ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
510 547 8706 Facsimile

Jennifer C. Sedlachek
Project Manager

ExxonMobil

June 29, 2010

Mr. Jerry T. Wickham
Alameda County Health Care Services Agency
1311 Harbor Bay Parkway
Alameda, California 94502-6577

Subject: Well Destruction Report
Former Exxon RAS 73567, 3192 Santa Rita Road, Pleasanton, California
ACHCSA File No. RO-2426

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Well Destruction Report* for the above-referenced site. The document, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, is being submitted in response to a letter from the Alameda County Health Care Services Agency dated April 29, 2010.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: Well Destruction Report

c: w/ attachment:
Ms. Colleen Morf - Zone 7 Water Agency
Valero Energy Corporation (pdf copy via e-mail to <elmreports@valero.com>)
MHCB USA Leasing & Finance Corporation, P.O. Box 690110, San Antonio, TX 78269

c: w/o attachment:
Mr. Bryan Campbell - ETIC Engineering, Inc.

ETIC ENGINEERING

29 June 2010

Ms. Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue, #194
Oakland, California 94611

Subject: Well Destruction
Former Exxon Retail Site 73567
3192 Santa Rita Road, Pleasanton, California

Dear Ms. Sedlachek:

At the request of ExxonMobil Environmental Services Company, on behalf of ExxonMobil Oil Corporation, ETIC Engineering Inc. (ETIC) observed the destruction of 14 existing wells at the above-referenced site. The wells were properly destroyed in response to a letter from the Alameda County Health Care Services Agency (ACHCSA) dated 29 April 2010 (attached).

Between 7 and 9 June 2010, all existing wells MW1 through MW14 were destroyed by Woodward Drilling of Rio Vista, California (C-57 license #710079). Per the Zone 7 Groundwater Protection Ordinance, all wells were destroyed by pressure grouting the well casings with neat cement grout and the well casings were removed at 2 feet below grade.

All boreholes were then backfilled with neat cement grout to approximately 1 foot below grade, concrete was added to fill the void to the surface, and the surface was restored to match the surrounding surface conditions. Well destruction activities were observed by an inspector from Zone 7.

Waste (construction debris and water) generated during the well destruction activities was contained in 55-gallon drums and stored at the site. The waste was removed from the site on 25 June 2010 by Dillard Environmental Services and transported for disposal to Republic facility in Livermore, California, and to the InStrat, Inc. facility in Rio Vista, California.

The former locations of the wells are shown on the attached site map (Figure 1). Well construction details for the destroyed wells are summarized in the attached well completion reports. Department of Water Resources (DWR) Forms 188 are completed and attached to this letter. In addition to the DWR Forms 188, a copy of the Zone 7 well destruction permit and waste documentation are attached.

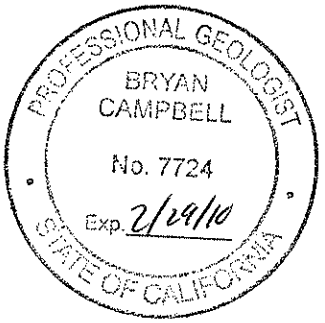
This concludes the work to be conducted on this project. Per your correspondence dated 29 April 2010, please issue a final closure letter at your earliest convenience. Thank you for your cooperation on this project.

If you have any questions or comments, please contact K. Erik Appel at (925) 602-4710 ext. 21, or Bryan Campbell at ext. 24.

Sincerely,

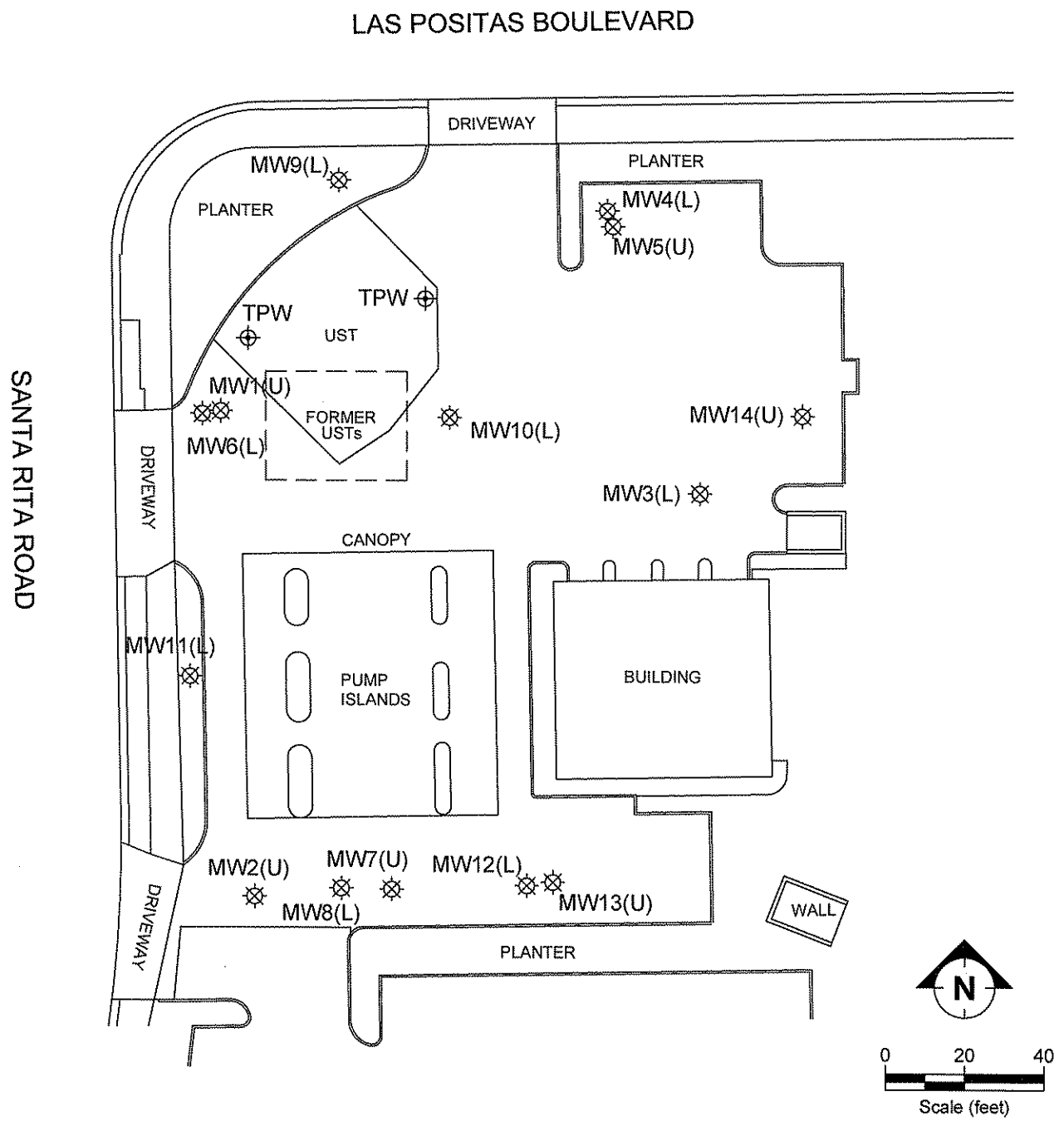
K. Erik Appel, P. G. #8092
Senior Project Geologist

Bryan Campbell, P.G. #7724
Senior Geologist



Figures

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

FILENAME: SITE1207.DWG 12/11/07

Regulatory Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

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

April 29, 2010

Ms. Jennifer Sedlachek (*Sent via E-mail to: jennifer.c.sedlachek@exxonmobil.com*)
Exxon Mobil
4096 Piedmont, #194
Oakland, CA 94611

R.J. Dold
MHCB (USA Leasing & Finance Corporation)
700 Louisiana Street, #3500
Houston, TX 77002

Mr. Robert Ehlers
Valero Energy Corporation
685 West Third Street
Hanford, CA 93230

Mr. Steve Asmann
Steve Asmann Incorporated
8099 Brittany Drive
Dublin, CA 94568-3501

Subject: Request for Well Decommissioning, Fuel Leak Case No. RO0002426 and Geotracker Global ID T0600100539, Valero #3827, 3192 Santa Rita Road, Pleasanton, CA 94566

Dear Ms. Sedlachek:

Alameda County Environmental Health (ACEH) staff have reviewed the fuel leak case file and case closure summary for the above-referenced site and concur that no further action related to the underground storage tank fuel release is required at this time. Public notification of potential case closure was sent to neighboring property owners and residents on March 23, 2010. No public comments have been received to date. Prior to issuance of a remedial action completion certificate and case closure, we request that the monitoring wells at the site be properly decommissioned, should the monitoring wells have no further use at the site. Please decommission the monitoring wells and provide documentation of the well decommissioning to this office no later than June 29, 2010. A remedial action completion certificate will be issued following receipt of the documentation.

The case will be closed with the following site management requirements:

"Case closure for the fuel leak site is granted for the current commercial land use only. If a change in land use to any residential or other conservative land use scenario occurs at this site, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH will re-evaluate the case upon receipt of approved development/construction plans. Excavation or construction activities in the areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities."

Well destruction permits may be obtained from the Zone 7 Water Agency (http://www.zone7water.com). If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham

Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o, ou, email=jerry.wickham@acgov.org, c=US
Date: 2010.04.29 08:44:00 -07'00'

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Danielle Stefani, Livermore Pleasanton Fire Department, 3560 Nevada St, Pleasanton, CA 94566 (*Sent via E-mail to: dstefani@lpfire.org*)

Cheryl Dizon (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551 (*Sent via E-mail to: cdizon@zone7water.com*)

MHCB (USA Leasing & Finance Corporation), P.O. Box 690110, San Antonio, TX 78269

Bryan Campbell, ETIC Engineering, Inc., 2285 Morello Avenue, Pleasant Hill, CA 94523 (*Sent via E-mail to: bcampbell@eticeng.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH

