

January 28, 2003

Mr. Barney Chan Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502 Alameda County

JAN 3 0 2003

Environmental Health

Subject:

Monitoring Well Abandonment Report Former Seabreeze Yacht Center, Oakland

Dear Mr. Chan:

Please find enclosed for your review, a letter report documenting the abandonment of monitoring wells PW-1 through PW-4, MW-SB1 and MW-SB2, former Seabreeze Yacht Harbor, Oakland. Each well was abandoned in accordance with the destruction requirements specified in drilling permits W02-1162 through W02-1166, issued by the Alameda County Public Works Agency on December 2, 2002.

If you have any questions, please contact me at 510-627-1184.

Sincerely.

Douglas/P. Herman

Associate Port Environmental Scientist

Cc (w/encl.):

Betty Graham, RWQCB

Peter Langtree, Lowney Associates Alameda County Public Works Agency

399 Elmhurst Street Hayward, CA 94544-1395

Cc:(w/o encl): Susanne M. von Rosenberg, GAIA

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2101 Webster Street, 12th Floor Oakland, CA 94612 tel (510) 663-4257 fax (510) 663-4141 www.gaiainc.com

January 10, 2003

Mr. Douglas Herman Port of Oakland 530 Water Street Oakland, CA 94607

SUBJECT:

Letter Report for Well Abandonment of Monitoring Wells

PW-1 through PW-4, MW-SB1, and MW-SB2 Former Seabreeze Yacht Center Oakland, CA

Dear Doug:

GAIA Consulting, Inc is pleased to present this letter report documenting the completion of well abandonment for monitoring wells PW-1 through PW-4, MW-SB1, and MW-SB2 at the former Seabreeze Yacht Center on December 6th, 2002. Future site plans include the construction of a tidal channel in the southern portion of the site to restore wetland habitat. A request letter to abandon monitoring wells PW-1 through PW-4 and MW-SB1 was submitted from the Port to the County on April 9, 2002. PW-4 was removed to facilitate adequate construction of the proposed tidal channel area. Because monitoring wells PW-1 through PW-3 and MW-SB1 are not included in the network of wells that are monitored annually at the site (MW-SB2 through MW-SB5), they were removed as well. In addition to these wells, MW-SB2 was mistakenly removed due to a field measurement error. The location of these wells is provided in Figure 1. Each well was abandoned in accordance with the destruction requirements specified in drilling permits W02-1162 through W02-1166, issued by the Alameda County Public Works Agency on December 2, 2002 (see attachment).

GAIA subcontracted Precision Sampling, Inc. to destroy the wells using the pressure grouting method. Because the County permit only required the wells to be pressure grouted; no drill rig was brought onto the site. Monitoring wells PW-2, PW-3, PW-4, MW-SB1, and MW-SB2 were located on the unpaved area of the site (Figure 1). The entire length of PVC casing and protective stovepipe finish was completely removed from the ground for these monitoring wells using a forklift. The holes remaining in the ground were then tremie grouted with neat cement (basalite) to about 0.5 to 1 foot below ground surface (bgs). After the cement dried, soil was shoveled over each hole to match existing conditions at the site and comply with Alameda county regulations.

PW-1 was located in the paved area of the Seabreeze site. The method that was used for the other wells was not feasible for this well. Unlike the other monitoring wells, which had been stovepipe surface completions, PW-1 was flush-mounted, and completed with a protective well box. Monitoring well PW-1 was first grouted with neat cement to about 3 feet bgs and then left to dry. A jackhammer was then utilized to go through the pavement surrounding the well to remove the well box. The top 2.5 feet (bgs) of casing and piping were then removed as specified in the County permits. The remaining length in the hole was then grouted up to ground surface.

Depth to water and total well depth was measured for each well prior to abandonment except for monitoring well PW-3, which had already been previously grouted to the top of the casing. The measurements taken are listed below.

Monitoring Well Measurements

Well ID #	Depth to Water (ft.)	Depth to Bottom of Well (ft.)
MW SB-1	5.7	9.5
MW-SB2	5.9	15.5
PW-1	3.8	13.5
PW-2	3.3	15.4
PW-3	NA	NA
PW-4	5.1	15.5

Notes: PW-3 had already been grouted.

MW-SB2 was mistakenly abandoned

The components of all the wells were placed in a debris pile on site to be disposed of by the Port. At the end of the day, cones were placed over each well or former well and labeled with a sharpie to display well ID numbers appropriately.

