

Atlantic Richfield Company

Chuck Carmel
Remediation Management Project Manager

RECEIVED

By Alameda County Environmental Health at 2:02 pm, Nov 06, 2014

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

November 4, 2014

Re: Well Destruction Report
Former Richfield Oil Company Station No. 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,



Chuck Carmel
Remediation Management Project Manager

Attachment



**WELL DESTRUCTION REPORT
Atlantic Richfield Company Station No. 472
6415 International Boulevard
Oakland, Alameda County, California**

Prepared for:

Mr. Chuck Carmel
Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583

Prepared by:

Broadbent & Associates, Inc.
4820 Business Center Drive, Suite 110
Fairfield, California 94534
(707) 455-7290

November 4, 2014

Project No. 09-88-601



BROADBENT

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

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

broadbentinc.com

CREATING SOLUTIONS. BUILDING TRUST.

November 4, 2014

Project No. 09-88-601

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

Attn.: Mr. Chuck Carmel

Re: Well Destruction Report, Atlantic Richfield Company Station No. 472
6415 International Boulevard, Oakland, Alameda County, California
ACEH Case No. RO0002982

Dear Mr. Carmel:

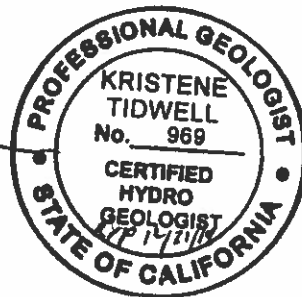
Broadbent & Associates, Inc. (Broadbent) is pleased to submit this *Well Destruction Report (Report)* for Atlantic Richfield Company Station No. 472 located at 6415 International Boulevard, Oakland, California (Site). This Report documents the permanent decommissioning of three groundwater monitoring wells. These activities were carried out in accordance with the Alameda County Environmental Health Agency's directive letter dated March 11, 2014.

Should you have questions or require additional information, please do not hesitate to contact us at (707) 455-7290.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Kristene Tidwell, P.G., C.H.G.
Associate Hydrogeologist



Enclosures

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

TABLE OF CONTENTS

<u>No.</u>	<u>Section</u>	<u>Page</u>
1.0	Introduction	1
2.0	Site Background	1
3.0	Field Activities Performed	1
3.1	Preliminary Field Activities	1
3.2	Well Destruction Activities	2
3.3	Excess Soil Produced	2
4.0	Conclusions & Recommendations.....	2
5.0	Limitations.....	2

DRAWINGS

Drawing 1	Site Location Map
Drawing 2	Well Destruction Location Map

APPENDICES

Appendix A	Regulatory Correspondence
Appendix B	Detailed Site History
Appendix C	Permits
Appendix D	Utility Clearance Survey

WELL DESTRUCTION REPORT
Atlantic Richfield Company Station No. 472
6415 International Boulevard, Oakland, California
ACEH Case #RO0002982

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM (a BP affiliated company) Broadbent & Associates, Inc. (Broadbent) has prepared this *Well Destruction Report* (Report) documenting case closure activities at Atlantic Richfield Company Station No. 472, located at 6415 International Boulevard, Oakland, California (Site). Case Closure was recommended by Alameda County Environmental Health (ACEH) in their March 11, 2014 *Well Decommissioning Letter* (Appendix A). This Report presents details of the field activities performed.

2.0 SITE BACKGROUND

The Site is located at 6415 International Boulevard, Oakland, California. It is a former ARCO-brand gasoline station (former Station No. 472). The Site is currently being used as a storage lot for used cars for an adjacent operating lot. Previously, a liquor store was operated onsite, and the building from this operation is still present. The Site is generally asphalt or concrete. A Site location map is included as Drawing 1. A Site Plan depicting current building, UST, and, well locations is presented as Drawing 2.

The Site is bound by International Boulevard to the northeast, 64th Avenue to the northwest, and commercial and residential buildings to the south. The property across 64th Avenue to the northwest is a car wash. The property to the southeast is a Little Caesars restaurant. Across International Blvd. to the north of the Site is a McDonald's restaurant. To the southwest, and adjacent to the Site, are single-family residences.

The Site operated as a gasoline fueling station between 1947 to at least 1971. The fueling station features including the USTs and dispensers were removed in 1976. A detailed Site history is included in Appendix B.

3.0 FIELD ACTIVITIES PERFORMED

On October 30, 2014, Broadbent oversaw Cascade Drilling, pressure grout monitoring wells MW-1 through MW-3. The top two feet of well casing was also removed from each well following completion of pressure grouting. A Site map depicting abandoned well locations is provided as Drawing 2.

3.1 Preliminary Field Activities

Necessary permits from Alameda County Public Works Agency (ACPWA) were secured prior to performing the field investigation. Copies of these permits are included in Appendix C. All borings were marked and areas were outlined with white spray paint, and an Underground Service Alert (USA) ticket was secured to notify all member utility companies of the planned field activities. Additionally, all boring locations were cleared for underground utilities by NORCAL Geophysical Consultants, Inc. (NORCAL) on September 19, 2014. NORCAL's survey report is included in Appendix D.

3.2 Well Destruction Activities

On October 30, 2014, monitoring wells MW -1 through MW-3 were destroyed by pressure grouting. Following completion of pressure grouting, the top two feet of each well casing was removed and the surface was finished to match the existing ground. On April 21 through 24, 2014, Cornerstone Environmental Contractors, Inc. removed all well boxes/vaults and completed surfaces to match existing. Each well was destroyed in accordance with ACPWA requirements. California Department of Water Resources Well Completion Reports have been completed, but are not published in this Report due to confidentiality of the records.

3.3 Excess Soil Produced

No soil was produced during well destruction activities.

