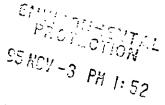
#674





Need@ UNR @ Soil disposal

November 2, 1995

Mr. Chuck Bryant 201 Hospital Road Sonora, CA 95370

Re:

Diesel Overfill

San Luis and Delta-Mendota Water Authority Pumping Station

Byron, CA

Dear Mr. Bryant,

This letter report presents a summary of remedial actions implemented by Clearwater Group, Inc. (Clearwater) on behalf of C.L. Bryant, Inc. following a diesel release at the referenced site. On October 2, 1995 date, personnel of C.L. Bryant, Inc. overfilled a diesel underground storage tank and approximately 25 gallons of diesel spilled on the surface.

#### Background

Initial emergency response actions were performed by on-site San Luis & Delta-Mendota Water Authority (SLDMWA) personnel following the spill. Apparently, the diesel moved across the pavement and entered the subsurface via the asphalt/concrete seam south of the fill pipe and an unpaved backfilled utility trench north and northwest of the fill pipe (Figure 1). The asphalt was removed to these areas and limited excavation occurred in areas where soil appeared stained and exhibited a diesel odor. Approximately 4 cubic yards of soil was removed, mostly from the areas where soil samples SS-1 and SS-2 were collected.

The soil samples were collected by One Earth Environmental, Inc. and analyzed by Delta Environmental Laboratories located in Benicia, California, for total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015 (modified), and purgable hydrocarbons by EPA Method 8020. TPHd concentrations were 2,860 and 6.50 parts per million (ppm) in SS-1 and SS-2, respectively. Purgable hydrocarbon concentrations were 98.184 ppm in sample SS-1 and below the laboratory method detection in sample SS-2. Copies of the laboratory report and chain-of-custody are included in Attachment A.

According to Mr. David Langlois of the SLDMWA, the dispensing line was broken during excavation activities and subsequently repaired.



#### Additional Excavation and Soil Sampling

On October 19, 1995, Clearwater personnel arrived at the site to direct limited additional excavation and collect confirmation soil samples. Upon arrival, Clearwater personnel noted that the repaired dispensing line was leaking at repair joints, which caused staining along the length of the repaired interval (Photograph 1). The line was constructed of one-inch diameter polyvinyl chloride (PVC). As the immediate area of this line and its connection to the diesel UST were hand excavated to assess the problem, the vent line was discovered. The vent line had approximately a one-inch gap and was constructed of the PVC also (Photograph 2). PVC joints of both the dispensing and vent lines were loose, likely the result of PVC cement degradation by the diesel. Based on these observations, it was unclear if and how long the entire piping system may have been leaking. As a result, it was agreed upon by Clearwater personnel and Mr. Dave Langlois of the SLDMWA that C.L. Bryant should not be held responsible for possible contamination in this area, and thus excavation activities in this location were terminated.

Additional excavation then focused on the following two areas where residual soil contamination resulting from the diesel overfill was identified: (1) a linear area of stained soil approximately one foot by 30 feet long, and (2) an area on the northeast side of a utility box (Figure 1). Approximately one cubic yard of soil was removed from each area and confirmation soil samples were collected. Sample locations and depths are shown on Figure 1.

Soil samples were collected by Clearwater personnel using a clean trowel and placed in clean brass tubes capped with teflon lined end caps. Each sample tube was labeled, documented on a chain-of-custody, and placed on ice in a cooler for transport to the project laboratory. The samples were analyzed by American Environmental Laboratories, Inc. located in Pleasanton, California for TPHd by EPA Method 8015 (modified). Soil was stockpiled on-site, enveloped in visqueen, pending removal and disposal by a licensed wastehauler. Approximately 10 cubic yards of soil and asphalt are currently stockpiled on-site.

Results of soil sample analyses for TPHd ranged from non-detectable above the laboratory method limit to 25 ppm. The samples collected from the linear trench, SS-3-1' and SS-4-1', contained concentrations of 7 ppm and 25 ppm, respectively. The sample collected from the excavated area near the utility box, SS-5-1', did not contain concentrations of TPHd exceeding the laboratory detection limit. The sample collected from the sidewall of the piping trench, SS-6-3.5', also did not contain concentrations of TPHd exceeding the

ULR



laboratory method detection limit. Copies of the laboratory report and chainof-custody are included in Attachment A.

