

Louis Badertscher, 5625 N. Highway 66, Kingman, AZ 86401

May 18, 2015

Mr. Keith Nowell
ACEHCSA
1131 Harbor Bay Parkway
Alameda, Ca 94502-6540

RECEIVED

By Alameda County Environmental Health 10:51 am, May 27, 2015

Subject: Monitoring Well Decommissioning Report, 3600 MacArthur Blvd., Oakland, Ca, Fuel Leak Case RO280

Dear Mr. Nowell:

Attached please find a copy of my May 18, 2015 monitoring well destruction report prepared by my consultant Ground Zone Environmental Services, LLC. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report is true and correct to the best of my knowledge.

Sincerely,


Louis Badertscher
Property Owner

Ground Zone

Environmental Services

1705 Modoc Ave, Hayward, Ca 94542; Phone No.: (510) 582-4212 & Toll Free No.: (888) 495-7379; Fax No.: 510) 244-7996; Cell Phone no.: (925) 570-7609, sbrathwaite@groundzonees.com; www.groundzonees.com

May 18, 2015

Louis Badertscher
5625 N. Highway 66
Kingman, Arizona 86401

Re: *Decommissioned Monitoring Wells MW-1, MW-2 and MW-3, 3600 MacArthur Blvd, Oakland, California*

Project No.160.A.01:

Dear Mr. Badertscher:

Ground Zone Environmental Services, LLC (Ground Zone) is pleased to present this report describing the decommissioning of the three shallow (14 feet deep) 2-inch diameter groundwater monitoring wells at the above referenced property. The decommissioning of the monitoring wells was directed by Alameda County Environmental Health Services Agency in a letter dated April 6, 2015. **Figure 1** shows the decommissioned monitoring well locations.

Scope of Work

The wells were decommissioned on May 14, 2015. Decommissioning of the wells required the following steps:

- Step 1: Add 2-inch diameter, 18-inch long PVC adapter casing to the well head and insert 1-inch diameter PVC tremie pipe into the well and begin grouting through the tremie pipe. Remove the displaced groundwater from the well using a shop vacuum. Stop grouting when the groundwater has been displaced and cement residue appears;
- Step 2: Remove tremie pipe and add pressure head to well. Pressurize well holding steady for 5 minutes at a pressure of 30 pound per square inch;
- Step 3: Remove pressure head and top of grout, if needed; and,
- Step 4: Remove well vault and backfill well boring with concrete.

Figure 2 show photographs of the steps taken during the decommissioning of the monitoring wells. Waste generated during the well decommissioning include concrete, metal from the vault box and grout. Waste material was removed from the site by the driller for recycling.

The wells were decommissioned by Vapor Tech, a C57 Licensed driller, under the supervision of Ground Zone. The decommissioned monitoring wells were also inspected by Alameda County Public Works Agency (ACPWA). Prior to decommissioning, a permit contained in **Attachment A**, was obtained from ACPWA and Underground Services Alert was notified of the activities approximately one week prior. Copies of the Well Completion/Well Decommissioned Report is provided in **Attachment B** along with copies of boring logs and well details for the former monitoring wells.

If you have any question regarding this report feel free to give me a call.