Geotracker, File

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT REQUESTS

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

ELECTRONIC SUBMITTAL OF REPORTS

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

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

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

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

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

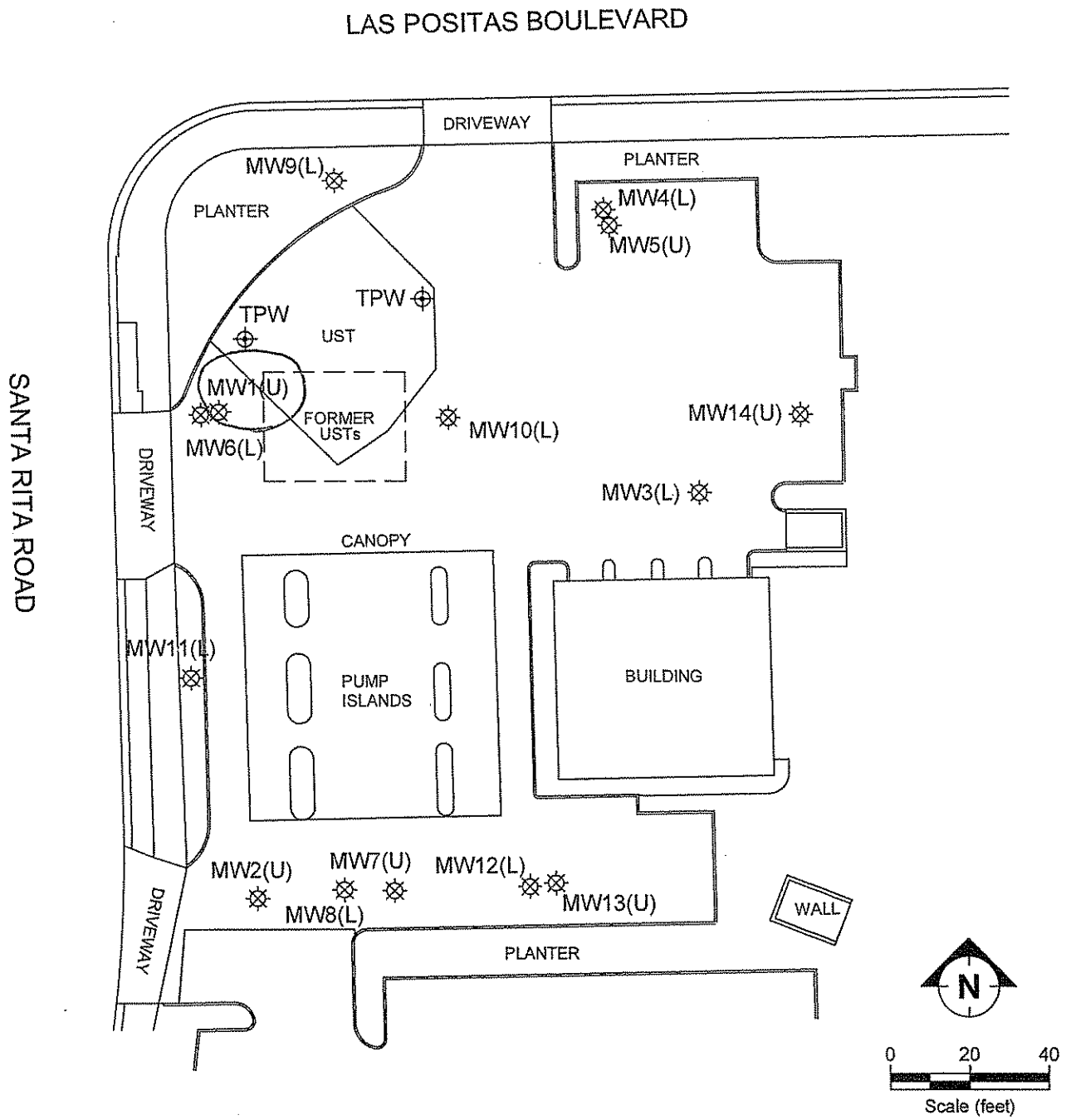
Well Completion Reports
(DWR 188 Forms)

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊛	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

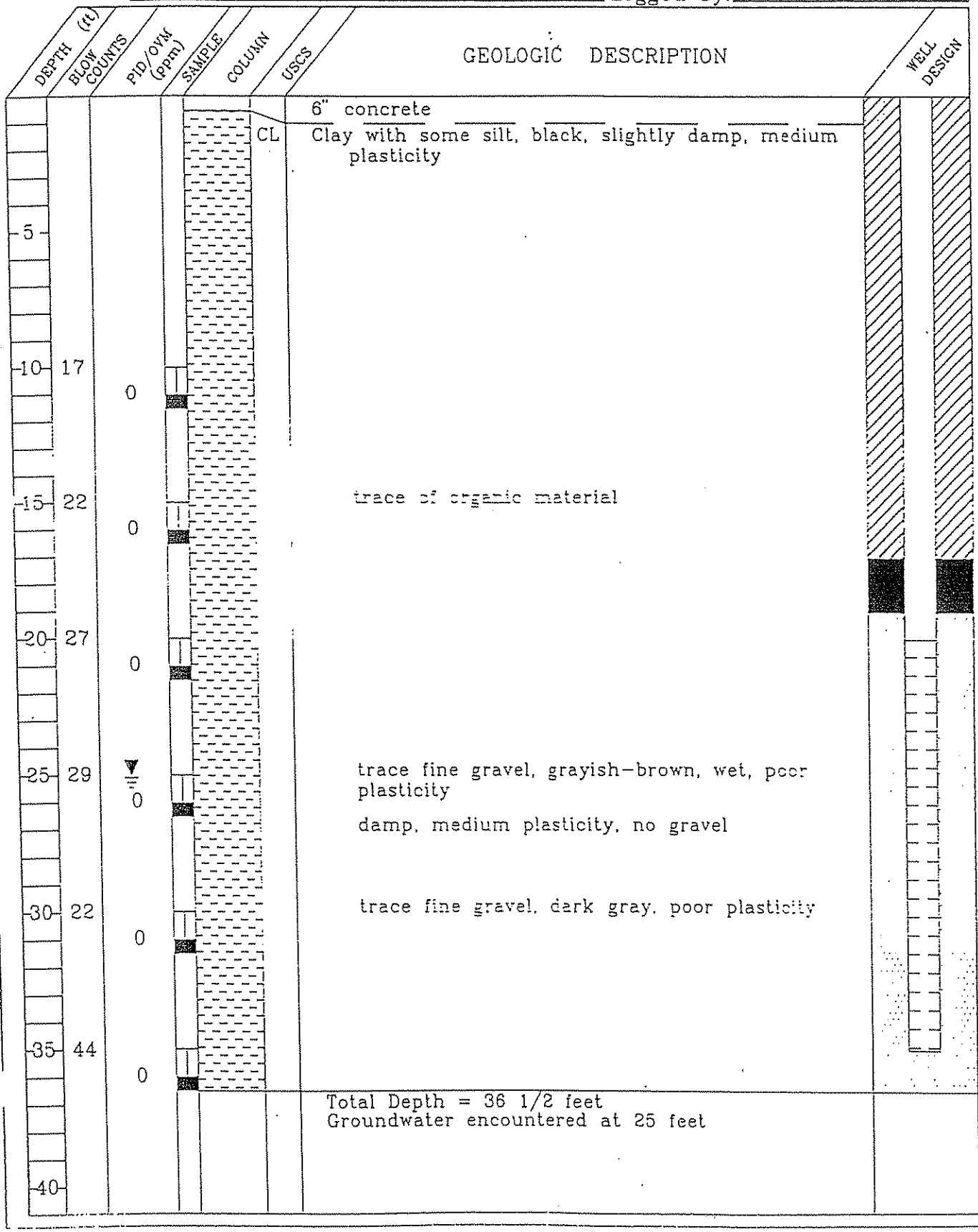
ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B3/MW1 Plate: APPENDIX
Site: Exxon Station 7-3567 Date: 11/12/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: Western corner of underground tank field Registration: R.G. 4333
Logged by: Dave Arndal



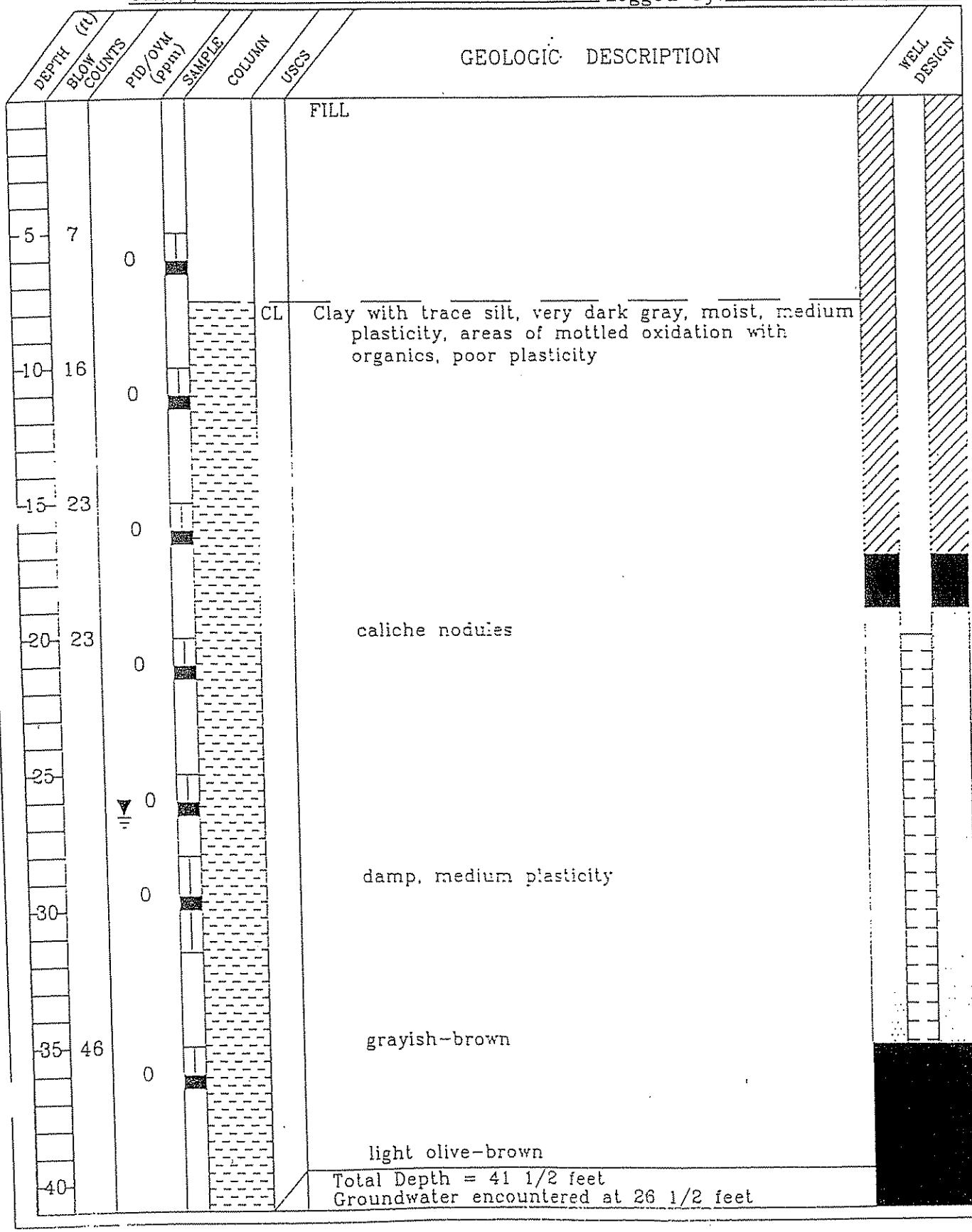
CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

