/00	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/12/00	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/12/00	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	1	1	NA	2/12/00	ND	
Methyl tert-Butyl Ether	EPA 5030	8021B	10	1	NA	2/12/00	ND	

Approved By: _____ Date: 3-2-00

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	2/4/00
Sample Matrix:	Water	**Date Received:**	2/4/00

Hydrocarbon Scan / Fuel Characterization

Sample Name:	MW-2	Units:	mg/L (ppm)
Lab Code:	L2000456-001	Basis:	NA
Test Notes:	X5		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
C13 - C22 DRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
C23 - C32 HRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
Total Petroleum Hydrocarbons	EPA 3510M	8015M	1.5	1	2/8/00	2/10/00	ND	
Fuel Characterization	EPA 3510M	8015M					NA	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
X5	Quantified with diesel fuel.

Approved By: _____ **Date:** 3-2-00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Hydrocarbon Scan / Fuel Characterization

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	L200208-MB	Basis:	NA
Test Notes:	X5		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
C13 - C22 DRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
C23 - C32 HRO	EPA 3510M	8015M	0.5	1	2/8/00	2/10/00	ND	
Total Petroleum Hydrocarbons	EPA 3510M	8015M	1.5	1	2/8/00	2/10/00	ND	
Fuel Characterization	EPA 3510M	8015M					NA	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
X5	Quantified with diesel fuel.

Approved By: _____ **Date:** 3-2-00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	2/4/00
Sample Matrix:	Water	**Date Received:**	2/4/00

Inorganic Parameters

Sample Name: MW-2
Lab Code: L2000456-001 Basis: NA
Test Notes: —

Analyte	Units	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	10	1	NA	2/4-9/00	ND	
Oil and Grease	mg/L (ppm)	413.1	10	1	2/8/00	2/8/00	ND	
Phenolics, Total	mg/L (ppm)	420.1	0.1	1	NA	2/9/00	ND	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	10	1	NA	2/7/00	14	
Sulfide, Total	mg/L (ppm)	376.2	0.05	1	NA	2/8/00	ND	
Surfactants	mg/L (ppm)	425.1	0.1	1	2/4/00	2/4/00	ND	
Turbidity	NTU	180.1	0.1	1	NA	2/4/00	38	

Approved By: _____ Date: 2-2-00
IS4/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L200045o
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Inorganic Parameters

Sample Name: Method Blank
Lab Code: L200204-MB
Test Notes:

Basis: NA

Analyte	Units	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	10	1	NA	2/4-9/00	ND	
Oil and Grease	mg/L (ppm)	413.1	10	1	2/8/00	2/8/00	ND	
Phenolics, Total	mg/L (ppm)	420.1	0.1	1	NA	2/9/00	ND	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	10	1	NA	2/7/00	ND	
Sulfide, Total	mg/L (ppm)	376.2	0.05	1	NA	2/8/00	ND	
Surfactants	mg/L (ppm)	425.1	0.1	1	2/4/00	2/4/00	ND	
Turbidity	NTU	180.1	0.1	1	NA	2/4/00	ND	

Approved By: _____ Date: 3 2-00

IS44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	2-4-00
Sample Matrix:	Water	**Date Received:**	2-4-00

Metals

Sample Name:	MW-2	Units:	mg/L (ppm)
Lab Code:	L2000456-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Digested	Date Analyzed	Result	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	1	2/9/00	2/9/00	ND	
Arsenic, Total	EPA 3020A	7060A	0.005	1	2/10/00	2/10/00	0.029	
Beryllium, Total	EPA 3010A	6010B	0.005	1	2/9/00	2/9/00	ND	
Cadmium, Total	EPA 3010A	6010B	0.005	1	2/9/00	2/9/00	ND	
Chromium, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	0.10	
Copper, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	0.12	
Lead, Total	EPA 3010A	6010B	0.05	1	2/9/00	2/9/00	ND	
Mercury, Total	METHOD	7470A	0.0005	1	2/10/00	2/10/00	ND	
Nickel, Total	EPA 3010A	6010B	0.04	1	2/9/00	2/9/00	0.11	
Selenium, Total	EPA 3020A	7740	0.005	1	2/10/00	2/10/00	ND	
Silver, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	ND	
Thallium, Total	EPA 3010A	6010B	0.1	1	2/9/00	2/9/00	ND	
Zinc, Total	EPA 3010A	6010B	0.02	1	2/9/00	2/9/00	0.60	

