

RECEIVED

By Alameda County Environmental Health at 2:51 pm, Jan 27, 2014

Atlantic Richfield Company

Chuck Carmel

Remediation Management Project Manager

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

January 24, 2014

Re: Fourth Quarter 2013 Status Report
Atlantic Richfield Company Station No. 2107
3310 Park Boulevard, Oakland, California
ACEH Case #RO0002526

"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,



Chuck Carmel

Remediation Management Project Manager

Attachment:



BROADBENT

875 Cotting Ln., Suite G, Vacaville, CA 95688

[T] 707-455-7290 [F] 707-455-7295

broadbentinc.com

CREATING SOLUTIONS. BUILDING TRUST.

January 24, 2014

Project No. 06-88-614

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


Attn.: Mr. Chuck Carmel

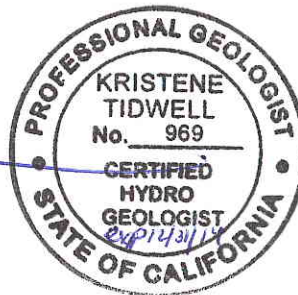
Re: Fourth Quarter 2013 Status Report, Atlantic Richfield Company Station No. 2107, 3310
Park Boulevard, Oakland, Alameda County, California; ACEH Case #RO0002526

Dear Mr. Carmel:

Attached is the *Fourth Quarter 2013 Status Report* for Atlantic Richfield Company Station No. 2107 located at 3310 Park Boulevard, Oakland, Alameda County, California (Site). This report presents a summary of current developments at the Site through the Fourth Quarter of 2013. Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (707) 455-7290.

Sincerely,
BROADBENT & ASSOCIATES, INC.


Kristene Tidwell, P.G., C.Hg.
Senior Geologist



Enclosures

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

**FOURTH QUARTER 2013
STATUS REPORT
STATION No. 2107, OAKLAND, CALIFORNIA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *Fourth Quarter 2013 Status Report* on behalf of Atlantic Richfield Company (a BP affiliated company) for Station No. 2107 located in Oakland, Alameda County, California (Site). Monitoring activities at the site were performed in accordance with the reporting requirements issued by the Alameda County Environmental Health (ACEH). Details of work performed, discussion of results, and recommendations are provided below.

Facility Name / Address:	Station No. 2107 / 3310 Park Boulevard, Oakland, California
Client Project Manager / Title:	Mr. Chuck Carmel, Remediation Management Project Manager
Broadbent Contact:	Kristene Tidwell, P.G., C.Hg., (707) 455-7290
Broadbent Project No.:	06-88-614
Primary Regulatory Agency / ID No.:	ACEH / Case #RO0002526
Current phase of project:	Monitoring
List of Acronyms / Abbreviations:	See end of report text for list of acronyms/abbreviations used in report.

WORK PERFORMED THIS QUARTER (Fourth Quarter 2013):

1. Submitted *Third Quarter 2013 Monitoring Report* on October 29, 2013 (Q3 GWM Report).
2. Carried out the majority of the *Addendum to the Work Plan for Groundwater Investigation* (Work Plan Addendum) dated August 21, 2013.
3. No other environmental field activities were conducted during the Fourth Quarter 2013.

WORK SCHEDULED FOR NEXT QUARTER (First Quarter 2014):

1. Conduct remaining offsite investigation activities as outlined in Work Plan Addendum.
2. Submit *Fourth Quarter 2013 Status Report* (contained herein).
3. Conduct First Quarter 2014 groundwater monitoring and sampling event.
4. Submit a report documenting recent offsite investigation described above.

GROUNDWATER MONITORING PLAN SUMMARY:

Groundwater level gauging:	MW-11A, MW-11B, MW-12A, MW-12B, MW-13A, MW-13B	(1Q & 3Q)
Groundwater sample collection:	MW-11A, MW-11B, MW-12A, MW-12B, MW-13A, MW-13B	(1Q & 3Q)
Biodegradation indicator parameter monitoring:	None	

QUARTERLY RESULTS SUMMARY:

LNAPL

LNAPL observed this quarter:	N/A	(yes/no)
LNAPL recovered this quarter:	N/A	(gal)
Cumulative LNAPL recovered:	N/A	(gal)

Groundwater Elevation and Gradient:

Depth to groundwater:	N/A	(ft below TOC)
Gradient direction:	N/A	(compass direction)
Gradient magnitude:	N/A	(ft/ft)
Average change in elevation:	N/A	(ft since last measurement)

Laboratory Analytical Data

Summary: No routine groundwater monitoring and sampling activities were conducted during Fourth Quarter 2013.

DISCUSSION:

The most recent groundwater monitoring/sampling occurred during the Third Quarter of 2013, the results of which are contained within the Q3 QWM Report. The scope of work outlined in the Work Plan Addendum was carried out in late December 2013, carrying over into the first quarter of 2014. A report documenting these field activities is currently underway and will be submitted during the first quarter 2014.

A site location map is presented as Drawing 1 and a groundwater elevation and analytical summary map from the most recent first quarter sampling is provided as Drawing 2.