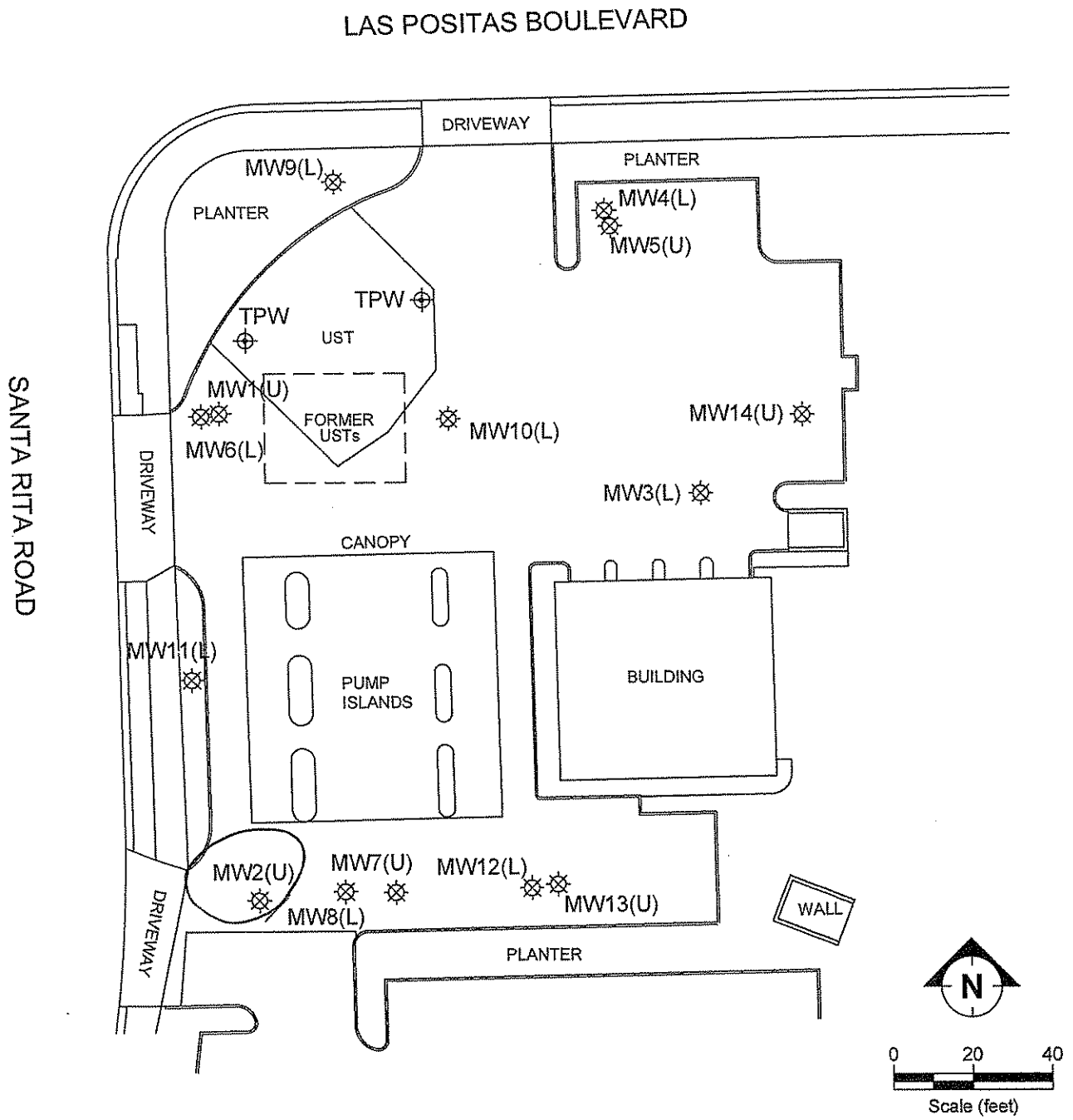
REMOVED

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B4/MW2 Plate: APPENDIX
Site: Exxon Station 7-3567 Date: 11/12/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: Southwestern corner of dispenser island canopy Registration: R.G. 4338
Logged by: Dave Arndal



LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

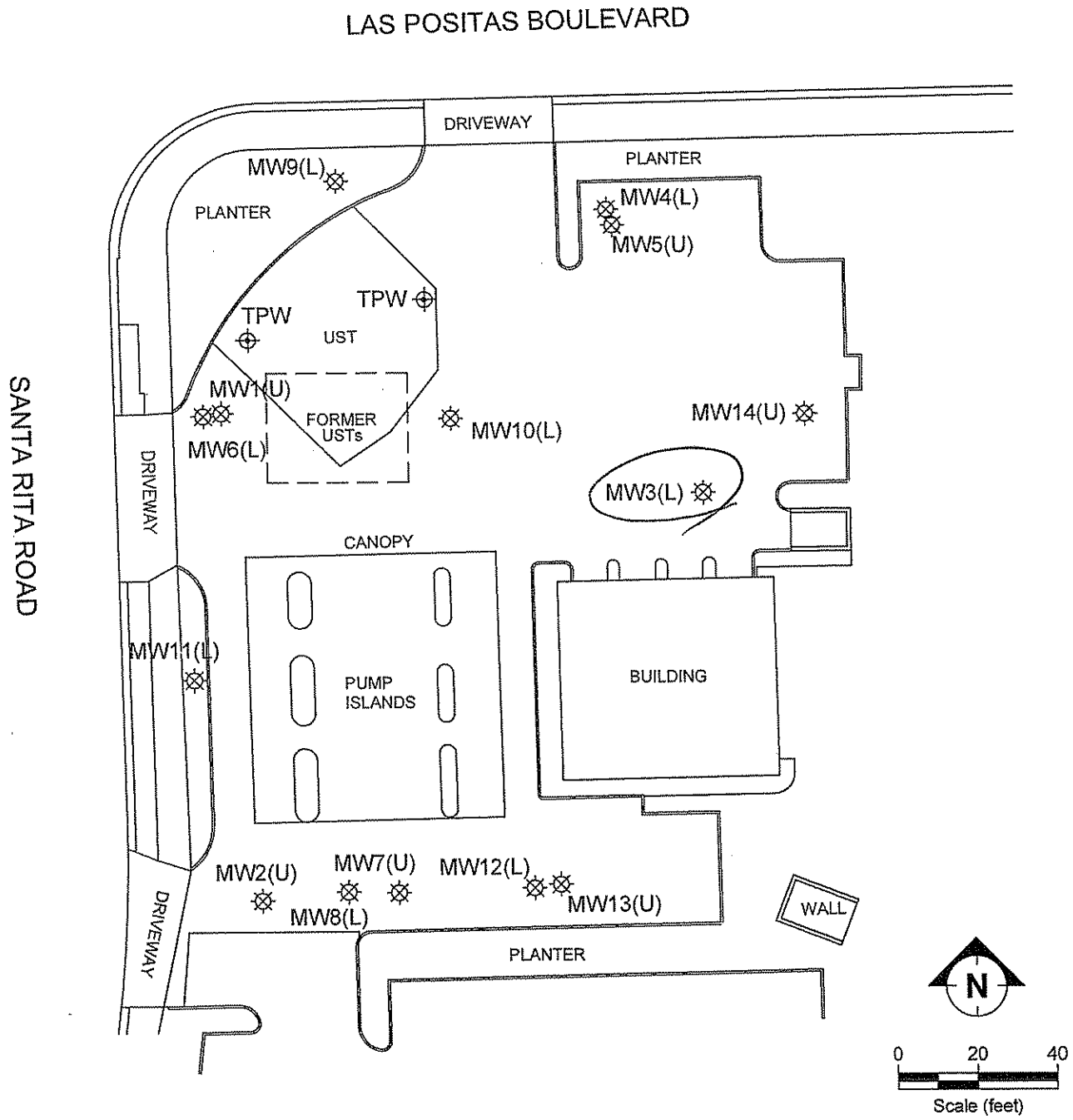
FIGURE: 1

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B1/MW3 Plate: 1 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: North of eastern half of station building Registration: R.G. 4333
Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	USCS	GEOLOGIC DESCRIPTION
				6" concrete
			CL	Clay with some silt, dark olive-brown, slightly damp, low plasticity
5	34	0		
10	15	0		olive-gray, high plasticity
15	31	0		very dark grayish brown, medium plasticity
20	26	0		slightly mottled, very dark grayish-brown and light gray, low plasticity
25	29	0		trace small organics (roots)
30	51	0		no organics
35	36	0		olive-brown, caliche nodules up to 1/4", trace organics
40				(Continued downward on next page.)

WELL DESIGN

Casing Diameter: 2", Slot Size: 0.020", Sand Size: #3..., Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B1/MW3 Plate: 2 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: North of eastern half of station building Registration: R.G. 4333
Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page.)	WELL DESIGN
40		0			CL	Clay with some silt, olive-brown, caliche nodules up to 1/4", trace organics	
					SC	Clayey sand, fine-grained, dark yellowish-brown, wet	
45	76	0					
					GP	Sandy gravel, gravel up to 3/4", fine-grained sand, dark yellowish-brown, wet	
50	76/8"						
						Total Depth = 51 1/2 feet Groundwater encountered at 41 1/2 feet	
55							
60							
65							
70							
75							
80							

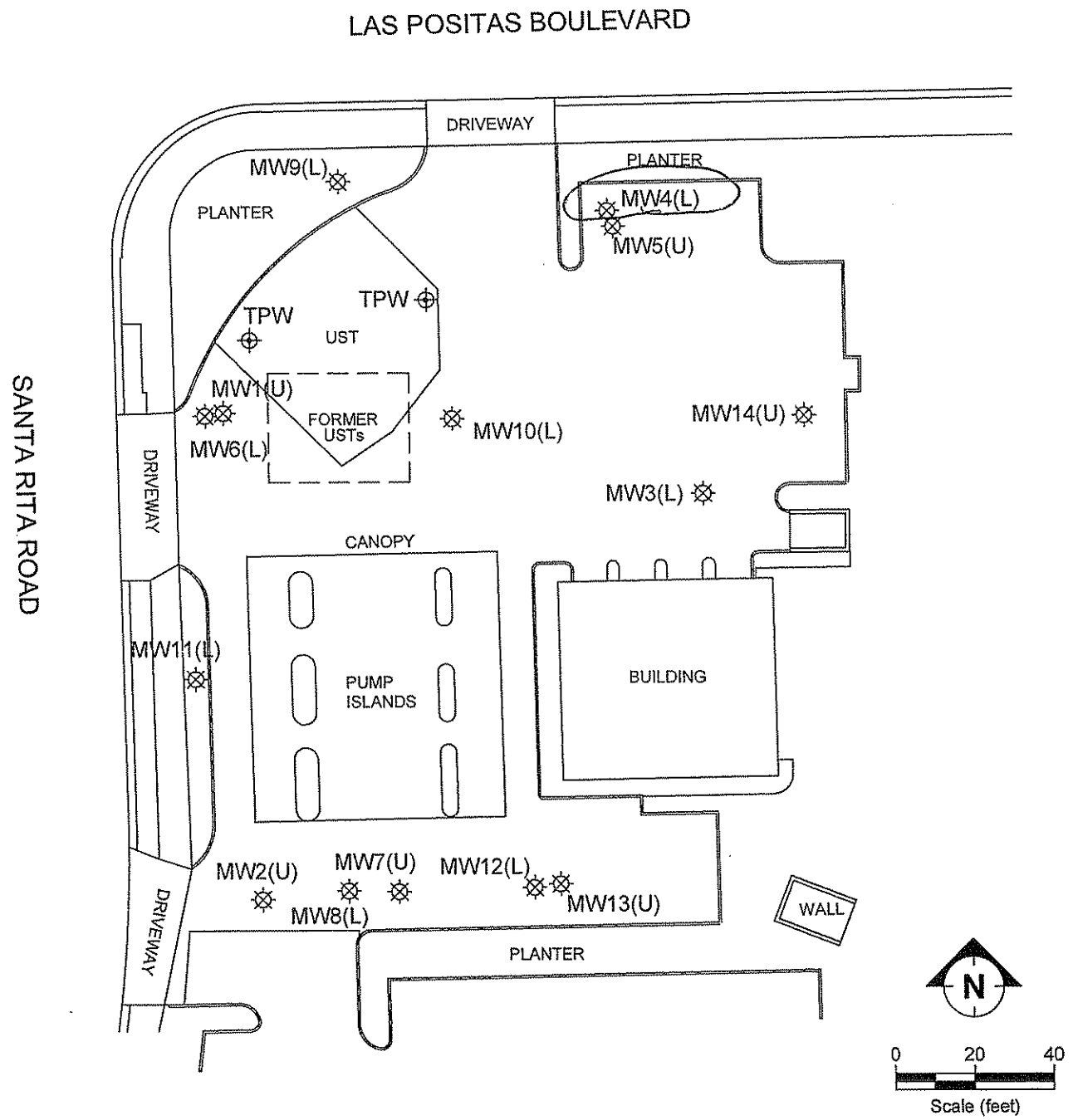
Casing Diameter: 2", Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊛	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B2/MW4 Plate: 1 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: Central northern property line Registration: R.G. 4338
Logged by: Jen Schulte

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	USCS	GEOLOGIC DESCRIPTION
				6" concrete
			CL	Clay with some silt, very dark gray, damp, medium plasticity
5	23	0		
			SC	Clayey sand, dark gray, damp, low plasticity
10	14	0		
15	8	0	CL	Clay with some silt, dark gray, moist, medium plasticity
20	24	0		caliche nodules, trace organics/woody fiber
25	16	0		gray with mottled oxidation
			SC	Clayey sand, gray, damp, low plasticity
			CL	Clay with trace silt, very dark gray, moist, medium plasticity
30	31	0		
35	25	0		dark grayish-brown, trace organics and mottled oxidation
				light olive-brown, caliche areas
40	42			(Continued downward on next page.)

