

Atlantic Richfield Company

Shannon Couch
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April 30, 2013

RECEIVED

By Alameda County Environmental Health at 10:44 am, May 01, 2013

Re: First Quarter 2013 Status Report
Atlantic Richfield Company Station #6113
785 East Stanley Boulevard, Livermore, California
ACEH Case #RO0000393

"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
Project Manager

Attachment



FIRST QUARTER 2013 STATUS REPORT
Atlantic Richfield Company Station #6113
785 East Stanley Blvd.
Livermore, Alameda County, California

Prepared for:

Ms. Shannon Couch
Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583

Prepared by:

Broadbent & Associates, Inc.
1370 Ridgewood Drive, Suite 5
Chico, California 95973
(530) 566-1400

April 30, 2013

No. 06-82-637



BROADBENT

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CREATING SOLUTIONS. BUILDING TRUST.

April 30, 2013

Project No. 06-82-637

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

Attn.: Ms. Shannon Couch

Re: First Quarter 2013 Status Report, Atlantic Richfield Company Station #6113
785 East Stanley Blvd, Livermore, California; ACEH Case #RO0000393

Dear Ms. Couch:

Provided herein is the *First Quarter 2013 Status Report* for Atlantic Richfield Company (a BP affiliated company) Station #6113 located at 785 East Stanley Blvd., Livermore, Alameda County, California (Site). This report presents a summary of current developments regarding the Site through the First Quarter 2013.

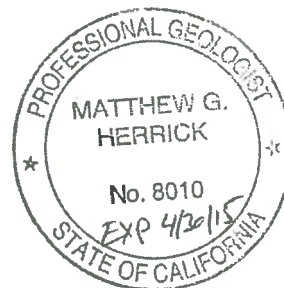
Should you have questions regarding this submission, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Jason Duda
Project Scientist

Matthew G. Herrick, P.G., C.H.G.
Senior Hydrogeologist



Enclosures

cc: Mr. Jerry Wickham, ACEH (Submitted via ACEH ftp Site)
Mr. Paul M. Smith/Ms. Danielle Stefani, Livermore-Pleasanton Fire Department
(submitted via GeoTracker)
Electronic copy uploaded to GeoTracker

**FIRST QUARTER 2013
STATUS REPORT
STATION #6113, LIVERMORE, CA**

Broadbent & Associates, Inc. (Broadbent) is pleased to present this *First Quarter 2013 Status Report* on behalf of Atlantic Richfield Company (a BP affiliated company) for Station #6113 located in Livermore, 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:	Station #6113 / 785 East Stanley Boulevard, Livermore, CA
Client Project Manager / Title:	Ms. Shannon Couch / Project Manager
Broadbent Contact:	Jason Duda, (530) 566-1400
Broadbent Project No.:	06-82-637
Primary Regulatory Agency / ID No.:	ACEH, Case #RO0000393
Current phase of project:	Monitoring / Remedial Well Installation / Remedial Pilot Testing
List of Acronyms / Abbreviations:	See end of report text for list of acronyms/abbreviations used in report.

WORK PERFORMED THIS QUARTER (First Quarter 2013):

1. Prepared and submitted the *Fourth Quarter 2012 Semi-Annual Groundwater Monitoring Report* (Broadbent, 1/11/2013).
2. Conducted underground utility surveying on February 11, 2013.
3. Attempted installation of remedial well on February 25 and March 29, 2013.

WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2013):

1. Conducted semi-annual groundwater monitoring/sampling for Second Quarter 2013 including collection of samples for geochemical analyses on April 9 and 10, 2013.
2. Conducted additional underground utility survey for potential remedial well location on April 26, 2013.
3. Prepared and submitted this *First Quarter 2013 Status Report* (contained herein).
4. Attempt to install on-Site remedial well and potentially conduct on-Site dual phase extraction (DPE) pilot test.

GROUNDWATER MONITORING PLAN SUMMARY:

Groundwater level gauging:	MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, RMW-13, VW-1, VW-2, and VW-4	(2Q & 4Q)
Groundwater sample collection:	MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, RMW-13, VW-1, VW-2, and VW-4	(2Q & 4Q)
Biodegradation indicator parameter monitoring:	NA	

DISCUSSION:

For reference, a Site Location Map is provided as Drawing 1. Provided as Drawing 2 is the Groundwater Elevation Contour and Analytical Summary Map from the *Fourth Quarter 2012 Semi-Annual Groundwater Monitoring Report* (Broadbent, 1/11/2013) for groundwater monitoring/sampling conducted on December 14, 2012. The next semi-annual groundwater monitoring and sampling event is scheduled to be conducted during the Second Quarter 2013.

The *Addendum Work Plan for Installation of Remedial Well, Collection of Geochemical Samples, and Completion of a Mobile Dual-Phase Extraction Event* dated September 12, 2012 was approved by ACEH in a letter dated October 22, 2012. As previously discussed, several attempts were made to install the additional remedial well on-Site during First Quarter 2013. However, due to the presence of a minimum of eight feet of pea gravel at the chosen location, well installation activities were terminated. Based on the results of an additional underground utility survey conducted on April 26, 2013 beneath the fuel dispenser canopy, remedial well installation activities will be attempted in between the fuel islands and further from the existing UST basin. It is anticipated that DPE pilot testing activities will commence following one more attempt to install the remedial well. Due to the complications with remedial well installation, an extension of the current deadline of May 31, 2013 for report submittal will likely be needed.