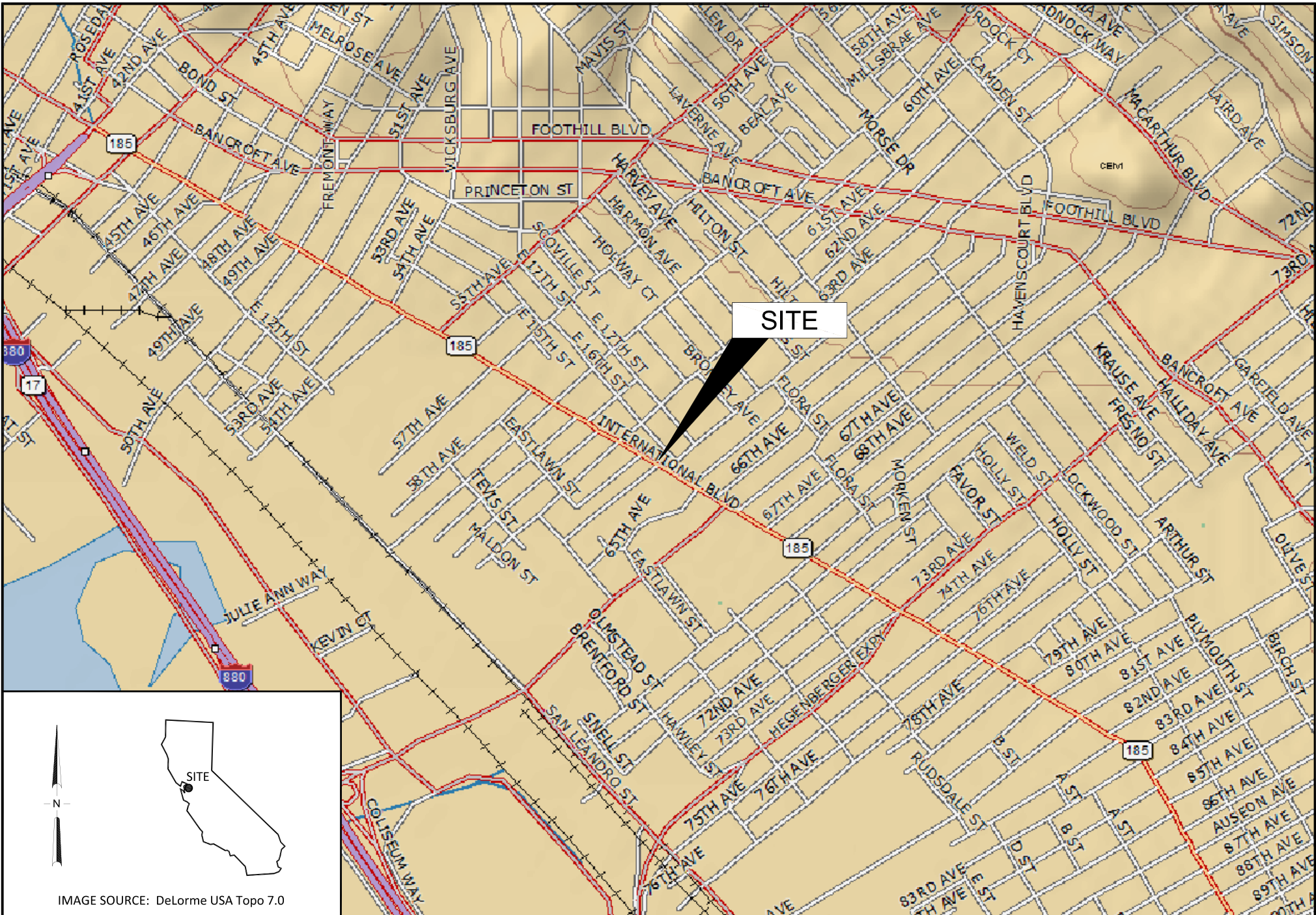
4.0 CONCLUSIONS & RECOMMENDATIONS

Monitoring, groundwater extraction, soil vapor extracion and soil vapor probes wells were abandoned in general accordance ACPWA monitoring well destruction requirements. Well abandonment work activities complete the Site case closure process. No further actions are recommended. We anticipate that following submittal of this report, Atlantic Richfield Company will be issued a "Remedial Action Completion Certificate."

5.0 LIMITATIONS

This document has been prepared for the exclusive use of Atlantic Richfield Company. The findings presented in this report are based upon the observations of Broadbent field personnel. Services were performed in accordance with the generally accepted standard of practice at the time this report was written. No warranty, expressed or implied, is intended.

DRAWINGS



SITE

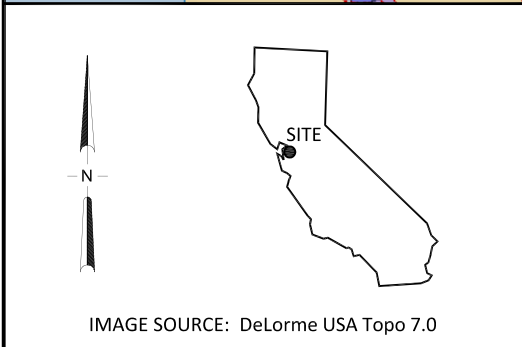
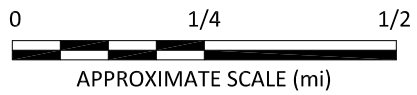


IMAGE SOURCE: DeLorme USA Topo 7.0



BROADBENT
1370 Ridgewood Dr., Suite 5
Chico, California 95973
Project No.: 09-88-601 Date: 4/2/2013