WELL DESIGN

Casing Diameter: 2", Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B2/MW4 Plate: 2 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature: Steve M. Zigan
Location: Central northern property line Registration: R.G. 4333
Logged by: Jen Schulte

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page.)	WELL DESIGN
40	42	0			CL	Clay with trace silt, light olive-brown, moist, medium plasticity	
					SC	Clayey sand, fine-grained, light olive-brown, moist	
45	28	0				with grayish-brown areas	
					SW	Gravelly sand, gravel up to 1", fine-grained, light olive-brown, wet	
50	74/10"	▼ 0					

Total Depth = 51 1/2 feet
Groundwater encountered at 50 feet

55
60
65
70
75
80

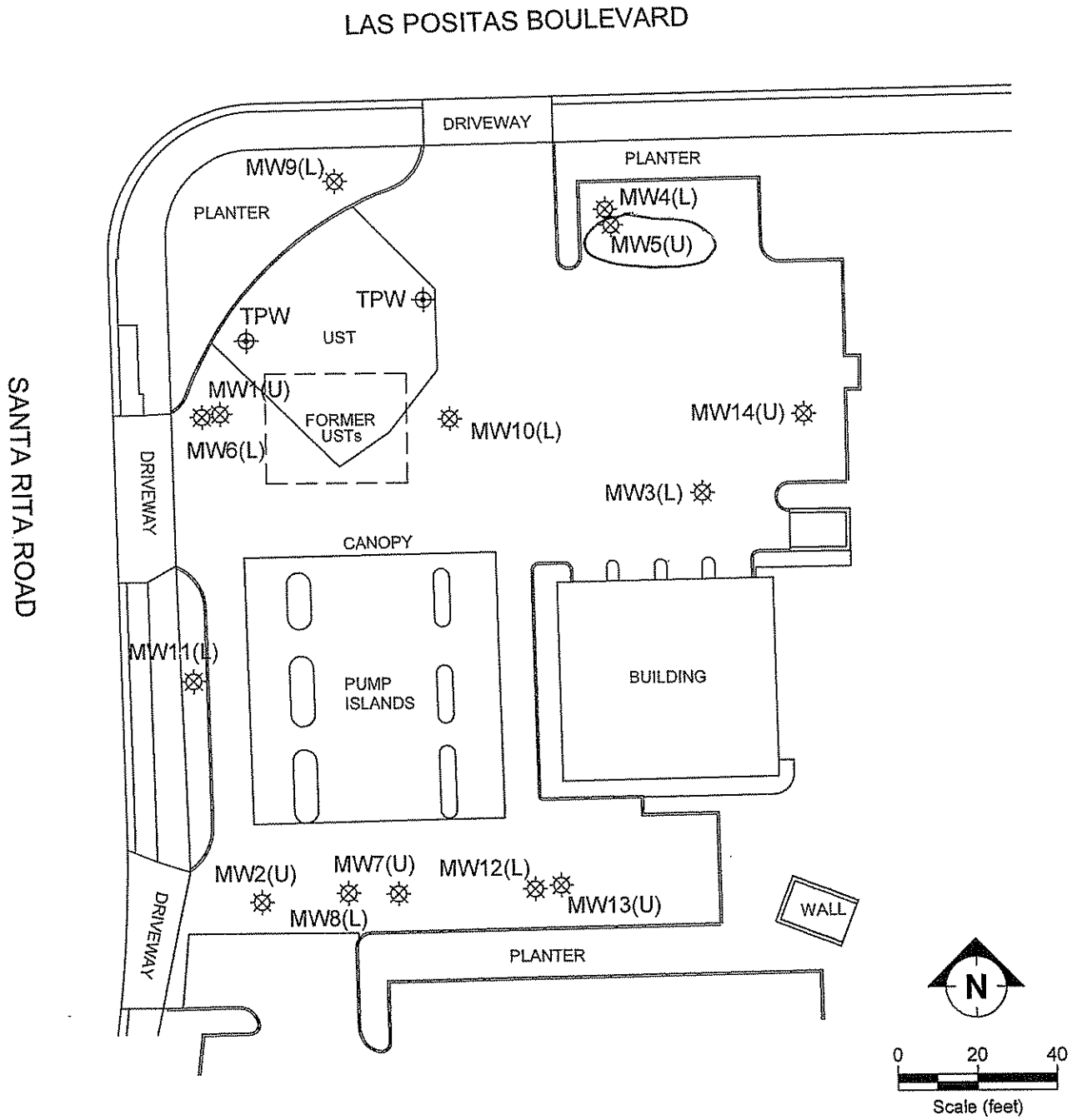
Grout: Portland Type I/II
Slot Size: 0.020", Sand Size: #2
Casing Diameter: 2"

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⛭	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Site: Former Exxon Service Station 7-3567 Date: 7/18/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBIT

Drill Rig: B57 Bore Hole Diameter: 8" Signature: [signature]

Location: 4 Feet South of MW4 Registration: R.G. 4313

85 Feet North of Station Building Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
						Clay, gray, wet, high plasticity	
5					CL	iron oxidation	
10					SM	Silty sand, gray, damp	
						wet	
						Silty clay, gray, medium plasticity, dry	
15					CL	calcium carbonate nodules	
20							
25					SC	Clayey sand with silt, light gray, high plasticity, damp, low density	
					CL	Sandy clay, gray, low plasticity, high density	
30						Total depth at 31 feet. No groundwater encountered.	
35							

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

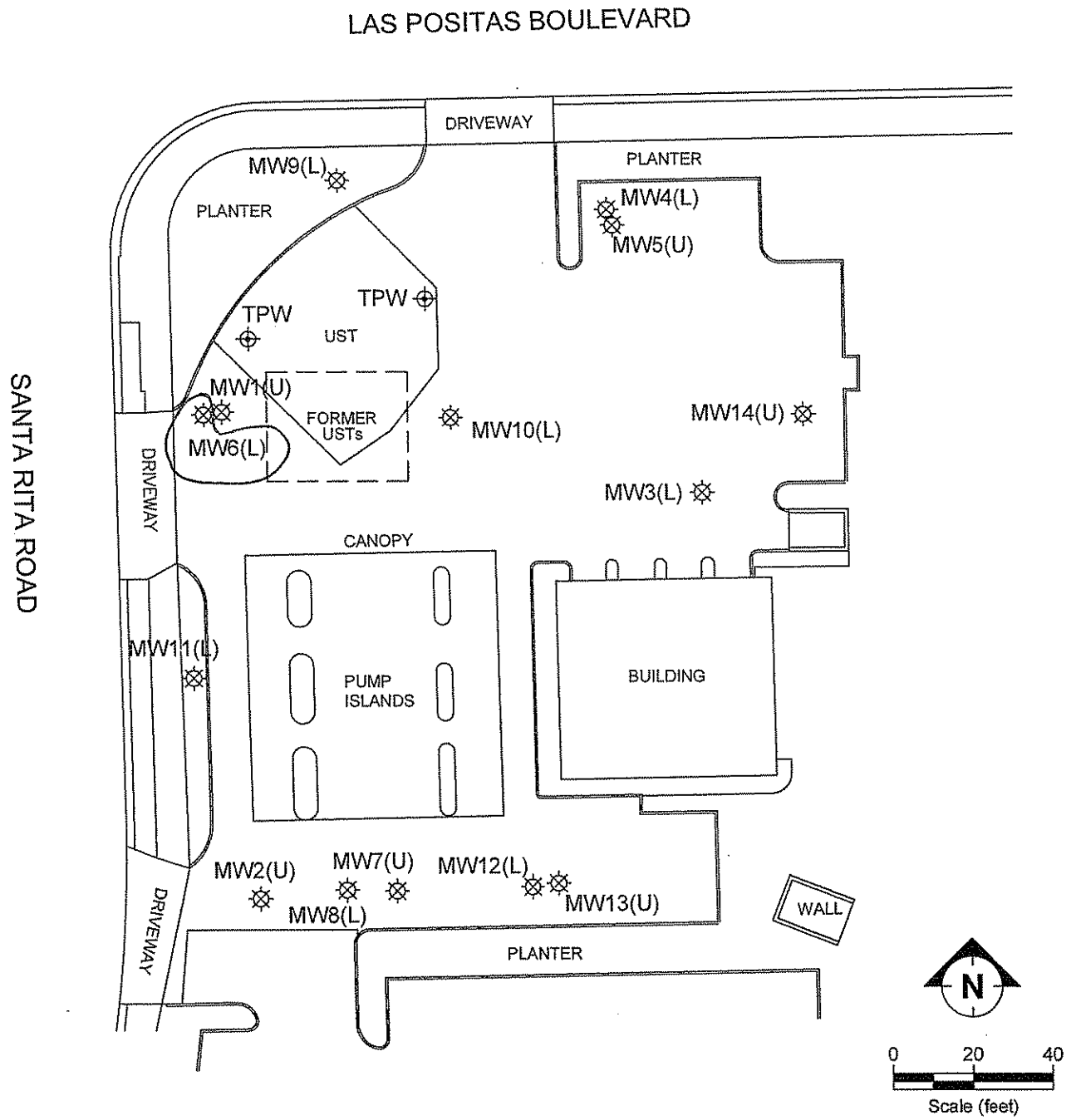
2431MW05

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊛	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

Project No.: 2431 Boring: MW6 Plate: 1 OF 2
Site: Former Exxon Service Station 7-3567 Date: 7/19/00
Drill Contractor: Woodward Drilling
Sample Method: Continuous Geologist: JOHN B. BOBBITT
Drill Rig: B57 Bore Hole Diameter: 8" Signature:
Location: 4 Feet West of MW1 Registration: R.G. 4313
25 Feet East of Santa Rita Road Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
						Clayey sand, brown, wet	
5					SC		
					CL	Sandy clay, brown, moist, high plasticity	
10					SC	Clayey sand, brown, wet	
						Sandy clay	
						silty clay, dark gray, high plasticity	
15					CL		
						small nodules of calcium carbonate, medium plasticity, very dense	
20							
						Clayey silt, light gray, moist, high plasticity	
					ML		
25						Clay with trace of silt, dark gray, little mottled iron oxidation, moderate plasticity, high density	
						trace of small gravel	
30						no gravel, up to 1/4" nodules of calcium carbonate	
					CL		
						encountered water at 9:40am clay with trace amounts of silt, medium plasticity, very dense, no sign lithologic changes upon encountering water	
35						clay, lighter gray color, iron oxidation, trace organics, calcium nodules up to 1/4	
						silty clay, gray/light brown, large calcium nodules organics	
40						(Continued downward on next page)	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW6 Plate: 2 OF 2
Site: Former Exxon Service Station 7-3567 Date: 7/19/00
Drill Contractor: Woodward Drilling
Sample Method: Continuous Geologist: JOHN B. BOBBITT
Drill Rig: B57 Bore Hole Diameter: 8" Signature: JBBobbitt
Location: 4 Feet West of MW1 Registration: R.G. 4313
25 Feet East of Santa Rita Road Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						(Continued downward from previous page)	
					ML	clayey silt with very fine-grained sand, gray/ brown organics	
45					SM	Silty sand, brown, high plasticity	
					SP	Sand with trace pebbles, wet, very loose with some pebbles to 1/2" increasing pebble content, angular to sub-angular	
50					SM	Silty sand with 1/4" gravel	
					GW	Sandy gravel with 1/4"-2" pebbles	
55						Total depth at 54 feet. Groundwater encountered at 32 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout Portland Type I/II