ATTACHMENTS:

- Drawing 1 Site Location Map, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Drawing 2. Groundwater Elevation Contour and Analytical Summary Map, December 14, 2012,
Station #6113, 785 East Stanley Boulevard, Livermore, California

LIST OF COMMONLY USED ACCRONYMS/ABBREVIATIONS:

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

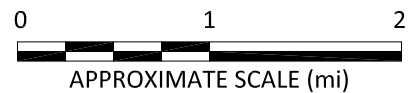
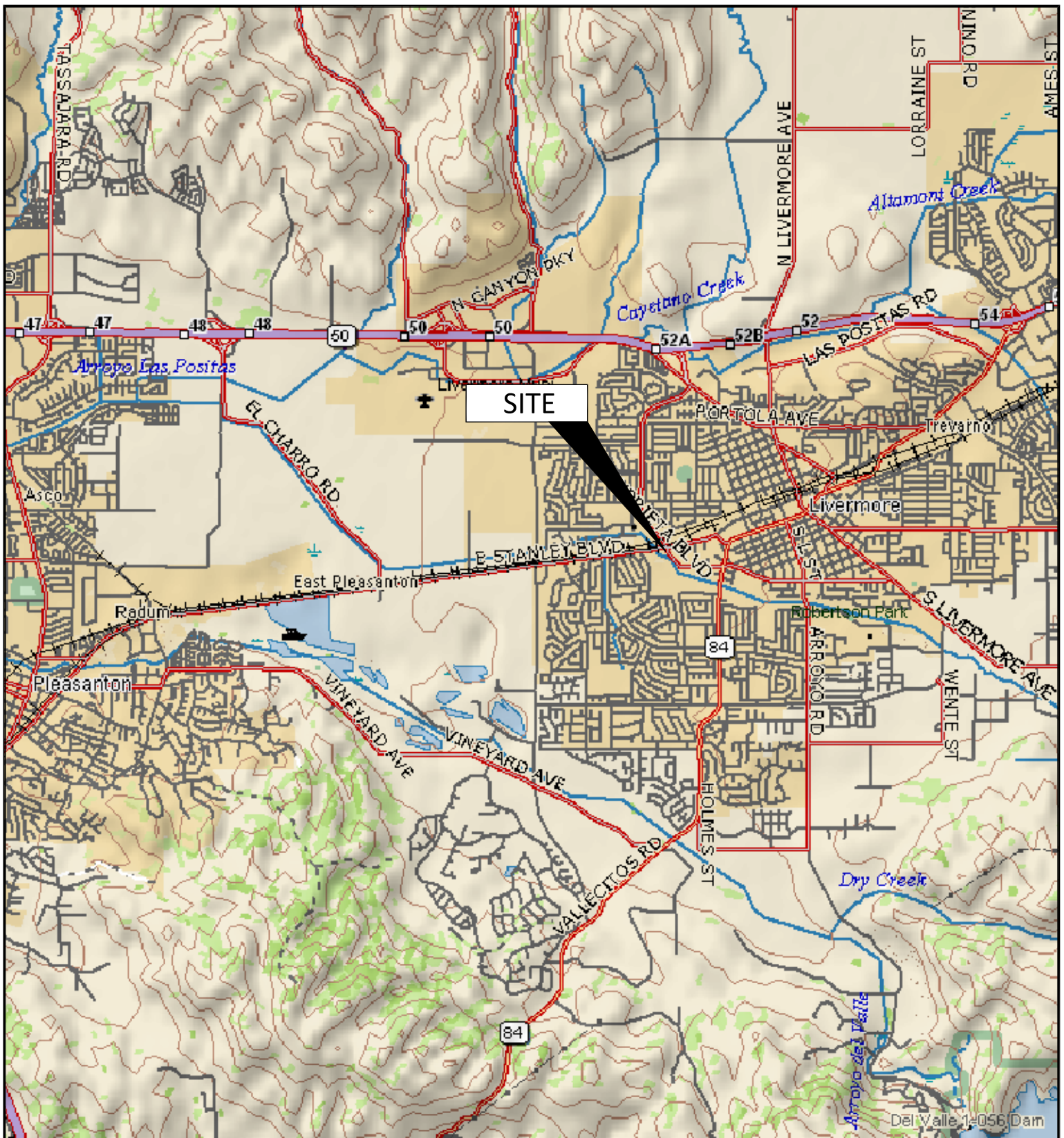