Former Station #472
6415 International Boulevard
Oakland, California

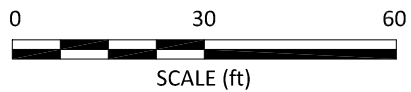
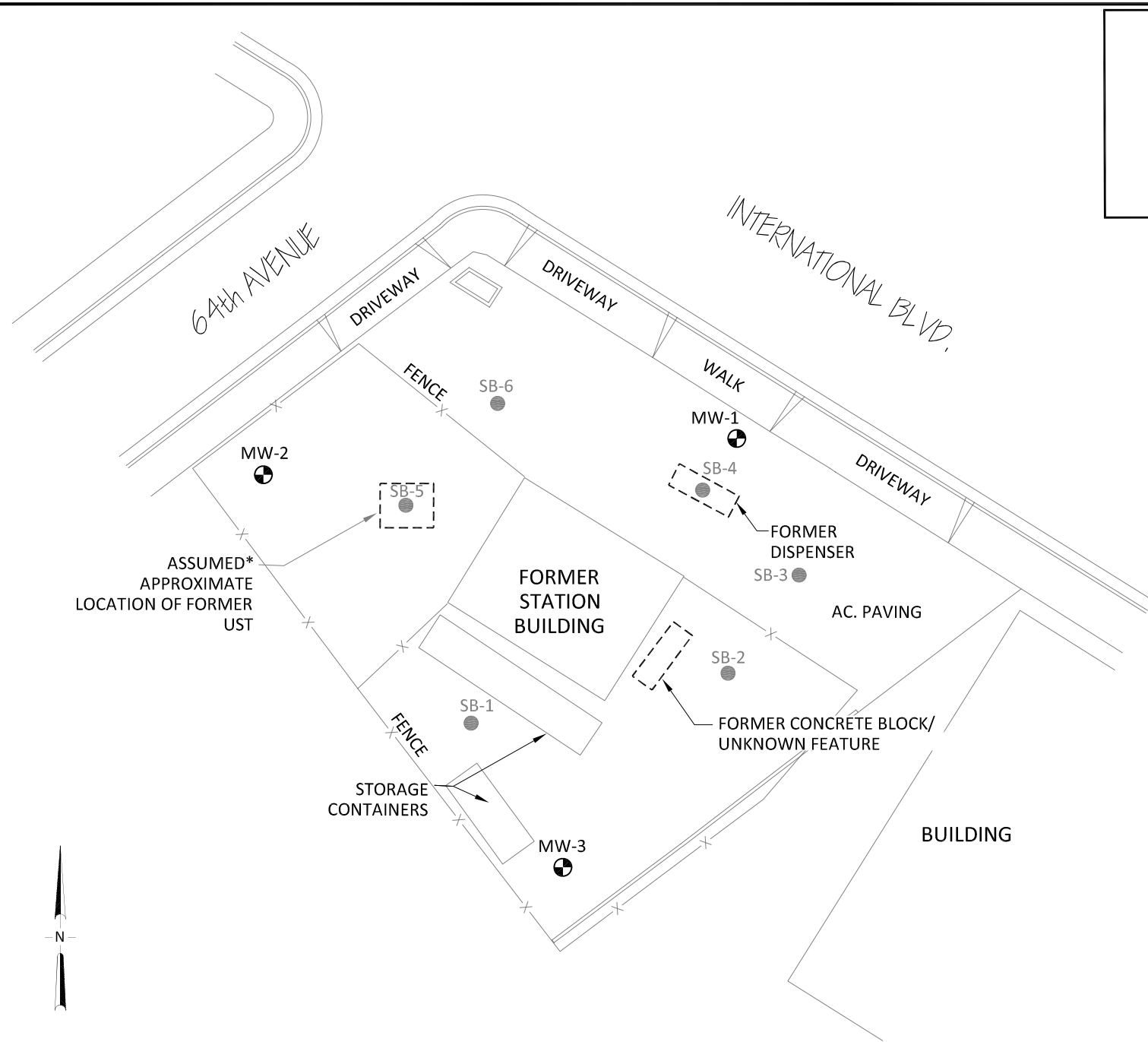
Site Location Map

Drawing

1

LEGEND

-  Destroyed Monitoring Well Location
-  Soil Boring
- * The Exact Location of The Former UST Has Not Been Established



Project No.: 09-88-601 Date: 10/014/2014

ARCO Former Station No 472
6415 International Boulevard
Oakland, California

Well Destruction Location Map

Drawing

2

APPENDIX A

REGULATORY CORRESPONDENCE



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

October 24, 2014

Chuck Carmel
(Sent via E-mail to: charles.carmel@bp.com)
Atlantic Richfield Company
(A BP Affiliated Company)
P.O. Box 1257
San Ramon, CA 94583

International Estates
6207 International Blvd.
Oakland, CA 94621-3823
Attn: Mahmud Ghanem

Tracey Campbell
(Sent via E-mail to: tracebell@aol.com)
307 W. Fairview Blvd
Inglewood, CA 90302

Jeanne Shepherd
Heirs of Estate
1722 Virginia Road
Los Angeles, CA 90012

Jaleeza Hazzard
(Sent via E-mail to: jaleesahazzard@gmail.com)
1722 Virginia Road
Los Angeles, CA 90012

Fabian A. Labat, Jr.
William C. Dixon
Address Unknown

Plucky Inc.
6415 International Blvd
Oakland, CA 94621

James J. Weiss
Address Unknown

Subject: Fuel Leak Case No. RO0002982 (GeoTracker Global ID T10000000417), ARCO #472 / Plucky Liquors, 6415 International Boulevard, Oakland, CA 94621

Dear Responsible Parties:

The public comment period for the subject site ended on October 21, 2014. No comments were received by Alameda County Environmental Health (ACEH).

You are free to proceed with the destruction of all wells associated with the site (groundwater, vapor, etc), as requested in the attached August 15, 2014 letter from ACEH. As requested in the letter, please contact the Alameda County Public Works Agency to obtain well destruction permits. Following the well destruction, please provide ACEH a well destruction report according to the schedule outlined below. The well destruction report should document site activities, provide well destruction permit documentation, and documentation indicating that any remaining investigation, remediation, and well destruction derived waste have been removed from the site

TECHNICAL REPORT REQUEST

Please submit reports to Alameda County Environmental Health (Attention: Keith Nowell), and upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **December 29, 2014 – Well Destruction Report** - File to be named RO2982_WELL_DCM_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Should you have any questions, please contact me at (510) 567--6764 or send me an electronic mail message at keith.nowell@acgov.org.

