

Atlantic Richfield Company

Shannon Couch
Operations Project Manager

PO Box 1257
San Ramon, CA 94583
Phone: (925) 275-3804
Fax: (925) 275-3815
E-Mail: shannon.couch@bp.com

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8:33 am, Jul 06, 2011

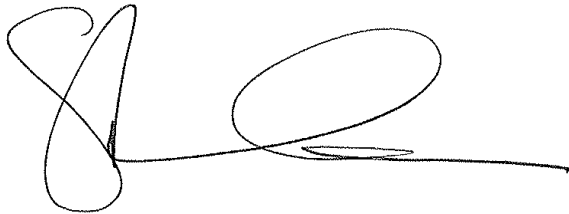
Alameda County
Environmental Health

July 5, 2011

Re: Second Quarter 2011 Status Report
Former Richfield Oil Company Station #472
6415 International Boulevard, Oakland, California
ACEH Case #RO0002982

I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,



Shannon Couch
Operations Project Manager

Attachment

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
Chico, CA 95926
Voice (530) 566-1400
Fax (530) 566-1401



July 5, 2011

Project No. 09-88-601

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Ms. Shannon Couch

Re: Second Quarter 2011 Status Report, Former Richfield Oil Company Station #472,
6415 International Boulevard, Oakland, California; ACEH Case #RO0002982

Dear Ms. Couch:

Attached is the Second Quarter 2011 Status Report for Former Richfield Oil Company Station #472 located at 6415 International Boulevard, Oakland, California. Should you have questions regarding this submittal, please do not hesitate to contact me at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink that reads 'Thomas A. Venus'.

Thomas A. Venus, P.E.
Senior Engineer



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (submitted via ACEH ftp site)
Electronic copy uploaded to GeoTracker

**SECOND QUARTER 2011
STATUS REPORT
FORMER STATION #472, OAKLAND, CALIFORNIA**

Broadbent & Associates, Inc. (BAI) is pleased to present this *Second Quarter 2011 Status Report* on behalf of Atlantic Richfield Company (a BP affiliated company) for Former Richfield Oil Company Station #472 located in Oakland, Alameda County, California. Quarterly reporting is being submitted to the Alameda County Environmental Health Services Agency (ACEH) consistent with their requirements under the legal authority of the California Regional Water Quality Control Board, as codified by California Code of Regulations Title 23, Section 2652(d). A summary description of current developments regarding the site is provided below.

Facility Name / Address:	<u>Former Station #472 / 6415 International Boulevard, Oakland</u>
Client Project Manager / Title:	<u>Ms. Shannon Couch / RM Operations Project Manager</u>
BAI Contact:	<u>Mr. Tom Venus, PE / (530) 566-1400</u>
BAI Project No.:	<u>09-88-601</u>
Primary Regulatory Agency / ID No.:	<u>ACEH, Case #RO0002982</u>
Current phase of project:	<u>Assessment</u>
List of Acronyms / Abbreviations:	<u>See end of report text for list of acronyms/abbreviations used in report.</u>

WORK PERFORMED THIS QUARTER (Second Quarter 2011):

1. Submitted *First Quarter 2011 Monitoring Report* (BAI, 4/29/2011).
2. No environmental field work was conducted at Former Station #472 during the Second Quarter 2011.

WORK SCHEDULED FOR NEXT QUARTER (Third Quarter 2011):

1. Submit *Second Quarter 2011 Status Report* (contained herein).
2. Perform groundwater monitoring/sampling for Third Quarter 2011.
3. Prepare and submit Case Evaluation & Request for No Further Action.

DISCUSSION:

During the First Quarter 2011 monitoring/sampling event, petroleum hydrocarbons as Diesel-Range Organics (DRO, hydrocarbon chain lengths C10-C28) were detected in upgradient well MW-1 at a concentration of 53 micrograms per liter ($\mu\text{g/L}$, parts per billion or ppb). In the analysis however, the laboratory reported the concentration with the flag "LX = Quantitation of unknown hydrocarbon(s) in sample based on Diesel". The remaining analytes (GRO, BTEX, MTBE, ETBE, TAME, DIPE, EDB, TBA, 1,2-DCA, and Ethanol) were not detected above their laboratory reporting limits in the three onsite wells sampled during the First Quarter 2011. This is consistent with past analytical results. In the past, the laboratory noted that the chromatogram did not resemble the laboratory standard for diesel and may be due to significant breakdown of aged fuel. Analysis of samples for the full-suite of volatile organic compounds by EPA Method 8260 in 2010 failed to identify individual peaks as specific petroleum hydrocarbon compounds. Therefore, in the Third Quarter 2011, BAI is proposing to have the groundwater samples for DRO analyzed by EPA Method 8015M as before, but also analyzed for DRO following the silica-gel extraction procedure to separate out the potentially naturally-occurring polar hydrocarbons from the non-polar petroleum hydrocarbons. Both results will be reported in the Third Quarter 2011 Monitoring Report data tables. For consistency, the laboratory's Electronic Data File (EDF) DRO result arrived at without the silica-gel extraction procedure will be uploaded to the State's GeoTracker AB2886 database.

