



DATE ANALYZED: 07/24/91

MED-TOX JOB NO: 9107143

SAMPLE SPIKED: 9107143-04A

INSTRUMENT: H

**MATRIX SPIKE RECOVERY SUMMARY  
METHOD TPHBTS  
5030 w/GCFID/8020**

ANALYTE	Spike Conc. (ug/kg)	Sample Result (ug/kg)	MS Result (ug/kg)	MSD Result (ug/kg)	Average Percent Recovery	RPD
Benzene	28.6	ND	27.5	28.7	102.2	4.3
Toluene	96.2	ND	91.2	99.0	98.9	8.2
Hydrocarbons as Gasoline	1030	240	1020	950	72.3	7.1

**CURRENT QC LIMITS (Revised 04/30/91)**

Analyte	Percent Recovery	RPD
Benzene	(78.6-121.5)	14.8
Toluene	(78.7-119.1)	11.8
Gasoline	(60.0-109.7)	15.6

MS = Matrix Spike  
MSD = Matrix Spike Duplicate  
RPD = Relative Percent Difference  
ND = Not Detected



DATE EXTRACTED: 07/25/91  
 DATE ANALYZED: 07/26/91  
 SAMPLE SPIKED: 9107143-05A

MED-TOX JOB NO: 9107143  
 INSTRUMENT: C

**MATRIX SPIKE RECOVERY SUMMARY**  
**TPH EXTRACTABLE SOILS**  
**METHOD 3550**  
**(SOIL MATRIX; EXTRACTION METHOD)**

ANALYTE	Spike Conc. (mg/kg)	Sample Result (mg/kg)	MS Result (mg/kg)	MSD Result (mg/kg)	Average Percent Recovery	RPD
Diesel	84.8	120	198	195	90.2	1.5

**CURRENT QC LIMITS (Revised 05/02/91)**

Analyte	Percent Recovery	RPD
Diesel	(48.8-126.6)	19.1

MS = Matrix Spike  
 MSD = Matrix Spike Duplicate  
 RPD = Relative Percent Difference  
 ND = Not Detected



QUALITY CONTROL DATA

PACIFIC EXCAVATORS

MED-TOX JOB NO: 9107143



PACIFIC EXCAVATORS

CLIENT ID: AP 315  
 CLIENT PROJ. ID: [REDACTED]  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-09A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24-25/91  
 INSTRUMENT: H

BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	1	1
Ethylbenzene	100-41-4	3	1
Xylenes, Total	1330-20-7	30	3
PURGEABLE HYDROCARBONS AS:			
Gasoline		7 mg/kg	0.2 mg/kg

ND = Not Detected



PACIFIC EXCAVATORS

CLIENT ID: [REDACTED]  
 CLIENT PROJ. ID: -  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-08A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24-25/91  
 INSTRUMENT: H

BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	ND	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	ND	3

PURGEABLE HYDROCARBONS AS:

Gasoline 0.7 mg/kg 0.2 mg/kg

ND - Not Detected



PACIFIC EXCAVATORS

CLIENT ID: AP 314  
CLIENT PROJ. ID: -  
DATE SAMPLED: 07/23/91  
DATE RECEIVED: 07/24/91  
REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-07A  
MED-TOX JOB NO: 9107143  
DATE ANALYZED: 07/24/91  
INSTRUMENT: H

BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GC/FID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	5
Toluene	108-88-3	ND	5
Ethylbenzene	100-41-4	ND	5
Xylenes, Total	1330-20-7	ND	20

PURGEABLE HYDROCARBONS AS:

Gasoline 12 mg/kg 1 mg/kg

ND = Not Detected



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## PACIFIC EXCAVATORS

CLIENT ID: AP 313  
 CLIENT PROJ. ID: -  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-06A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24-25/91  
 INSTRUMENT: H

## BTX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	2	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	5	3

## PURGEABLE HYDROCARBONS AS:

Gasoline 2 mg/kg 0.2 mg/kg

ND = Not Detected

## PACIFIC EXCAVATORS

CLIENT ID: AP 312  
 CLIENT PROJ. ID: -  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-05A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24/91  
 INSTRUMENT: H

## BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	5
Toluene	108-88-3	9	5
Ethylbenzene	100-41-4	ND	5
Xylenes, Total	1330-20-7	ND	20
PURGEABLE HYDROCARBONS AS:			
Gasoline		14 mg/kg	1 mg/kg

ND = Not Detected





## PACIFIC EXCAVATORS

CLIENT ID: AP 311  
 CLIENT PROJ. ID: -  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-04A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24/91  
 INSTRUMENT: H

## BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	ND	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	ND	3
PURGEABLE HYDROCARBONS AS:			
Gasoline		0.2 mg/kg	0.2 mg/kg

ND - Not Detected



PACIFIC EXCAVATORS

CLIENT ID: AP 310  
 CLIENT PROJ. ID: -  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-03A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24-26/91  
 INSTRUMENT: H

BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	ND	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	ND	3

PURGEABLE HYDROCARBONS AS:

Gasoline

3 mg/kg

0.2 mg/kg

ND = Not Detected



## PACIFIC EXCAVATORS

CLIENT ID: AP 309  
 CLIENT PROJ. ID:  
 DATE SAMPLED: 07/23/91  
 DATE RECEIVED: 07/24/91  
 REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-02A  
 MED-TOX JOB NO: 9107143  
 DATE ANALYZED: 07/24-25/91  
 INSTRUMENT: H

## BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GC/FID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	1	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	5	3
PURGEABLE HYDROCARBONS AS:			
Gasoline		2 mg/kg	0.2 mg/kg

ND - Not Detected



PACIFIC EXCAVATORS

CLIENT ID: AP 308  
CLIENT PROJ. ID: -  
DATE SAMPLED: 07/23/91  
DATE RECEIVED: 07/24/91  
REPORT DATE: 08/14/91

MED-TOX LAB NO: 9107143-01A  
MED-TOX JOB NO: 9107143  
DATE ANALYZED: 07/24-25/91  
INSTRUMENT: H

BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	6	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	6	3

PURGEABLE HYDROCARBONS AS:

Gasoline 2 mg/kg 0.2 mg/kg

ND - Not Detected



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## PACIFIC EXCAVATORS

DATE SAMPLED: 07/23/91

REPORT DATE: 08/14/91

DATE RECEIVED: 07/24/91

MED-TOX JOB NO: 9107143

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/kg)
AP-308	01A	30 *
AP-309	02A	20 *
AP-310	03A	50 *
AP-311	04A	ND
AP-312	05A	120 *
AP-313	06A	20 *
AP-314	07A	90 *
AP-315	08A	ND
AP-316	09A	730 **

Detection Limit 10

Method: 3550 GCFID

Instrument: C

Date Extracted: 07/25/91

Date Analyzed: 07/25-26/91

ND = Not Detected

\* Resembles weathered gasoline

\*\* Appears to contain diesel as well  
as weathered gasoline

# ANALYTICAL SERVICES



DOHS CERTIFICATION NO: E772

## CERTIFICATE OF ANALYSIS

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PACIFIC EXCAVATORS  
P.O. BOX 384  
MARTINEZ, CA 94553

ATTN: RITA MADISON

REPORT DATE: 08/14/91


DATE SAMPLED: 07/23/91

DATE RECEIVED: 07/24/91

MED-TOX JOB NO: 9107143

ANALYSIS OF: SOIL SAMPLES

See attached for results

  
Andrew Bradeen, Manager  
Organic Laboratory

Results FAXed 07/26-29/91