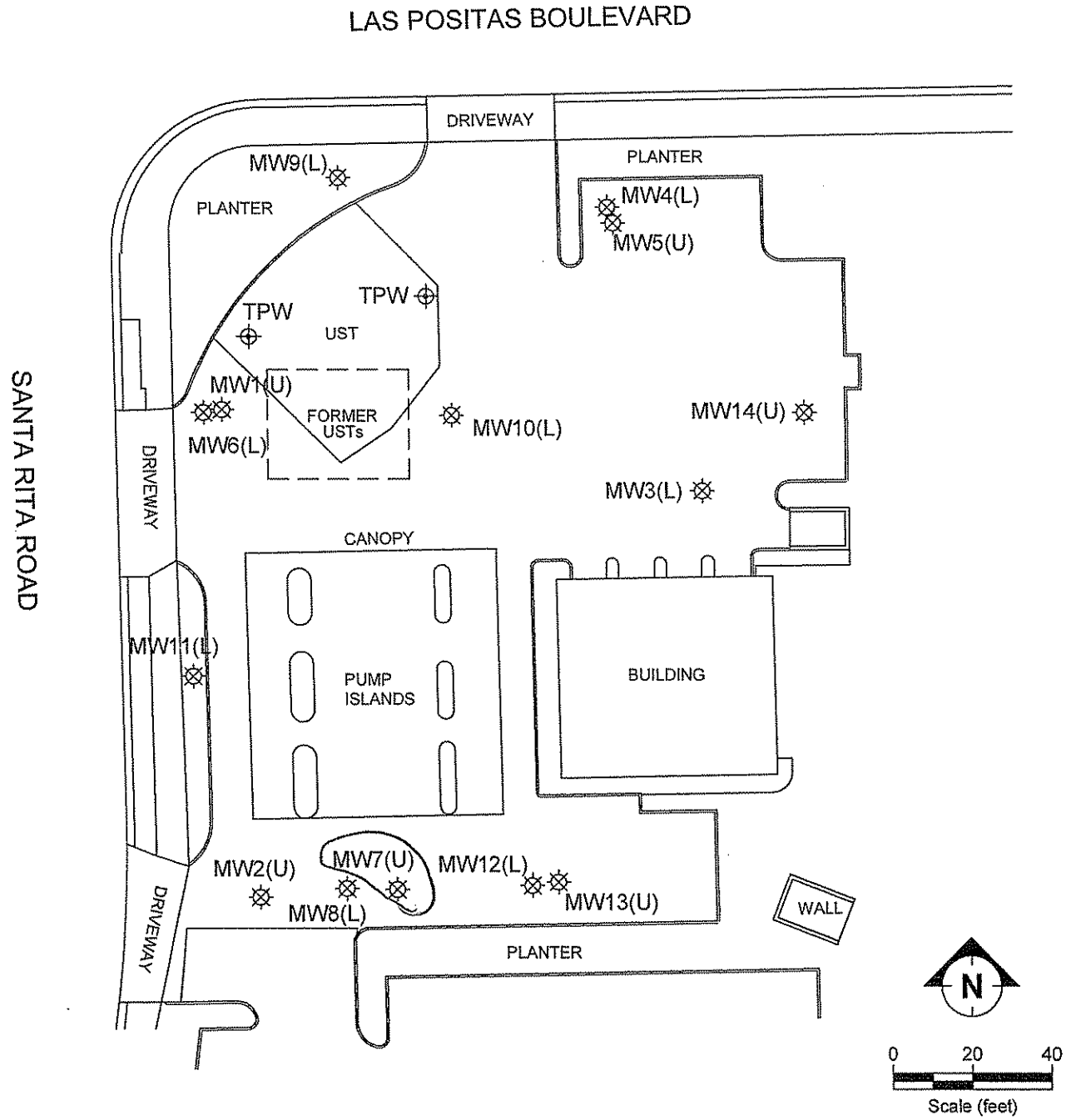
FN: B431WTGA

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

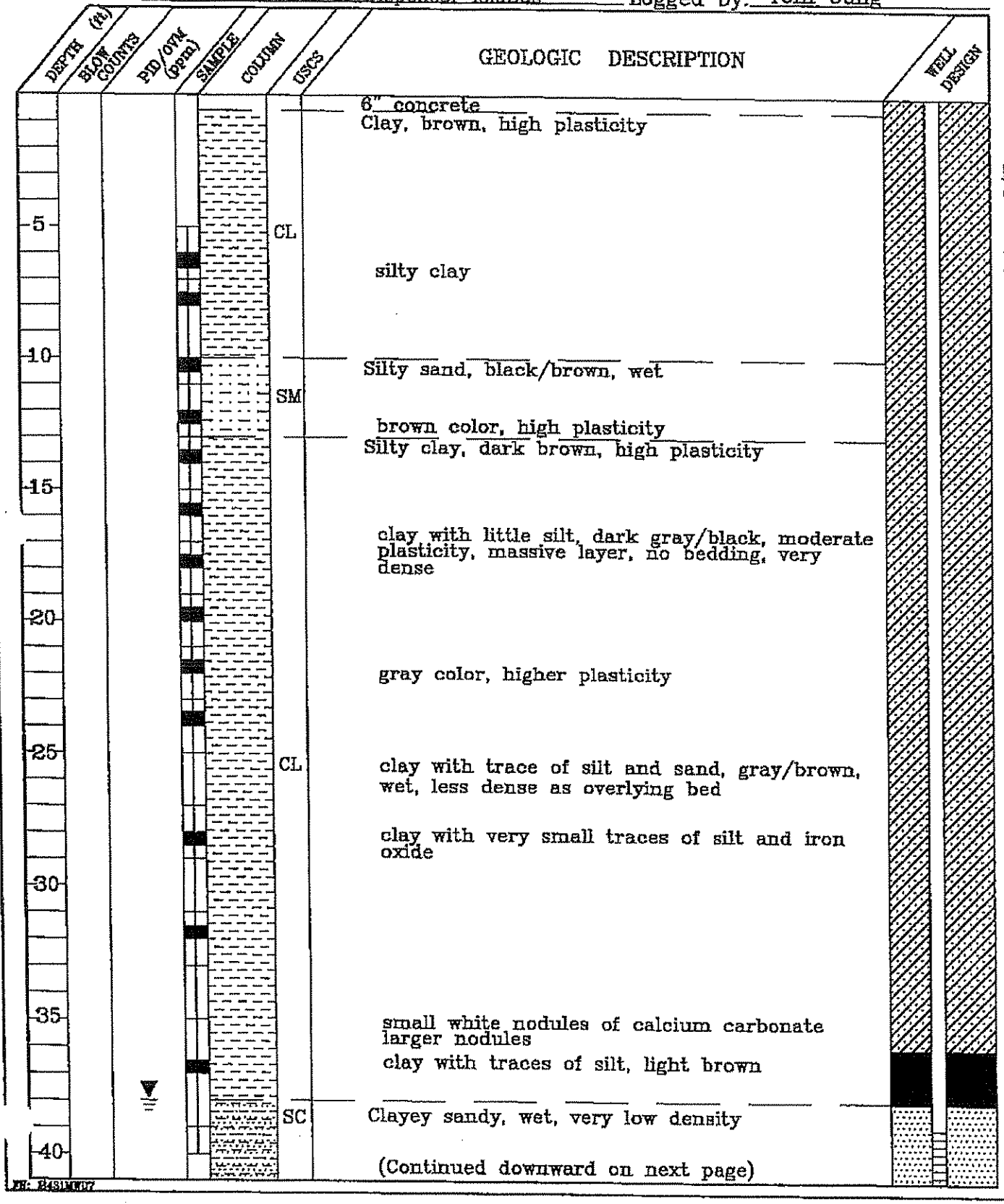
ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW7 Plate: 1 OF 2
Site: Former Exxon Service Station 7-3567 Date: 7/18/00
Drill Contractor: Woodward Drilling
Sample Method: Continuous Geologist: JOHN B. ROBBITT
Drill Rig: B57 Bore Hole Diameter: 8" Signature:
Location: 35 Feet East of MW2 Registration: R.G. 4313
18 Feet South of Dispenser Islands Logged by: Tom Culig



FN: 2431MW07

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW7 Plate: 2 OF 2
Site: Former Exxon Service Station 7-3567 Date: 7/18/00
Drill Contractor: Woodward Drilling
Sample Method: Continuous Geologist: JOHN B. BORBITT
Drill Rig: B57 Bore Hole Diameter: 8" Signature: JB Borbitt
Location: 35 Feet East of MW2 Registration: R.G. 4313
18 Feet South of Dispenser Islands Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLES	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page)	WELL DESIGN
					SC	higher density	
						clayey sand, dark brown, wet, very loose	
45					CL	Clay with traces of sand, light brown	
					SC	Clayey sand, dark brown, wet, very loose	
					CL	Sandy clay, light brown, very dense, moderate plasticity	
					ML	Clayey silt with traces of sand, bands of iron oxide, high plasticity	
50						Total depth at 50 feet. Groundwater encountered at 38 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

