



**AGRA Earth & Environmental**  
ENGINEERING GLOBAL SOLUTIONS

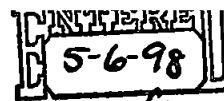
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APR 01 1998

DEPT. OF ECOLOGY

UST# 340064

LAST# 418509



AGRA Earth &  
Environmental, Inc.  
11335 NE 122nd Way  
Suite 100  
Kirkland, Washington  
USA 98034-6918  
Tel (425) 820-4669  
Fax (425) 821-3914

25 March 1998  
6-614-08610

Red Lion Hotels  
SeaTac Red Lion  
18470 Pacific Hwy S.  
Seattle, Washington 98188

Attention: Mr. Craig Brosene  
Senior Director, Corporate Engineering

Subject: **Additional Groundwater Sampling**  
Red Lion Inn  
300 112<sup>th</sup> Avenue S.E.  
Bellevue, Washington

|  |  |
|--|--|
| DEPARTMENT OF ECOLOGY<br>NWRO/TCP TANKS UNIT |  |
| INTERIM CLEANUP REPORT                       | <input type="checkbox"/>               |
| SITE CHARACTERIZATION                        | <input type="checkbox"/>               |
| FINAL CLEANUP REPORT                         | <input checked="" type="checkbox"/>    |
| OTHER  | <input type="checkbox"/>               |
| AFFECTED MEDIA:                              | SOIL <input type="checkbox"/>          |
| OTHER  | GW <input checked="" type="checkbox"/> |
| INSPECTOR (INIT.)                            | DATE 5/5/98                            |

Dear Mr. Brosene:

AGRA Earth & Environmental, Inc. (AEE) is pleased to provide the following letter report detailing additional groundwater sampling for the above-referenced site (Figure 1, Vicinity Map).

#### BACKGROUND

The 430-gallon capacity, single-walled, steel UST (used to store diesel fuel for the facility's emergency generator), was removed from the site on 5 February 1997. The UST was located on the south side of the hotel building inside a enclosed area which houses the hotel's generator, transformer and heat exchangers (Figure 2). Native soils in the UST excavation consisted of moist to saturated, brownish-gray sandy gravel with silt. Groundwater was observed at approximately 4 feet below ground surface (bgs). The fill material (pea gravel) and native soils exhibited a slight hydrocarbon odor. A 1,000-gallon, above-ground storage tank was installed at the same location on 7 February 1997. Two soil samples collected from the sidewalls of the UST excavation at approximately 3 feet below ground surface did not contain diesel- or heavy oil-range petroleum hydrocarbons above state cleanup levels (Table 1). However, a water sample that was collected from the excavation did contain diesel- and heavy oil-range petroleum hydrocarbons above state cleanup levels (Table 2).

#### ADDITIONAL GROUNDWATER SAMPLING

On 23 February 1998 AEE purged approximately 10 gallons of water from the former UST excavation utilized a peristaltic pump and Teflon tubing. Groundwater sample W-022398 was collected and transported to AEE's Washington State certified analytical laboratory in Portland, Oregon. The sample was analyzed for diesel- and heavy oil-range petroleum hydrocarbons by Washington State Method WTPH-D Extended. Laboratory-reported results indicated

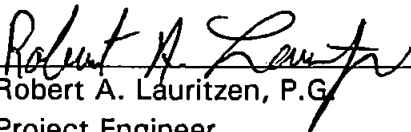


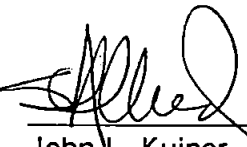
concentrations of diesel- and heavy oil-range petroleum hydrocarbons were below state cleanup levels (Table 2).

We trust this letter report fulfills your current needs for the subject site. If you have any questions or comments, or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted,

AGRA Earth & Environmental, Inc.

  
Robert A. Lauritzen, P.G.  
Project Engineer

  
John L. Kuiper, P.G.  
Associate

RAL/JLK/beh

Attachments:      Figure 1 - Vicinity Map  
                         Table 1 - Analytical Results — Soil  
                         Table 2 - Analytical Results — Water  
                         Laboratory Report

cc:      Annette Ademasu; Department of Ecology, NW Region

**Table 1: Summary of Analytical Test Results: Soil**  
**Red Lion Inn**  
**Bellevue, Washington**  
**AGRA Earth & Environmental, Inc. Project No. 6-61M-08610-0**

| Sample Number                 | Date Collected | Depth Collected (feet) | WTPH-DX      |                 |
|-------------------------------|----------------|------------------------|--------------|-----------------|
|                               |                |                        | Diesel (ppm) | Heavy Oil (ppm) |
| Excavation Samples            |                |                        |              |                 |
| T1/N1/-3'                     | 05-Feb-97      | 3                      | <10          | <25             |
| T1/W1/-3'                     | 05-Feb-97      | 3                      | 57.1         | <25             |
| Stockpile Samples             |                |                        |              |                 |
| Diesel                        | 07-Feb-97      | -                      | 125          | -               |
| Diesel                        | 07-Feb-97      | -                      | 86           | -               |
| MTCA Method "A" Cleanup Level |                |                        | 200          | 200             |

**Notes:**

WTPH-DX = Total petroleum hydrocarbons, diesel range (C12-C24) and heavy oil range (C>24), by Washington State Method WTPH-D Extended.