Although well MW-SB2 was mistakenly abandoned, in accordance with recent phone conversations with Ms. Betty Graham from the Regional Water Quality Control Board (January 7, 2003) and Mr. Barney Chan from Alameda County (December 30, 2003), MW-SB2 does not need to be reinstalled.

Please contact me if you have any questions or require further information.

Iven Rosenberg

Cordially,

Susanne M. von Rosenberg, P.E.

Principal

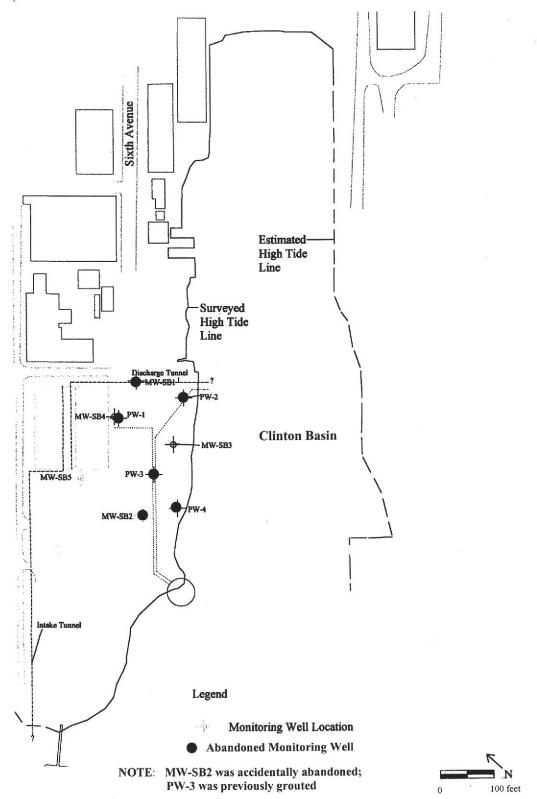


FIGURE 1

Port of Oakland Monitoring Well Abandonment Locations Seabreeze Yacht Center, Oakland, CA

Well Permits

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NOV-17-00 FRI 11:34 AM ALAMEDA COUNTY PWA RM238 FAX NO. 5107821939



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 199 ELMHURST ST. (1AYWARD CA. 96544-1396
PHONE (510) 676-3554 G 90-6633 Sames YOU FAX (\$10)782-1939

DRILLING PERMIT APPLICATION

LOCATION OF PROJECT SCADICCZE Yacht Control 280 5:xts Quence, Control	PERMIT NUMBER WOL-1162 WELL NUMBER APN
	PERMIT COMDITIONS Circled Permit Requirement Apply
Name Post of Drekland Address 5 50 Notes 54 Phone 510-623-1184 City Carland APPLICANT Nume TAIN Consulting in 1 yair Fax 510-643-444 Address 2 101 Webyter 4, 12th Floor 210-663-4208 City Ole Harm	A. GENERAL 1. A permit application should be submitted to at to arrive at the ACPWA office five days prior to proposed starting trate. 2. Shoult to ACPWA within 60 days after completion of permitted original Department of Water Renounces. Well Completion Report. 3. Permit is void if project not begun within 90 days of approval date B. WATER SUPPLY WELLS 1. Ministurs surface and thickness is projected.
TYPE OF PROJECT Well Construction Cathodic Protection Water Supply Monitoring General Contamination Well Desirution	coment grout placed by transit. 2. Minimum scal depth is 50 feet for musicipal and industrial wells at 20 feet for demestic and integriton wells unless a leater depth is specially approved. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
PROPOSED WATER SUPPLY WELL USE New Demostic 0 Registered Demostic 0 Municipal 0 irrigation 0 Industrial 0 Other	1. Minimum surface seal thickness is two inches of content grout placed by transe. 2. Minimum seal depth for monitoring wells is the maximum depth practicable of 20 feet. D. GEOTECHNICAL.
DRIT, LING METHOD: Med Rothly II Air Rothly II Auger II Cable II Other II	Backfill bord hole by tramio with commit grout or centent grout/stad mixture. Upper two-three feet replaced in kind or with compacted curings. E. CATHODIC
DRILLER'S LICENSE NO. (57-7-17-510 or 636387	Fill hole ancere zone with concrete placed by tremle. P. WELL DESTRUCTION Sond a map of work that separate permit is required for wells deeper than 45 feet.
WELL PROJECTS DICH Hole Diameter // 4 tin. Casing Diameter // 4 tin. Surface Scal Depth / 1 Owner's Well Number PW-1	C. SPECIAL CONDITIONS NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for acceptable and contamination investigations.
CROTECHNICAL PROJECTS Number of Borines Holo Diameter In. Depth R DESTIMATED STARTING DATS DESTIMATED STARTING DATS	APPROVED DATE 12-2-02
ESTIMATED COMPLETION PATE 120 2 0 7 12 602. I hereby agree to comply with all requirements of this permit and Alameda County Ordina APPLICANT'S SIGNATURE DATE 11.	
PLEASE PRINT NAME Cross M. Bett Revs-	13-00