Approved By: _____ Date: 3-2-00

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Metals

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	L200209-MB1	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Digested	Date Analyzed	Result	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	1	2/9/00	2/9/00	ND	
Arsenic, Total	EPA 3020A	7060A	0.005	1	2/10/00	2/10/00	ND	
Beryllium, Total	EPA 3010A	6010B	0.005	1	2/9/00	2/9/00	ND	
Cadmium, Total	EPA 3010A	6010B	0.005	1	2/9/00	2/9/00	ND	
Chromium, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	ND	
Copper, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	ND	
Lead, Total	EPA 3010A	6010B	0.05	1	2/9/00	2/9/00	ND	
Mercury, Total	METHOD	7470A	0.0005	1	2/10/00	2/10/00	ND	
Nickel, Total	EPA 3010A	6010B	0.04	1	2/9/00	2/9/00	ND	
Selenium, Total	EPA 3020A	7740	0.005	1	2/10/00	2/10/00	ND	
Silver, Total	EPA 3010A	6010B	0.01	1	2/9/00	2/9/00	ND	
Thallium, Total	EPA 3010A	6010B	0.1	1	2/9/00	2/9/00	ND	
Zinc, Total	EPA 3010A	6010B	0.02	1	2/9/00	2/9/00	ND	

Approved By: _____ Date: 3-2-00

IS44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method:	EPA 5030	Units:	PERCENT
Analysis Method:	8021B	Basis:	NA

Sample Name	Lab Code	Test Notes	Percent Recovery	
			4-Bromochlorobenzene	Fluorobenzene
MW-2	L2000456-001		120	101
Method Blank	L200212-MB		121	100
Batch QC	L2000502-001MS		93	98
Batch QC	L2000502-001DMS		86	101

CAS Acceptance Limits:	63-131	75-125

Approved By: _____ **Date:** 3-2-00

SUR2/061197p
00456VOA.DG1 - SUR2 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	2/13/00

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	Batch QC	Units:	ug/L (ppb)
Lab Code:	L2000502-001MS, L2000502-001DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	2.0	10.0	10.0	ND	11.6	12.7	116	127	28-167	9	
Trichloroethene (TCE)	EPA 5030	8021B	0.5	10.0	10.0	ND	9.22	8.98	92	90	35-146	3	
Tetrachloroethene (PCE)	EPA 5030	8021B	0.5	10.0	10.0	ND	9.39	8.97	94	90	26-162	5	
Benzene	EPA 5030	8021B	0.5	10.0	10.0	ND	10.6	11.0	106	110	39-150	4	
Toluene	EPA 5030	8021B	0.5	10.0	10.0	ND	10.3	11.0	103	110	46-148	7	
Ethylbenzene	EPA 5030	8021B	0.5	10.0	10.0	ND	10.7	11.3	107	113	32-160	5	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	1.0	10.0	10.0	ND	9.13	10.2	91	102	41-138	11	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	0.5	10.0	10.0	ND	10.3	8.63	103	86	51-147	18	

Approved By: _____ Date: 3-2-00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Hydrocarbon Scan / Fuel Characterization

Prep Method:	EPA 3510M	Units:	PERCENT
Analysis Method:	8015M	Basis:	NA

Sample Name	Lab Code	Test Notes	Percent Recovery *p*-Terphenyl
MW-2	L2000456-001		101
Method Blank	L200208-MB		106
MW-2	L2000456-001MS		122
MW-2	L2000456-001DMS		129

CAS Acceptance Limits: 50-140

Approved By: _____ Date: 3-2-00

SUR1/061197p
00456SOH.SS1 - SUR1 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	2/8/00
		Date Analyzed:	2/10/00

Matrix Spike/Duplicate Matrix Spike Summary
Hydrocarbon Scan / Fuel Characterization

Sample Name:	MW-2	Units:	mg/L (ppm)
Lab Code:	L2000456-001MS, L2000456-001DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Diesel	EPA 3510M	8015M	0.5	20.0	20.0	ND	20.7	20.9	103	104	41-136	<1	

Approved By: _____ Date: 3-2-00

DMS/020597p
00456SOH.SS1 - DMS 3/2/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	2/8/00
		Date Analyzed:	2/8/00

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Inorganic Parameters

Sample Name: Duplicate Lab Control Sample
Lab Code: L200208-LCS, L200208-DLCS Basis: NA
Test Notes: OG1

			Percent Recovery								
			True Value		Result				CAS Acceptance	Relative Percent	Result
Analyte	**Units**	**Analysis Method**	LCS	DLCS	LCS	DLCS	LCS	DLCS	Limits	**Difference**	**Note**
Oil and Grease	mg/L (ppm)	413.2	78.7	78.7	80.9	86.5	103	110	80-120	7	

OG1 Sample quantity was insufficient to perform MS and Duplicate MS. Three separate, replicate one liter samples are required to analyze sample and spikes.

