N00296_004205
MOFFETT FIELD
SSIC NO. 5090.3.A

Memorandum of Monitoring Well Destruction at Former Hydraulic Lift Systems, Waste Oil Drainage Line, and Clarifier at Building 503

Former Naval Air Station Moffett Field
Mountain View, California

March 2016

Document Control No. CEKA-2627-0005-0012
Contract No. N62473-09-D-2627
Contract Task Order No. 0005

Prepared for:

Department of the Navy
Naval Facilities Engineering Command Southwest
1220 Pacific Highway
San Diego, California 92132

Prepared by:

CE2-Kleinfelder Joint Venture
6140 Stoneridge Mall Road, Suite 500
Pleasanton, California 94588

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Certification

Memorandum of Monitoring Well Destruction at Former Hydraulic Lift Systems, Waste Oil Drainage Line, and Clarifier at Building 503

March, 2016

Document Control Number: CEKA-2627-0005-0012
Contract Number: N62473-09-D-2627
Contract Task Order Number: 0005

I certify that the work presented in this report was performed under my supervision. To the best of my knowledge, the data contained herein are true and accurate and the work was performed in accordance with professional standards.

Thomas R. Berry, CEG
CE2-Kleinfelder JV Project Manger

PROFESSIONAL GEOLOGIST
THOMAS R. BERRY
No. 1982
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

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Introduction

This report documents the destruction of two groundwater monitoring wells located near Building 503 at former Naval Air Station Moffett Field (Moffett), Mountain View, California (Figure 1). The report summarizes the following:

- Project background,
- Monitoring well installation and destruction summary,
- Well destruction permitting,
- Well destruction field activities, and
- Waste management.

Project Background

CE2-Kleinfelder Joint Venture (CE2-Kleinfelder JV) was retained by the Naval Facilities Engineering Command Southwest (NAVFAC) to conduct a soil and groundwater investigation, and if necessary, implement actions for impacted soil and groundwater associated with former hydraulic lifts, waste discharge line, and a clarifier used as part of a former Navy Exchange (NEX) Service Station in Building 503 located at former Naval Air Station Moffett Field, in Mountain View, California.

The current property owner, the National Aeronautics and Space Administration (NASA) Ames Research Center, removed nine hydraulic lifts, a waste oil drainage line, and a subgrade clarifier in March 2011 with oversight by the Santa Clara Valley Water District (SCVWD). Of the 17 soil samples collected during the removal, four indicated impact by total petroleum hydrocarbons as hydraulic oil (TPH-HO) above the cleanup standard of 500 mg/kg. Separate-phase hydrocarbon (SPH) was also observed in one soil boring in the immediate vicinity of one of the hydraulic lifts.

In October 2012, investigation was conducted to evaluate the extent of soil and groundwater contamination and to assess the presence of SPH where it was previously observed. Seventeen borings were advanced and sampled at two depth intervals (approximately 3 and 6 feet below ground surface [bgs]). All soil sample results were below cleanup standards, except for polynuclear aromatic hydrocarbons in one sample collected at 4.5 feet bgs that contained 0.38 mg/kg benzo(a)pyrene. Twelve grab groundwater samples were collected and analyzed. All concentrations were below cleanup standards except for TPH as motor oil (TPH-MO) at one location. No SPH, visible soil staining, or hydrocarbon odors were observed in soil cores collected during this investigation. Results of this investigation were reported to the San Francisco Bay Regional Water Quality Control Board (Water Board) in a Technical Memorandum (CE2-Kleinfelder JV, 2013) with recommendation for no further action for soil and further assessment of groundwater.

In February 2014, groundwater samples were collected from monitoring well WT41A-1, located approximately 30 feet from the location of soil samples with the highest detected TPH concentrations. These groundwater samples showed TPH-HO and TPH-MO concentrations (200 and 160 µg/L, respectively) above cleanup standards. These results provided information for locating additional groundwater monitoring wells.

In June 2014, with the approval of the Water Board, two groundwater monitoring wells were installed; one was installed south and hydraulically upgradient of Building 503 (B503-MW-1) and the other was installed north and hydraulically downgradient of Building 503 (B503-MW-2). Quarterly sampling of these two wells and previously installed monitoring well WT41A-1 was conducted between June 2014 and March 2015 along with water level measurements in several surrounding wells to confirm the hydraulic gradient. Analytical results showed no TPH concentrations above cleanup standards in either of the new wells. Concentrations of TPH-HO and TPH-MO were detected up to 240 and 180 µg/L, respectively, in samples from WT41A-1.

Results from these investigations confirmed that residual contamination from the hydraulic lifts and associated waste oil lines and clarifier were very limited in nature and extent. Pursuant to discussions with the Water Board, CE2-Kleinfelder JV and the Navy determined that necessary and appropriate corrective actions had been implemented. The Navy submitted a Final Closure Report (CE2-Kleinfelder JV, 2015) requesting formal approval of No Further Action (NFA) from the Water Board and proposing destruction of monitoring wells B503-MW-1 and B503-MW-2. Well WT41A-1 would remain in place as it was continuing to be used for water level measurements related to the regional volatile organic compound plume monitoring program.

The Water Board issued a letter dated December 14, 2015 approving NFA for the site (Water Board, 2015) and instructed the Navy to proceed with destruction of any monitoring wells that would no longer be used.

Following receipt of NFA approval, the Navy confirmed that the two wells installed specifically for this Building 503 investigation, B503-MW-1 and B503-MW-2, were not needed for ongoing site-wide groundwater monitoring or depth-to-water measurements and proceeded with their destruction.

Monitoring Well Installation and Destruction Summary

Monitoring wells B503-MW-1 and B503-MW-2 were installed in June 2014 with the same drilling and construction methods. Each well borehole was initially advanced with a 1.5-inch diameter Geoprobe direct-push tool to a depth of 20 feet bgs. Upon retrieving the direct-push tool, the bottom two feet of the boring swelled shut with native material. The interval from 16 to 18 feet bgs was backfilled with hydrated bentonite chips prior to constructing the well. The boreholes were then reamed with a 9-inch diameter auger to a depth of 16 feet bgs to facilitate well construction.

Well casings were installed with 2-inch diameter Schedule 40 PVC extending to 16 feet bgs with a secured bottom cap and with 0.010-inch slotted screen from 5 to 16 feet bgs and blank casing extending from ground surface to the top of the screen. A filter pack of #2/12 sand was emplaced from 4 to 16 feet bgs. Six inches of hydrated bentonite chips were placed from 3.5 feet to the top of the filter pack, and the remaining borehole annulus was sealed with Portland cement grout to within 0.5 feet of the ground surface. Each well was fitted with a locking cap and secured with an at-grade traffic-rated well box.

Monitoring wells B503-MW-1 and B503-MW-2 were destroyed on February 10, 2016 in accordance with the Santa Clara Valley Water District (SCVWD) Standards for Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County (SCVWD, 1989) and the State of California Department of Water Resources (DWR) Bulletin 74-81 (DWR, 1981) and Bulletin 74-90 (DWR, 1991).

Well Destruction Permitting

Permits to destroy the wells were obtained from SCVWD prior to well destruction. Copies of the SCVWD well destruction application, Department of Water Resources form 188, and well destruction completion notice for each well are included in Attachment 1.

Well registration numbers and associated SCVWD permit numbers are as follows:

Owner Well Number	Well Registration Number	Original Well Construction Permit Number	Well Destruction Permit Number
B503-MW-1	06502W14L046	14W00260	D20160125001
B503-MW-2	06502W14L047	14W00261	D20160125002

Well Destruction Field Activities

Underground Service Alert was contacted more than two working days prior to the commencement of work. A geophysical survey had been conducted shortly prior to the well installations in June 2014, and no utilities or obstructions were identified at that time. No construction activities had occurred in the vicinity of the two wells since their installation, and therefore repeating a geophysical survey at these locations was not necessary.

Photographs documenting well destruction field activities are included in Attachment 2. SCVWD inspector Charles Rambo was on site to inspect and approve the grouting operations. Each well was grouted following the procedure below:

- The total depth of each well was confirmed by sounding the well with a water level probe. Measurements confirmed the installation casing depth and indicated that no debris or accumulated sediment needed to be removed prior to grouting.
- Each well vault was removed by cutting an approximate 12-inch square section of asphalt out with a jackhammer and digging out the vault and concrete collar (Photographs 1 and 2).

- A tremie pipe was inserted to the bottom of the well (Photograph 3).
- Neat Portland cement grout, mixed in accordance with the destruction permit, was poured down the tremie pipe using a funnel and a 5-gallon bucket (Photograph 4).
- Calculated volume for filling the casing was approximately 2.6 gallons. Over 6 gallons, representing 230% more than the calculated casing volume, was tremied into the casing while displacing the water column from the bottom of the casing up.
- Because the volume of injected grout exceeded the 133% maximum volume required under the well destruction permit conditions, the SCVWD inspector waived the pressurization step and approved the grouting.
- Consistent with well destruction elsewhere on Moffett Field and per request from the property owner (NASA), each borehole and casing material was then drilled out with a 9-inch diameter auger to a depth of 5 feet bgs (Photograph 5).
- The cleaned out upper borehole was then backfilled from 5 feet bgs to within approximately 0.5 feet bgs with neat Portland cement grout (Photograph 6).
- The upper 0.5 feet was then filled and smoothed with concrete patching dyed black to match the surrounding asphalt pavement (Photograph 7).
- Cuttings and debris generated during well destruction were containerized in 55-gallon drums.

Waste Management

All drill-cuttings were containerized in one labeled 55-gallon drum and stored on site pending coordination of offhauling and disposal. Recology Hay Road Landfill in Vacaville, California, the landfill that received the non-hazardous waste from the installation of these two wells in June 2014, extended the existing waste profile to incorporate disposal of the waste generated from subsequent destruction of these same wells. The drum was released with approval from the Navy as non-hazardous waste and picked up from the site on February 25, 2016. The drum was temporarily stored by a licensed waste hauler, North State Environmental, and subsequently transported to the Recology landfill on March 14, 2016. The executed non-hazardous waste manifest for the waste drum is included in Attachment 3.

REFERENCES

California Department of Water Resources (DWR). 1981. *California Well Standards Bulletin 74-81*. December.

California Department of Water Resources (DWR). 1991. *California Well Standards Bulletin 74-90*. June.

CE2-Kleinfelder JV. 2013. *Final Technical Memorandum for Building 503 Soil and Groundwater Sampling, Former Naval Air Station Moffett Field, Mountain View, California*. July.