11/27/02 WED 09:20 FAX 510 663 6350

663 6350 GEOMATRIX OAKLAND

NOV-17-00 FRI 11:34 AM ALAMEDA COUNTY PWA RM239 FAX NO. 5107821939 P. 02



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 199 ELMHURST ST. MAYWARD CA. 94544-1395 PHONE (\$10) 678-555 670-6633 James you FAX (610)782-1939

DRILLING PERMIT APPLICATION		
LOCATION OF PROJECT LEADICCZE Yacht Conter	PERMIT NUMBER WOZ-1/63 WELL NUMBER APN	
	PERMIT COMPITIONS Circled Permit Requirement Apply	
Nama Post of Oakland Nama Post of Oakland Address 5:70 John St Phone 5:0-62;-1184 Applicant Ald Consisting, 12. / Const Numa (Ald Consisting, 12. / Const Address 2:1014/hite(2, 12/h/1) Phone 5:0-663-4208 City Ocal Land	A. GENERAL 1. A period application should be submitted to as to arrive at the ACPWA office five days prior to proposed staring date. 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources. Well Completion Report. 3. Permit is void if project not began within 90 days of approved date. 8. WATER SUPPLY WELLS	
TYPE OF PROJECT Well Construction Calindle Protection O General Water Supply O Contamination O Well Destruction PROPOSED WATER SUPPLY WELL USE New Demostic O Replacement Demostic Municipal O ther O DRILLING METHOD: Mud Rothy O Air Rolly O Other O DRILLER'S NAME DRILLER'S NAME DRILLER'S LICENSE NO. (S7-717-510 of 636387)	1. Minimum surface soal thickness is pare inches of coment grout placed by branche. 2. Minimum seal depth is 50 feet for menticipal and lindustrial wells of 20 feet for concepts and hrighlen wells unless a leaser depth is specially approved. C. GROUNDWATER MONITORING WELLS I. Minimum rurface soal thickness is two inches of coment grout placed by trans. 2. Minimum seal depth for monitoring wells it the maximum depth practicable or 20 feet. D. GEOTECTINICAL. Buckfill bore hole by transa with coment grout or coment groutesed mixture. Upper two three feet replaced in kind or with compacted curings. E. CATHODIC Fill hole apade zona with controls by transc. P. WELL DESTRUCTION Send a map of wells the A repersic permit is required for wells deeper than 45 feet. C. SPECIAL CONDITIONS C. SPECIAL CONDITIONS	
DRILLER'S LICENSE NO. (57-717-510 of 636307) WELL PROJECTS Drill Mole Diameter (14") Casing Diameter (14") Surface Scall Depth (7.5 1. Owner's Well Number Plan 2")	NOTE: One application must be rebuilted for each well or well destruction. Multiple borings as an application are acceptable for geotechnical and contamination investigations.	
GEOTECHNICAL PROJECTS Nowher of Borings	26/02/	

NOV-17-00 FRI 11:34 AM ALAMEDA COUNTY PWA RH239 FAX NO. 5107821938

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ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
199 EUMHURST ST. HAYWARD CA. 94544-1395 PHONE (510) 670-555 670-6633 James 400 FAX (510)782-1939

