



93 SEP 23 PM 2: 53

LRA ENVIRONMENTAL

3235 SUNRISE BOULEVARD, SUITE 5
RANCHO CORDOVA, CA 95742
PHONE 916/631-4455

FAX 916/631-4466

22 September 1993

Ms. Juliet Shin
Alameda County Health Agency Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Subject: Taco Bell Restaurant
1900 Webster Street
Alameda, Alameda County, California

Dear Ms. Shin:

Enclosed is a copy of the lab analysis for the third quarter sampling of the four on-site groundwater monitoring wells located at the above referenced site. Please retain the lab report for your records. A complete technical report will follow.

Very truly yours,

LRA ENVIRONMENTAL

Janine M Jewell

Janine M. Jewell
Staff Geologist

epa:e9170.2.3
Enclosures

cc: Mr. Dan Mundy, Dolan Foster Enterprises Inc.

*30,000 ppb
identified from
Well MW-3*



| | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|--------------------------------------|-----------|--------------------|------|---|--|---------------|--|------|--|----------|--|--------|--|---------|--|
| CLIENT NAME LRA Environmental | | CLIENT JOB NUMBER E9171 | | ANALYSIS REQUESTED | | | | FIELD CONDITIONS: | | | | | | | | | | | |
| ADDRESS 3235 Sunrise Blvd #5 | | DESTINATION LABORATORY | | PRESERVATIVES | TPH G/D/K | TOTAL OIL & GREASE | BTEX | COOL / Partial A.M. overcast COMPOSITE: NONE | | | | | | | | | | | |
| PROJECT NAME THCO Bell Alameda / 3rd QTR '93 | | <input checked="" type="checkbox"/> CLS 3249 FITZGERALD RD. RANCHO CORDOVA, CA 95742 | | | | | | | | | | | | | | | | | |
| PROJECT MANAGER Robert A Nicholson (916) 631-4455 | | <input type="checkbox"/> OTHER PH: (916) 638-7301 | | | | | | | | | | | | | | | | | |
| SAMPLED BY Chuck Johnson | | JOB DESCRIPTION UST Removal / 3rd QTR Monitoring | | SPECIAL INSTRUCTIONS: None | | | | TURN AROUND TIME | | | | | | | | | | | |
| SITE LOCATION 1900 Webster Street | | OAKLAND, CA | | 24 HOURS | | | | NOTE / FIELD READINGS | | | | | | | | | | | |
| DATE | | TIME | | IDENTIFICATION | | METHOD | | MATRIX | | CONTAINER NO. | | TYPE | | 48 HOURS | | 1 WEEK | | 2 WEEKS | |

| DATE | TIME | IDENTIFICATION | METHOD | MATRIX | CONTAINER NO. | TYPE | TPH G/D/K | TOTAL OIL & GREASE | BTEX | 24 HOURS | 48 HOURS | 1 WEEK | 2 WEEKS |
|----------|------|----------------|--------|--------|---------------|-------------|-----------|--------------------|------|----------|----------|--------|---------|
| 09-01-93 | 1405 | E9171 MW #1 | Bail | H2O | 02 | Amber 500ml | X | X | | | | X | |
| " | " | " " " | " | " | 06 | VOA | | | X | | | X | |
| 09-01-93 | 1320 | E9171 MW #2 | Bail | H2O | 02 | Amber 500ml | X | X | | | | X | |
| " | " | " " " | " | " | 06 | VOA | | | X | | | X | |
| 09-01-93 | 1225 | E9171 MW #3 | Bail | H2O | 02 | Amber 500ml | X | X | | | | X | |
| " | " | " " " | " | " | 06 | VOA | | | X | | | X | |
| 09-01-93 | 1100 | E9171 MW #3 | Bail | H2O | 02 | Amber 500ml | X | X | | | | X | |
| " | " | " " " | " | " | 06 | VOA | | | X | | | X | |

SUSPECTED CONSTITUENTS: **Petroleum H4Drocarbons / BTEX** SAMPLE RETENTION TIME: _____ PRESERVATIVES: (1) HCL (2) HNO3 (3) = COLD (4)

| RELINQUISHED BY (SIGN) | PRINT NAME / COMPANY | DATE / TIME | REC'D BY (SIGN) | PRINT NAME / COMPANY |
|---------------------------|----------------------|-------------------|---------------------------|----------------------|
| <i>Chuck Johnson</i> | LRA Environmental | 09-01-93 / 1900NE | <i>Robert A Nicholson</i> | LRA Environmental |
| <i>Robert A Nicholson</i> | LRA Environmental | 09-07-93 / 1605 | CLS | |

REC'D AT LAB BY: *Susan Wilcox* DATE / TIME: **9-7-93 1605** CONDITIONS / COMMENTS:

SHIPPED VIA: FED X UPS OTHER C.T.C. AIR BILL #



LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

09/14/93

Attention: Robert Nicholson

Reference: Analytical Results

Project Name: Taco Bell Alameda/3rd QTR '93
Project No.: E9171
Date Received: 09/07/93
Chain Of Custody: 10006