LIMITATIONS:

The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by TestAmerica Laboratories, Inc. (Irvine, California), and our understanding of ACEH requirements. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of the Atlantic Richfield Company. It is possible that variations in soil or groundwater conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

Drawing 1: Site Location Map

Drawing 2: Groundwater Elevation Contours and Analytical Summary Map, September 4, 2013

LIST OF COMMONLY USED ACRONYMS/ABBREVIATIONS:

ACEH:	Alameda County Environmental Health	ft/ft:	feet per foot
Broadbent:	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

DRAWINGS

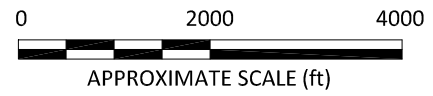
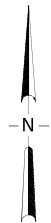
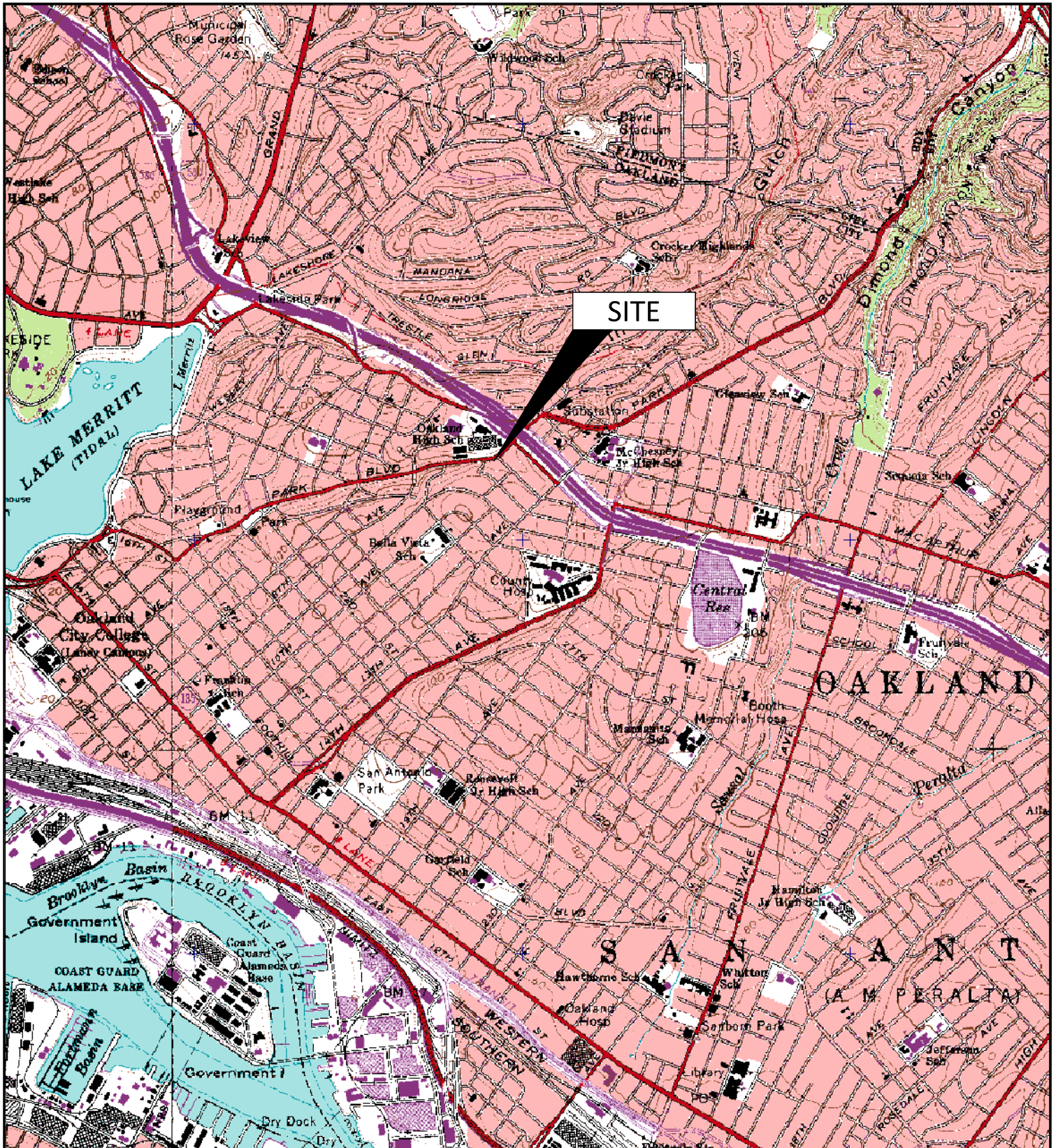


IMAGE SOURCE: USGS



1370 Ridgewood Dr., Suite 5
Chico, California 95973

Project No.: 06-88-614 Date: 10/08/2013

Station No.2107
3310 Park Boulevard
Oakland, California

Site Location Map

Drawing

1

Oakland High School

MW-13A	MW-13B
111.81	111.83
<50	<50
<0.50	<0.50
51	62
SA(1,3)	SA(1,3)

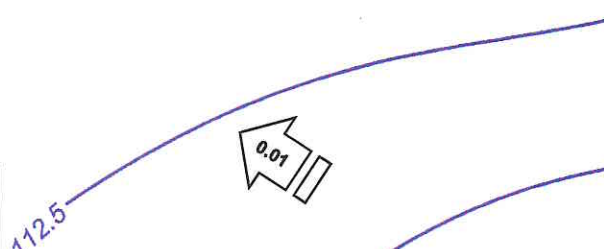
MW-12A
111.96
<50
<0.50
17
SA(1,3)

MW-12B
111.98
<50
<0.50
34
SA(1,3)

Sidewalk

PARK BLVD.