If your email address does not appear on the cover page of this notification ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,

Keith Nowell, PG, CHG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations and Electronic Report Upload (ftp) Instructions

Attachment 2 – ACEH Directive Letter dated August 15, 2014

cc: Kristene Tidwell, Broadbent & Associates, Inc., Suite G, 875 Cotting Lane, Vacaville, CA (*Sent via E-mail to: Ktidwell@broadbentinc.com*)

Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Dilan Roe, ACEH, (sent via e-mail to dilan.roe@acgov.org)
Keith Nowell, ACEH, (sent via e-mail keith.nowell@acgov.org)
Geotracker, Electronic File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

ATTACHMENT 2

ACEH Directive Letter dated August 15, 2014

Nowell, Keith, Env. Health

From: Nowell, Keith, Env. Health
Sent: Friday, August 15, 2014 1:05 PM
To: Ktidwell@broadbentinc.com
Cc: 'charles.carmel@bp.com'; Roe, Dilan, Env. Health
Subject: Fuel leak case RO2982 - BP #472 - ARCO #472/ Plucky Liquors

Kristine,

The public notification fact sheet for the subject fuel leak case was mailed yesterday, dated August 18th for the beginning of the 60-day notification period.

Request for Monitoring Well Destruction Scheduling

As part of an attempt to expedite closures, and with the recognition that coordination of well decommissioning is a long lead item, ACEH requests that you schedule well decommissioning for approximately two weeks after closure of the public comment period for the site, ending on October 17, 2014. Please contact the Alameda County Public Works Agency at 510.567.6791 or online, to obtain the required permits. After written ACEH concurrence (email or other) that there have been no comments, you would be free to proceed with well decommissioning. Should there be public comments, then there would be sufficient time to cancel (and / or reschedule) the date and not incur a cost from the drilling company. Please provide notification to ACEH by the date identified below, that you have contracted a licensed drilling contractor for the decommissioning of all remaining wells at the site.

Technical Report Request

Please upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **September 19, 2014 – CONFIRMATION OF SCHEDULED WELL DECOMMISSIONING** (file name: RO0002982_CORRES_L_yyyy-mm-dd)

Thank you for your cooperation. ACEH looks forward to working to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org. Regards,

Keith

Keith Nowell PG, CHG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540
phone: 510 / 567 - 6764
fax: 510 / 337 - 9335
email: keith.nowell@acgov.org

PDF copies of case files can be reviewed/downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

APPENDIX B

DETAILED SITE HISTORY

Summary of Previous Investigations

In 1947, Richfield Oil Company purchased the property for the construction of a service station with completion taking place in 1949. The service station was operated by various Richfield Oil Company dealers from 1949 to 1970. In 1966, two 4,000 gallon and one 6,000 gallon replacement underground storage tanks (USTs) were installed on the property. Richfield Oil Company sold the property in 1971 to the Natrass Corporation. Station features including underground storage tanks (USTs) dispensers, and product lines were removed in 1976

In May 2007, AAI Environmental Corporation (AAI) conducted a Phase I Environmental Site Assessment (ESA) on the property. Work included review of environmental and regulatory databases and site reconnaissance prior to selling the property. AAI reported that one or two USTs were previously removed from the northeast corner of the property prior to 1976, but no soil sampling data or removal report were found to confirm the information given. Sampling and reporting information was likely not required at that time. The AAI site reconnaissance reportedly did not identify potential concerns. However, AAI recommended a limited Phase II Environmental Site Assessment on the property to assess the former presence of the USTs and/or legacy environmental contamination (AAI, 2007).

In April 2008, GEOCON conducted a Limited Phase II Environmental Site investigation on the Site. Work included the advancement of six soil borings (SB-1 through SB-6) down to 31 feet below ground surface (ft bgs) at the locations shown on Drawing 2. Soil samples were collected from each boring and groundwater samples were collected from borings SB-1, SB-2, SB-3 and SB-5. Soil boring SB-1 was drilled on the backside of the property to assess the potential for off-site contaminant migration. Borings SB-2, SB-3, SB-5 and SB-6 were advanced in the area suspected of containing the former USTs. SB-4 was advanced to assess a former pump island. Soil samples from borings SB-1 through SB-6 contained Total Petroleum Hydrocarbons in the Gasoline Range (TPHg) at concentrations up to 95 milligrams per kilogram (mg/kg) (SB-6 at 14 ft bgs), Total Petroleum Hydrocarbons in the Diesel Range (TPHd) at concentrations up to 20 mg/kg (SB-2 at 20 ft bgs), and Total Petroleum Hydrocarbons in the Motor Oil Range (TPHmo) at concentrations up to 51 mg/kg (SB-2 at 20 ft bgs). Grab groundwater samples from borings SB-1, SB-2, SB-3 and SB-5 contained TPHg at concentrations up to 8.1 milligrams per liter (mg/L) (SB-3), TPHd at concentrations up to 7.2 mg/L (SB-3), and TPHmo at concentrations up to 0.18 mg/L (SB-5). No concentrations of Benzene, Toluene, Ethylbenzene, or Xylenes (BTEX) were detected above the laboratory reporting limits in the soil or groundwater samples collected (GEOCON, 2008).