Ground Zone

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Sincerely,



Sam Brathwaite, PG, CEG, CHg
Ground Zone Environmental Services, LLC

Attachments

Figure 1 – Well Location

Figure 2 – Steps used to Decommission Wells

Attachment A – Well Permit

Attachment B – Well Decommissioned Report



Expires 11/30/2015



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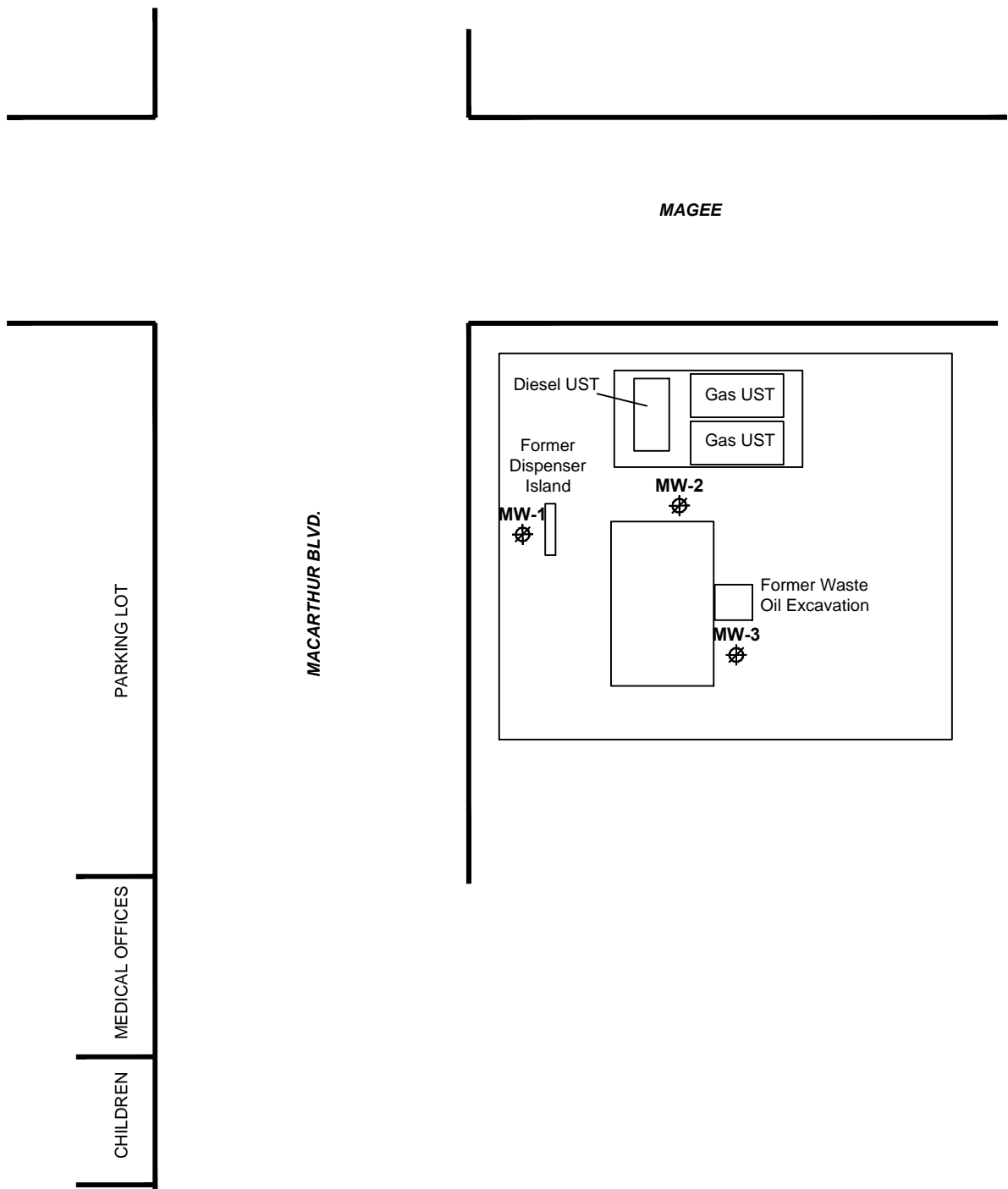
Attachments




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Figures

D:\Work\EnviroCAD\Ground Zone\160.A.01\Figure 1 - Well Locations.dwg Layout: 8.5x11-P May 15, 2015 - 6:11pm



LEGEND:

MW-1
 Monitoring Well Decommissioned on May 14, 2015



Scale (Feet)

No.	Date	Revision	Approved



Date:	05/14/15
Designed:	OS
Drawn:	OS
Checked:	SB
DWG file:	Fig. 1

FORMER MONITORING WELL LOCATIONS
 3600 MacArthur Boulevard
 Oakland, California

Figure	1
Project	160.A.01



Photo No. 1 - Add PVC adapter to well casing



Photo No. 2 - Insert tremie pipe and begin grouting



Photo No. 3 - Remove displaced groundwater



Photo No. 4 - Pressurize grout



Photo No. 5 - Remove vault box



Photo No. 6 - Backfill upper section of borehole with concrete

D:\Work\EnviroCAD\Ground Zone\160.A.01\Figure 2 - Photos.dwg Layout: 8.5x11.1 May 15, 2015 - 8:37am