CLS ID No.: M2133
CLS Job No.: 792133

The following analyses were performed on the above referenced project:

| <u>No. of Samples</u> | <u>Turnaround Time</u> | <u>Analysis Description</u> |
|---------------------------|----------------------------|--|
| 4 | 5 Days | TPH Diesel by DHS Method - M8015 (water) |
| 4 | 5 Days | TPH Gasoline and BTXE (water) |
| 4 | 5 Days | Total Oil and Grease, EPA Method 9070 |

These samples were received by California Laboratory Services in a chilled, intact state and accompanied by a valid chain of custody document.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,


George Hampton
Laboratory Director



California Laboratory Services

Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12041
Matrix: WATER

Date Sampled: 09/01/93
Date Received: 09/07/93
Date Extracted: 09/08/93
Date Analyzed: 09/09/93
Date Reported: 09/10/93

ANALYTE

| Client | Sample I.D. | CLS | TPH as Diesel (mg/L) | TPH as Kerosene (mg/L) |
|-------------|-------------|-----|-------------------------|---------------------------|
| E9171 MW #1 | | 1A | ND | ND |
| E9171 MW #2 | | 2A | ND | ND |
| E9171 MW #3 | | 3A | ND | ND |
| E9171 MW #4 | | 4A | ND | ND |
| Rep. Limit | | | 0.05 | 0.20 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



California Laboratory Services

Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12041
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/09/93
Date Reported: 09/10/93

METHOD BLANK

| Analyte | CAS No. | Results (mg/L) | Rep. Limit (mg/L) |
|-----------------|---------|----------------|-------------------|
| TPH as Diesel | N/A | ND | 0.05 |
| TPH as Kerosene | N/A | ND | 0.20 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12041
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/09/93
Date Reported: 09/10/93

LAB CONTROL SAMPLE

| Analyte | CAS No. | LCS Conc. (mg/L) | LCS Recovery (percent) |
|---------|---------|---------------------|------------------------------|
| Diesel | N/A | 1.0 | 90 |

LAB CONTROL SAMPLE DUPLICATE

| Analyte | CAS No. | LCS Conc. (mg/L) | LCSD Recovery (percent) |
|---------|---------|---------------------|-------------------------------|
| Diesel | N/A | 1.0 | 90 |

LCS RPD

| Analyte | CAS No. | LCS Relative Percent Difference (percent) |
|---------|---------|---|
| Diesel | N/A | 0 |



Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Sampled: 09/01/93
Date Received: 09/07/93
Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

ANALYTE

| Client | Sample I.D. CLS | TPH as Gasoline (mg/L) |
|-------------|--------------------|---------------------------|
| E9171 MW #1 | 1B | ND |
| E9171 MW #2 | 2B | ND |
| E9171 MW #3 | 3B | ND |
| E9171 MW #4 | 4B | ND |

Rep. Limit 0.05

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

METHOD BLANK

| Analyte | CAS No. | Results (mg/L) | Rep. Limit (mg/L) |
|-----------------|---------|----------------|-------------------|
| TPH as Gasoline | N/A | ND | 0.05 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Sampled: 09/01/93
Date Received: 09/07/93
Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

SURROGATE RECOVERY

| Client | Sample I.D. CLS | o-Chlorotoluene CAS No. 95-49-8 (percent) |
|----------------------|--------------------|---|
| E9171 MW #1 | 1B | 111 |
| E9171 MW #2 | 2B | 111 |
| E9171 MW #3 | 3B | 111 |
| E9171 MW #4 | 4B | 110 |
| Surr Conc. (ug/L) | | 20 |

ANALYTE

| Client | Sample I.D. CLS | Benzene 71-43-2 (ug/L) | Toluene 108-88-3 (ug/L) | Ethylbenzene 100-41-4 (ug/L) | Xylenes, total 1330-20-7 (ug/L) |
|-------------|--------------------|------------------------------|-------------------------------|------------------------------------|---------------------------------------|
| E9171 MW #1 | 1B | ND | ND | ND | ND |
| E9171 MW #2 | 2B | ND | ND | ND | ND |
| E9171 MW #3 | 3B | ND | ND | ND | ND |
| E9171 MW #4 | 4B | ND | ND | ND | ND |
| Rep. Limit | | 0.3 | 0.3 | 0.3 | 0.6 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

MB SURROGATE

| Analyte | CAS No. | Surr Conc. (ug/L) | MB Surrogate Recovery (percent) |
|-----------------|---------|-------------------|---------------------------------|
| o-Chlorotoluene | 95-49-8 | 20 | 112 |

METHOD BLANK

| Analyte | CAS No. | Results (ug/L) | Rep. Limit (ug/L) |
|----------------|-----------|----------------|-------------------|
| Benzene | 71-43-2 | ND | 0.3 |
| Toluene | 108-88-3 | ND | 0.3 |
| Ethylbenzene | 100-41-4 | ND | 0.3 |
| Xylenes, total | 1330-20-7 | ND | 0.6 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