In a letter dated January 29, 2009, ACEH requested completion of an Unauthorized Release Report (URR), and soil and groundwater investigation work plan. A URR was submitted to ACEH on February 20, 2009. A work plan for a soil and groundwater investigation was submitted to ACEH on March 30, 2009. In a letter dated April 16, 2009, ACEH requested an addendum work plan. An addendum work plan for a soil and groundwater investigation was submitted to ACEH on May 28, 2009. In a letter dated June 11, 2009, ACEH approved the addendum work plan. Broadbent and Associates, inc. (Broadbent) submitted the *Revised Soil & Ground-Water Investigation with Third Quarter 2009 Ground-Water Monitoring Report* detailing the installation of three groundwater monitoring wells on November 17, 2009. No petroleum hydrocarbons were detected in the 20 soil samples collected during monitoring well installation activities with the exception of one sample containing Gasoline Range Organics (GRO), which was detected at a concentration of 0.87 mg/kg in boring MW-1 at 14.5 ft bgs.

Broadbent conducted quarterly groundwater monitoring and sampling from the Third Quarter of 2009 to the Second Quarter of 2010. With the concurrence of ACEH, Broadbent switched to semi-annual monitoring and sampling in the First Quarter of 2011. Low concentrations of Diesel Range Organics (DRO) and GRO have been generally stable or decreasing in wells since initial sampling. The highest GRO concentration was found in well MW-1 at 1,000 micrograms per liter ($\mu\text{g/L}$, parts per billion, ppb) during the Third Quarter 2010 sampling event. The highest DRO concentration was detected in well MW-3 during the First Quarter 2013 sampling event at 95 $\mu\text{g/L}$. BTEX and MTBE have not been detected in any of the groundwater samples with the exception of a concentration of 1.2 $\mu\text{g/L}$ of Toluene in well MW-3 (third quarter 2009) and 0.54 $\mu\text{g/L}$ of MTBE in well MW-1 (Third Quarter 2009).

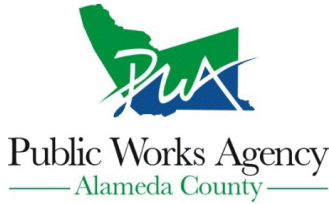
References

- AAI, May 9, 2007. *Phase I Environmental Site Assessment Report, Former Gasoline Station Plucky's Liquors, 6415 International Boulevard, Oakland, California*. Prepared for Mr. Marcelo Bermudez, Freeman.
- Broadbent & Associates, Inc., February 20, 2009. *Underground Storage Tank Unauthorized Release (Leak)/ Contamination Site Report, Atlantic Richfield Company Station No. 472, 6415 International Boulevard, Oakland, CA, ACEH Case No. RO0002982*.
- Broadbent & Associates, Inc., November 17, 2009. *Revised Soil & Ground-Water Investigation and Third Quarter 2009 Ground-Water Monitoring Report, For Former Atlantic Richfield Company Station No. 472, 6415 International Boulevard, Oakland, CA, ACEH Case No. RO0002982*.
- Broadbent & Associates, Inc., November 28, 2011. *Case Evaluation and Justification for No Further Action, Former Atlantic Richfield Company Station No. 472, 6415 International Boulevard, Oakland, CA, ACEH Case No. RO0002982*.
- Broadbent & Associates, Inc., April 26, 2013. *First Quarter 2013 Monitoring Report, Former Richfield Oil Company Station #472, 6415 International Boulevard, Oakland; ACEH Case #RO0002982*.
- GEOCON, May 7, 2008. *Limited Soil and Grab Groundwater Sampling Report, Plucky's Liquors/ Former Gasoline Station, 6415 International Boulevard, Oakland, California*. Prepared for Ms. Holly Moore, DGC Associates.

APPENDIX C

PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 10/28/2014 By jamesy

Permit Numbers: W2014-0990 to W2014-0992
Permits Valid from 10/30/2014 to 10/30/2014

Application Id: 1411153794234
Site Location: 6414 International Blvd
Project Start Date: 10/30/2014
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site:Oakland

Completion Date:10/30/2014

Applicant: Broadbent - Lu Damerell
4820 Business Center Drive #110, Fairfield, CA 94534
Property Owner: Chuck Carmel
PO Box 1257, San Ramon, CA 94583
Client: Chuck Carmel
PO Box 1257, San Ramon, CA 94583

Phone: 510-364-2079

Phone: --

Phone: --

Total Due: \$1191.00
Total Amount Paid: \$1191.00
Payer Name : Broadbent & Associates, Inc. Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 3 Wells
Driller: Cascade - Lic #: 938110 - Method: press

Work Total: \$1191.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2014-0990	10/28/2014	01/28/2015	MW-1	12.00 in.	4.00 in.	5.00 ft	17.00 ft	No Records	No Records	No Records
W2014-0991	10/28/2014	01/28/2015	MW-2	12.00 in.	4.00 in.	5.00 ft	17.00 ft	No Records	No Records	No Records
W2014-0992	10/28/2014	01/28/2015	MW-3	12.00 in.	4.00 in.	5.00 ft	17.00 ft	No Records	No Records	No Records

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

Alameda County Public Works Agency - Water Resources Well Permit

4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

APPENDIX D

UTILITY CLEARANCE SURVEY

NORCAL Geophysical Consultants, Inc.

321A Blodgett Street

Cotati, CA 94931

707-796-7170

DAILY FIELD REPORT/LIMITATIONS

Date: 9-19-14 Personnel: TWB NORCAL Job #: 14-1034.34

Client/Location: BROADBENT / OAKLAND

Equipment: GPR, EMIL

Description: LOCATE ALL DETECTABLE UTILITIES FOR PROPOSED WELL DESTRUCTIONS

TIME	NOTES
0845	ARRIVE @ OFFICE - MOB VEHICLE AND EQUIPMENT
0900	DEPART FOR SITE - 6415 INTERNATIONAL BLVD. OAKLAND, CA
1015	ARRIVE ON SITE - STANDBY FOR CLIENT
1040	MEET w/ CLIENT - LU DAMERELL OF BROADBENT SAFETY TAILGATE, REVIEW SITE/SCOPE OF WORK
1100	SETUP EQUIPMENT - BEGIN UTILITY MARKOUT CLEAR 3 LOCATIONS FOR WELL DESTRUCTION: MW-1 ; MW-2 ; MW-3
1240	WPA? SURVEY - BEGIN MAPPING Pack up? EQUIPMENT
1330	LEAVE SITE

* NOTE: SANITARY SEWER NOT DETECTED - POSSIBLY IN PROXIMITY OF MW-1

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL cannot assume liability in the event that utilities or other subsurface features are not detected.