E. 34th ST.



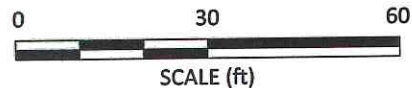
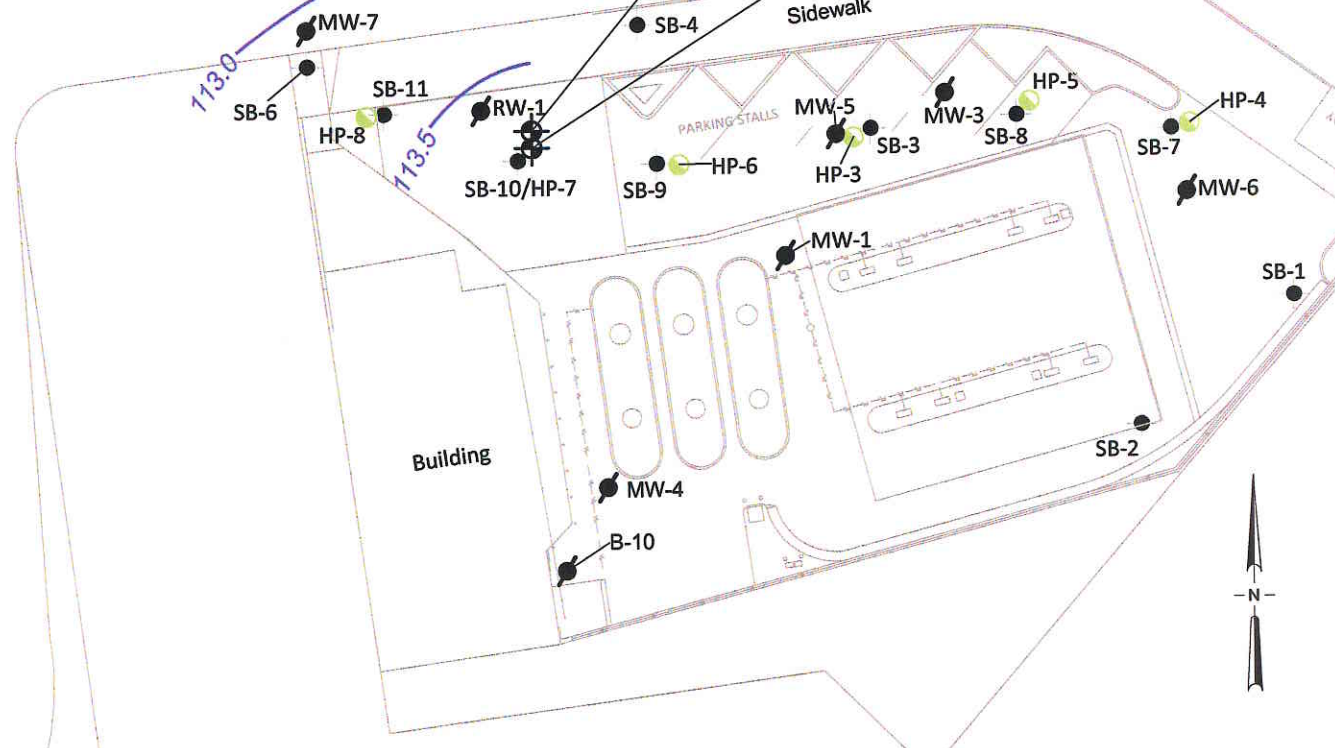
LEGEND

- Monitor Well Location
- Hydro Punch Location
- Soil Boring Location
- Hydropunch and Soil Boring Location
- Destroyed Well Location
- * Not Included in Contouring
- Groundwater Elevation Contour (Feet Above Site Datum)
- Approximate Groundwater Gradient (ft/ft)
- SA(1,3) Sampled Semi-Annually, 1st and 3rd Quarter

WELL	Well Designation
ELEV	Groundwater Elevation (ft)
GRO	GRO, Benzene, and MTBE Concentrations (µg/L)
BZ	
MTBE	
Q	Sampling Frequency

< Not Detected at or Above Laboratory Reporting Limits

33rd St.



BROADBENT
 1370 Ridgewood Dr., Suite 5
 Chico, California 95973
 Project No.: 06-88-614 Date: 4/16/2013

Station #2107
 3310 Park Boulevard
 Oakland, California

Groundwater Elevation Contour and
 Analytical Summary Map
 September 4, 2013

Drawing
2