Approved By: _____ Date: 3-2-00

DLCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	2/9/00

Matrix Spike/Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: L2000291-016MS, L2000291-016DMS Basis: NA
Test Notes:

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Accept.	Relative Percent	
Analyte	**Units**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	Result Notes
Phenolics, Total	mg/L (ppm)	420.1	0.1	0.500	0.500	ND	0.504	0.496	101	99	60-130	2	

Approved By: _____ **Date:** 3-2-00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	2/8/00

Matrix Spike/Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: L2000291-031MS, L2000291-031DMS Basis: NA
Test Notes:

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Accept.	Relative Percent	
Analyte	**Units**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Result Notes**
Sulfide, Total	mg/L (ppm)	376.2	0.05	0.492	0.492	ND	0.319	0.333	65	68	60-140	4	

Approved By: _____ Date: 3-2-00

DMS/020597p

00456WET.SA1 - DMS (2) 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	2/2/00
		Date Analyzed:	2/2/00

Matrix Spike/Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: L2000403-001MS, L2000403-001DMS Basis: NA
Test Notes:

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Accept.	Relative Percent	
Analyte	**Units**	**Analysis Method**	**MRL**	**MS**	**DMS**	**Result**	**MS**	**DMS**	**MS**	**DMS**	**Limits**	**Difference**	**Result Notes**
Surfactants	mg/L (ppm)	425.1	0.1	0.500	0.500	ND	0.512	0.505	102	101	80-120	1	

Approved By: _____ Date: 3-2-00

DMS/020597p

00456WET.SA1 - DMS 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Digested:	2/9/00
		Date Analyzed:	2/9/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name:	Batch QC	Units:	mg L (ppm)
Lab Code:	L2000492-003MS, L2000492-003DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Antimony, Total	EPA 3010A	6010B	0.05	5.00	5.00	ND	4.70	4.66	94	93	75-125	<1	
Beryllium, Total	EPA 3010A	6010B	0.005	0.100	0.100	ND	0.0908	0.0907	91	91	75-125	<1	
Cadmium, Total	EPA 3010A	6010B	0.005	0.100	0.100	ND	0.0928	0.0925	93	92	75-125	<1	
Chromium, Total	EPA 3010A	6010B	0.01	0.500	0.500	ND	0.462	0.463	92	93	75-125	<1	
Copper, Total	EPA 3010A	6010B	0.01	0.500	0.500	ND	0.457	0.455	91	91	75-125	<1	
Lead, Total	EPA 3010A	6010B	0.05	5.00	5.00	ND	4.44	4.46	89	89	75-125	<1	
Nickel, Total	EPA 3010A	6010B	0.04	0.500	0.500	ND	0.484	0.481	97	96	75-125	<1	
Silver, Total	EPA 3010A	6010B	0.01	0.100	0.100	ND	0.0815	0.0795	82	80	75-125	2	
Thallium, Total	EPA 3010A	6010B	0.1	5.00	5.00	ND	4.41	4.46	88	89	75-125	1	
Zinc, Total	EPA 3010A	6010B	0.02	0.500	0.500	ND	0.464	0.463	93	93	75-125	<1	

Approved By: _____ Date: 3-2-00

DMS/020597p

004561CP.CG1 - DMS 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Digested:	2/10/00
		Date Analyzed:	2/10/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	L2000291-031MS, L2000291-031DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Arsenic, Total	EPA 3020A	7060A	0.005	0.0400	0.0400	0.0059	0.0329	0.0330	68	68	75-125	<1	A5
Selenium, Total	EPA 3020A	7740	0.005	0.0400	0.0400	ND	0.0279	0.0283	70	71	75-125	1	A5

A5 Outside of acceptance limits. The LCS was acceptable; therefore, data was approved.