CE2-Kleinfelder JV. 2015. *Final Closure Report for the Former Hydraulic Lift Systems, Waste Oil Drainage Line, and Clarifier at Building 503, Former Naval Air Station Moffett Field, Mountain View, California*. August.

San Francisco Bay Regional Water Quality Control Board (Water Board). 2015. Letter to Loretta Winsper, Director, NEXCOM, Code BE. from Bruce H. Wolfe, Executive Officer, Water Board Subject: *No Further Action for Former Hydraulic Lift Systems, Waste Oil Drainage Line, and Clarifier at Building 503, Former Naval Air Station Moffett Field, Santa Clara County*. December 14.

Santa Clara Valley Water District (SCVWD). 1989. *Standards for Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County*. Revised June 1989.

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Figures

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Location of A1-zone Groundwater Monitoring Wells in Vicinity of Building 503

FIGURE
1

CE² KLEINFELDER
6140 Stoneridge Mall Rd, # 500
Pleasanton, CA 94588-3677

NAVFAC Naval Facilities Engineering Command
Naval Facilities Engineering
Command Southwest
1220 Pacific Highway,
San Diego, California 92132-5190

NC 2/24/16

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Attachment 1

Well Destruction Permits

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Santa Clara Valley Water District

5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

FC 198 (03-26-15)

▶ Please complete all information.

DISTRICT PERMIT NO.: D201601250001

Well Owner: Navy Exchange Service Command	**Property Owner:** NASA Ames Research Center	**Name of Business/Residence at Site:** Former Navy Exchange Automotive Center
Well Owner's Mailing Address: NEXCOM Code BE **City, State, Zip** 3280 Virginia Beach, VA 23452	**Property Owner's Mailing Address:** M/S 204-15, Bldg N204, Room 102 **City, State, Zip** Moffett Field, CA 94035	**Address of Well Site:** Former Naval Air Station Moffett Field, Building 503 **City, State, Zip** Mountain View, CA 94035
Telephone No.: Loretta Winsper: 757-631-3798	**Telephone No.:** ~~Kimberly Finch: 650-604-1294~~	**Assessor's Parcel No. of Well Site:** Book 116 Page 18 Parcel 012

☐ Well on District property/easement (See General Condition E.)

RECEIVED JAN 12 2016 S.C.V.W.D. WELLS

Consultant: CE2 Corporation	**Drilling Company:** Vapor Tech Services	
Address: 6140 Stoneridge Mall Road, Suite 300 **City, State, Zip** Pleasanton, CA 94588	**Address:** 2316 Tripaldi Way **City, State, Zip** Hayward, CA 94545	
Telephone No.: 925-463-7301 (Ext 115) Thomas Berry	**Telephone No.:** 415-378-0415	**C-57 License No.:** 916085
☐ Check if address or phone number has changed	☐ Check if address or phone number has changed	

▶ **All questions below are to be completed before permit can be issued; if unknown, applicant shall make on-site investigation to determine correct answers.**

WELL INFORMATION

Well Registration No.: 06S02.W14L040	**Owner/Consultant Well No.:** B503-MW-1	**Original Well Construction Permit No.:** 14W00260
Well Casing Depth: 16 ft	**Total Boring Depth:** 20-ft (1.25-in direct push), 16-ft (9-in hollow stem auger)	**Well Casing Diameter:** 2 inches

This Section to Be Completed for All Monitoring Wells or Extraction/Recovery Wells

Case Name/No.: Moffett Field Buidling 503 / T10000006753	**Caseworker Name:** Elezabeth Wells
Oversight Agency: San Francisco Bay Regional Water Quality Control Board	**Caseworker Telephone No.:** 510-622-2440

WELL TYPE/USE	☐ Water Production	☒ Monitoring	☐ Remediation	☐ Dewatering	☐ Heat Exchange	☐ Injection	☐ Cathodic Protection	☐ Other
	☐ Agricultural ☐ Domestic ☐ Industrial ☐ Municipal	☒ GW Level ☒ GW Quality ☐ Inclinometer ☐ Vapor ☐ Other	☐ Air Sparge ☐ GW Extraction ☐ Material Emplacement ☐ Vapor Extraction ☐ Other	☐ Permanent ☐ Temporary	☐ Closed Loop ☐ Open Loop	☐ Groundwater Cleanup Reinjection ☐ Stormwater ☐ Water Supply Recharge ☐ Other		

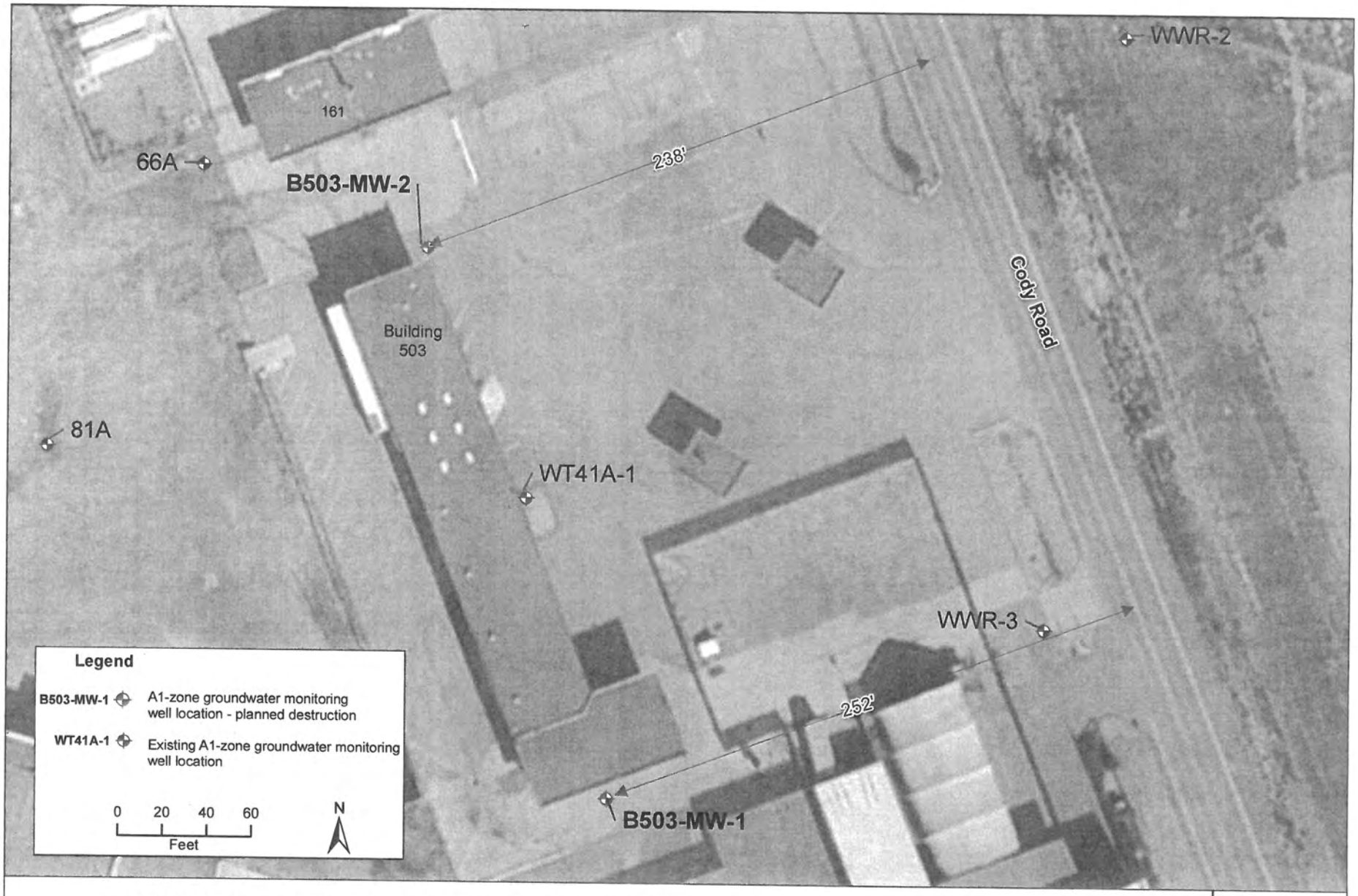
ADDITIONAL QUESTIONS FOR WATER PRODUCING WELLS

Does the well have:

1.	Outer conductor casing?	☐ Yes	☒ No
2.	Annular cement seal outside of casing at surface?	☒ Yes	☐ No
3.	A S.C.V.W.D. water meter attached?	☐ Yes	☒ No

Original Drilling Method: Pilot borehole 1.25-in OD w/ direct-push to 20 ft. 18-20 ft swelled shut, 16-18 ft was backfilled with bentonite chips. Borehole was cleaned out to 16 ft with 9-in OD w/ hollow-stem auger for subsequent well installation.

IMPORTANT: A minimum 24-hour notice must be given to Santa Clara Valley Water District prior to installing the annular seal. Call (408) 265-2607, ext. 2660. Please allow 10 working days to process permit application.



Location of A1-zone Groundwater Monitoring Wells in Vicinity of Building 503 Planned for Destruction

FIGURE
1

CE² KLEINFELDER
6140 Stoneridge Mall Rd, # 500
Pleasanton, CA 94588-3677

NAVFAC Naval Facilities Engineering Command
Naval Facilities Engineering
Command Southwest
1220 Pacific Highway,
San Diego, California 92132-5190

NC 8/18/15

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Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

Please describe in detail, the proposed destruction method (Any well destruction in which the well casing is left in place and in which the well has a filter pack outside the casing, must be destroyed using approved neat cement grout):

There is no dedicated pump apparatus in the well. The well will be sounded to ensure no significant debris or sediment has collected in the bottom of the well. If it has, it will be removed by bailing. Well will be pressure grouted to top of casing using 21-sack neat cement grout placed under a minimum of 25 pounds per square inch of pressure for at least five minutes or until at least an additioanl 33 percent of the total casing's volume of sealing material is pumped into the well. The top five ft of casing and borehole materials will then be drilled out to the full diameter of the original borehole (9 inches) and the well vault and adjacent skirt material will be removed. The top five ft of the drilled out borehole will be gravity backfilled with 21-sack neat cement to within 4-6 in. of ground surface. The footprint of the removed vault and surrounding skirt (approximately 2 ft X 2 ft) will be repaved with concrete flush with the surrounding pavement.

SIGNATURES

I understand and agree that all work associated with this permit is required to be done in accordance with Santa Clara Valley Water District (District) Well Ordinance 90-1, the District Well Standards, and conditions of this permit (see page 4). I certify that the information given in this permit is correct to the best of my knowledge and that the signature below, whether original, electronic, or photocopied, is authorized and valid, and is affixed with the intent to be enforceable. I also certify that a right of entry/encroachment agreement has been formalized between the well owner and property owner, if parties differ.