No.	Date	Revision	Approved



Date:	05/14/15
Designed:	OS
Drawn:	OS
Checked:	SB
DWG file:	Fig 2

PHOTOGRAPHS SHOWING THE VARIOUS STAGES OF WELL DECOMMISSIONING
 3600 MacArthur Boulevard
 Oakland, California

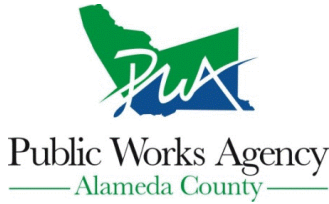
Figure	2
Project	160.A.01



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Attachment A
Well Permit

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: 05/04/2015 By jamesy

Permit Numbers: W2015-0384 to W2015-0386
Permits Valid from 05/14/2015 to 05/14/2015

Application Id: 1430412212139
Site Location: 3600 MacArthur Bl, Oakland, CA
Project Start Date: 05/22/2015
Assigned Inspector: Contact James Yoo at (510) 670-6633 or jamesy@acpwa.org
Extension Start Date: 05/14/2015
Extension Count: 1

City of Project Site: Oakland

Completion Date: 05/22/2015
Extension End Date: 05/14/2015
Extended By: jamesy

Applicant: GroundZone - Sam Brathwaite
1705 Modoc Ave, Hayward, CA 94542
Property Owner: Louis Bodertscher
5625N Hwy66, Kingsman, AZ 86401
Client: ** same as Property Owner **

Phone: 925-570-7609

Phone: --

Receipt Number: WR2015-0227	Total Due:	\$1191.00
Payer Name : GroundZone	Total Amount Paid:	\$1191.00
	Paid By: CHECK	PAID IN FULL

Works Requesting Permits:

Well Destruction-Monitoring - 3 Wells
Driller: Vapor Tehc - Lic #: 916085 - Method: other

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 #
W2015-0384	05/04/2015	08/20/2015	MW1	0.00 in.	2.00 in.	4.00 ft	15.00 ft			
W2015-0385	05/04/2015	08/20/2015	MW2	0.00 in.	2.00 in.	4.00 ft	15.00 ft			
W2015-0386	05/04/2015	08/20/2015	MW3	0.00 in.	2.00 in.	4.00 ft	15.00 ft			

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. 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.

7. 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.



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Attachment B
Well Decommissioned Report

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

Depth (fbg)	Recovery/ Sample ID	Blow Counts	Organic Vapor (ppm)	USCS Soil Type	Description	Well Construction Detail
1		(Hand Auger)		ML	Concrete (5 inches)	
	B2-2.5		0	ML	Moist, brownish black (5YR 2/1), slightly clayey SILT	
	B2-4.5		0	ML	Moist, olive gray (5Y 3/2), clayey SILT	
5				CL	Moist, moderate olive brown (5Y 4/4), silty CLAY	
	B2-7	10,21,26	7,300	CL	Moist, stiff to hard, moderate olive brown (5Y 4/4) to light olive gray (5Y 5/2), sandy, silty CLAY with gravel	
10	B2-10	13,15,15	767	SM/SC	Wet, medium dense, pale yellowish brown (10YR 6/2) and grayish yellow (5Y 8/4), clayey, silty SAND with gravel	
	B2-13	13,13,23	0	CL	Wet, very stiff, light brown (5YR 5/6), sandy, silty CLAY	
15					Total Depth of Boring = 14 fbg Total Well Depth = 14 fbg	
20						
25						

BORING / WELL NUMBER: B2 / MW-1

LOCATION: Scooter's Auto Repair
3600 MacArthur Blvd., Oakland, CA

PROJECT NO: 97-0187.1

DRILLING CONTRACTOR: V&W Drilling, Inc.