Approved By: _____ Date: 3-2-00

DMS/020597p

00456ICP.CGI - DMS (Z) 3/2/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA QC Report

Client: California Environmental
Project: Casden Westwood
Sample Matrix: Water

Service Request: L2000456
Date Collected: NA
Date Received: NA
Date Digested: 2/10/00
Date Analyzed: 2/10/00

Matrix Spike/Duplicate Matrix Spike Summary
Metals

Sample Name: Batch QC
Lab Code: L2000291-016MS, L2000291-016DMS
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury, Total	METHOD	7470A	0.0005	0.00500	0.00500	ND	0.00473	0.00479	95	96	75-125	1	

Approved By: _____ Date: 3-2-00

DMS/020597p

00456ICP.CG1 - DMS (3) 2/28/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	California Environmental	**Service Request:**	L2000456
Project:	Casden Westwood	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Digested:	2/10/00
		Date Analyzed:	2/10/00

Laboratory Control Sample Summary
Metals

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	L200210-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Arsenic, Total	EPA 3020A	7060A	0.0400	0.0389	97	75-125	
Selenium, Total	EPA 3020A	7740	0.0400	0.0384	96	75-125	

Approved By: _____ Date: 3-2-00

Columbia Analytical Services, Inc.

6925 Canoga Avenue • Canoga Park, CA 91303 • (818) 587-5550 • Fax (818) 587-5555

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 2/4/00 PAGE 1 OF 1

L2000456

PROJECT NAME CASDEN WESTWOOD #

PROJECT MANAGER CIB

COMPANY/ADDRESS CALIF. ENVIRONMENTAL
31119 VIA COLINAS 501
WESTLAKE VILLAGE CA PHONE 9911542

SAMPLERS SIGNATURE [signature]

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TPH Gas/BTEX 8015/8020/602	TPH/8015 Modified Diesel ☐ FC ☒ Gasoline ☐	BTEX 602/8020 + 8021 + MTBE FULL LIST	Total Petroleum Hydrocarbons EPA 418.1	Halogenated Volatiles 601/8010	Volatile Organics GC/MS 624/8240/8260	Base Neutral Acid Organic GC/MS 625/8270	CAM Metals 6010/7000	BOD, TSS, TURB	SC, MBAS	Total Metals (Priority Pollutants)	T Phen	O&G 413.1				REMARKS
MW2	2/4	830	1	WATER			X	X						X	X	X	X	X				~~Hold 8015FC~~ ~~& 8021~~ off hold per Chris Rude at 2-4-00

RELINQUISHED BY:
Signature: Christopher Rude
Printed Name: Chris Rude
Firm: CE
Date/Time: 2/4/00 935

RECEIVED BY:
Signature: E. Niedda
Printed Name: Eric Niedda
Firm: CAS
Date/Time: 2/4/00 935

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 5 day
X Standard
___ Other (Specify)
___ Provide Verbal Preliminary Results
Requested Report Date ________

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ RWQCB

INVOICE INFORMATION:
P.O.#
Bill To

SAMPLE RECEIPT:
Shipping VIA
Shipping #
Condition
Lab No.

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

SPECIAL INSTRUCTIONS/COMMENTS:
NPDES PERMIT

DISTRIBUTION: WHITE ... YELLOW ...

023

APPENDIX II

Groundwater Sampling Protocols

GROUNDWATER SAMPLING PROTOCOLS

2.0 WATER LEVEL, PRODUCT THICKNESS MEASUREMENTS AND GROUND WATER SAMPLING.

2.1 Water Level and Product Thickness Measurements.

The static water level and/or product thickness in each well will be measured prior to purging or sampling.

The depth to water will be measured using an electronic interface probe. The wire of the interface probe is marked at 0.01-foot intervals. A tone is emitted from the interface probe when water is encountered. At this point, the mark on the interface wire opposite the permanent reference point on the top of the well casing will be read to the nearest 0.01 foot and recorded. The interface probe will be washed and rinsed in deionized water between measurements in different wells.

Following measurement of the water level in each well, a disposable polyethylene bailer will be used to check the well for the existence of free product. The bailer will be gently lowered approximately 3 inches beyond the measured depth to groundwater. The bailer will then be extracted from the well and the existence of free product will be determined visually. Should free product be observed, its thickness will be measured directly to the nearest 0.1 inch. The appearance of the free product (color, opacity "freshness") will also be described in field notes.

A permanent reference point will be marked on the well casings. The permanent reference point on the well casings will be surveyed to a common reference point. All well casing riser elevations are known to within 0.01 foot.

2.2 Well Evacuation and Development

The static water level in a well will be determined and prior to collection of a ground water sample, stagnant water will be removed from the well casing and the surrounding gravel pack by bailing, pumping, or with a vacuum truck. At least three casing volumes of water will be removed from each well from which a sample will be collected. The volume of water in the casing will be determined from the known elevation of the water surface, the well bottom elevation (as measured when the well is installed), and the well diameter.