#### Status

It is understood that the diesel UST piping was decommissioned on October 19, 1995, and that a temporary hand pump would be used to remove the remaining diesel fuel as needed by SLDMWA personnel. The area of excavation remains open, secured with barricades and caution tape, and will be backfilled during the week of November 6 in conjunction with the removal of stockpiled soil. The affected area will not be resurfaced with asphalt at this time, but will be coordinated with removal of diesel UST in early 1996.

Based on field observations and analytical results, damages caused by the overfill spill appear to be successfully mitigated.

If you have any questions or comments regarding this report, please contact either myself or Juniper Neill at (510) 337-8730.

Sincerely,

CLEARWATER GROUP, INC.

Brian Gwinn

Project Geologist

Juniper Neill

Project Manager

#### Attachments

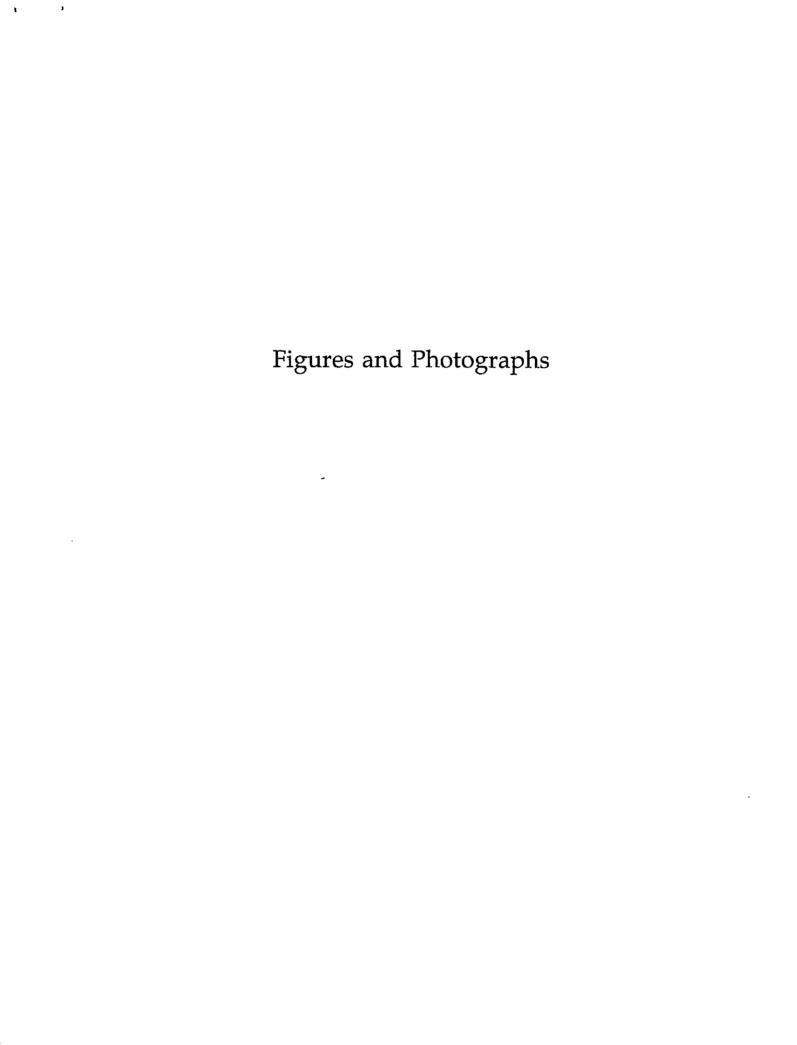
cc: Mr. David Langlois, San Luis & Delta-Mendota Water Authority

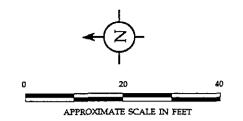
Mr. Andrew Bohart, NSR Information, Inc.