IMAGE SOURCE: DELORME



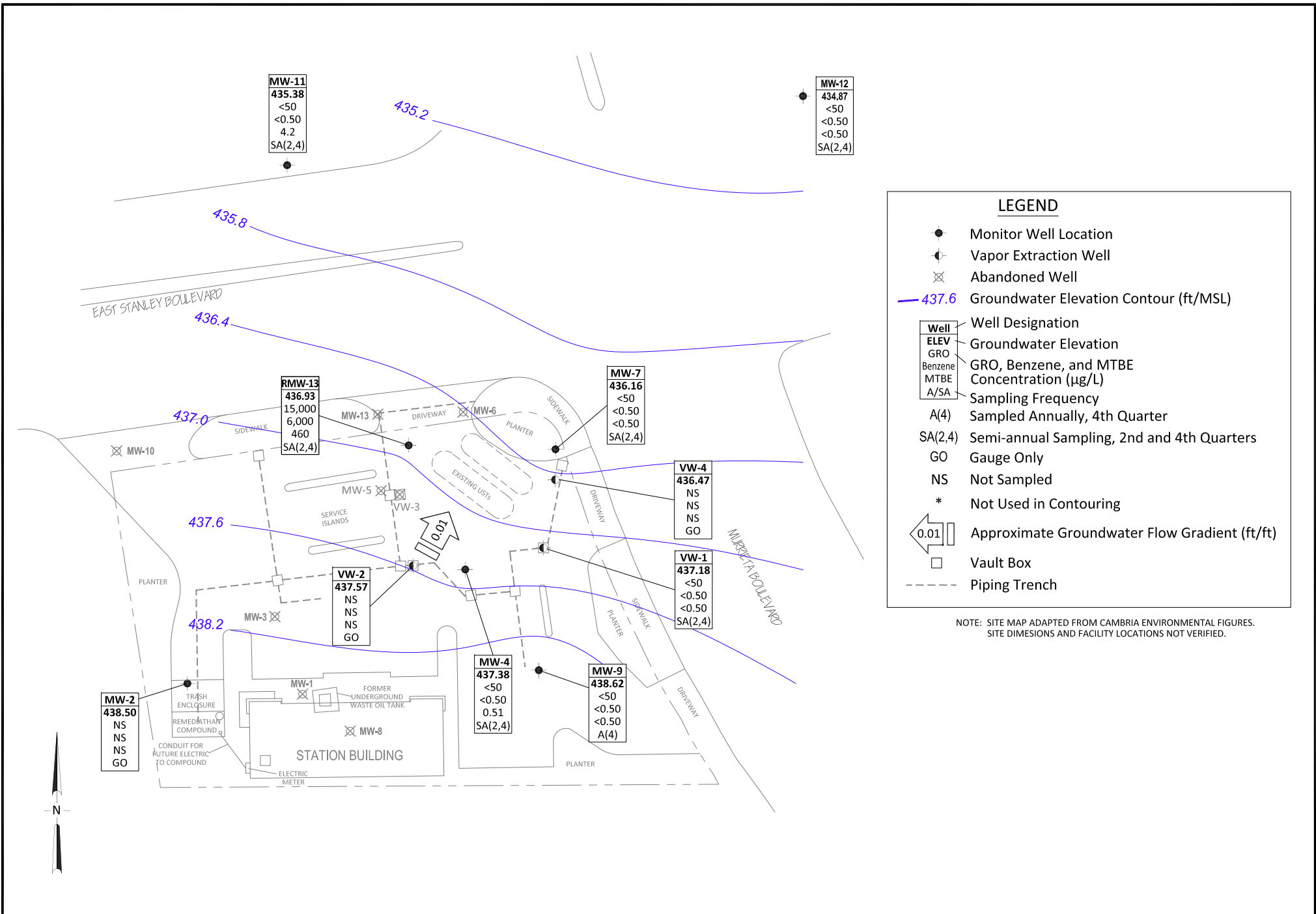
1370 Ridgewood Dr., Suite 5
Chico, California 95973
Project No.: 06-82-637 Date: 12/4/2012

Station #6113
785 East Stanley Boulevard
Livermore, California

Site Location Map

Drawing

1



LEGEND

- Monitor Well Location
- ⊕ Vapor Extraction Well
- ⊗ Abandoned Well
- 437.6 Groundwater Elevation Contour (ft/MSL)

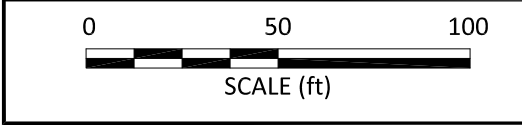
Well	Well Designation
ELEV	Groundwater Elevation
GRO	GRO, Benzene, and MTBE Concentration (µg/L)
Benzene	
MTBE	
A/SA	Sampling Frequency
A(4)	Sampled Annually, 4th Quarter
SA(2,4)	Semi-annual Sampling, 2nd and 4th Quarters
GO	Gauge Only
NS	Not Sampled
*	Not Used in Contouring

← 0.01 Approximate Groundwater Flow Gradient (ft/ft)

□ Vault Box

- - - Piping Trench

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.




BROADBENT
 1370 Ridgewood Dr., Suite 5
 Chico, California 95973
 Project No.: 06-82-637 Date: 1/4/2013

Station #6113
 785 East Stanley Boulevard
 Livermore, California

Groundwater Elevation Contour
 and Analytical Summary Map
 October 10, 2012

Drawing
2