If the well will be bailed or pumped during purging, samples will be collected and field analyzed for pH, temperature, and specific conductance. The well will be considered stabilized when repeated readings of the following parameters are within the ranges indicated as follows.

- Specific conductance ± 10 percent of the reading range
- pH ± 0.1 pH unit
- Temperature ± 0.5° C.

After stabilization, and after at least three well volumes will be evacuated, a sample will be collected for analysis. The field container used for well stabilization measurements, and the pH, temperature, and conductivity probes will be rinsed between wells with deionized water.

All purge water will be containerized and properly handled and documented for disposal. If the containers will be stored on site, a label specifying the date of purging, source and the known or suspected nature of the contents will be affixed to each container.

2.3 Sample Collection, Preservation, and Handling

After purging, a new polyethylene disposable bailer will be used to collect sample for analysis. The bailer will be attached to a new disposable rope and lowered slowly into the water to avoid agitation of the collected sample. Containers for volatile organic analyses will be filled completely so no airspace remained in the vial after sealing.

All sample containers will be prepared at the analyzing laboratory in accordance with quality assurance/quality control protocols of the laboratory. Only sample containers appropriate for the intended analyses will be used.

3.0 DECONTAMINATION AND DISPOSAL PROCEDURES

3.1 Equipment Decontamination

All equipment that came in contact with potentially contaminated soil, drilling fluid, air, or water will be decontaminated before each use. Decontamination consisted of steam-cleaning, a high-pressure, hot-water rinse, or alconox soap and freshwater rinse, as appropriate.

Drilling and sampling equipment will be decontaminated as follows:

1. Drill rig augers, drill rods, and drill bits will be steam-cleaned prior to use and between borings. Visible soil, grease, and other impurities will be removed.

2. Soil sampling equipment will be cleaned prior to use and between each boring. Prior to individual sample collection, the sampling device will be cleaned in an alconox solution and rinsed twice in clean water. Any visible soil residue will be removed.

3. Water sampling containers will be cleaned and prepared by the respective analytical laboratories.

4. Stainless steel or brass soil sampling tubes will be steam-cleaned or will be washed in an alconox solution and rinsed with clean water.

5. Field monitoring equipment (pH, conductivity, or temperature probes) will be rinsed with clean water prior to use and between samples.

4.0 FIELD MEASUREMENTS

Field data will be collected during various sampling and monitoring activities; this section describes routine procedures followed by personnel performing field measurements. The methods presented below are intended to ensure that field measurements are consistent and reproducible when performed by various individuals.

4.1 Buried Utility Locations

Prior to commencement of work on site, CE contacts appropriate utility companies to have underground utility lines located. CE also researches the location of all underground utilities using past site construction and surveying plans and by conducting a ground reconnaissance of the area. All work associated with the borings will be preceded by hand augering to a minimum depth of 5 feet below grade to avoid contact with underground utilities.

4.2 Lithologic Logging

A log of soil conditions encountered during the drilling and sample collection will be maintained using the Unified Soil Classification System by an CE geologist. All borings will be reviewed by a California registered geologist.

The collected soil samples will be examined and the following information recorded: boring location, sample interval and depth, blow counts, color, soil type, moisture content (qualitative), and depth at which ground water (if present) is first encountered. Also recorded on the soil boring logs will be the field screening results derived from the use of a portable PID or FID.

4.3 Disposal Procedures

Soils and fluids that will be produced and/or used during the installation and sampling of borings, and that are known or suspected to contain potentially hazardous materials, will be contained during the above operations. These substances will be retained on site until chemical testing had been completed to determine the proper means of disposal. Handling and disposal of substances known or suspected to contain potentially hazardous materials complied with the applicable regulations of DHS, the California Department of Water Resources, and any other applicable regulations. Soils and fluids produced and/or used during the above-described operations that appeared to contain potentially hazardous materials will be disposed of appropriately.

Residual substances generated during cleaning procedures that are known or suspected to pose a threat to human health or the environment will be placed in appropriate containers until chemical testing had been completed to determine the proper means for their disposal.

4.4 CONDUCTIVITY, TEMPERATURE, AND pH

Specific conductance, water temperature, and pH measurements will be made when a water sample will be placed in a transfer bottle used solely for field parameter determinations. A conventional pH meter with a combination electrode or equivalent will be used for field-specific conductance measurements. Temperature measurements will be performed using standard thermometers or equivalent temperature meters. Combination instruments capable of measuring two or all three of the parameters may have also been used.