Mr. Robert Westen, ACEP

imper Neill

Mr. Herb Ng, Bureau of Reclamation

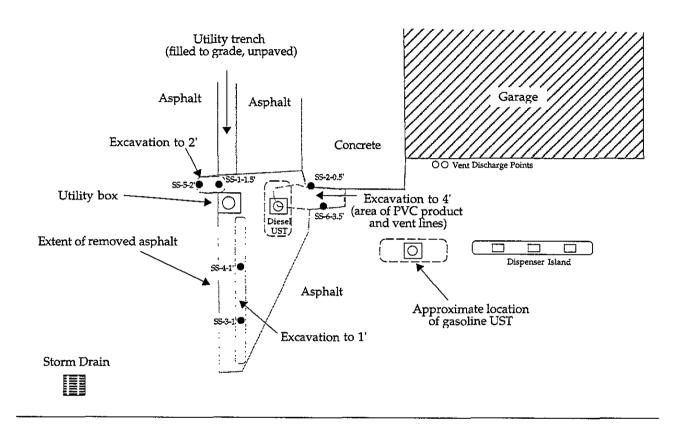




#### **EXPLANATION**

Soil sample location, designation, and depth

Limit of excavation



#### **ROAD**

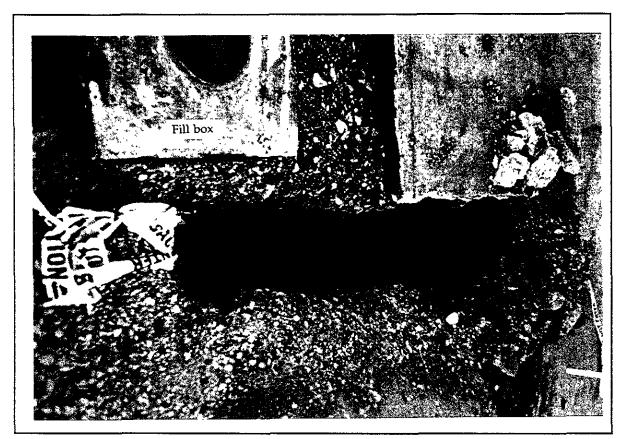
# SITE PLAN

San Luis & Delta-Mendota Water Authority
Pumping Facility
Byron, California

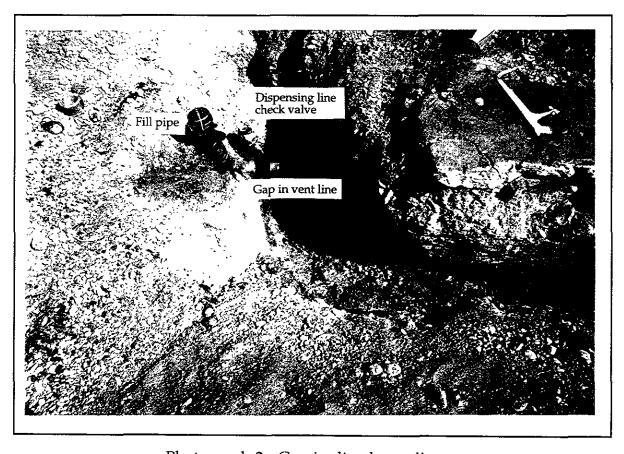
## CLEARWATER GROUP, INC.