MTCA = Washington State, Model Toxics Control Act, Method "A" Cleanup Guidelines.

ppm = Parts per million (equivalent to milligrams per kilogram [mg/kg]).

Errors in report  
2.42 mg/l  
9.39 mg/l  
per lab results  
in previous report dated  
2/26/97

**Table 2: Summary of Analytical Test Results: Groundwater**  
**Red Lion Inn**  
**Bellevue, Washington**  
**AGRA Earth & Environmental, Inc. Project No. 6-61M-08610-0**

| Sample Number                 | Date Collected | WTPH-DX      |                 |
|-------------------------------|----------------|--------------|-----------------|
|                               |                | Diesel (ppm) | Heavy Oil (ppm) |
| MW-1                          | 05-Feb-97      | 2,420        | 9,390           |
|                               | 23-Feb-98      | <0.25        | <1.0            |
| MTCA Method "A" Cleanup Level |                | 1            | 1               |

**Notes:**

WTPH-DX = Total petroleum hydrocarbons, diesel range (C12-C24) and heavy oil range (C>24), by Washington State Method WTPH-D Extended.

MTCA = Washington State Model Toxics Control Act, Method "A" Cleanup Guidelines.

ppb = Parts per billion (equivalent to micrograms per kilogram [ug/kg]).