Signature	Print Name	Date
Signature of Well Owner/Agent: Loretta Winsper	Print Name: Loretta Winsper	Date: 12/21/15
Signature of Property Owner/Agent: FINCH, KIMBERLY S. (ARC-JQ) Digitally signed by FINCH, KIMBERLY S. (ARC-JQ) DN: cn=FINCH, KIMBERLY S. (ARC-JQ), o=Environmental Management Divisions, ou=JQ, email=kimberly.s.finch@nasa.gov, c=US Date: 2015.12.22 07:51:34 -08'00'	Print Name: Kimberly Finch	Date: 12/22/2015
Signature of Driller/Agent: Glenn D Reiss	Print Name: Glen Reiss	Date: 12-17-15
Signature of Consultant/Agent (if any): Thomas Berry	Print Name: Thomas Berry	Date: 12/18/2015

DISTRICT USE ONLY

The District has approved the following destruction methods for the well described in this permit:

☒ Pressure Grout Method (as outlined in Standards)
NOTE: Neat cement is the only sealing material approved for pressure grouting.

OR

☒ Drill out well to a total depth of 16 feet, with a minimum bore of 9 Inches.

☐ Clean out well casing to a total depth of _____ feet and back fill with approved sealing material (if total depth is unknown, driller must determine total depth during clean out of well). NOTE: Neat cement is the only sealing material approved for back filling gravel packed wells.

☐ Well casing must be perforated at the following depths prior to backfilling: _____

☐ Other: _____

Permit Approved by:	Date:
B [illegible]	1-22-16

District Permit No.	Date Issued	Expiration Date	Driller's Log No.
D20160125001	1-25-16	7-25-16	

Please allow 10 working days to process this application

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

GENERAL CONDITIONS

A. **District** (telephone 408-265-2607, ext. 2660) **must be notified a minimum of one working day before the placement of the well destruction sealing materials**. An authorized District representative must be on site to witness the destruction activities. This requirement may be waived by an authorized District representative. If the District waives the inspection requirement, the District may request the permittee(s) to furnish certification under penalty of perjury that the well was destroyed in accordance with the District Well Standards and with the permit conditions.

B. This permit is valid only for the purpose specified herein. Well destruction methods authorized under this permit may not be changed except by written approval of an authorized District representative, and only if the District believes that such a change will result in equal or superior compliance with the District and State Well Standards (e.g., if the District representative believes that site conditions warrant such a change).

C. This permit is only valid for the Assessor's Parcel No. indicated on it.

D. This permit may be voided if it contains incorrect information. If the permit is voided after work has begun, the well or boring that is being destroyed under this permit may be required to be reconstructed in accordance with District and State Well Standards.

E. If any work associated with this permit will take place on District property/easement, an encroachment or construction permit must be granted by the District's Community Projects Review Unit (telephone 408-265-2607, ext. 2350, 2217, or 2253).

F. Within 30 days of the completion of the well destruction activities, the driller or consultant identified on this permit shall fully complete State of California DWR Form 188 and submit the original to the District's Wells and Water Production Unit.

G. The permittee(s) shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend, and hold the District, its officers, agents, and employees free and harmless from any and all expense, cost, and liability in connection with or resulting from, the granting of or exercise of this permit including, but not limited to, property damage, personal injury, and wrongful death.

H. Permittees are required to be in full compliance with Cal/OSHA California Labor Code Section 6300.

I. A current C-57 Water Well Drilling Contractor's License is required for the destruction of all wells.

J. Permittee, permittee's contractors, consultants, or agents shall be responsible to assure that all materials generated during drilling, well destruction, well development, pump testing, 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/waters be allowed to enter, or potentially enter, on- or off-site storm sewers, dry wells, or waterways. Such materials/waters shall not be allowed to move off the property where the work is being completed.

K. The driller and consultants (if applicable) shall have an active copy of their Worker's Compensation Insurance on file with the District.

L. This permit shall expire if not exercised within 180 calendar days of its approval unless an extension of the permit expiration date is granted by an authorized District representative.

M. If the well approved to be destroyed under this permit is a monitoring well, associated with an investigation/cleanup overseen by a regulatory agency, the proposed well destruction must be approved by the person with regulatory authority over the investigation/cleanup.

N. This permit must be kept on site during all activities associated with it and shall immediately be presented to an authorized District representative upon request.

O. Permittee shall notify Underground Service Alert (USA) at 1-800-227-2600 or 811 prior to any digging.

Please allow 10 working days to process this application.

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0302077

Page 1 of 3

Owner's Well Number B503-MW-1

Date Work Began 02/10/2016 Date Work Ended 2/10/2016

Local Permit Agency Santa Clara Valley Water District

Permit Number D20160125001 Permit Date 1/25/16

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method hollow-stem auger Drilling Fluid none

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
		Well destruction: see attached geologic log.
		Well casing grouted in place from total well depth
		of 16.25 ft below ground surface to ground surface.
		Over 6 gal neat grout gravity injected = >225%
		of casing volume. Pressurization waived onsite
		by SCVWD inspector based on volume injected.
		Top five feet of casing and borehole drilled out
		to full borehole diameter of 9 inches. Backfilled
		with grout to within 0.5 ft of ground surface.
		Well vault removed. Concrete used to fill in top
		0.5 ft of void from well vault removal and
		smoothed flush with surrounding pavement.
		"Casings" and "Annular Material" information
		below reflect current conditions (post-destruction).

Total Depth of Boring 20 Feet

Total Depth of Completed Well 16 Feet

Well Owner

Name Navy Exchange Service Command

Mailing Address 3280 Virginia Beach Blvd.

City Virginia Beach State VA Zip 23452

Well Location

Address Former Naval Air Station Moffett Field, Building 503

City Mountain View County Santa Clara

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Dec. Lat. ___ Dec. Long. ___

APN Book 116 Page 18 Parcel 012

Township ___ Range ___ Section ___

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See attached Figure 1.

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

○ New Well
○ Modification/Repair
○ Deepen
○ Other ___
◉ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other ___

Water Level and Yield of Completed Well

Depth to first water ___ (Feet below surface)

Depth to Static Water Level 6 (Feet) Date Measured 02/10/2016

Estimated Yield * ___ (GPM) Test Type ___

Test Length ___ (Hours) Total Drawdown ___ (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size If Any (Inches)
0	5	9	none	none (removed)				
5	16	9	Screen	PVC Sch. 40		2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	(depth is 0.5')
1	16	Cement	neat Portland
4	16	Filter Pack	#2/12 sand
16	20	Bentonite	chips

Attachments

☑ Geologic Log
☑ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☑ Other location figure

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

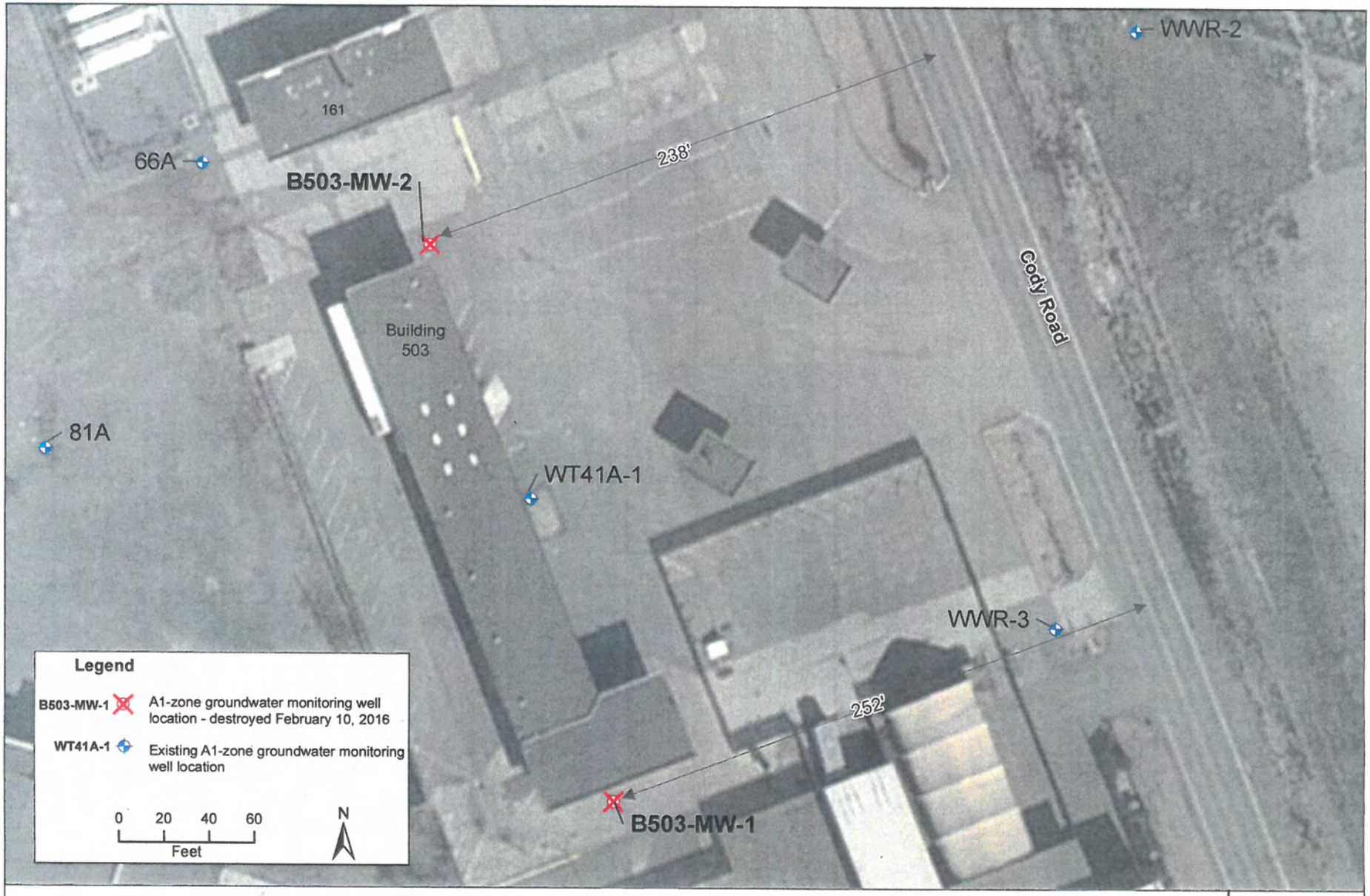
Name Glenn Reiss - Vapor Tech Services (Person, Firm or Corporation)

2316 Tripaldi Way (Address) Hayward (City) CA (State) 94545 (Zip)

Signed Glenn D Reiss (C-57 Licensed Water Well Contractor) 3/8/16 (Date Signed) 916085 (C-57 License Number)

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM



Location of A1-zone Groundwater Monitoring Wells in Vicinity of Building 503

FIGURE
1

CE² KLEINFELDER

6140 Stoneridge Mall Rd, # 500
Pleasanton, CA 94588-3677

NAVFAC Naval Facilities Engineering Command

Naval Facilities Engineering
Command Southwest
1220 Pacific Highway,
San Diego, California 92132-5190

NC 2/24/16

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Date Begin - End:	2/10/2016 - 2/10/2016	**Drilling Company:**	Vapor Tech Services
Logged By:	B. Rucker	**Drill Crew:**	Glen Reiss, Joel Mendoza
Hor.-Vert. Datum:	NAD83	**Drilling Equipment:**	Geoprobe 7822DT w/ Hollow Stem Auger Attachment
Plunge:	-90 degrees	**Drilling Method:**	Hollow Stem Auger
Weather:	Clear	**Exploration Diameter:**	9.0 in. O.D. to 5 feet bgs, in place grouting to 16 feet bgs in.