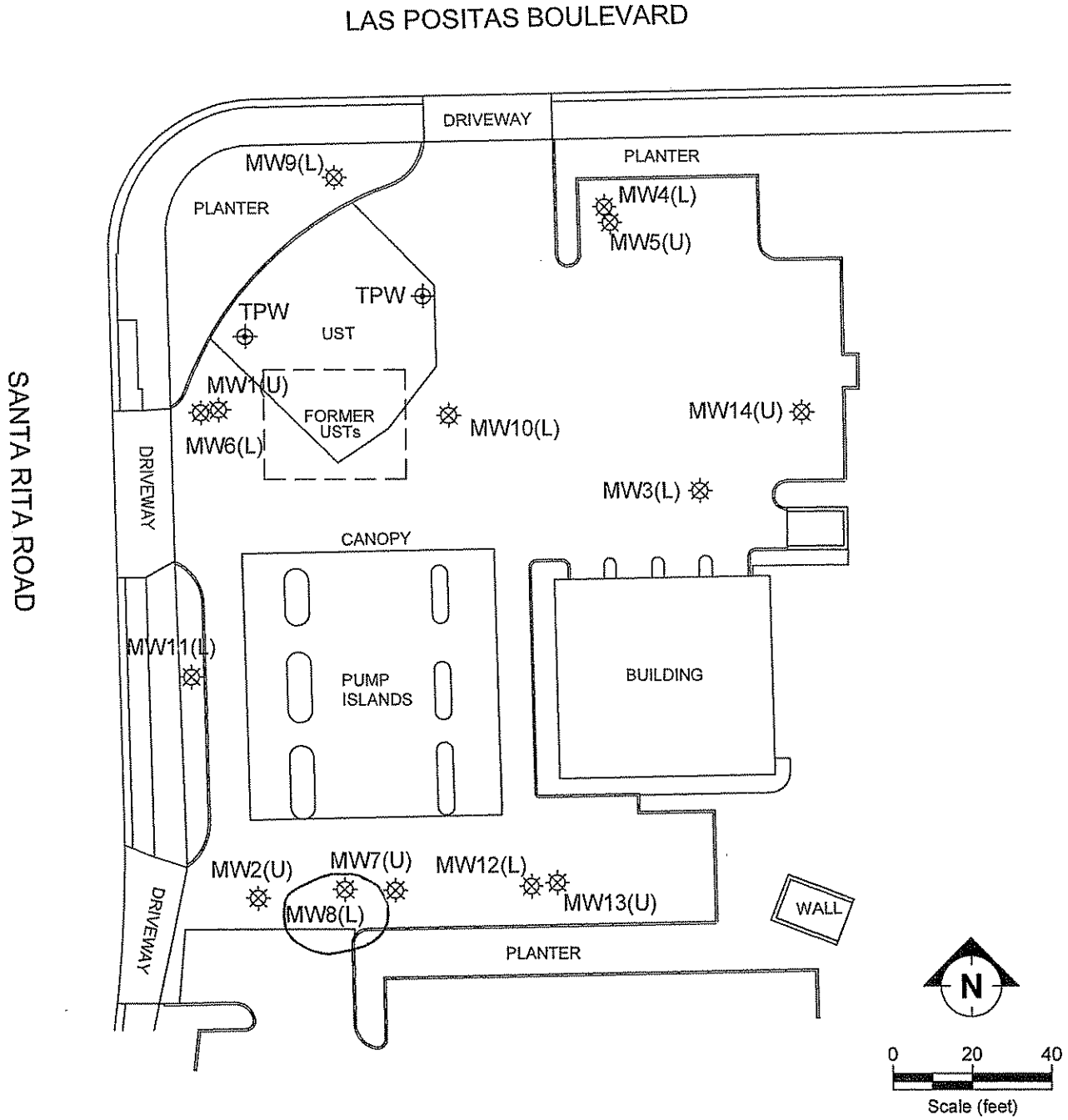
FS: 2431MW7A

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 243103X Boring: MW8 Plate: 1 OF 2
Site: 7-3567 Date: 3/16/01
Drill Contractor: GREG DRILLING
Sample Method: Split Spoon Geologist: John B. Bobbitt
Drill Rig: B-57 Bore Hole Diameter: 8 Signature:
Location: 19 feet south of southwestern dispenser island. Registration: R.G. 4313
Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" Concrete Clay dark, brown,high plasticity	
5	3 4 4					Silty clay, brown	
10	3 4 5					Clay, dark gray, medium plasticity, oxidation	
15	4 7 8					Clay with little silt, dark brown/grey moderate plasticity, very dense	
20	5 8 12					dark grey, caliche nodules	
25	5 9 12				CL	Clay with trace of silt, gray brown, dry	
30	4 7 12					Gray, traces of iron oxide	
35						White nodules of calcium carbonate	
	4 8 14						
40	7 10 15	▼				Larger nodules, higher density, wet	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOURCES, INC.

Project No.: 243103X Boring: MW8 Plate: 2 of 2
Site: 7-3567 Date: 3/16/01
Drill Contractor: GREG DRILLING
Sample Method: Split Spoon Geologist: John B. Bobbitt
Drill Rig: B-57 Bore Hole Diameter: 8 Signature: [signature]
Location: 19 feet south of southwest dispenser island. Registration: R.G. 4313
Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page)	WELL DESIGN
	4 5 9				CL		
					SC	Clayey sand, gray/brown, wet	
						Sandy clay, brown, wet	
45	4 5 7 7				CL	Clay with traces of silt, light brown, wet	
	13 22					Sandy clay, brown, iron oxide	
	10 16 7 10				ML	Clayey silt with traces of sand, high plasticity Increasing sand, bands of iron oxide	
50	16 9 16 18 13 20 25 15 22				SP	Sand with pebbles up to 1 inch subrounded, dry - moist, trace silt	
55	16 20 25 15 21 26 18 26 31				SW	Gravelly sand, pebbles up to 1 inch	
					GP	Sandy gravel	
60	17 35 31 38 44				SW	Gravelly sand	
	30 32 45 35 42				GP	Sandy gravel, gravel up to 1 inch, subrounded, wet	
65	37 35 42 25 45 40 26 45 50					Pebbles up to 1 3/4 inch, subangular	
70						Total depth at 70 feet. Groundwater encountered at 39.5 feet and 62 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

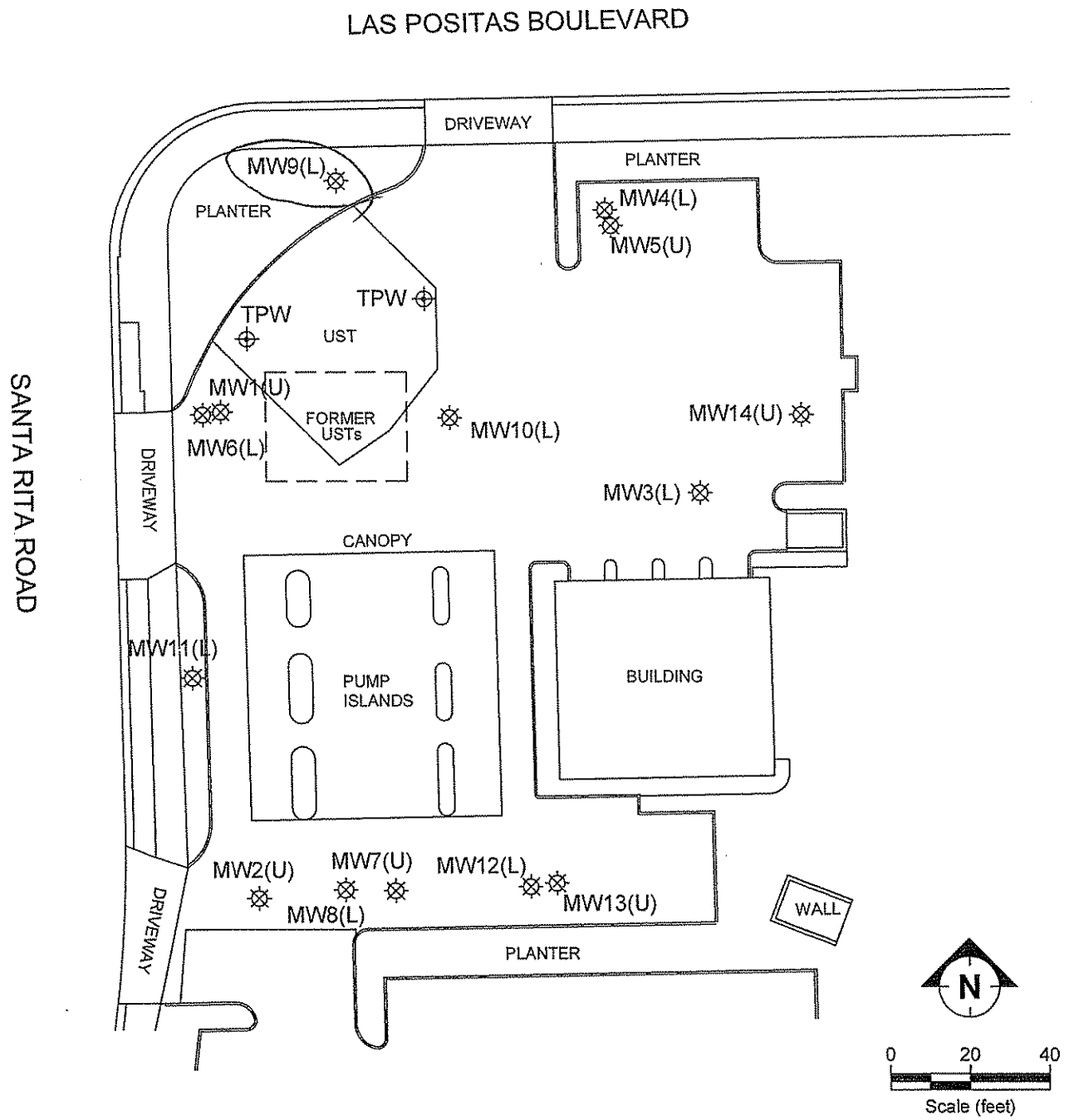
FS 845lmw8

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

LOG OF SOIL BORING: **MW9**

COORDINATES:
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:

DRILLING COMPANY: Woodward Drilling, Inc.
LICENSE NUMBER: C57-710079

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

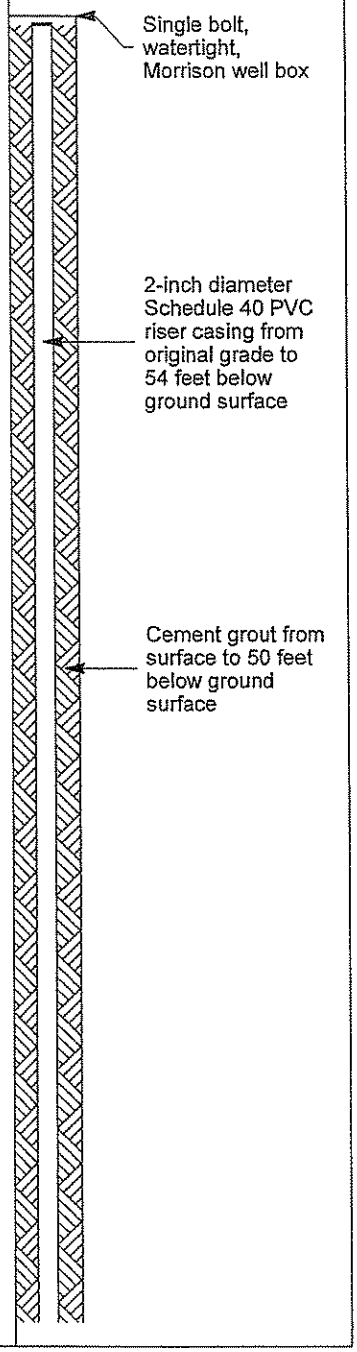
				START	FINISH
WATER LEVEL	▽ 47.25	▼ 43.5			
TIME	1055	1025		TIME 0900	TIME 1530
DATE	12/10/08	12/11/08		DATE 12/8/08	DATE 12/9/08
REFERENCE	GS	TOC			

SURFACE CONDITIONS: Grass

DESCRIPTION BY: E. Appel, Y. Mamiya

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION
				0		
				1		**CLAY WITH SILT** - very dark gray (2.5Y 3/1), stiff to very stiff, low plasticity, moist, roots to 0.5 feet bgs.
				2	CL	
				3		- with rounded to subrounded gravels up to 2 inches in diameter.
				4		
6	6			5	SM	**SILTY SAND** - very dark gray (2.5Y 3/1), medium dense, fine grained, moist.
				6		**CLAY WITH SILT** - very dark gray (2.5Y 3/1), stiff to very stiff, low plasticity, moist.
				7		
				8		
				9		
18	13	4 7 10	0.4	10	CL	- becoming stiff, medium plasticity.
				11		
				12		
				13		
				14		
18	18	7 9 10	0.2	15		**CLAY** - very dark gray (2.5Y 3/1), very stiff, medium plasticity, moist, a few caliche grains.
				16		
				17	CL	
				18		
				19		
				20		

DETAILS



LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW9

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	5 10		21	CL	**CLAY WITH SOME SILT** - very dark grayish brown (2.5Y 3/2), hard, low plasticity, moist.
		13	0.1	22		
				23		
				24		
				25		
18	18	10 13		26		
		25	0.1	27		
				28		
				29		
				30		
18	18	6 12		31		-becoming very stiff to stiff.
		8	0.1	32		
				33		
				34		
				35	CL	- becoming dark grayish brown (2.5Y 4/2), very stiff.
18	18	10 10		36		
		14	0.2	37		
				38		
				39		
				40		
18	18	7 7		41		- becoming stiff to very stiff.
		11	0.1	42		
				43		
				44		
				45		