FIELD DAY SUMMARY

Signature: [Handwritten Signature] Print: TRAVIS BLACK NORCAL Representative

Signature: [Handwritten Signature] Print: LU DAMERELL Client Representative

LIMITATIONS

EMLL

The detection of underground utilities is dependent upon the composition and construction of the line of interest, as well as depth. Standard line locating techniques (EMLL) and ground penetrating radar (GPR) are typically used in conjunction with each other to detect various utilities. Utilities detectable with standard line location techniques include any continuously connected metal pipes, cables/wires or utilities with tracer wires. Unless carrying a passive current these utilities must be exposed at the surface or in accessible utility vaults in close proximity to the survey area. These generally include water, electric, natural gas, telephone, and other conduits related to facility operations. Utilities that may not be detectable using standard electromagnetic line location techniques include certain abandoned utilities, utilities not exposed at the ground surface, or those made of non-electrically conductive materials such as PVC, fiberglass, vitrified clay, and metal pipes with insulating joints. Pipes generally deeper than about five to seven feet may not be detected.

GPR

Utilities detectable with the GPR technique include both metallic and nonmetallic pipes. The ability to detect these pipes is dependent on site specific conditions. These conditions include depth of burial, the size or diameter of the utility, the condition of the utility in question, the type of backfill material associated with the utility, and the surface conditions over the utility. Typically, the GPR depth of detection will be reduced as the clay content in the subsurface increases. Therefore, it is possible that utilities, buried greater than 2 to about 4 feet, may not be detectable by the GPR technique.

PERSONNEL: TWB

JOB: 14-1034.34

DATE: 9-18-14

CLIENT: BROADBENT & ASSOC.

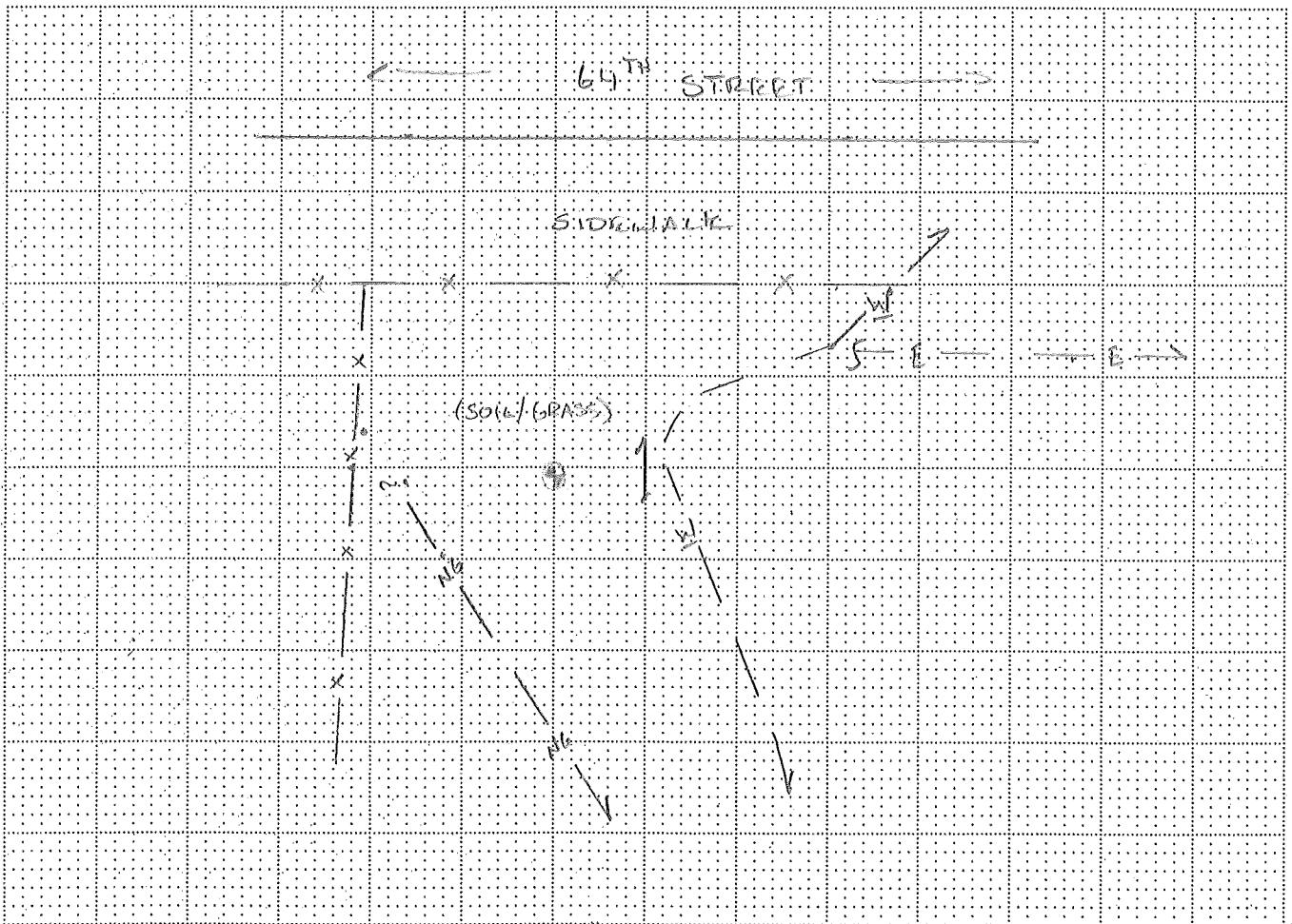
LOCATION: BP472 OAKLAND, CA

NORCAL

GEOPHYSICAL CONSULTANTS INC.