POST-DESTRUCTION MONITORING WELL LOG B503-MW-1

FIELD EXPLORATION

Latitude: 37.40947° N
Longitude: -122.05341° W
Surveyed Ground Surface Elevation (ft.): 25.44
Surface Condition: Asphalt

Surveyed Elevation (feet)	Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	VOC	Graphical Log	Lithologic Description
25					100%				**Clayey GRAVEL (GP-GC)**: strong brown (7.5YR 5/6), base rock
						0			**Lean CLAY (CL)**: dark brown (7.5YR 3/2), slightly moist, medium stiff, slightly cohesive, minor fine sand
									color change to, very dusky red (10BG 3/1), moderately cohesive, minor small gravel
						0			color change to, light gray (5YR 7/1), slightly stiff, cohesive, blocky, minor silt, occasional iron staining
20	5				90%	0			color change to, greenish black (5BG 2.5/1), moderately stiff, light gray mottling
						0			
						0			color change to, greenish gray (10BG 6/1), moist, slightly stiff, very cohesive, sticky
					100%				
15	10					0			**Fat CLAY (CH)**: dark grayish brown (10YR 4/2), moist, slightly stiff, moderately cohesive, minor fine sand
						0			**Clayey SAND (SC)**: dark grayish brown (10YR 4/2), very moist to wet, moderately stiff, slightly cohesive, fine grained sand
					100%				**Sandy Lean CLAY (CL)**: dark grayish brown (10YR 4/2), moist, moderately stiff, slightly cohesive, fine grained sand becomes, very moist, slightly stiff
						0			
10	15								color change to, greenish black (5BG 2.5/1), moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
					100%				**Silty CLAY (CL)**: greenish black (5BG 2.5/1), slightly moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
5	20					0			**Clayey SAND (SC)**: greenish black (5BG 2.5/1), moist, dense, no cohesion, fine grained sand

MONITORING WELL CONSTRUCTION

Completion Method:
Post Destruction

The bore was terminated at approximately 20 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
▼ Groundwater was observed at approximately 6.2 ft. below top of casing prior to well destruction 2/10/2016

GENERAL NOTES:
Upper 5-ft of boring was hand augered to clear for utilities.
The bore location and elevation were surveyed by Cal Vada.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	122454
DRAWN BY:	F JAIME
CHECKED BY:	T. BERRY
DATE:	3/4/2016
REVISED:	-

POST-DESTRUCTION MONITORING WELL LOG B503-MW-1

Moffett Field
Building 503
Mountain View, California

PLATE
B-1

GINT FILE: C:\Users\fjaime\desktop\ms Noland.gpj C:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_ENVIRONMENTAL LOG]

Santa Clara Valley Water District

WELL DESTRUCTION COMPLETION NOTICE

FC 218 (05-16-14)

Inspector: C Ramb	Date of Inspection: 2-10-16	Permit: D20160125001
Owner/Consultant No.: B503-MW1	Well Registration No.: 06S02W14L046	
Well Owner: Navy Exchange	Address of Well Site: Moffet Field BLDG 503	City or County: Mtn View
Drilling Company: Vapor Tech	Consultant: CE2	

Well Depth:	Borehole Diameter:	Casing Diameter:	Casing Material:	Well Type:
16	8	2	PVC	☒ HSA ☐ Rotary ☐ Other (See Comments) ☐ Direct Push ☐ Cable Tool

Casing Perforated: — to —

Sealing Material: ☒ Neat Cement ☐ 10 Sack Sand Slurry ☐ Bentonite ☐ Other (See Comments)

Destruction Method: ☒ Pressure Grout ☐ Drill Out ☐ Excavate ☐ Bail, Perf & Backfill ☐ Bail & Backfill ☐ Other (See Comments)

Well destroyed according to provisions of Santa Clara Valley Water District Permit? ☒ Yes ☐ No (See Comments)

GPS Coordinates: Lat. Long.

Comments:

Distribution: **ORIGINAL**–Permit File; **YELLOW**– Permittee; **PINK**–Well File

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0218604

Page 1 of 3

Owner's Well Number B503-MW-1

Date Work Began 06/06/2014 Date Work Ended 6/6/2014

Local Permit Agency Santa Clara Valley Water District

Permit Number 14W00260 Permit Date 6/5/14

DWR Use Only – Do Not Fill In

0 6 5 0 2 W 1 4 L 0 4 6

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method hollow-stem auger Drilling Fluid none

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
		see attached geologic log

RECEIVED JUL 10 2014 S.C.V.W.D. WELLS

Total Depth of Boring 20 Feet

Total Depth of Completed Well 16 Feet

Well Owner

Name Navy Exchange Service Command

Mailing Address 3280 Virginia Beach Blvd.

City Virginia Beach State VA Zip 23452

Well Location

Address Former Naval Air Station Moffett Field, Building 503

City Mountain View County Santa Clara

Latitude 37 Deg. 24 Min. 34.0914 Sec. N Longitude -122 Deg. 3 Min. 12.3652 Sec. W

Datum NAD 83 Dec. Lat. 37.4094700 Dec. Long. -122.0534071

APN Book 116 Page 18 Parcel 012

Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See attached location figure

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

⦿ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water ~11.5 (Feet below surface)

Depth to Static Water Level 6.44 (Feet) Date Measured 06/16/2014

Estimated Yield * (GPM) Test Type not conducted

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	5	9	Blank	PVC Sch. 40		2		
5	16	9	Screen	PVC Sch. 40		2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	3.5	Cement	neat Portland
3.5	4	Bentonite	chips
4	16	Filter Pack	#2/12 sand
16	20	Bentonite	chips

Attachments

☑ Geologic Log

☑ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other location figure

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Glenn Reiss - Vapor Tech Services

Person, Firm or Corporation

2316 Tripaldi Way Hayward CA 94545

Address City State Zip

Signed Glenn B Reiss 6/30/14 916085

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

26

06S02W14L046

MONITORING WELL LOG B503-MW-1

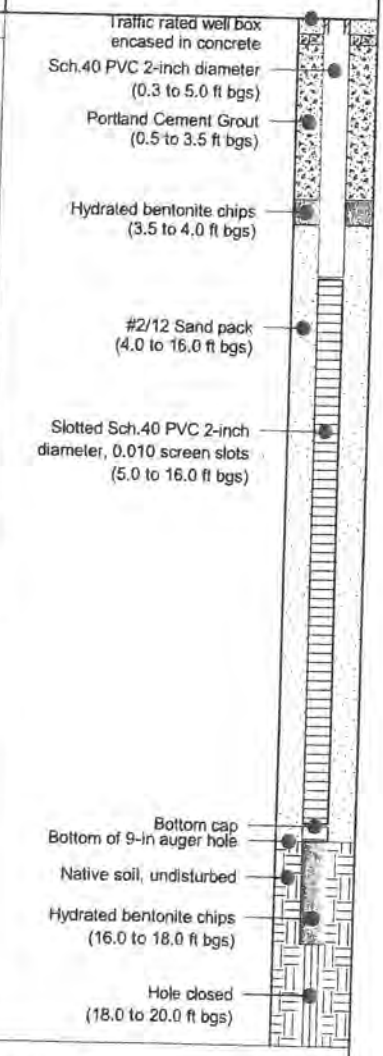
Date Begin - End:	6/06/2014 - 6/06/2014	Drilling Company:	Vapor Tech Services
Logged By:	B. Rucker	Drill Crew:	Glenn, Joel
Hor.-Vert. Datum:	NAD83	Drilling Equipment:	Geoprobe 7822DT
Plunge:	-90 degrees	Drilling Method:	Direct push (DP)/ Hollow Stem Auger (HSA)
Weather:	Clear	Exploration Diameter:	1.25 in. O.D. (DP)/ 9.0 in. O.D. (HSA)

FIELD EXPLORATION

Latitude: 37.40947° N
Longitude: -122.05341° W
Top of Casing Elevation (ft.): 25.44
Surface Condition: Asphalt

Surveyed Elevation (feet)	Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	VOC	Graphical Log	Lithologic Description
25					100%				**Clayey GRAVEL (GP-GC)**: strong brown (7.5YR 5/6), base rock
						0			**Lean CLAY (CL)**: dark brown (7.5YR 3/2), slightly moist, medium stiff, slightly cohesive, minor fine sand
									color change to, very dusky red (10BG 3/1), moderately cohesive, minor small gravel
						0			color change to, light gray (5YR 7/1), slightly stiff, cohesive, blocky, minor silt, occasional iron staining
	5								
20					90%	0			color change to, greenish black (5BG 2.5/1), moderately stiff, light gray mottling
						0			
						0			color change to, greenish gray (10BG 6/1), moist, slightly stiff, very cohesive, sticky
					100%				
	10								
15						0			**Fat CLAY (CH)**: dark grayish brown (10YR 4/2), moist, slightly stiff, moderately cohesive, minor fine sand
						0			**Clayey SAND (SC)**: dark grayish brown (10YR 4/2), very moist to wet, moderately stiff, slightly cohesive, fine grained sand
					100%				**Sandy Lean CLAY (CL)**: dark grayish brown (10YR 4/2), moist, moderately stiff, slightly cohesive, fine grained sand becomes, very moist, slightly stiff
						0			
	15								
10						0			color change to, greenish black (5BG 2.5/1), moist, slightly stiff to soft, very cohesive, fine grained sand
					100%				**Silty CLAY (CL)**: greenish black (5BG 2.5/1), slightly moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
									Clayey SAND (SC): greenish black (5BG 2.5/1), moist, dense, no cohesion, fine grained sand
20						0			
5									

MONITORING WELL CONSTRUCTION



The bore was terminated at approximately 20 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
▽ Groundwater was observed at approximately 6.44 ft. below top of casing on 06/16/2014 in completed well.