All instruments will be calibrated in accordance with manufacturer methods. The values for conductivity standards and pH buffers used in calibration will be recorded daily in a field notebook. All probes will be thoroughly cleaned and rinsed with fresh water prior to any measurements, in accordance with Section 3.1.

5.0 SAMPLE CUSTODY

This section describes standard operating procedures for sample custody and custody documentation. Sample custody procedures will be followed through sample collection, transfer, analysis, and ultimate disposal. The purpose of these procedures is to assure that (1) the integrity of samples will be maintained during their collection, transportation, and storage prior to analysis and (2) post-analysis sample material will be properly disposed of. Sample custody is divided into field procedures and laboratory procedures, as described below.

5.1 FIELD CUSTODY PROCEDURES

Sample quantities, types, and locations will be determined before the actual fieldwork commenced. As few people as possible handle samples. The field sampler will be personally responsible for the care and custody of the collected samples until they will be properly transferred.

5.1.1 Field Documentation

Each sample will be labeled and sealed properly immediately after collection. Sample identification documents will be carefully prepared so that identification and chain-of-custody records could be maintained and sample disposition could be controlled. Forms will be filled out with waterproof ink. The following sample identification documents will be utilized.

- Sample labels
- Field notes
- Chain-of-custody forms

5.1.2 Sample Labels

Sample labels provide identification of samples. Pre-printed sample labels will be provided. Where necessary, the label will be protected from water and solvents with clean label-protection tape. Each level contained the following information:

- Name of collector
- Date and time of collection
- Place of collection
- CE project number
- Sample number
- Preservative (if any)

5.1.3 Field Notes

Information pertinent to a field survey, measurements, and/or sampling will be recorded in field notes. Entries may have included the following:

- Name and title of author, date and time of entry, and physical/environmental conditions during field activity.
- Location of sampling or measurement activity.
- Name(s) and title(s) of field crew.
- Type of sampled or measured media (e.g., soil, groundwater, air, etc.)
- Sample collection or measurement method(s).
- Number and volume of sample(s) taken.
- Description of sampling point(s).
- Description of measuring reference points.
- Date and time of collection or measurement.
- Sample identification number(s).
- Sample preservative (if any).
- Sample distribution (e.g. laboratory).
- Field observations/comments.
- Field measurement data (pH, etc.)

5.1.4 Chain-of-Custody Record

A chain-of-custody record will be filled out for and accompanied every sample and every shipment of samples to the analytical laboratories in order to establish the documentation necessary to trace sample possession from the time of collection. The record contained the following information:

- Sample or station number of sample I.D.
- Signature of collector, sampler, or recorder.
- Date and time of collection.
- Place of collection.

- Sample type.
- Signatures of persons involved in the chain of possession.
- Inclusive dates of possession.

The laboratory portion of the form will be completed by laboratory personnel and contains the following information:

- Laboratory sample number.
- Date and time of sample receipt.
- Analyses requested.
- Sample condition and temperature.

5.1.5 Sample Transfer and Shipment

A chain-of-custody record will always accompany samples. When transferring samples, the individuals relinquishing and receiving the samples signed, dated, and noted the time on the chain-of-custody record. Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis. The chain-of-custody record accompanied each shipment. The method of shipment, courier name(s), and other pertinent information will be entered in the chain-of-custody record.

5.2 Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample label matched that on the chain-of-custody record. Information regarding method of delivery and sample conditions will be also checked on the chain-of-custody record. The custodian then entered the appropriate data into the laboratory sample tracking system. The laboratory custodian may have used the sample number on the sample label or may have assigned a unique laboratory number to each sample. The custodian then transferred the sample(s) to the proper analyst(s) or stored the sample(s) in the appropriate secure area.

Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Once at the laboratory, the samples are handled in accordance with U.S. Environmental Protection Agency SW-846. Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition, for the intended analyses. All date sheets, chromatographs, and laboratory results will be field as part of the permanent documentation.

5.3 Corrections to Documentation

Original data recorded in field notebooks, chain-of-custody records, and other forms will be written in ink. These documents will be not altered, destroyed, or discarded, even if they will be illegible or contained inaccuracies that required a replacement document.

If an error will be made or found on a document, the individual making the corrections did so by crossing a single line through the error, entering the correct information, and initialing and dating the change. The erroneous information will be obliterated. Any subsequent error(s) discovered on a document will be corrected. All corrections will be initialed and dated.