BORING: MW-2



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- Localized GPR Anomaly
- Utility Alignment

Utilities

- T (Telephone, Comm.)
- E (Electric)
- NG (Natural Gas)
- CA (Compressed Air)
- STM (Steam)
- SS (Sanitary Sewer)
- SD (Storm Drain)
- W (Water)
- FS (Fire Suppression)
- UU (Undifferentiated Utility)

Surface

- RC (Reinforced Concrete)
- AC (Asphalt)
- C (Concrete)
- Soil
- Gravel
- other

NOTES

- | | | |
|---|--|---|
| Equipment: | Procedure: | Surface Conditions: |
| <input checked="" type="checkbox"/> GPR (Radar) | <input checked="" type="checkbox"/> EMC (Conduction) | <input type="checkbox"/> Wet |
| <input checked="" type="checkbox"/> RD 400 | <input checked="" type="checkbox"/> EMI (Induction) | <input checked="" type="checkbox"/> Dry |
| <input checked="" type="checkbox"/> M Scope | <input type="checkbox"/> Ambient | <input type="checkbox"/> other |
| <input type="checkbox"/> other | <input checked="" type="checkbox"/> GPR | |

REMARKS



PERSONNEL: TWB

CLIENT: BROADBENT & ASSOC.

JOB: 14-1034.34

DATE: 9-18-14

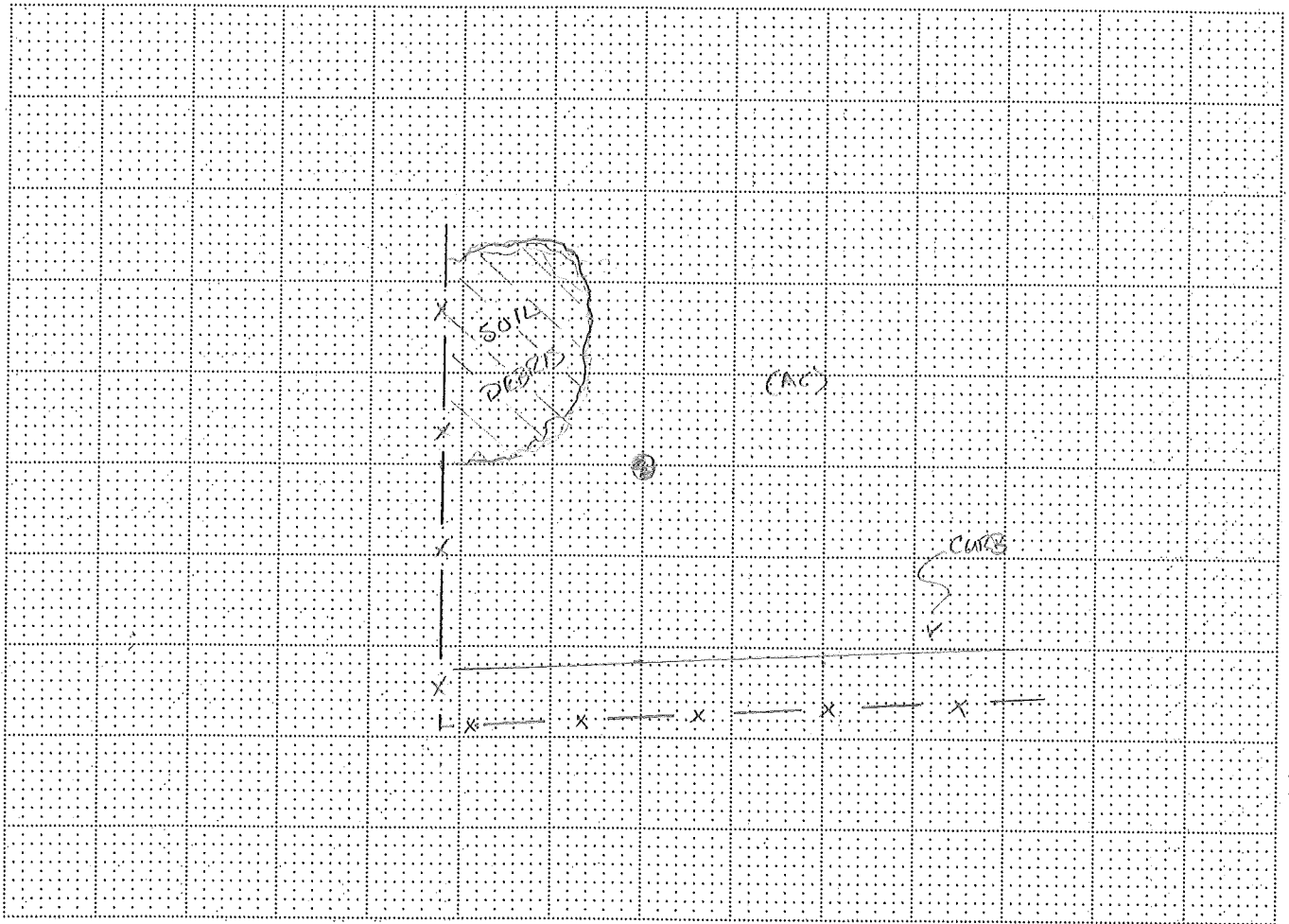
LOCATION: BP472 OAKLAND, CA

NORCAL

GEOPHYSICAL CONSULTANTS INC.