Project No. **A-172** 

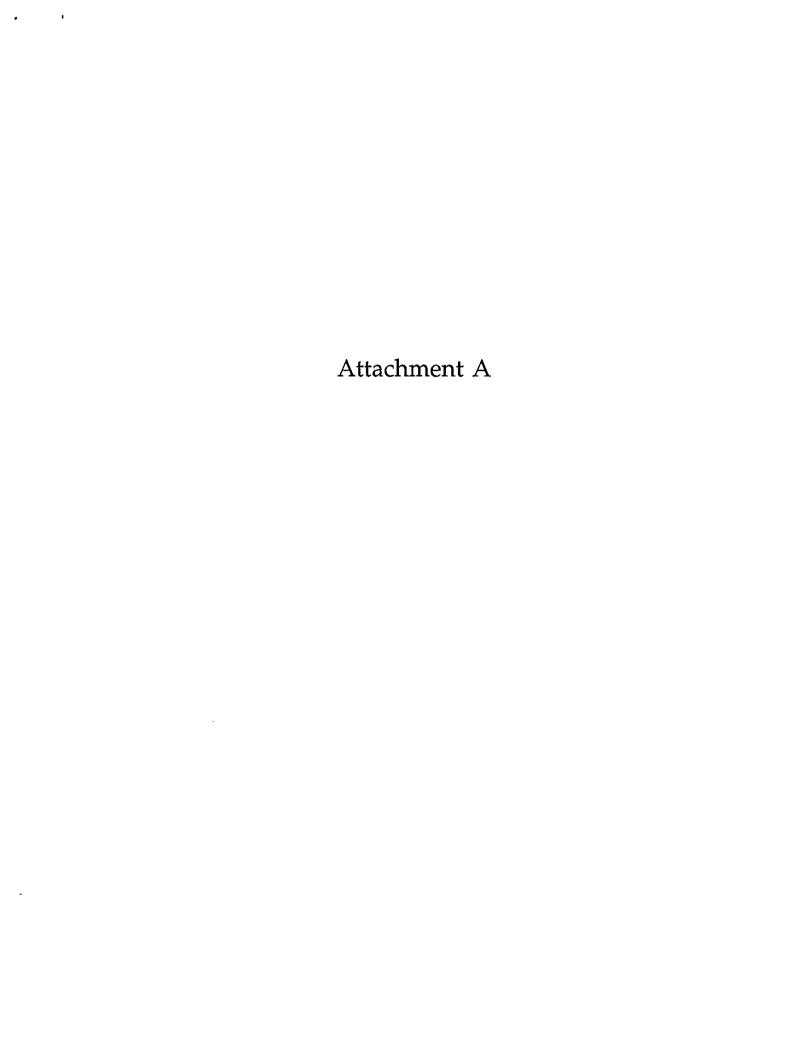
Report Date 10/95 Figure 1



Photograph 1: Stained soil beneath diesel dispensing line



Photograph 2: Gap in diesel vent line



WATER - WASTE WATER - HAZARDOUS WASTE - FUEL - AIR - SOIL

San Luis Delta & Endota Water Authority

Route One Box 35F

Attn: David Langlois

Byron, CA 94514

Client Project ID:

Method:

EPA 8020, 8015

Sampled: Received: 10/2/95

Matrix

10/2/95 Soil

Analyzed:

10/6 - 10/9/95

Reported:

10/10/95

Units:

mg/kg

## Laboratory Results for TPH + BTEX Analysis

	Detection	Results Sample ID		
Analyte	Limit			
	mg/kg			
		SS-1	SS-2	
TPH-D	2.5	0000		
		2860	6.50	
2				
8020				
Benzene	0.005	0.332	ND	
Toluene	0.005	3.90	ND	
Ethylbenzene	0.005	0.302	ND	
Chlorobenzene	0.005	6.17	ND	
m.p-Xylene	0.005	24.1	ND	
o-Xylene	0.005	12.4	ND	
1,3-Dichlorobenzene	0.005	9.69	ND	
1,4-Dichlorobenzene	0.005	25.7	ND	
1,2-Dichlorobenzene	0.005	16.6	ND	
NIDANIA Desaded AND				

ND:Not Detected(<MDL)

**Deits** Environmental Laboratories

Hossein Khosh Khoo, Ph.D.

# American Environmental Network

# Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

CLEARWATER GROUP, INC. 1125 ATLANTIC AVE, STE 102 ALAMEDA. CA 94501

ATTN: JUNIPER NEILL CLIENT PROJ. ID: A-172

CLIENT PROJ. NAME: SAN LUIS DELTA

REPORT DATE: 10/26/95

DATE(S) SAMPLED: 10/19/95

DATE RECEIVED: 10/20/95

AEN WORK ORDER: 9510261

#### PROJECT SUMMARY:

On October 20, 1995, this laboratory received 4 soil sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein

Laboratory Director

### CLEARWATER GROUP, INC.

SAMPLE ID: SS-3-1'
AEN LAB NO: 9510261-01
AEN WORK ORDER: 9510261
CLIENT PROJ. ID: A-172

DATE SAMPLED: 10/19/95 DATE RECEIVED: 10/20/95 REPORT DATE: 10/26/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3550		E	Extrn Date	10/23/95
TPH as Diesel	GC-FID	7 *	1 n	ng/kg	10/23/95