5.4 Sample Storage and Disposal

Samples and extracts will be retained by the analytical laboratory for 60 days after a written report will be issued by the laboratory. Unless notified by the program manager, excess or unused samples will be disposed of by the laboratory in an appropriate manner consistent with applicable government regulations.

California

geologists & engineers

Environmental

April 17, 2001

CE Job No. EP100-2075

Casden Properties Operating Partnership LP
9090 Wilshire Boulevard, 3rd Floor
Beverly Hills, California 90210

Attention: Mr. Greg D. Smith, Senior Project Manager

Subject: Responses to LA Planning Comments

Dear Greg:

Enclosed are my comments for the three items provided to you by the LA Planning Department.

- Item No. 14. Item 14 makes an incorrect statement regarding the location of the project site. Division of Oil and Gas and Geothermal Resources Map No. 117 shows the subject site is not within the Sawtelle Oil Field. The nearest producing oil wells are located greater than 3600 feet to the west of the property. The construction of the proposed project will not limit access to the Sawtelle Oil Field since the field is located to the west of the property and wells within the Sawtelle Oil Field are directionally drilled to reach the oil producing zone.

- Item No. 15. The project is not located over an existing oil field and the nearest producing wells are located over 3600 feet to the west. Therefore, no risk from methane gas is expected.

- Item No. 16. No evidence of hydrocarbon odors or staining of soil were observed during drilling of geotechnical borings on the property. No evidence of onsite releases of hazardous materials into the soil were identified during preparation of the Phase I Environmental Assessment report.

I trust these responses adequately address the concerns as raised by the LA City Planning Department. Should you have any additional questions or comments, please call me directly.

Respectfully submitted,

Charles L. Buckley
Certified Hydrogeologist No. 55
Registered Environmental Assessor II No. 20116

See comments 14, 15 & 16

CITY OF LOS ANGELES
DEPARTMENT OF CITY PLANNING

ENVIRONMENTAL NOTATIONS

EIR NO.: 2000-3213 (SPA) (DRB) (ZV) (CCR) (CUB) (CUX)

PROJECT DESCRIPTION: Palazzo Westwood, a mixed use project in Westwood Village. The project consists of a 4-story, 350-unit (413,490 square feet) residential apartment community above the ground level, and 115,000 square foot ground level neighborhood retail uses including a supermarket, a drug store, 3 restaurants and retail stores, with 1550 parking spaces on 3 subterranean levels and 25 bicycle slots, all on a 4.98 gross acre site, zoned C4-2D-O.

PROJECT LOCATION/ADDRESS: 1001-1029 Tiverton Avenue; 1020-1070 Glendon Avenue, 1015-1065 Glendon Avenue; Westwood Village, Los Angeles, California.

AREAS OF POSSIBLE ENVIRONMENTAL IMPACT:

1. EARTH (DEMOLITION / GRADING): The proposed project may result in possible subsidence and alteration of on-site soil stability.

2. AIR QUALITY (CONSTRUCTION): Demolition, grading, hauling, and construction activities may increase fugitive dust emissions and deteriorate ambient air quality.

3. NOISE (CONSTRUCTION): Demolition, grading, hauling, and construction vehicles and equipment, and activities may increase noise levels in the project vicinity.

4. SEISMIC (GEOLOGIC HAZARDS): The proposed project is located adjacent to an identified Alquist-Priolo Fault Rupture Study Area, which is subject to possible seismic activity, unstable earth conditions, and other seismic-related hazards.

5. LIQUEFACTION: The proposed project is located in an identified area with liquefaction potential, which may be subject to unstable earth conditions and other seismic-related hazards.

6. AIR QUALITY (PARKING GARAGE): Air quality impacts could occur from project implementation due to restricted air movement and to the build-up of vehicle exhaust emissions within the confines of the proposed three-level, subterranean parking structure.

7. WATER (DRAINAGE, SURFACE WATER RUNOFF): Environmental impacts could occur from project implementation due to changes in drainage patterns and surface water runoff.

8. GROUND WATER: Project implementation may change the quantity and/or direction or flow of groundwater. Interception of an existing water table by the excavation may also result

in subsequent flooding and structural weakening of the parking structure.

9. WATER CONSERVATION (OPERATIONS/LANDSCAPING): Project operations and maintenance of landscaped areas, would increase the demand on available water resources.