BORING: MW-3



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- Localized GPR Anomaly
- Utility Alignment

Utilities

- T (Telephone, Comm.)
- E (Electric)
- NG (Natural Gas)
- CA (Compressed Air)
- STM (Steam)
- SS (Sanitary Sewer)
- SD (Storm Drain)
- W (Water)
- FS (Fire Suppression)
- UU (Undifferentiated Utility)

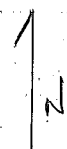
Surface

- RC (Reinforced Concrete)
- AC (Asphalt)
- C (Concrete)
- Soil
- Gravel
- other

NOTES

- | | | |
|---|---|---|
| Equipment: | Procedure: | Surface Conditions: |
| <input checked="" type="checkbox"/> GPR (Radar) | <input type="checkbox"/> EMC (Conduction) | <input type="checkbox"/> Wet |
| <input checked="" type="checkbox"/> RD 400 | <input checked="" type="checkbox"/> EMI (Induction) | <input checked="" type="checkbox"/> Dry |
| <input checked="" type="checkbox"/> M Scope | <input checked="" type="checkbox"/> Ambient | <input type="checkbox"/> other |
| <input type="checkbox"/> other | <input checked="" type="checkbox"/> GPR | |

REMARKS



PERSONNEL: TWB

CLIENT: BROADBENT & ASSOC.

JOB: 14-1034.34

DATE: 9-18-14

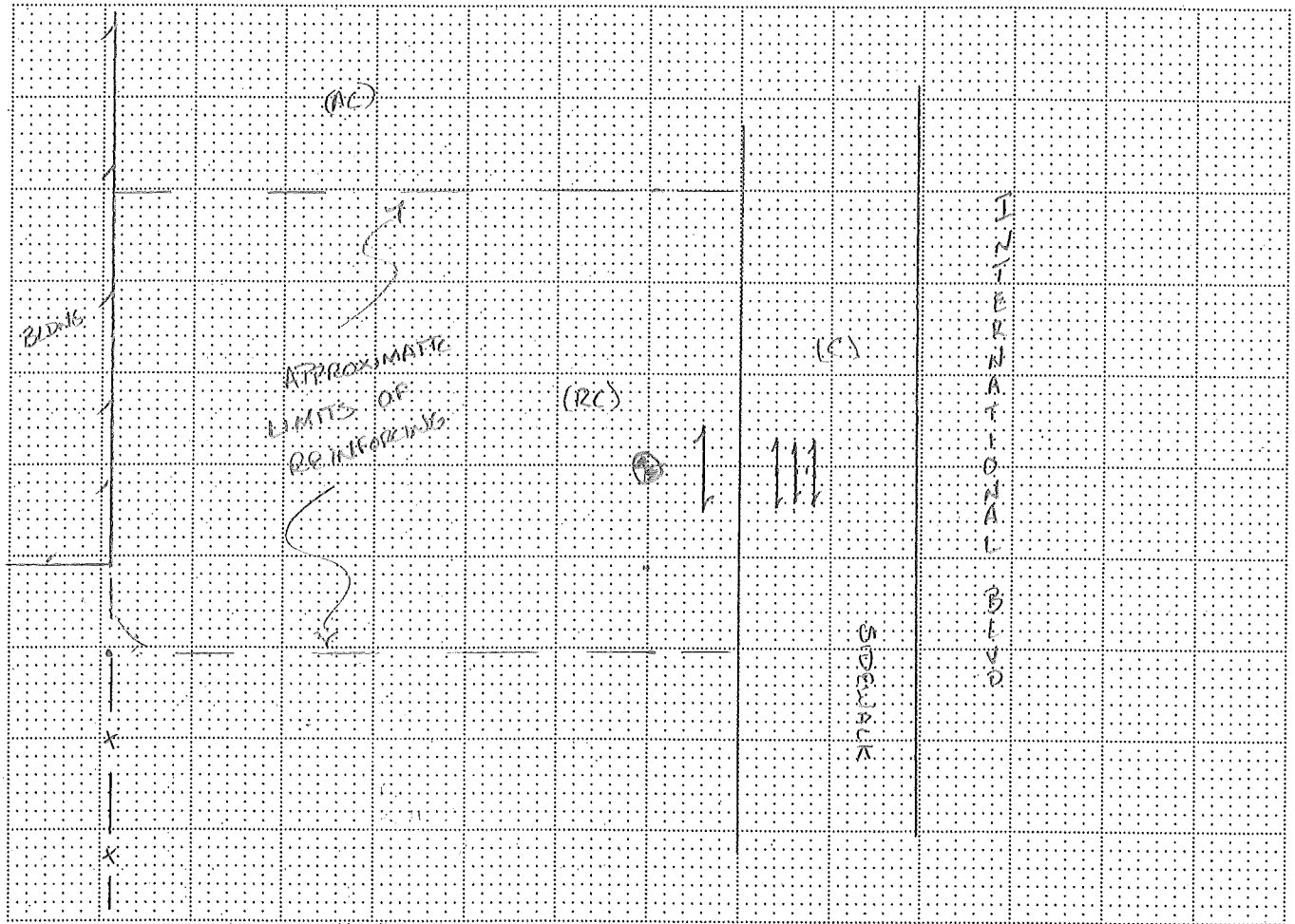
LOCATION: BP 472 OAKLAND, CA

NORCAL

GEOPHYSICAL CONSULTANTS INC.



BORING: MW-1



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- OR ← Localized GPR Anomaly
- - - Utility Alignment

Utilities

- T (Telephone, Comm.)
- E (Electric)
- NG (Natural Gas)
- CA (Compressed Air)
- STM (Steam)
- SS (Sanitary Sewer)
- SD (Storm Drain)
- W (Water)
- FS (Fire Supression)
- UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- AC (Asphalt)
- C (Concrete)
- Soil
- Gravel
- other

NOTES

- | | | |
|---------------|--------------------|---------------------|
| Equipment: | Procedure: | Surface Conditions: |
| ✓ GPR (Radar) | - EMC (Conduction) | - Wet |
| ✓ RD 400 | ✓ EMI (Induction) | ✓ Dry |
| ✓ M Scope | ✓ Ambient | - other |
| - other | ✓ GPR | |

REMARKS