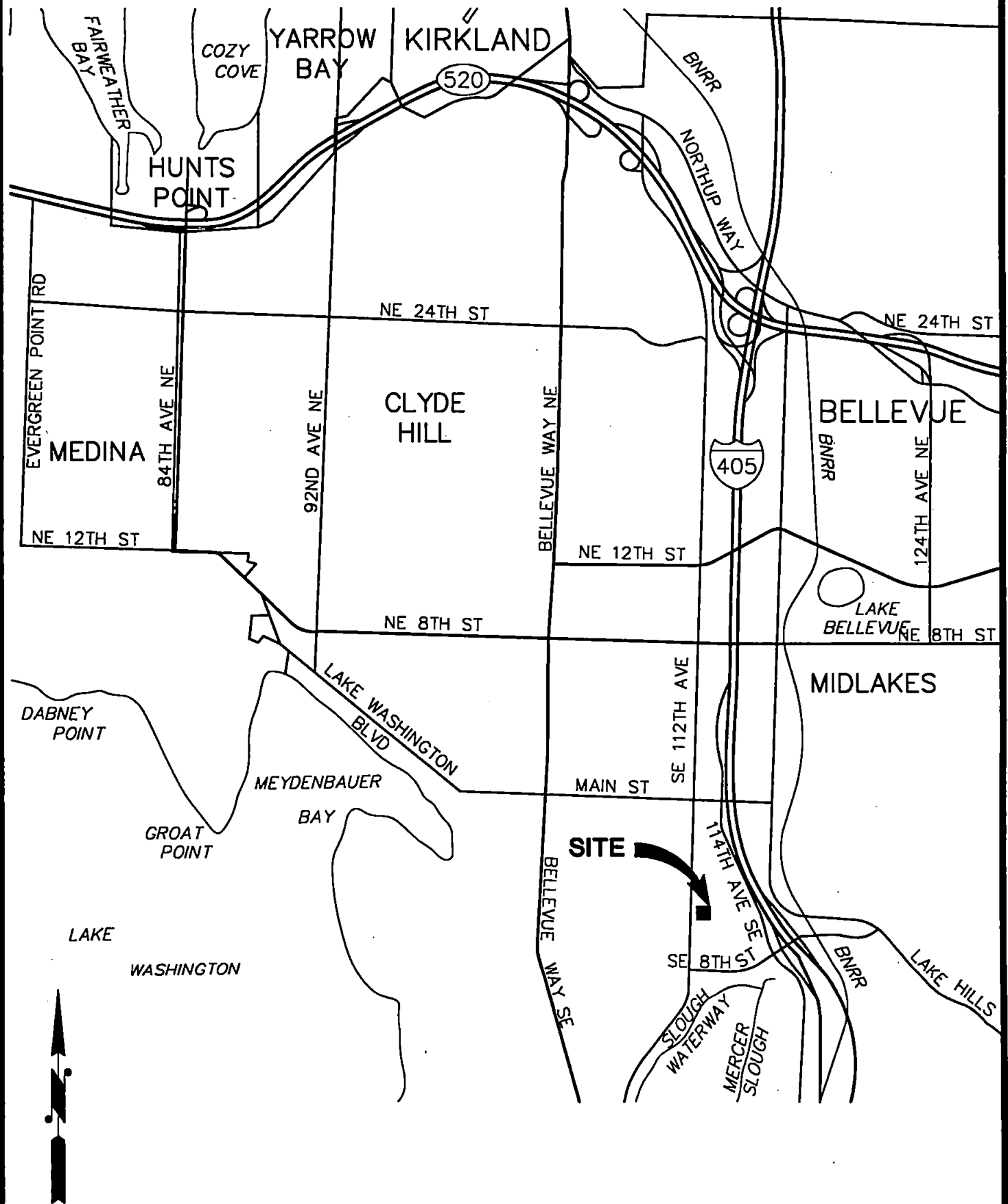


FIGURE 1

**AGRA**  
Earth & Environmental

11335 N.E. 122nd Way, Suite 100  
Kirkland, WA, U.S.A. 98034-6918

|        |               |
|--------|---------------|
| W.O.   | 6-61M-08610-0 |
| DESIGN | RAL           |
| DRAWN  | JMR           |
| DATE   | FEB 1997      |
| SCALE  | N.T.S.        |

**RED LION (SOUTH)**  
300 112TH AVENUE SE  
BELLEVUE, WASHINGTON

**LOCATION MAP**

March 5, 1998

AGRA Earth & Environmental  
11335 NE 122nd Way, Suite 100  
Kirkland, WA 98034

**Attention: Mr. Bob Lauritzen**

Dear Mr. Lauritzen:

RE: Analytical Results For Project 6-61M-08610-0

Attached are the results for the sample submitted on February 25, 1998 from the above referenced project. For your reference, our project number associated with this sample is WA980090.

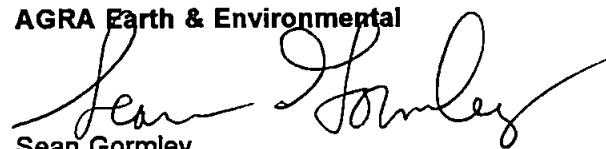
The sample was analyzed for diesel and heavy range total petroleum hydrocarbons at the AGRA Earth & Environmental Portland Chemistry Laboratory.

All analyses were conducted in accordance with applicable QA/QC guidelines. The results apply only to the sample submitted.

Please feel free to contact me if you have any questions regarding this report, or if I can be of any assistance in any other matter.

Respectfully submitted,

**AGRA Earth & Environmental**



Sean Gormley  
Laboratory Manager

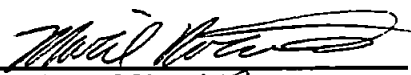
Project: Bellevue Red Lion  
Project No.: 6-61M-08610-0  
Project Manager: Bob Lauritzen  
Sample Matrix: Water

Service Request No.: WA980090  
Report Date: 3/4/98  
Report No.: 98009001  
C.O.C. No.: 03085

**Total Petroleum Hydrocarbons - Diesel and Heavy Oil Range**  
**WDOE Method WTPH-D Extended**  
**mg/L (ppm)**

| Sample Name | Lab Code | Sample Date | Extraction Date | Analysis Date | Diesel Result | Heavy Oil Result | Surrogate Recovery O-Terphenyl |
|-------------|----------|-------------|-----------------|---------------|---------------|------------------|--------------------------------|
| W-022398    | 0090-1   | 2/23/98     | 2/26/98         | 3/3/98        | <0.25         | <1.0             | 109                            |
| Lab Blank   | 0090-MB  | 2/26/98     | 2/26/98         | 3/2/98        | <0.25         | <1.0             | 104                            |

Acceptance Criteria: 50%-150%

  
Signature of Chemist

  
QA/QC Review

0002



Project: Bellevue Red Lion  
Project No.: 6-61M-08610-0  
Project Manager: Bob Lauritzen  
Sample Matrix: Water

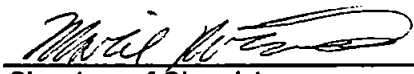
Service Request No.: WA980090  
Report Date: 3/4/98  
Report No.: 98009002  
C.O.C. No.: 03085