GENERAL NOTES:
Upper 5-ft of boring was hand augered to clear for utilities.
The bore location and elevation were surveyed by Cal Vada.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 122454	MONITORING WELL LOG B503-MW-1		PLATE
DRAWN BY: F JAIME			
CHECKED BY: C. NOLAND	Moffett Field Building 503 Mountain View, California		B-1
DATE: 6/24/2014			
REVISED: -			PAGE: 1 of 1

PLOTTED: 07/02/2014 04:31 PM BY: FJaime
gINT FILE: C:\users\fjaime\desktop\chris Noland.gpj
gINT TEMPLATE: PROJECTWISE: KLF_STANDARD_GINT_LIBRARY_2014.GLB: (KLF_ENVIRONMENTAL LOG)

Santa Clara Valley Water District

WELL CONSTRUCTION COMPLETION NOTICE

FC 158A (12-08-08)

Inspector: Thiemann | Date of Inspection: 6/6/14 | Permit: 14W00260

Well Owner: Navy Exchange Service | Owner Well No.: B503 MW1 | Well Registration No.: 06S02W14L046

Address of Well Site: Command Bld 503 | City or County: Moffett Field

Drilling Company: VTS | Consultant: CE2 Corp

Cond. Bore: | Conductor Depth: | Conductor Diameter & Material: | TD: 16 | Boring Diameter: 8 | BOC: 16

Casing Diameter & Material: 2" PVC | Slot Size: 010 | Screen Interval(s): TD - 5

Filter Pack Material: 2/12 | Filter Pack Interval(s): TD - 4 | Bent: 4 - 3.5 | Seal Depth: 4

Sealing Material: ☒ Neat Cement ☐ 10 Sack Sand Slurry ☐ Bentonite Slurry ☐ Other (See Comments)

Drilling Method: ☒ HSA ☐ Direct Push ☐ Mud Rotary ☐ Air Rotary ☐ Other (See Comments)

Well Type: ☒ GW Monitoring ☐ Domestic ☐ GW Extraction ☐ Agricultural ☐ Vadose Monitoring ☐ Municipal/Industrial ☐ Vadose Extraction ☐ Elevator ☐ Cathodic ☐ Other (See Comments)

Well constructed according to provisions of Santa Clara Valley Water District Permit? ☒ Yes ☐ No (See Comments)

Well Location: ft. N/S ft. E/W

GPS Coordinates: Lat. Long.

Comments: 550 S/O Wescoat Rd
255 W/O Cody Rd

Distribution: **ORIGINAL**–Permit File; **YELLOW**–City/County; **PINK**–Well File; **GOLDENROD**–Permittee

FORMER NAVY EXCHANGE AUTOMOTIVE CENTER

APN116-18-012
FORMER NAVAL AIR STATION MOFFETT FIELD, BLGD. 503
MOUNTAIN VIEW, CA 94035

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614

Approximate Scale

0 875 1,750 Feet

Wells

- A01: Water Supply - Active
- S: Water Supply - Standby
- IS01: Water Supply - Inactive
- A02: Extraction (Env) - Active
- I02: Extraction (Env) - Inactive
- A: Other - Active
- I: Other - Inactive
- B: Abandoned
- D: Destroyed
- Undet: Status Undetermined
- Parcels

N W E S

1/20/2016

ID	CONSULTANT	PERMIT	WELLID	WELLSTATUS
1	ERM-6	NOPERMIT467		Undet
2	46B	85W1283	06S02W14L011	A
3	81A	85W1285	06S02W14L010	A
4	WWR 3	95W01197	06S02W14L033	A
5	WT41A-1	99W00107	06S02W14L040	A
6	B503-MW-1	14W00260	06S02W14L046	A
7	B503-MW-2	14W00261	06S02W14L047	A
8	66A	82W0224	06S02W14L003	A
9	W9-30(A1)	90W0701	06S02W14F013	A
10	W6	87W0199	06S02W14L023	A
11	51B	85W1282	06S02W14L016	A

Santa Clara Valley Water District

5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

FC 198 (03-26-15)

▶ Please complete all information.

DISTRICT PERMIT NO.: D2016 0125 002

Well Owner: Navy Exchange Service Command	**Property Owner:** NASA Ames Research Center	**Name of Business/Residence at Site:** Former Navy Exchange Automotive Center
Well Owner's Mailing Address: NEXCOM Code BE **City, State, Zip** 3280 Virginia Beach, VA 23452	**Property Owner's Mailing Address:** M/S 204-15, Bldg N204, Room 102 **City, State, Zip** Moffett Field, CA 94035	**Address of Well Site:** Former Naval Air Station Moffett Field, Building 503 **City, State, Zip** Mountain View, CA 94035
Telephone No.: Loretta Winsper: 757-631-3798	**Telephone No.:** Kimberly Finch: 650-604-1294	**Assessor's Parcel No. of Well Site:** Book 116 Page 18 Parcel 012

☐ Well on District property/easement (See General Condition E.)

RECEIVED
JAN 12 2016
S.C.V.W.D.
WELLS

Consultant: CE2 Corporation	**Drilling Company:** Vapor Tech Services	
Address: 6140 Stoneridge Mall Road, Suite 500 **City, State, Zip** Pleasanton, CA 94588	**Address:** 2316 Tripaldi Way **City, State, Zip** Hayward, CA 94545	
Telephone No.: 925-463-7301 (Ext 115) Thomas Berry	**Telephone No.:** 415-378-0415	**C-57 License No.:** 916085
☐ Check if address or phone number has changed	☐ Check if address or phone number has changed	

▶ **All questions below are to be completed before permit can be issued; if unknown, applicant shall make on-site investigation to determine correct answers.**

WELL INFORMATION

Well Registration No.: 06S02W14L047	**Owner/Consultant Well No.:** B503-MW-2	**Original Well Construction Permit No.:** 14W00261
Well Casing Depth: 16 ft	**Total Boring Depth:** 20-ft (1.25-in direct push), 16-ft (9-in hollow stem auger)	**Well Casing Diameter:** 2 inches

This Section to Be Completed for All Monitoring Wells or Extraction/Recovery Wells

Case Name/No.: Moffett Field Buidling 503 / T10000006753	**Caseworker Name:** Elezabeth Wells
Oversight Agency: San Francisco Bay Regional Water Quality Control Board	**Caseworker Telephone No.:** 510-622-2440

WELL TYPE/USE	☐ WATER PRODUCTION	☒ MONITORING	☐ REMEDIATION	☐ DEWATERING	☐ HEAT EXCHANGE	☐ INJECTION	☐ CATHODIC PROTECTION	☐ OTHER
	☐ Agricultural ☐ Domestic ☐ Industrial ☐ Municipal	☒ GW Level ☒ GW Quality ☐ Inclinometer ☐ Vapor ☐ Other	☐ Air Sparge ☐ GW Extraction ☐ Material Emplacement ☐ Vapor Extraction ☐ Other	☐ Permanent ☐ Temporary	☐ Closed Loop ☐ Open Loop	☐ Groundwater Cleanup Reinjection ☐ Stormwater ☐ Water Supply Recharge ☐ Other		

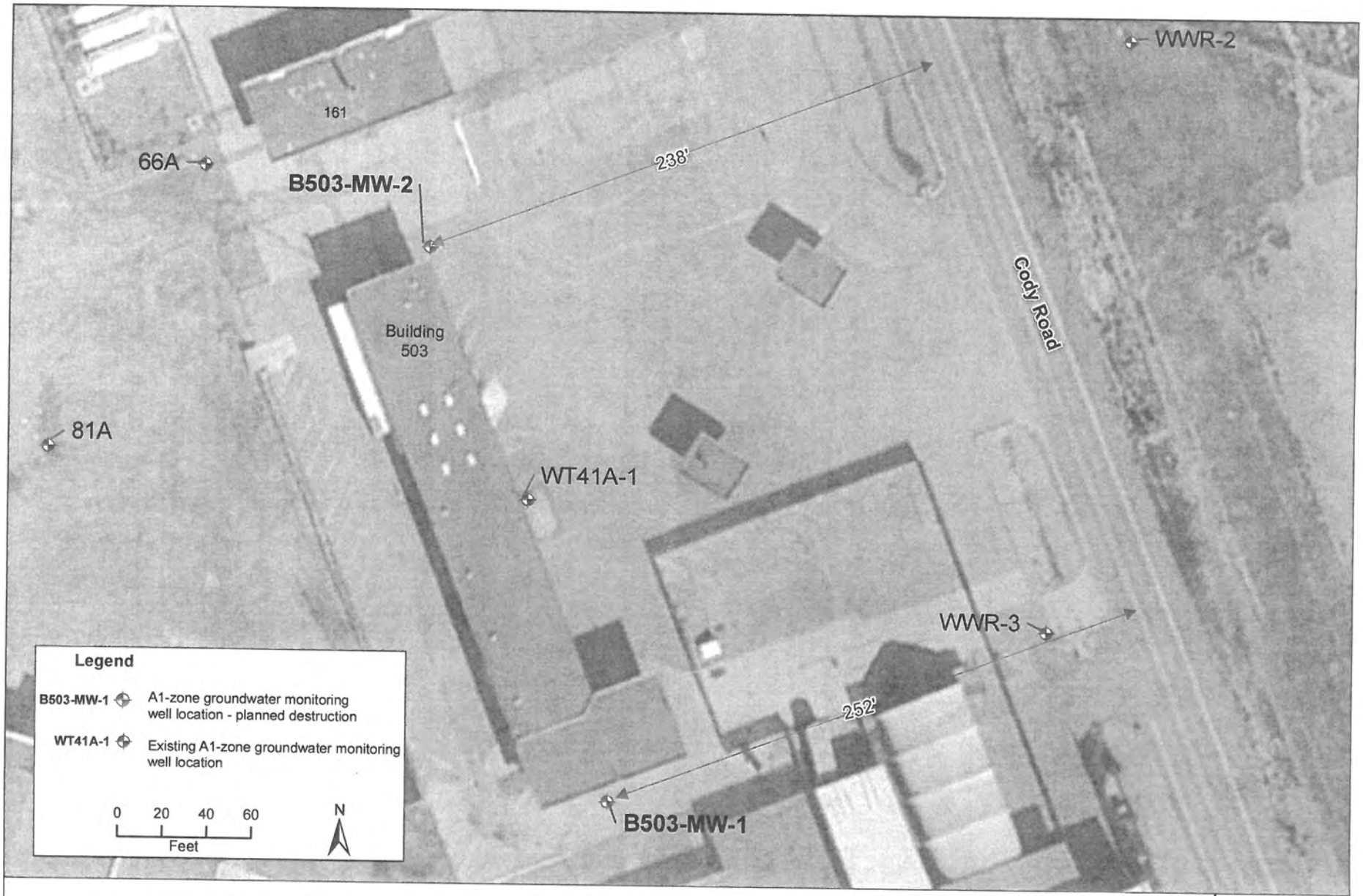
ADDITIONAL QUESTIONS FOR WATER PRODUCING WELLS

Does the well have:

1. Outer conductor casing? ☐ Yes ☒ No
2. Annular cement seal outside of casing at surface? ☒ Yes ☐ No
3. A S.C.V.W.D. water meter attached? ☐ Yes ☒ No

Original Drilling Method: Pilot borehole 1.25-in OD w/ direct-push to 20 ft. 18-20 ft swelled shut, 16-18 ft was backfilled with bentonite chips. Borehole was cleaned out to 16 ft with 9-in OD w/ hollow-stem auger for subsequent well installation.