AIR SAMPLE | WATER SAMPLE | SOIL SAMPLE | RECOVERED

LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

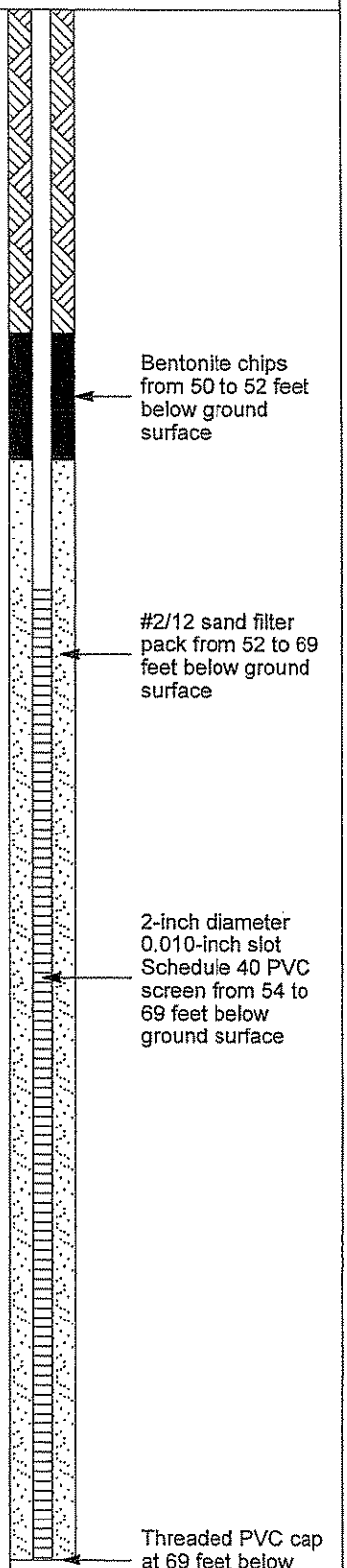
ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW9

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	17, 17		46	CL	- becoming olive brown (2.5Y 4/4).
		13	0.0			
				47 ▽		
18	18	3, 3, 12	0.0	48, 49	GC	**CLAYEY GRAVEL** - olive brown (2.5Y 4/4), medium dense, rounded to well-rounded, up to 1-inch in diameter, moist.
18	15	7, 14		50	CL	**CLAY WITH SOME SILT** - olive brown (2.5Y 4/4), stiff, low to medium plasticity, very moist.
		20	0.0	51	SC	**SANDY GRAVEL WITH CLAY / GRAVELLY SAND WITH CLAY** - olive brown (2.5Y 4/4), medium dense to dense, fine to coarse grained sand, subrounded gravels up to 1-inch in diameter, wet.
18	18	9, 26, 40	0.0	52, 53, 54	CL / SC	**CLAY WITH SOME SILT** - olive brown (2.5Y 4/4), stiff, low to medium plasticity, very moist. **SANDY GRAVEL WITH CLAY / GRAVELLY SAND WITH CLAY** - olive brown (2.5Y 4/4), very dense, fine to coarse grained sand, subrounded gravels up to 1-inch in diameter, wet.
18	16	6, 12, 20	0.0	55, 56	CL	**CLAY WITH SOME SILT** - olive brown (2.5Y 4/4), stiff, low to medium plasticity, very moist. **WELL GRADED SAND WITH SOME GRAVEL** - dark brown (10YR 2/3) medium dense, fine to coarse grained, subangular to subrounded gravels up to 1-inch in diameter, wet.
18	14	4, 12, 23	0.3	57, 58, 59		- becoming dense.
12	9	9, 50@6"	0.2	60, 61		- becoming very dense.
18	10	11, 16, 25		62, 63, 64	SW	- decreasing gravel content, dense, fine to medium grained sand.
18	13	9, 14, 36	0.1	65, 66		
12	8	12, 50@6"	0.1	67, 68, 69		- becoming very dense.
				70		Boring terminated at 69 feet below ground surface.



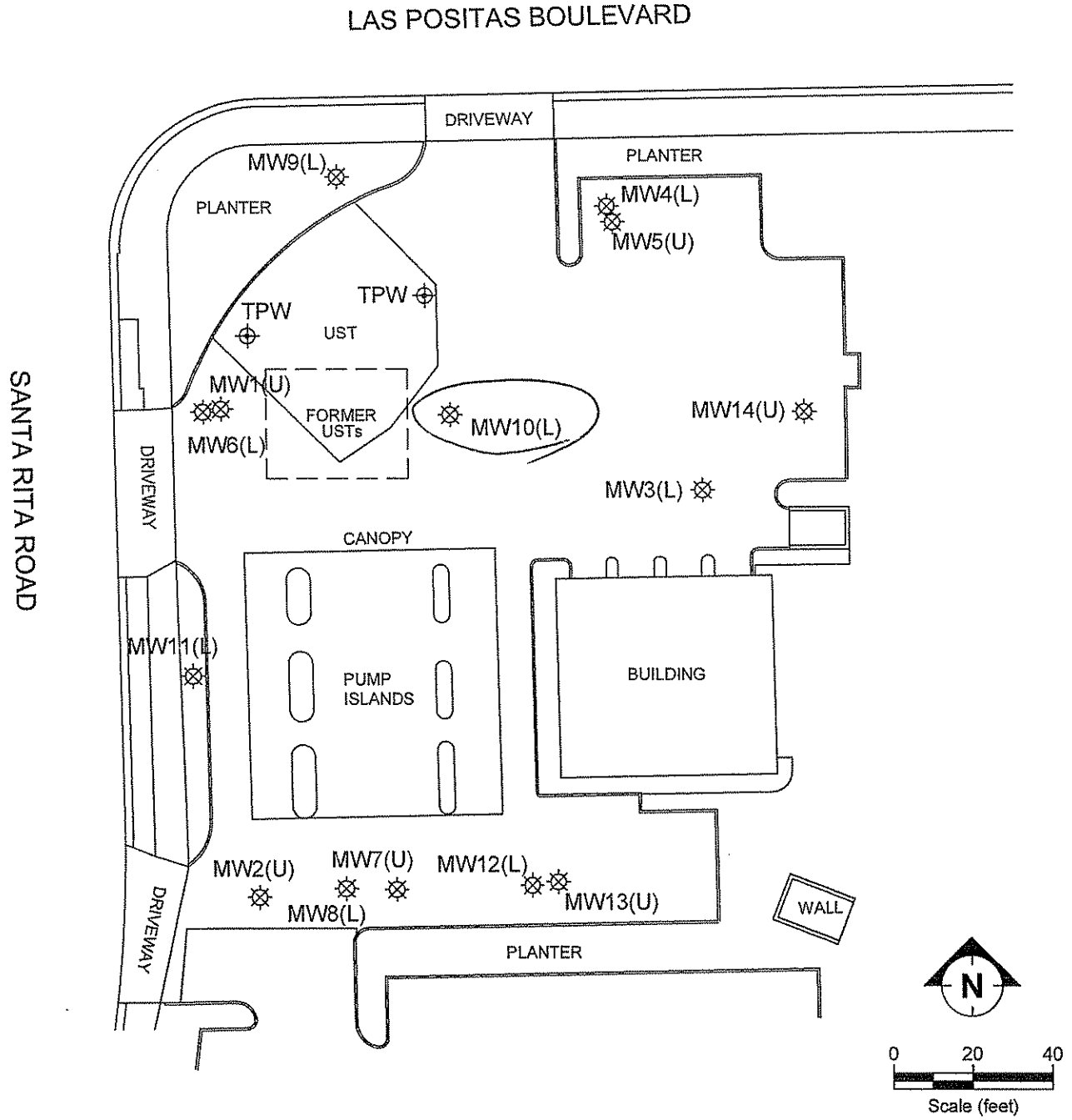
LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

LOG OF SOIL BORING: **MW10**

COORDINATES:
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:
DRILLING COMPANY: Woodward Drilling, Inc.
LICENSE NUMBER: C57-710079

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

				START	FINISH
WATER LEVEL	▽ 48.3	▼ 46.5			
TIME	1055	0805		TIME 1100	TIME 1500
DATE	12/9/08	12/10/08		DATE 12/8/08	DATE 12/9/08
REFERENCE	GS	TOC			

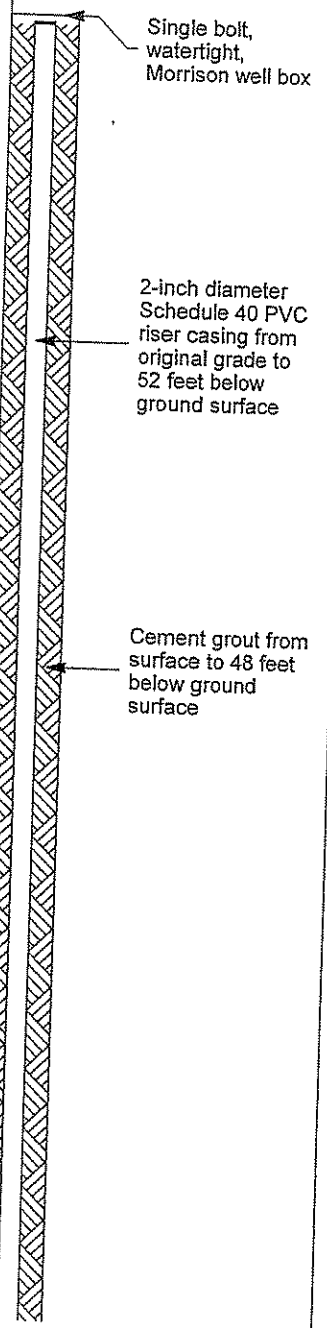
SURFACE CONDITIONS: Concrete

DESCRIPTION BY: E. Appel

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION
				0	AC/AB	**CONCRETE** - to 0.5 feet below ground surface. **AGGREGATE BASE** - from 0.5 to 1 feet below ground surface. **CLAY WITH SILT** - very dark gray (2.5Y 3/1), very stiff, medium plasticity, moist.
				1		
				2		
				3		
				4		
6	6			5	CL	- occasional subrounded to rounded gravels up to 2 inches in diameter.
				6		
				7		
				8		
				9		
18	18	3		10	ML	**CLAYEY SILT** - dark olive gray (5Y 3/2), medium stiff, low plasticity to non-plastic, moist.
		3				
		4	77.6	11		**CLAY WITH SILT** - very dark gray (2.5Y 3/1), medium stiff, medium plasticity, moist.
				12	CL	
				13		
				14		
18		3		15	SC	**CLAYEY SAND** - brown (10YR 4/3), medium dense, fine to medium grained, very moist.
	13	4				
		9	81.1	16		**SILTY CLAY** - very dark gray (2.5Y 3/1), stiff, medium plasticity, moist.
				17	CL	
				18		
				19		
				20	CL	**CLAY WITH SILT** - black (2.5Y 2.5/1), medium stiff to stiff, moderate plasticity, moist, caliche

AIR SAMPLE | WATER SAMPLE | SOIL SAMPLE RECOVERED

DETAILS



LOG OF SOIL ...ING 7-3567.GPJ ETIC.GDT 1/22/09

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW10

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE	RECOVERED	GRAPHIC LOG	
18	15	5 5		21						stringers.
		5	17.2							
				22						
				23						
				24						
				25						
18		4 10								- becoming very stiff, diminishing caliche.
	6	15	37.0	26						
				27						
				28						
				29						
			38.9	30						
18	18	6 9								
		12		31						- becoming dark grayish brown (2.5Y 4/2).
				32						
				33						
				34						
				35						
18	18	5 10								- diminishing silt content, caliche nodules up to 0.25 inches in diameter.
		12	10.5	36						
				37						
				38						
				39						
18	18	7 7		40						- increasing silt content, stiff to very stiff, no caliche.
		11	59.9	41						
				42						
				43						
				44						
				45						