**QC Data Report - Blank Spike Recoveries**  
**Diesel and Heavy Oil Range Petroleum Hydrocarbons**  
**WDOE Method WTPH-D Extended**  
**mg/L(ppm)**

| Sample Name:        | Lab Blank | Spike Level | Blank   | Percent  | Blank     | Percent  | Relative       |
|---------------------|-----------|-------------|---------|----------|-----------|----------|----------------|
| Lab Code:           | 0090-MB   | (mg/L)      | Spike   | Recovery | Spike     | Recovery | Percent        |
| Diesel:             | <0.25     | 1.0         | 0.90    | (BS)     | Duplicate | (BSD)    | Difference     |
|                     |           |             |         | 90       | 0.89      | 89       | 1              |
| Acceptance Limits:  | ~         | ~           | ~       | 75%-125% | ~         | 75%-125% | <25            |
| Extraction Date:    | 2/26/98   | ~           | 2/26/98 | ~        | 2/26/98   | ~        | ~              |
| Analysis Date:      | 3/2/98    | ~           | 3/3/98  | ~        | 3/3/98    | ~        | ~              |
| Surrogate Recovery: |           |             |         |          |           |          | Control Limits |
| O-Terphenyl:        | 104%      | ~           | 123%    | ~        | 123%      | ~        | 50%-150%       |

ND Not Detected

Spike Source: #2 Diesel Fuel (AEE Lot # 96-1-89-5).

  
Signature of Chemist

  
QA/QC Review

0003



**AGRA Earth & Environmental Portland Chemistry Laboratory  
Sample Receipt Documentation Form**

|   |  |
|---|--|
| Project: <u>Belleuve Bed Lion</u>                         | Cooler Temperatures<br>Samples<br><br><u>3.4°C</u> |
| SR No.: <u>WA980090</u>                                   |  |
| Date: <u>2/25/03</u>                                      |  |
| Time: <u>10:50am</u>                                      |  |
| Temperature of Cooler Upon Receipt (Record to the Right): |  |
| Received By: <u>CDW</u>                                   |  |

**Section One: Shipping/Delivery Issues**

|  |              |    |    |
|--|--------------|----|----|
| 1. Method of Sample Delivery: <u>UPS</u>   |              |    |    |
| 2. Airbill or Courier Receipt Number: <u>12 8E1 256 01 4013 0041</u>                   |              |    |    |
| 3. Is a copy of the airbill or courier receipt available to be placed in the job file? | <u>(Yes)</u> | No | NA |

**Section Two: Sample Custody Issues**

|   |              |    |             |
|---|--------------|----|-------------|
| 4. Are custody seals on the shipping container intact?    | Yes          | No | <u>(NA)</u> |
| 5. Is a COC or other sample transmittal document present? | <u>(Yes)</u> | No | NA          |
| 6. Is the COC complete?                                   | <u>(Yes)</u> | No | NA          |
| 7. Are the sample seals intact?                           | Yes          | No | <u>(NA)</u> |
| 8. Does the COC match the samples received?               | <u>(Yes)</u> | No | NA          |

**Section Three: Sample Integrity Issues**


|  |              |             |             |
|--|--------------|-------------|-------------|
| 9. Are all sample containers intact and not leaking?   | <u>(Yes)</u> | No          | NA          |
| 10. Are all samples preserved properly?  | Yes          | <u>(NO)</u> | NA          |
| 11. Are all samples within holding time for the required tests?                                      | <u>(Yes)</u> | No          | NA          |
| 12. Were all samples received at the proper temperature?   | <u>(Yes)</u> | No          | NA          |
| 13. Are samples for volatiles and other headspace sensitive parameters free of headspace or bubbles? | Yes          | No          | <u>(NA)</u> |

**Section Four: Sample Containers Received:**

|                       |                        |
|-----------------------|------------------------|
| 14. 4 oz. glass jars: | 19. 2oz. amber (MeOH): |
| 15. 8 oz. glass jars: | 20. Encore samplers:   |
| 16. 40ml VOA vials:   | 21. 500ml plastic:     |
| 17. 1 liter glass:    | 22. 1liter plastic:    |
| 18. Other (describe): |                        |

#10 - Sample was not preserved with HCl. Unable to preserve in sample receiving since the bottle was too full.

Reviewed By:

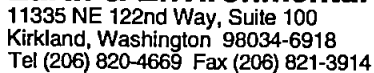
  
\_\_\_\_\_  
Laboratory Manager or Designee

0004



**AGRA Earth & Environmental**  
ENGINEERING GLOBAL SOLUTIONS





## CHAIN OF CUSTODY

0005AGRA Earth & Environmental, Inc. (7/94)

**DISTRIBUTION:** White, Yellow - Laboratory, Pink - Originator

WA980090