IMPORTANT: A minimum 24-hour notice must be given to Santa Clara Valley Water District prior to installing the annular seal. Call (408) 265-2607, ext. 2660. Please allow 10 working days to process permit application.



Location of A1-zone Groundwater Monitoring Wells in Vicinity of Building 503 Planned for Destruction

FIGURE
1

CE² KLEINFELDER
6140 Stoneridge Mall Rd, # 500
Pleasanton, CA 94588-3677

NAVFAC Naval Facilities Engineering Command
Naval Facilities Engineering
Command Southwest
1220 Pacific Highway,
San Diego, California 92132-5190

NC 8/18/15

I:\Projects\MoffettField\GIS\Events\Fld\B503_WorkPermit\Map_WellDestruction_20140818.mxd

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

Please describe in detail, the proposed destruction method (Any well destruction in which the well casing is left in place and in which the well has a filter pack outside the casing, must be destroyed using approved neat cement grout):

There is no dedicated pump apparatus in the well. The well will be sounded to ensure no significant debris or sediment has collected in the bottom of the well. If it has, it will be removed by bailing. Well will be pressure grouted to top of casing using 21-sack neat cement grout placed under a minimum of 25 pounds per square inch of pressure for at least five minutes or until at least an additioanl 33 percent of the total casing's volume of sealing material is pumped into the well. The top five ft of casing and borehole materials will then be drilled out to the full diameter of the original borehole (9 inches) and the well vault and adjacent skirt material will be removed. The top five ft of the drilled out borehole will be gravity backfilled with 21-sack neat cement to within 4-6 in. of ground surface. The footprint of the removed vault and surrounding skirt (approximately 2 ft X 2 ft) will be repaved with concrete flush with the surrounding pavement.

SIGNATURES

I understand and agree that all work associated with this permit is required to be done in accordance with Santa Clara Valley Water District (District) Well Ordinance 90-1, the District Well Standards, and conditions of this permit (see page 4). I certify that the information given in this permit is correct to the best of my knowledge and that the signature below, whether original, electronic, or photocopied, is authorized and valid, and is affixed with the intent to be enforceable. I also certify that a right of entry/encroachment agreement has been formalized between the well owner and property owner, if parties differ.

Signature	Print Name	Date
Signature of Well Owner/Agent: Loretta Winsper	Print Name: Loretta Winsper	Date: 12/21/15
Signature of Property Owner/Agent: FINCH, KIMBERLY S. (ARC-JQ) Digitally signed by FINCH, KIMBERLY S. (ARC-JQ) DN: cn=FINCH, KIMBERLY S. (ARC-JQ), o=Environmental Management Division, ou=JQ, email=kimberly.s.finch@sccgov.org, c=US Date: 2015.12.22 07:33:41 -08'00'	Print Name: Kimberly Finch	Date: 12/22/2015
Signature of Driller/Agent: Glenn D Reiss	Print Name: Glen Reiss	Date: 12-17-15
Signature of Consultant/Agent (if any): Thomas Berry	Print Name: Thomas Berry	Date: 12/18/2015

DISTRICT USE ONLY

The District has approved the following destruction methods for the well described in this permit:

☒ Pressure Grout Method (as outlined in Standards)
NOTE: Neat cement is the only sealing material approved for pressure grouting.

OR

☒ Drill out well to a total depth of 16 feet, with a minimum bore of 9 inches.

☐ Clean out well casing to a total depth of _____ feet and back fill with approved sealing material (if total depth is unknown, driller must determine total depth during clean out of well). NOTE: Neat cement is the only sealing material approved for back filling gravel packed wells.

☐ Well casing must be perforated at the following depths prior to backfilling: _____

☐ Other: _____

Permit Approved by: B.	Date: 1-22-16

District Permit No.	Date Issued	Expiration Date	Driller's Log No.
D201601 25002	1-25-16	7-25-16	

Please allow 10 working days to process this application.

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600

WELL DESTRUCTION APPLICATION

GENERAL CONDITIONS

A. **District** (telephone 408-265-2607, ext. 2660) **must be notified a minimum of one working day before the placement of the well destruction sealing materials**. An authorized District representative must be on site to witness the destruction activities. This requirement may be waived by an authorized District representative. If the District waives the inspection requirement, the District may request the permittee(s) to furnish certification under penalty of perjury that the well was destroyed in accordance with the District Well Standards and with the permit conditions.

B. This permit is valid only for the purpose specified herein. Well destruction methods authorized under this permit may not be changed except by written approval of an authorized District representative, and only if the District believes that such a change will result in equal or superior compliance with the District and State Well Standards (e.g., if the District representative believes that site conditions warrant such a change).

C. This permit is only valid for the Assessor's Parcel No. indicated on it.

D. This permit may be voided if it contains incorrect information. If the permit is voided after work has begun, the well or boring that is being destroyed under this permit may be required to be reconstructed in accordance with District and State Well Standards.

E. If any work associated with this permit will take place on District property/easement, an encroachment or construction permit must be granted by the District's Community Projects Review Unit (telephone 408-265-2607, ext. 2350, 2217, or 2253).

F. Within 30 days of the completion of the well destruction activities, the driller or consultant identified on this permit shall fully complete State of California DWR Form 188 and submit the original to the District's Wells and Water Production Unit.

G. The permittee(s) shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend, and hold the District, its officers, agents, and employees free and harmless from any and all expense, cost, and liability in connection with or resulting from, the granting of or exercise of this permit including, but not limited to, property damage, personal injury, and wrongful death.

H. Permittees are required to be in full compliance with Cal/OSHA California Labor Code Section 6300.

I. A current C-57 Water Well Drilling Contractor's License is required for the destruction of all wells.

J. Permittee, permittee's contractors, consultants, or agents shall be responsible to assure that all materials generated during drilling, well destruction, well development, pump testing, 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/waters be allowed to enter, or potentially enter, on- or off-site storm sewers, dry wells, or waterways. Such materials/waters shall not be allowed to move off the property where the work is being completed.

K. The driller and consultants (if applicable) shall have an active copy of their Worker's Compensation Insurance on file with the District.

L. This permit shall expire if not exercised within 180 calendar days of its approval unless an extension of the permit expiration date is granted by an authorized District representative.

M. If the well approved to be destroyed under this permit is a monitoring well, associated with an investigation/cleanup overseen by a regulatory agency, the proposed well destruction must be approved by the person with regulatory authority over the investigation/cleanup.

N. This permit must be kept on site during all activities associated with it and shall immediately be presented to an authorized District representative upon request.

O. Permittee shall notify Underground Service Alert (USA) at 1-800-227-2600 or 811 prior to any digging.

Please allow 10 working days to process this application.

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0302295

Page 1 of 3

Owner's Well Number B503-MW-2

Date Work Began 2/10/2016 Date Work Ended 2/10/2016

Local Permit Agency Santa Clara Valley Water District

Permit Number D20160125002 Permit Date 1/25/2016

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method hollow-stem auger Drilling Fluid none

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
		Well destruction. see attached geologic log.
		Well casing grouted in place from total well depth
		of 16.25 ft below ground surface to ground
		surface. Over 6 gal neat grout gravity injected
		= >25% of casing voolume. Pressurization
		waived onsite by SCVWD inspector based on
		volume injected. Top five feet of casing and
		borehole drilled out to full borehole diameter of
		9 inches. Backfilled with grout to within 0.5 ft of
		ground surface. Well vault removed. Concrete
		used to fill top 0.5 ft of void from well vault
		removal and smoothed flush with surrounding
		pavement.
		"Casings" and "Annular Material" information below
		reflect current conditions (post-destruction).

Total Depth of Boring 20 Feet

Total Depth of Completed Well 16 Feet

Well Owner

Name Naval Exchange Service Command

Mailing Address 3280 Virginia Beach Blvd.

City Virginia Beach State VA Zip 23452

Well Location

Address Former Naval Air Station Moffett Field, Building 503

City Mountain View County Santa Clara

Latitude Deg Min Sec N Longitude Deg Min Sec W

Datum Dec. Lat Dec. Long.

APN Book 116 Page 18 Parcel 012

Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See attached Figure 1.