MS SURROGATE

| Analyte | CAS No. | MS Surr. Conc. (ug/L) | MS Surrogate Recovery (percent) |
|-----------------|---------|-----------------------|---------------------------------|
| o-Chlorotoluene | 95-49-8 | 20 | 100 |

MATRIX SPIKE

| Analyte | CAS No. | MS Conc. (ug/L) | MS Recovery (percent) |
|----------------|-----------|-----------------|-----------------------|
| Benzene | 71-43-2 | 20 | 97 |
| Toluene | 108-88-3 | 20 | 89 |
| Ethylbenzene | 100-41-4 | 20 | 96 |
| Xylenes, total | 1330-20-7 | 60 | 108 |

MSD SURROGATE

| Analyte | CAS No. | Surr. Conc. (ug/L) | MSD Surrogate Recovery (percent) |
|-----------------|---------|--------------------|----------------------------------|
| o-Chlorotoluene | 95-49-8 | 20 | 100 |

MATRIX SPIKE DUPLICATE

| Analyte | CAS No. | MSD Conc. (ug/L) | MSD Recovery (percent) |
|----------------|-----------|------------------|------------------------|
| Benzene | 71-43-2 | 20 | 97 |
| Toluene | 108-88-3 | 20 | 90 |
| Ethylbenzene | 100-41-4 | 20 | 97 |
| Xylenes, total | 1330-20-7 | 60 | 109 |



Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

RELATIVE % DIFFERENCE

| Analyte | CAS No. | Relative Percent Difference (percent) |
|----------------|-----------|---------------------------------------|
| Benzene | 71-43-2 | 0 |
| Toluene | 108-88-3 | 1 |
| Ethylbenzene | 100-41-4 | 1 |
| Xylenes, total | 1330-20-7 | 1 |



Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12040
Matrix: WATER

Date Extracted: 09/08/93
Date Analyzed: 09/08/93
Date Reported: 09/09/93

LCS SURROGATE

| Analyte | CAS No. | LCS Conc. (ug/L) | LCS Surrogate Recovery (percent) |
|-----------------|---------|------------------|----------------------------------|
| o-Chlorotoluene | 95-49-8 | 20 | 99 |

LAB CONTROL SAMPLE

| Analyte | CAS No. | LCS Conc. (ug/L) | LCS Recovery (percent) |
|----------------|-----------|------------------|------------------------|
| Benzene | 71-43-2 | 20 | 99 |
| Ethylbenzene | 100-41-4 | 20 | 90 |
| Toluene | 108-88-3 | 20 | 97 |
| Xylenes, total | 1330-20-7 | 60 | 109 |



Analysis Report: Total Oil and Grease, EPA Method 9070
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12053
Matrix: WATER

Date Sampled: 09/01/93
Date Received: 09/07/93
Date Extracted: 09/09/93
Date Analyzed: 09/13/93
Date Reported: 09/14/93

ANALYTE

| Client | Sample I.D. CLS | Total Oil & Grease (mg/L) |
|-------------|--------------------|------------------------------|
| E9171 MW #1 | 1A | ND |
| E9171 MW #2 | 2A | ND |
| E9171 MW #3 | 3A | 30 |
| E9171 MW #4 | 4A | ND |

Rep. Limit 5

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: Total Oil and Grease, EPA Method 9070
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12053
Matrix: WATER

Date Extracted: 09/09/93
Date Analyzed: 09/13/93
Date Reported: 09/14/93

METHOD BLANK

| Analyte | CAS No. | Results (mg/L) | Rep. Limit (mg/L) |
|--------------------|---------|----------------|-------------------|
| Total Oil & Grease | N/A | ND | 5 |

ND = Not detected at or above indicated Reporting Limit
Rep. Limit = Reporting Limit unless otherwise indicated in parentheses.



Analysis Report: Total Oil and Grease, EPA Method 9070
Separatory Funnel, EPA Method 3510

Client: LRA Environmental
3235 Sunrise Blvd. Ste. 5
Rancho Cordova, CA 95742

Project No.: E9171
Contact: Robert Nicholson
Phone: (916) 631-4455

Project: Taco Bell Alameda/3rd QTR '93

CLS Contact: George Hampton
Job No.: 792133
COC Log No.: 10006
CLS ID No.: M2133
Batch No.: 12053
Matrix: WATER

Date Extracted: 09/09/93
Date Analyzed: 09/13/93
Date Reported: 09/14/93

LAB CONTROL SAMPLE

| Analyte | CAS No. | LCS Conc. (mg/L) | LCS Recovery (percent) |
|--------------|---------|------------------|------------------------|
| Oil & Grease | N/A | 50 | 95 |

LAB CONTROL SAMPLE DUPLICATE

| Analyte | CAS No. | LCS Conc. (mg/L) | LCSD Recovery (percent) |
|--------------|---------|------------------|-------------------------|
| Oil & Grease | N/A | 50 | 97 |

LCS RPD

| Analyte | CAS No. | LCS Relative Percent Difference (percent) |
|--------------|---------|---|
| Oil & Grease | N/A | 2 |