DRILLING METHOD: 4.25-inch-I.D. Hollow-stem Auger

DRILLING DATE: November 4, 1998

LOGGED BY: B. Wheeler / D. Milano

LEGEND:

fbg = feet below grade

ppm = parts per million

▼ = approximate depth to groundwater measured on November 12, 1998.

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

Depth (fbg)	Recovery/ Sample ID	Blow Counts	Organic Vapor (ppm)	USCS Soil Type	Description	Well Construction Detail
1					Asphalt (4 inches)	
	B3-2.5	(Hand Auger)	0	CL	Moist, moderate yellowish brown (10YR 5/4), silty CLAY with trace sand	
5	B3-4.5		0	CL	Moist, pale olive (10Y 6/2), silty CLAY with trace sand and fine gravel	
	B3-7	16,30,35	313	GC	Moist to wet, silty, clayey GRAVEL with sand; matrix predominantly grayish olive (10Y 4/2)	
10	B3-10	18,14,10	0	SM/SC	Wet, medium dense, moderate yellowish brown (10YR 5/4), clayey, silty SAND with gravel	
	B3-13	14,18,20	0	ML	Moist to wet, very stiff to hard, dark yellowish orange (10YR 6/8) to light brown (5YR 5/6), sandy, clayey SILT with trace gravel	
15					Total Depth of Boring = 14 fbg Total Well Depth = 14 fbg	8.25 inches
20						
25						

BORING / WELL NUMBER: B3 / MW-2

LOCATION: Scooter's Auto Repair
3600 MacArthur Blvd., Oakland, CA

PROJECT NO: 97-0187.1

DRILLING CONTRACTOR: V&W Drilling, Inc.

DRILLING METHOD: 4.25-inch-I.D. Hollow-stem Auger

DRILLING DATE: November 4, 1998

LOGGED BY: B. Wheeler / D. Milano

LEGEND:

fbg = feet below grade

ppm = parts per million

▼ = approximate depth to groundwater measured on November 12, 1998.

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

Depth (fbg)	Recovery/ Sample ID	Blow Counts	Organic Vapor (ppm)	USCS Soil Type	Description	Well Construction Detail
1	B4-2.5	(Hand Auger)	0	SM	Asphalt (3 inches) Silty SAND with gravel	Traffic Box Locking Well Cap Concrete 2-Inch-Diameter Schedule 40 PVC Bentonite Chips
				CL	Damp, moderate yellowish brown (10YR 5/4), silty CLAY with trace sand	
5	B4-4.5		0	GC	Moist, moderate yellowish brown (10YR 5/4), silty, clayey GRAVEL with a trace amount of sand and moist, dusky yellow (5Y 6/4), silty, clayey SAND with gravel	
				SC		
	B4-7	15,17,21	0	SC	Moist, medium dense, moderate yellowish brown (10YR 5/4), clayey, fine- to coarse-grained SAND with gravel	#2/16 Sand 2-Inch-Diameter Schedule 40 PVC (0.010 Screen)
10	B4-10	11,14,26	0	SM/SC	Moist, very stiff to hard, dark yellowish orange (10YR 6/6), clayey, silty SAND with gravel (Rock fractured with split spoon?)	
	B4-13	9,11,13	0	ML	Wet, very stiff, moderate yellowish brown (10YR 5/4), sandy, clayey SILT with trace gravel and sandy, silty CLAY with a trace amount of gravel	Bottom Cap
				CL		
15					Total Depth of Boring = 14 fbg Total Well Depth = 14 fbg	8.25 Inches
20						
25						

BORING / WELL NUMBER: B4 / MW-3

LOCATION: Scooter's Auto Repair
3800 MacArthur Blvd., Oakland, CA

PROJECT NO: 97-0187.1

DRILLING CONTRACTOR: V&W Drilling, Inc.

DRILLING METHOD: 4.25-inch-I.D. Hollow-stem Auger

DRILLING DATE: November 4, 1998

LOGGED BY: B. Wheeler / D. Milano

LEGEND:

fbg = feet below grade

ppm = parts per million

▼ = approximate depth to groundwater measured on November 12, 1998.