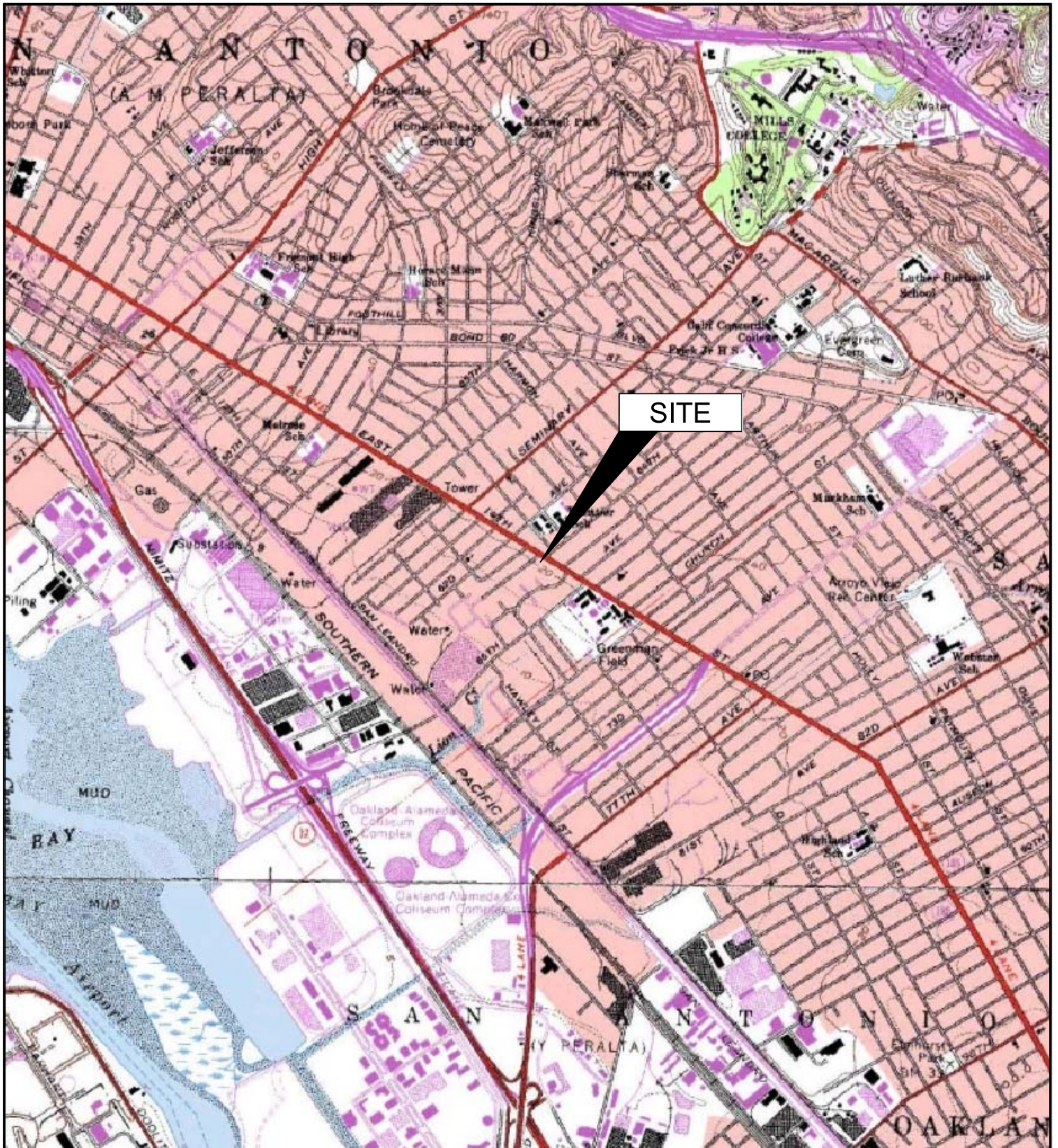
As BAI has stated in past quarterly reports, the ACEH is encouraged to review this case as a candidate for site closure. To assist the ACEH with this effort, BAI is performing a case evaluation with the goal of submitting a Justification for No Further Action Status Report before the end of the Third Quarter 2011. For reference a Site Location Map is provided as Drawing 1.

ATTACHMENT:

Drawing 1: Site Location Map

LIST OF COMMONLY USED ACCRONYMS/ABBREVIATIONS:

ACEH:	Alameda County Environmental Health	ft/ft:	feet per foot
BAI:	Broadbent & Associates, Inc.	gal:	Gallons
BTEX:	Benzene, Toluene, Ethylbenzene, Total Xylenes	GRO:	Gasoline-Range Organics
1,2-DCA:	1,2-Dichloroethane	LNAPL:	Light Non-Aqueous Phase Liquid
DIPE:	Di-Isopropyl Ether	MTBE:	Methyl Tertiary Butyl Ether
DO:	Dissolved Oxygen	NO ₃ :	Nitrate as Nitrogen
DRO:	Diesel-Range Organics	ppb:	parts per billion
EDB:	1,2-Dibromomethane	SO ₄ :	Sulfate
Eh:	Oxidation Reduction Potential	TAME:	Tert-Amyl Methyl Ether
EPA:	Environmental Protection Agency	TBA:	Tertiary Butyl Ether
ETBE:	Ethyl Tertiary Butyl Ether	TOC:	Top of Casing
Fe ²⁺ :	Ferrous Iron	µg/L:	micrograms per liter



SITE

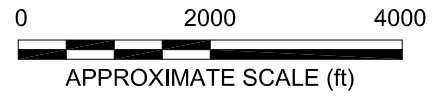
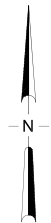


IMAGE SOURCE: USGS