ND = Not detected at or above the reporting limit
\* = Value at or above reporting limit

### CLEARWATER GROUP, INC.

SAMPLE ID: SS-4-1' AEN LAB NO: 9510261-02

AEN WORK ORDER: 9510261 CLIENT PROJ. ID: A-172

DATE SAMPLED: 10/19/95 DATE RECEIVED: 10/20/95 REPORT DATE: 10/26/95

ANALYTE	METHOD/ CAS#		PORTING LIMIT UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3550	-	Extrn Date	10/23/95
TPH as Diesel	GC-FID	25 *	1 mg/kg	10/23/95

ND = Not detected at or above the reporting limit
\* = Value at or above reporting limit

### CLEARWATER GROUP, INC.

SAMPLE ID: SS-5-1' AEN LAB NO: 9510261-03 AEN WORK ORDER: 9510261 CLIENT PROJ. ID: A-172

DATE SAMPLED: 10/19/95 DATE RECEIVED: 10/20/95 REPORT DATE: 10/26/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3550	-	E	Extrn Date	10/23/95
TPH as Diesel	GC-FID	ND	1 n	ng/kg	10/23/95

ND = Not detected at or above the reporting limit
\* = Value at or above reporting limit

#### CLEARWATER GROUP. INC.

SAMPLE ID: SS-6-3.5' AEN LAB NO: 9510261-04 AEN WORK ORDER: 9510261 CLIENT PROJ. ID: A-172

**DATE SAMPLED: 10/19/95** DATE RECEIVED: 10/20/95 REPORT DATE: 10/26/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3550	-	E	xtrn Date	10/23/95
TPH as Diesel	GC-FID	ND	5 m	g/kg	10/23/95

Reporting limit elevated due to high level of non-target compounds. Sample run at dilution.

ND = Not detected at or above the reporting limit
\* = Value at or above reporting limit

# AEN (CALIFORNIA) OUALITY CONTROL REPORT

AEN JOB NUMBER: 9510261

CLIENT PROJECT ID: A-172

#### Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

#### <u>Definitions</u>

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

- D: Surrogates diluted out.
- #: Indicates result outside of established laboratory QC limits.

#### QUALITY CONTROL DATA

METHOD: EPA 3550 GCFID

AEN JOB NO: 9510261 DATE EXTRACTED: 10/23/95 INSTRUMENT: C

MATRIX: SOIL

### Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
10/23/95 10/23/95 10/23/95 10/23/95	SS-3-1' SS-4-1' SS-5-1' SS-6-3.5'	01 02 03 04	90 89 88 I
QC Limits:			45-110

I: Interference

DATE EXTRACTED: 10/23/95 DATE ANALYZED: 10/23/95

SAMPLE SPIKED: 9510190-10

INSTRUMENT: C

## Matrix Spike Recovery Summary

***************************************	Caika	A		QC Limi	ts
Analyte	Spike Added (mg/kg)	Average Percent Recovery	RPD	Percent Recovery	RPD
Diesel	41.3	85	4	44-108	13

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

CGI Project Contact: Juniper Neill CLEARWATER GROUP, INC. CGI Project Number: A-172 1125 Atlantic Avenue, Suite 102 Alameda, California 94501 Page 1 of 1 Phone: (510) 337-8730 Fax: (510) 523-0984 Pax #: 523-0984 Phone #: 337-8731 Client: CL Brant / Federated Contact: Juniper Neice
San Luis
Site Address: Byron, CA Delta Mendota Water Authority Shipment Method: Course Sampler's Signature: Junju Nall Sampled by: J. Neich B. Gwinh Lab. Phone #: 930 -9090 Lab. Address: Laboratory: AEN ANALYSIS REQUIRED TAT: 72 hr 48 hr 72 hr 10 day (std.) PRESERVATIVES Comments NUMBER MATRIX COLLECTION DATE/TIME SAMPLE DESCRIPTION CONT SOIL/WATER Heed Tusday SS-3-1' 4pm/10-19 Soil 55-5-1' 55-4-35 Additional Comments: Time Date Received by/Affiliation Time Relinquished by/Affiliation Date Juniper Neil/OMECGI 19/2015 9:59 Say Kar / AEN 10/20/95 02:00