

November 9, 1988

Harding Lawson Associates 1355 Willow Way, Suite 109 Concord, CA 94520

Attention: Mr. Randy Stone

Subject: Report of Data - Case Number 2534

Dear Mr. Stone:

The technical staff at CHEMWEST is pleased to provide our report for the analysis you requested: BTEX - EPA Method 602.

One water sample for Project Texaco #8; Grand, Project Number 2251,081.03 were received October 25, 1988 in good condition. Results of the analysis, along with the analytical methodology and appropriate reporting limits, are presented on the following pages.

Thank you for choosing CHEMWEST Laboratories. Should you have questions concerning this data report or the analytical methods employed, please do not hesitate to contact Toni Weeks, our Technical Service Representative, or your project manager. We hope that you will consider CHEMWEST Laboratories for your future analytical support and service requirements.

Sincerely,

Jill B. Henes, Ph.D.

Vice President of Technical Services

and

Kirk Pocan

Project Manager

KP:bw

cc: Joel Bird, President File

ANALYTICAL METHODOLOGY

BTEX (Benzene, Toluene, Ethyl Benzene, and Xylenes) by Purge & Trap and GC-PID

WATER - Method 602 or 8020

A 5 ml sample volume, or 5 ml of a suitable dilution, is purged on a suitable purge and trap system with helium. The purged sample is analyzed on a Gas Chromatograph equipped with a Photoionization Detector (PID). A packed column is used to separate the compounds.

SOIL - Method 8020

A 10 gram, or other appropriate aliquot of soil, is weighed into a clean VOA vial. Soils received in brass core tubes are sampled by discarding 2-5 centimeters of soil from each end of the tubes (this is done to reduce the possibility of analyzing a portion of soil that has been exposed to sampling technique contamination). Equal aliquots of soil are then removed from each end of the tube and combined in the VOA vial. Soil in jars or bags is aliquoted using a similar technique, which discards exposed sample surfaces. A 10 ml, or other appropriate volume of methanol, is added to the soil and the soil is shaken with the solvent. 100 ul of the extract, or a reduced aliquot or volume of a suitable dilution, is injected into 5 ml of laboratory blank water and analyzed by the same technique used for water samples.

CHEMWEST ANALYTICAL LABORATORIES BENZENE, TOLUENE, ETHYL BENZENE, XYLENES

Client I.D.: MW-8E-1&2 Date Analyzed: 11/02/88 CHEMWEST I.D.: 2534

Matrix : Water

Compound	Amount Detected (ug/L)	RL (ug/L)	
Benzene	1400	25	
Toluene		50	
Ethyl Benzene		100	
Total-Xylenes (1)	,	50	

	%	Acceptance	
Surrogate	Recovery	Window	
ortho-Chlorotoluene	108%	50-150%	

BRL: Below Reporting Limit.

RL: Reporting Limit.

(1): Total of P-, M-, and O- Xylenes.

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CHEM WEST ANALYTICAL LABORATORIES, INC.	Order No2534
600 West North Market Blvd.	Date Rec'd. 10/25/88/60
· Sacramento, California 95834	Compl. Date
(916) 923-0840 FAX (916) 923-1938	Section VIII Dran
CLIENT: TANDAMA CON DORM, CLOCK, F	Project Name: 2251 081.03
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	Contact
	Phone (415) 687-9660
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Harding Lawson Associa 1355 Willow Way, Suite 109 Concord, California 94520	ntes	CHAIN OF CUS	STODY FORM	Lab: CHEM WEST
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Job Number: 2257	<i>©</i> 81,03	G	LENN S. Young	_
Name/Location: Texace	#8; BAND			_
Project Manager: AA	<u> C</u>	Recorder	sture Required)	EPA 601/8010 EPA 602/8020 EPA 622/8240 EPA 625/8270 Priority Piltnt. Metals Benzene/Toluene/Xylene/F Total Petrol. Hydrocarb.
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RECEIVED FOR LAB BY:
(Signature)
(T) Chel D. Milks

DATE/TIME

DISPATCHED BY: (Signature)

METHOD OF SHIPMENT