DRILLING PERMIT APPLICATION		
LOCATION OF PROJECT SCABICCEP YOLK COLOR	PERMIT NUMBER 1/10-1164 WELL NUMBER APN	
	PERMIT CONDITIONS Circled Permit Requirements Apply	
NEME POST of Orakland Name Post of Orakland Address 5.30 where St. Phone 510-623-1189 APPLICANT ALL CONJULTING IN MARCH Name FEE 510-623-6441 Address 2101 William 4 124 FL Phone 510-643-4208 City Orakland	A. GENERAL 1. A permit application should be submitted so as to arrive at the ACPWA offers five says prior to expensed starting tlate. 2. Submit to ACPWA within 60 days after completion of pursuited original Department of Water Resources. Well Completion Report. 3. Permit is void if project not began within 90 days of approved sate. B. WATER SUPPLY WELLS.	
TYPE OF PROJECT Well Construction General Gen	1. Minimum surface sent thickness is two inches of coment grout placed by tressin. 2. Minimum sould doubt it 50 feet for municipal and industrial wells of 20 feet for domestic and irrigation walls unless a lesser doubt is specially approved. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface sent thickness is two inches of content growt placed by turble. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. D. GEOTECHNICAL Backfill bore hole by transa with coment grout of content growthend mixture. Upper two three feet replaced in kind or with compacted carriags. E. CATHODIC	
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DRILLER'S LICENSE NO. (57-717510 or 636387 WELL PROJECTS DIVIN Hale Diameter 4 4 1 in. Maximum Casing Dianictar in. Doput 1751. Surface Scal Depth	C. SPECIAL CONDITIONS NOTE: One application must be submitted for each well or well destruction. Multiple horings as one application are acceptable for evolutionized and contempolation investigations.	
CROTECHNICAL PROJECTS Number of Borines Maximum Hala Diameter In Danth n. ESTIMATED STARTING DATE 12/5/02 of 12/6/03.	APPROVED DATE 12-2-02	
I hereby agree to settiply with all requirements of this permit and Alandea County Ordin APPLYCANT'S SICHATURE PLEASE PRINT NAME (roth 1 M) 2014 Rev.3-	26/02-	

NOV-17-00 FRI 11:34 AM ALAMEDA COUNTY PWA RM230 FAX NO. 5107821939

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ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 199 ELMHURST ST. MAYWARD CA. 94544-1395 PHONE (\$10) 478-5554 600-6633 James You FAX (510)782-1939

DRILLING PERMIT APPLICATION		
FOR APPLICANT TO COMPLETE LOCATION OF PROJECT LEADICLEY YOLK COLOR 280 SIXTH BYENDS, ONLY ON CA	PERMIT NUMBER WELL NUMBER APN PERMIT CONDITIONS Circled Permit Requirement Apply	
CLIENT POST OF OR MAIN Phone 510-627-1184 Applicant Sip Gusch Applicant Consulting in Consulting Faz 510-663-644 Address 2101 Webter St. 13th Br Phone 510-663-4106 City Occilians	A. GENERAL 1. A permit application should be submitted to at to arrive at the ACPWA office five days prior to proposed starting tlate. 2. Shapping to ACPWA within 60 days after completion of structured original Department of Water Resources—Well Completion Report. 3. Permit is void (project not began within 90 days of approval date. 8. WATER SUPPLY WELLS 1. Minimum surface seed thickness is two inches of	
TYPE OF PROJECT Well Construction Cathodic Protection Uniter Supply Consumination Wall Positioning PROPOSED WATER SUPPLY WELL USE New Dementic Content Dementic Content Cont	coment grout placed by bessie. 2. Minimum seal depth in 50 feet for municipal and industrial walls of 20 feet for demarkic and irrigation wells unless a leaser depth in specially approved. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface real thickness is two juckes of contact grout placed by tremic. 2. Minimum seal depth for molitoring wells is the maximum depth practicable of 20 feet. D. GEOTECTINICAL. Back (III bare hole by tramic with coment grout or content grout and mixture. Upper two-three feet replaced in kind or with compacted cuttons. E. CATHODIC Fill hole anade zono with concrete placed by tremic.	
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ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 199 ELMHURST ST. TIAYWARD CA. 94544-1396
PHONE (510) 670-5654 690-6633 396123 400 FAX (510)782-1939

FOR OFFICE USE WO2-1166 L NUMBER PERMIT CONSTIONS
Circled Permit Regularism Apply
I. A permit application should be submitted to as to arrive at the ACPWA office five days prior to proposed starting date. 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources. Well Completion Report. 3. Permit is void if project not begun within 90 days of approval date. WATER SUPPLY WELLS 1. Minimum suffice seal thickness is two inches of coment group placed by ownie. 2. Minimum seal depth in 50 feet for municipal and
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