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

⦿ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 6 (Feet) Date Measured 02/10/2016

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size If Any (Inches)
0	5	9	none	none (removed)				
5	16	9	Screen	PVC Sch. 40		2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	depth is 0.5'
1	16	Cement	neat Portland
5	16	Filter Pack	#2/12 sand
16	18	Bentonite	chips
18	20	slough	hole swelled at 18'

Attachments

☑ Geologic Log

☑ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other location figure

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Glenn Reiss - Vapor Tech Services

Person, Firm or Corporation

2316 Tripaldi Way Hayward CA 94545

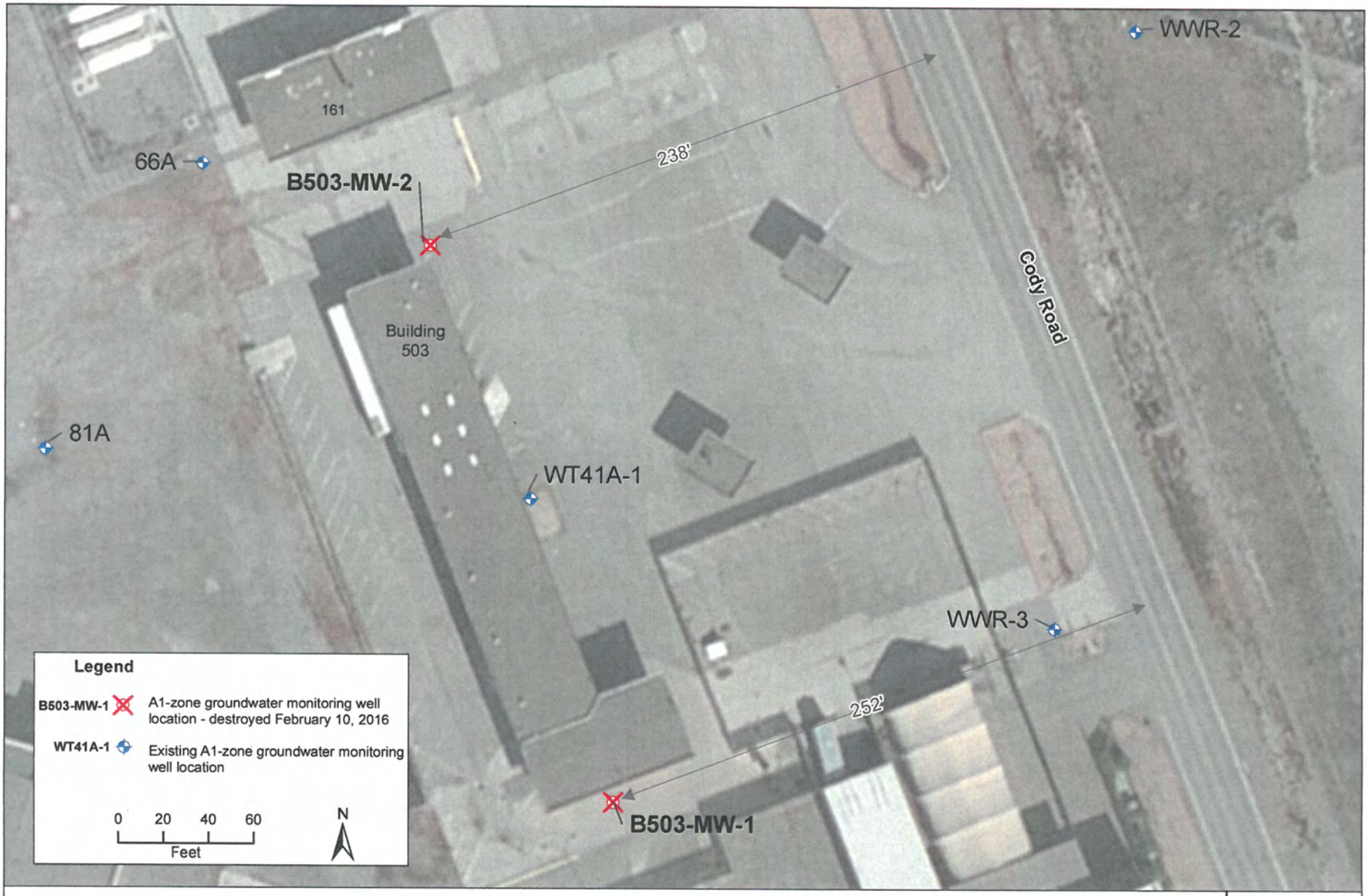
Address City State Zip

Signed Glenn D Reiss 3/8/16 916085

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV 1/2005

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM



Location of A1-zone Groundwater Monitoring Wells in Vicinity of Building 503

FIGURE
1

CE² KLEINFELDER
6140 Stoneridge Mall Rd, # 500
Pleasanton, CA 94588-3677

NAVFAC Naval Facilities Engineering Command
Naval Facilities Engineering
Command Southwest
1220 Pacific Highway,
San Diego, California 92132-5190

NC 2/24/16
I:\Projects\MoffettField\GIS\Events\Fld\B503_WellDestruction_Feb2016_20160224_image.mxd

Date Begin - End:	2/10/2016 - 2/10/2016	**Drilling Company:**	Vapor Tech Services
Logged By:	B. Rucker	**Drill Crew:**	Glen Reiss, Joel Mendoza
Hor.-Vert. Datum:	NAD83	**Drilling Equipment:**	Geoprobe 7822DT w/ Hollow Stem Auger Attachment
Plunge:	-90 degrees	**Drilling Method:**	Hollow Stem Auger
Weather:	Clear	**Exploration Diameter:**	9.0 in. O.D. to 5 feet bgs, in place grouting to 16 feet bgs in.

POST-DESTRUCTION MONITORING WELL LOG B503-MW-2

FIELD EXPLORATION

Latitude: 37.41021° N
Longitude: -122.05372° W
Surveyed Ground Surface Elevation (ft.): 25.4
Surface Condition: Asphalt

Surveyed Elevation (feet)	Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	VOC	Graphical Log	Lithologic Description
25					100%				**Clayey GRAVEL (GP-GC)**: strong brown (7.5YR 5/6), base rock
						0			**Lean CLAY (CL)**: dark brown (7.5YR 3/2), slightly moist, medium stiff, slightly cohesive, minor fine sand
									color change to, very dusky red (10BG 3/1), moderately cohesive, minor small gravel
						0			color change to, light gray (5YR 7/1), slightly stiff, cohesive, blocky, minor silt, occasional iron staining
20	5				100%	0			color change to, greenish black (5BG 2.5/1), moderately stiff, light gray mottling
						0			
						0			color change to, greenish gray (10BG 6/1), moist, slightly stiff, very cohesive, sticky
									becomes, moderately stiff
					100%				becomes, slightly stiff, minor small gravel
15	10					0			
									Fat CLAY (CH): dark grayish brown (10YR 4/2), moist, slightly stiff, moderately cohesive, minor fine sand
						0			**Clayey SAND (SC)**: brown (10YR 4/3), very moist to wet, moderately stiff, slightly cohesive, fine grained sand
									Sandy Lean CLAY (CL): dark grayish brown (10YR 4/2), moist, moderately stiff, slightly cohesive, fine grained sand
					100%				**Clayey SAND (SC)**: brown (10YR 4/3), very moist to wet, soft, moderately cohesive
						0			**Silty CLAY (CL)**: brown (10YR 4/3), moist, moderately stiff, cohesive
10	15								**Sandy Lean CLAY (CL)**: greenish black (5BG 2.5/1), moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
					100%				**Silty CLAY (CL)**: greenish black (5BG 2.5/1), slightly moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
									Clayey SAND (SC): greenish black (5BG 2.5/1), moist, dense, no cohesion, fine grained sand, minor small gravel
5	20					0			

MONITORING WELL CONSTRUCTION

Completion Method:
Post Destruction

The bore was terminated at approximately 20 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
Groundwater was observed at approximately 5.8 ft. below top of casing prior to well destruction 2/10/2016

GENERAL NOTES:
Upper 5-ft of boring was hand augered to clear for utilities.
The bore location and elevation were surveyed by Cal Vada.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	122454
DRAWN BY:	F. JAIME
CHECKED BY:	T. BERRY
DATE:	3/4/2016
REVISED:	-

POST-DESTRUCTION MONITORING WELL LOG B503-MW-2

Moffett Field
Building 503
Mountain View, California

PLATE
B-2

PAGE: 1 of 1

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Santa Clara Valley Water District

WELL DESTRUCTION COMPLETION NOTICE

FC 218 (05-16-14)

Inspector: C Ramb	Date of Inspection: 2-10-16	Permit: D2016012 5002
Owner/Consultant No.: B503-MW2	Well Registration No.: 06502W14L047	
Well Owner: Navy Exchange	Address of Well Site: Moffett Bldg 503	City or County: Mtn View
Drilling Company: Vapor Tech	Consultant: CE2	

Well Depth:	Borehole Diameter:	Casing Diameter:	Casing Material:	Well Type:
16	8	2	PVC	☒ HSA ☐ Rotary ☐ Other (See Comments) ☐ Direct Push ☐ Cable Tool

Casing Perforated: ____ to ____

Sealing Material: ☒ Neat Cement ☐ 10 Sack Sand Slurry ☐ Bentonite ☐ Other (See Comments)

Destruction Method: ☒ Pressure Grout ☐ Drill Out ☐ Excavate ☐ Bail, Perf & Backfill ☐ Bail & Backfill ☐ Other (See Comments)

Well destroyed according to provisions of Santa Clara Valley Water District Permit? ☒ Yes ☐ No (See Comments)

GPS Coordinates: Lat. Long.

Comments:

Distribution: **ORIGINAL**–Permit File; **YELLOW**– Permittee; **PINK**–Well File

The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0218613

Page 1 of 3

Owner's Well Number B503-MW-2

Date Work Began 06/06/2014 Date Work Ended 6/6/2014

Local Permit Agency Santa Clara Valley Water District

Permit Number 14W00261 Permit Date 6/5/14

DWR Use Only – Do Not Fill In

06S02W14L047

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method hollow-stem auger Drilling Fluid none

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
		see attached geologic log

Total Depth of Boring 20 Feet

Total Depth of Completed Well 16 Feet

RECEIVED JUL 10 2014 S.C.V.W.D. WELLS

Well Owner

Name Naval Exchange Service Command

Mailing Address 3280 Virginia Beach Blvd.