10. FLOOD HAZARD: The project site is in an area potentially subject to downstream flood inundation hazards associated with the possible failure of the Upper and Lower Stone Canyon Reservoir Spillways, 2-3 miles to the north.

11. NOISE (VEHICLES AND OPERATIONS): Noise impacts to surrounding properties may result from the proposed project's supermarket, retail and restaurant activities on the site.

12. LIGHT AND GLARE (ILLUMINATION): Environmental impacts to the surrounding areas may occur due to artificial illumination.

13. LAND USE (SPECIFIC PLAN AMENDMENTS, VARIANCES, CONDITIONAL USE PERMITS, ENCROACHMENT PERMITS, DENSITY TRANSFER, BUILDING HEIGHTS, ETC.): The proposed building heights, density, building setbacks, bicycle parking spaces, trees removal, signages, etc., may result in land use and related aesthetic impacts of inappropriate height and scale, and are not in strict conformance with the Westwood Village Specific Plan.

14. NATURAL RESOURCES (OIL FIELD): The proposed project site is located on the existing State-Designated, Sawtelle Oil Field. The site is also adjacent westerly of the Sawtelle Major Oil Drilling Area; and within the City Supplemental Use District, "O", Westwood Oil Drilling District (approximately 299 acres). The location and scope of the proposed project, including the excavation for the three-level, subterranean parking structure may limit future access to extraction of the natural resource.

15. RISK OF UPSET (EXPLOSION/RELEASE OF METHANE GAS): The proposed project site is located over an existing oil field, an area which may also include the potential risk of methane gas generation and release, or explosion. Also the proposed project is located adjacent to an identified Alquist-Priolo Fault Rupture Study Area, subject to possible seismic activity, unstable earth conditions, and other seismic-related hazards, including but not limited to liquefiable, possibly alluvial soils.

16. HAZARDS (EXCAVATION/HAULING OF CONTAMINATED SOIL): Excavation and hauling of soil, which may be contaminated with oil and/or petroleum-related gases, or other materials, may pose a hazard to workers and the population of the surrounding community and to those areas along the proposed haul route.

17. HAZARDS (DEMOLITION RELEASE OF ASBESTOS): Due to the age of the buildings being demolished, asbestos may be located in the structures, typically in floors, ceilings, and insulation materials. Exposure to asbestos dust during demolition and hauling could be hazardous to the health of the demolition workers and area visitors and residents.

18. TRAFFIC (CIRCULATION, STREET IMPROVEMENTS, PARKING, DRIVEWAY ACCESS): An adverse impact could occur from the project's traffic generation. Possible impacts include damage and deterioration of street conditions from project-related demolition, grading, excavation, hauling, and construction vehicles and equipment; and from increased traffic generation related to project operations after completion.

19. PARKING PLAN (OFF-STREET PARKING AUGMENTATION OR INTRODUCTION FOR BROADENED USE OF EXISTING FACILITY): The project would result in additional demand for on-street, and off-street parking spaces.

20. FIRE: The proposed project may have an impact upon fire protection capabilities.

21. POLICE: The proposed project may have an impact upon police protection capabilities.

22. STREET IMPROVEMENT: Deterioration of street surface conditions could result from increased automobile and truck traffic generation, during the demolition, hauling, and construction phases; and during the subsequent operation of the proposed project.

23. STORM WATER DRAINAGE: The proposed project may result in an increased demand for additional stormwater drainage system capacity.

24. SOLID WASTE: The proposed project would create additional solid waste materials, which would increase demands upon solid waste disposal systems and sanitary landfills.

25. LANDSCAPING: The proposed project may adversely impact the character and aesthetics of the village neighborhood.

26. WALL (GRAFFITI): An adverse aesthetic impact could result if graffiti is painted on the walls, and/or if rubbish and debris accumulate adjacent to the public right-of-ways.

27. SIGNAGE (RETAIL MARKETS, RESTAURANTS): The operation of numerous different, retail shops, restaurants, and supermarket, could result in adverse aesthetic impacts from excessive on-site signage.

28. AESTHETICS (LANDSCAPING, WALLS, SIGNAGE.): The proposed project may result in adverse aesthetic impacts upon the character of the village neighborhood.

29. ARCHAEOLOGY: The project site is adjacent to an area of recorded archaeological sites. On-site archaeological materials may exist undisturbed on the project site.

ALTERNATIVES TO THE PROPOSED PROJECT: No Project, Change in Intensity, Change of Land Use, Alternative Site.

ATTACHMENTS: Vicinity Map, Radius Map, Site Plan.