City Virginia Beach State VA Zip 23452

Well Location

Address Former Naval Air Station Moffett Field, Building 503

City Mountain View County Santa Clara

Latitude 37 Deg. 24 Min. 36.7554 Sec. N Longitude -122 Deg. 3 Min. 12.3986 Sec. W

Datum NAD 83 Dec. Lat. 37.4102099 Dec. Long. -122.0537217

APN Book 116 Page 18 Parcel 012

Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See attached location figure

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete**

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

⦿ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water ~11.5 (Feet below surface)

Depth to Static Water Level 6.85 (Feet) Date Measured 6/16/14

Estimated Yield * (GPM) Test Type not conducted

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	5	9	Blank	PVC Sch. 40		2		
5	16	9	Screen	PVC Sch. 40		2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	3.5	Cement	
3.5	4	Bentonite	chips
4	16	Filter Pack	#2/12 sand
16	18	Bentonite	chips
18	20	slough	hole swelled at 18'

Attachments

☑ Geologic Log

☑ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other location figure

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Glenn Reiss - Vapor Tech Services (Person, Firm or Corporation)

2316 Tripaldi Way (Address) Hayward (City) CA (State) 94545 (Zip)

Signed Glenn O'Reiss (C-57 Licensed Water Well Contractor) 6/20/14 (Date Signed) 916085 (C-57 License Number)

DWR 188 REV. 1/2005

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

22

0G502W14L047

MONITORING WELL LOG B503-MW-2

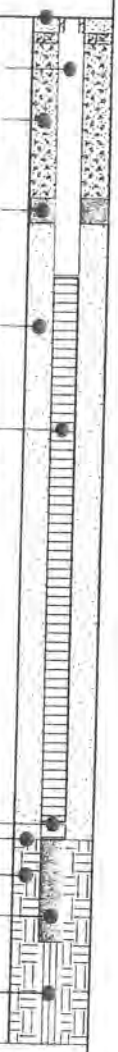
Date Begin - End:	6/06/2014 - 6/06/2014	Drilling Company:	Vapor Tech Services
Logged By:	B. Rucker	Drill Crew:	Glenn, Joel
Hor.-Vert. Datum:	NAD83	Drilling Equipment:	Geoprobe 7822DT
Plunge:	-90 degrees	Drilling Method:	Direct push (DP)/ Hollow Stem Auger (HSA)
Weather:	Clear	Exploration Diameter:	1.25 in. O.D. (DP)/ 9.0 in. O.D. (HSA)

Latitude: 37.41021° N
Longitude: -122.05372° W
Top of Casing Elevation (ft.): 25.40
Surface Condition: Asphalt

FIELD EXPLORATION

Surveyed Elevation (feet)	Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	VOC	Graphical Log	Lithologic Description
25					100%				**Clayey GRAVEL (GP-GC)**: strong brown (7.5YR 5/6), base rock
						0			**Lean CLAY (CL)**: dark brown (7.5YR 3/2), slightly moist, medium stiff, slightly cohesive, minor fine sand
									color change to, very dusky red (10BG 3/1), moderately cohesive, minor small gravel
						0			color change to, light gray (5YR 7/1), slightly stiff, cohesive, blocky, minor silt, occasional iron staining
20	5				100%	0			color change to, greenish black (5BG 2.5/1), moderately stiff, light gray mottling
						0			
						0			color change to, greenish gray (10BG 6/1), moist, slightly stiff, very cohesive, sticky
					100%				becomes, moderately stiff
									becomes, slightly stiff, minor small gravel
15	10					0			
									Fat CLAY (CH): dark grayish brown (10YR 4/2), moist, slightly stiff, moderately cohesive, minor fine sand
						0			**Clayey SAND (SC)**: brown (10YR 4/3), very moist to wet, moderately stiff, slightly cohesive, fine grained sand
					100%				**Sandy Lean CLAY (CL)**: dark grayish brown (10YR 4/2), moist, moderately stiff, slightly cohesive, fine grained sand
						0			**Clayey SAND (SC)**: brown (10YR 4/3), very moist to wet, soft, moderately cohesive
10	15								**Silty CLAY (CL)**: brown (10YR 4/3), moist, moderately stiff, cohesive
						0			**Sandy Lean CLAY (CL)**: greenish black (5BG 2.5/1), moist, slightly stiff to soft, very cohesive, fine grained sand
					100%				**Silty CLAY (CL)**: greenish black (5BG 2.5/1), slightly moist, slightly stiff to soft, very cohesive, fine grained sand
						0			
5	20					0			**Clayey SAND (SC)**: greenish black (5BG 2.5/1), moist, dense, no cohesion, fine grained sand, minor small gravel

MONITORING WELL CONSTRUCTION



The bore was terminated at approximately 20 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
▽ Groundwater was observed at approximately 6.84 ft. below top of casing on 06/10/2014 in completed well.

GENERAL NOTES:
Upper 5-ft of boring was hand augered to clear for utilities.
The bore location and elevation were surveyed by Cal Vada.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 122454	MONITORING WELL LOG B503-MW-2		PLATE
DRAWN BY: F. JAIME			
CHECKED BY: C. NOLAND			B-2
DATE: 6/24/2014	Moffett Field Building 503 Mountain View, California		
REVISED: -			PAGE: 1 of 1

PLOTTED: 07/02/2014 04:31 PM BY: FJaime
gINT FILE: C:\users\fjaime\desktop\chris Noland.gpj
gINT TEMPLATE: PROJECTWISE: KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_ENVIRONMENTAL LOG]

Santa Clara Valley Water District

WELL CONSTRUCTION COMPLETION NOTICE

FC 158A (12-08-08)

Inspector: Thiemann	Date of Inspection: 6/6/14	Permit: 14W00261
Well Owner: Navy Exchange Service	Owner Well No.: Bld 503-MW2	Well Registration No.: ~~MW-2~~ 06S02W14L047
Address of Well Site: Command Bld 503		City or County: Moffett Fiel
Drilling Company: VTS	Consultant: CEZ Corp	

Cond. Bore:	Conductor Depth:	Conductor Diameter & Material:	TD: 16	Boring Diameter: 8	BOC: 16

Casing Diameter & Material: 2" PVC	Slot Size: 010	Screen Interval(s): TD - 5	
Filter Pack Material: 2/12	Filter Pack Interval(s): TD - 4	Bent: 4 - 3.5	Seal Depth: 4

Sealing Material: ☒ Neat Cement ☐ 10 Sack Sand Slurry ☐ Bentonite Slurry ☐ Other (See Comments)

Drilling Method: ☒ HSA ☐ Mud Rotary ☐ Other (See Comments) ☐ Direct Push ☐ Air Rotary

Well Type: ☒ GW Monitoring ☐ GW Extraction ☐ Vadose Monitoring ☐ Vadose Extraction ☐ Cathodic ☐ Domestic ☐ Agricultural ☐ Municipal/Industrial ☐ Elevator ☐ Other (See Comments)

Well constructed according to provisions of Santa Clara Valley Water District Permit? ☒ Yes ☐ No (See Comments)

Well Location: ft. N/S ft. E/W

GPS Coordinates: Lat. Long.

Comments: 266 S/o Wescoat Rd
232 W/o Cody Rd

Distribution: **ORIGINAL**–Permit File; **YELLOW**–City/County; **PINK**–Well File; **GOLDENROD**–Permittee

FORMER NAVY EXCHANGE AUTOMOTIVE CENTER

APN116-18-012
FORMER NAVAL AIR STATION MOFFETT FIELD, BLGD. 503
MOUNTAIN VIEW, CA 94035

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614

Approximate Scale

0 875 1,750 Feet

Wells

- A01: Water Supply - Active
- S: Water Supply - Standby
- IS01: Water Supply - Inactive
- A02: Extraction (Env) - Active
- I02: Extraction (Env) - Inactive
- A: Other - Active
- I: Other - Inactive
- B: Abandoned
- D: Destroyed
- Undet: Status Undetermined
- Parcels

N W E S

1/20/2016

ID	CONSULTANT	PERMIT	WELLID	WELLSTATUS
1	ERM-6	NOPERMIT467		Undet
2	46B	85W1283	06S02W14L011	A
3	81A	85W1285	06S02W14L010	A
4	WWR 3	95W01197	06S02W14L033	A
5	WT41A-1	99W00107	06S02W14L040	A
6	B503-MW-1	14W00260	06S02W14L046	A
7	B503-MW-2	14W00261	06S02W14L047	A
8	66A	82W0224	06S02W14L003	A
9	W9-30(A1)	90W0701	06S02W14F013	A
10	W6	87W0199	06S02W14L023	A
11	51B	85W1282	06S02W14L016	A

Attachment 2

Photographs

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Photograph 1: Monitoring well prior to destruction.

Photograph 2: Cutting out well vault and collar.

Photograph 3: Lowering tremie pipe to bottom of well.

Photograph 4: Emplacing grout via tremie pipe into well.

Photograph 5: Drilling out upper 5 ft of casing and borehole.

Photograph 6: Emplacing grout in upper 5 ft of borehole.

Photograph 7: Dyed concrete patch flush with surrounding pavement.

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Attachment 3

Waste Disposal Manifest

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NON-HAZARDOUS WASTE MANIFEST

JH6158

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N/A

Manifest Document No.: N800377

2. Page 1 of

3. Generator's Name and Mailing Address
Navy Exchange Service Command
3280 Virginia Beach Blvd., Virginia Beach, VA 23452

4. Generator's Phone (707) 631-3798

5. Transporter 1 Company Name: NORTH STATE ENVIRONMENTAL

6. US EPA ID Number: Not Applicable

A. State Transporter's ID: 0539

B. Transporter 1 Phone: 650.222.4280

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Recology Hay Road Landfill
6426 Hay Road, Vacaville, CA 95687

10. US EPA ID Number: Not Applicable

E. State Facility's ID: Not Applicable

F. Facility's Phone: (707) 678-1492

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-hazardous soil (contaminated with trace hydraulic oil and VOCs)	01	DM	0350	P
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
Soil generated from groundwater monitoring well installations at Building 503, Former Naval Air Station Moffett Field, Mountain View, California

H. Handling Codes for Wastes Listed Above
1X55

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Brian Nitke (ES) (agent for generator) | Signature: [signature] | Date: Month 02 Day 25 Year 16

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Tony Mallellicci | Signature: [signature] | Date: Month 02 Day 25 Year 16

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: [illegible] | Signature: [signature] | Date: Month Day Year

NON-HAZARDOUS WASTE

RECOLOGY HAY ROAD
6426 Hay Road Vacaville, CA 95687
Phone: (707)-678-4718

Ticket: 1527762
Date: 2/14/2016
Time: 12:52:35 - 12:19:20
INBOUND

Truck: 7D67521
Customer: 59611/NORTH STATE ENVIRONMI
Origin: MVIE/Mountain View

Profile: 6155/Navy Exchange/503 Mounta

Gross:	0 LBS	Scale
Tare:	LBS	Scale
Net:	LBS	
Scale:	H2	

Materials & Services	Quantity	Rate	Amount
SOILB/Soil - Contaminated in Barrels	1.00 MULTIPLE		

WASTE ZERO

Total Amount:

WMSTR4-LO 9/09 Printed on recycled paper

NON-HAZARDOUS W

G. Additional Descriptions for Materials Listed Above

Soil generted from groundwater monitoring well installations at Building 503, Former Naval Air Station Moffett Field, Mountain View, California

1X55

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Brian Kirk (ES) (agent for generator)
Signature: [signature]
Date: Month 02 Day 25 Year 16

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Tony Matteucci
Signature: [signature]
Date: Month 02 Day 25 Year 16

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:
Signature:
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: [illegible]
Signature: [signature]
Date: Month Day Year