CL

LOG OF SOIL ING 7-3567.GPJ ETIC.GDT 1/22/09

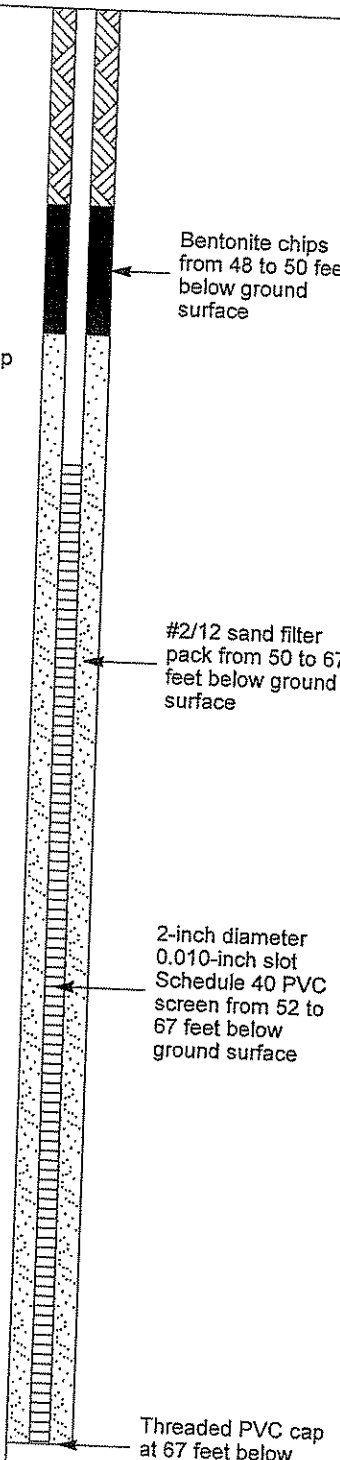
ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW10

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	11				
		13				
		17	19.0	46	CL	-becoming very stiff.
				47		
		17				
18	14	38		48	SC	**CLAYEY SAND** - light olive brown (2.5Y 5/3), very dense, medium to coarse grained, very moist.
		50@2	16.5	49		
				50	SP	**POORLY GRADED SAND WITH GRAVEL** - dark olive brown (2.5Y 3/3), very dense, fine to coarse grained sand, subangular to subrounded gravels up to 2 inches in diameter, wet.
12	12	14				
		50@6		51		
				52		
		22			CL	
12	11	50@5"	1.3	53		**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), medium stiff to stiff, moderate plasticity, moist. **POORLY GRADED SAND WITH GRAVEL AND SOME CLAY** - dark olive brown (2.5Y 3/3), very dense, medium grained, subangular to subrounded gravels up to 2 inches in diameter, wet.
				54		
		7		55		
18	15	14				
		29	0.8	56	SP	
				57		
		5				
18		9		58		
	6	20				
				59		- becoming medium dense.
				60		
12	8	28	1.0			**WELL GRADED SAND WITH GRAVEL** - dark olive brown (2.5Y 4/2), very dense, fine to coarse grained, angular to subangular gravels up to 1 inch in diameter.
		50@2		61	SW	
				62		
		5				
18	15	5		63		
		15	0.8		CL	
				64		**CLAY WITH SILT** - dark grayish brown (2.5Y 4/1), medium stiff to stiff, moderate plasticity, wet. **POORLY GRADED SAND WITH GRAVEL AND SOME CLAY** - dark olive brown (2.5Y 3/3), very dense, coarse grained, subangular to subrounded gravels up to 2 inches in diameter, wet.
				65		
18	15	4			SP	
		7		66		- becoming dense.
		9				
				67		Boring terminated at 67 feet below ground surface.
				68		
				69		
				70		



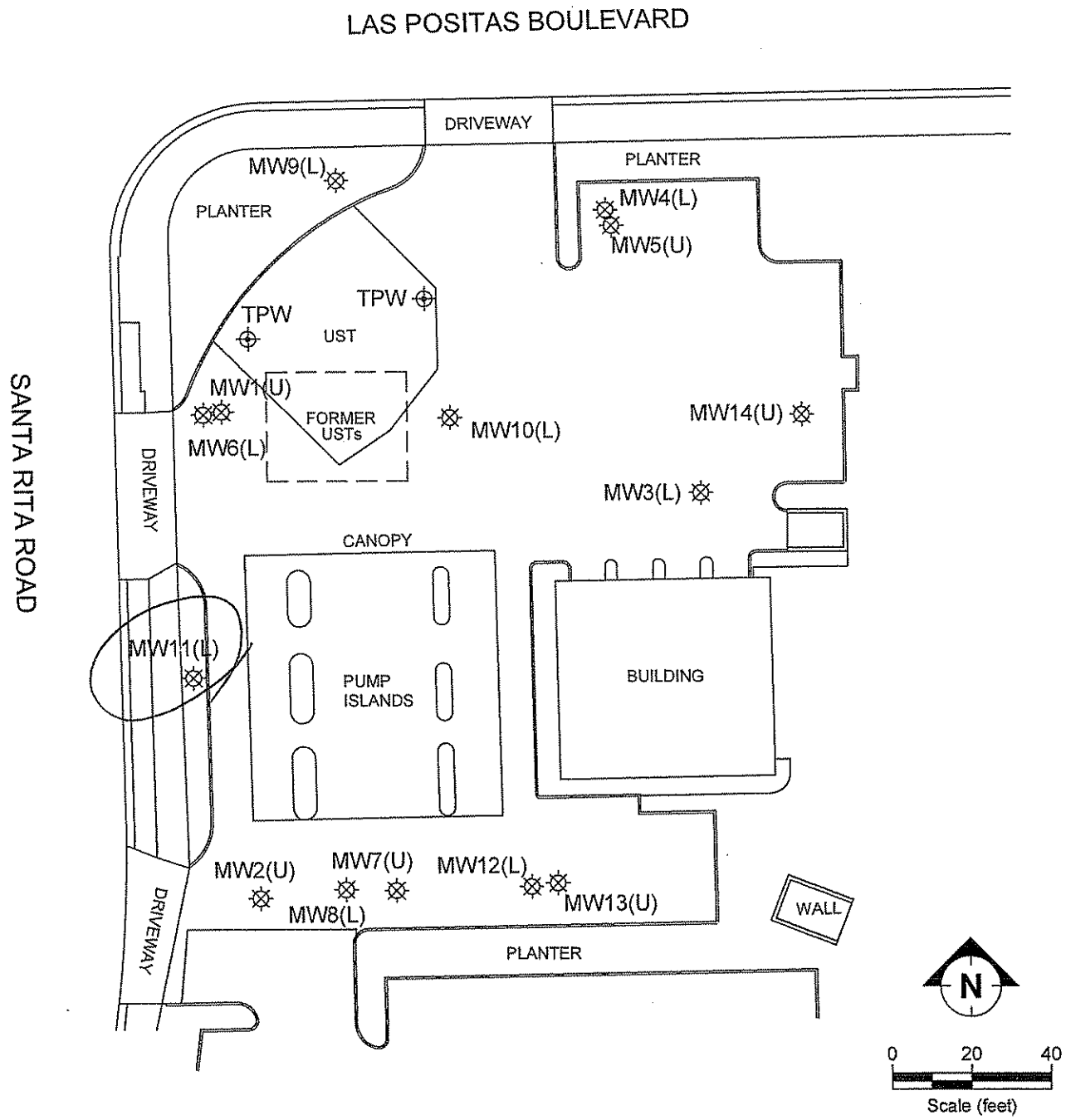
LOG OF SOIL ...ING 7-3567.GPJ ETIC.GDT 1/22/09

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

LOG OF SOIL BORING: **MW11**

COORDINATES:
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:

DRILLING COMPANY: Woodward Drilling, Inc.
LICENSE NUMBER: C57-710079

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

				START	FINISH
WATER LEVEL	▽ 40.0				
TIME	0943			TIME 0845	TIME 1420
DATE	12/15/08			DATE 12/9/08	DATE 12/15/08
REFERENCE	GS				

SURFACE CONDITIONS: Grass

DESCRIPTION BY: Y. Mamiya

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG
				0	ML
				1	SP
				2	
				3	
				4	
6	6			5	CL
				6	
				7	
				8	
				9	
18	18	3 4		10	
		9	0.2	11	
				12	
				13	
				14	
18		6 7		15	CL
	6	12		16	
				17	
				18	
				19	
				20	

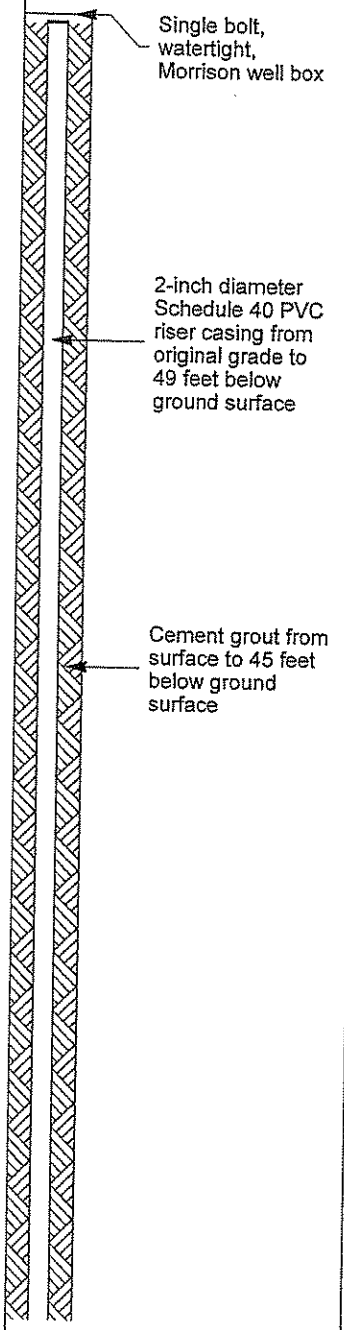
SANDY SILT WITH CLAY - dark brown (10YR 3/3), soft, low plasticity, fine grained sand, moist.
SAND WITH CLAY - dark gray (5Y 4/1), non-plastic, fine to medium grained, moist.
SILTY CLAY - gray (2.5Y 5/1), soft, medium plasticity, moist.

- becoming medium stiff.

SILTY CLAY - very dark gray (5Y 3/1), stiff, low plasticity, moist.

- becoming very stiff.

DETAILS



LOG OF SOIL BURING 7-3567.GPJ ETIC.GDT 1/22/09

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW11

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	17	5, 6, 10	0.1	21		**CLAY WITH SOME SILT** - very dark gray (2.5Y 3/1), stiff, medium plasticity, moist, caliche.
				22		
				23		
				24		
				25		
18	18	10, 10		26		- becoming very dark grayish brown (2.5Y 3/2), hard.
		30	0.3	27		
				28		
				29		
				30	CL	
18	18	6, 12		31		
		30		32		
				33		
				34		
				35		
18	18	7, 13, 17	0.2	36		- becoming dark grayish brown (2.5Y 4/2), very stiff, pervasive caliche.
				37		
				38		
				39		
				40		
18	18	5, 9		41		**CLAYEY SILT** - olive brown (5Y 4/3), very stiff, low plasticity, very moist to wet.
		10				- trace of fine grained sand.
				42	ML	
				43		
				44		
				45		

AIR SAMPLE | WATER SAMPLE | SOIL SAMPLE | RECOVERED

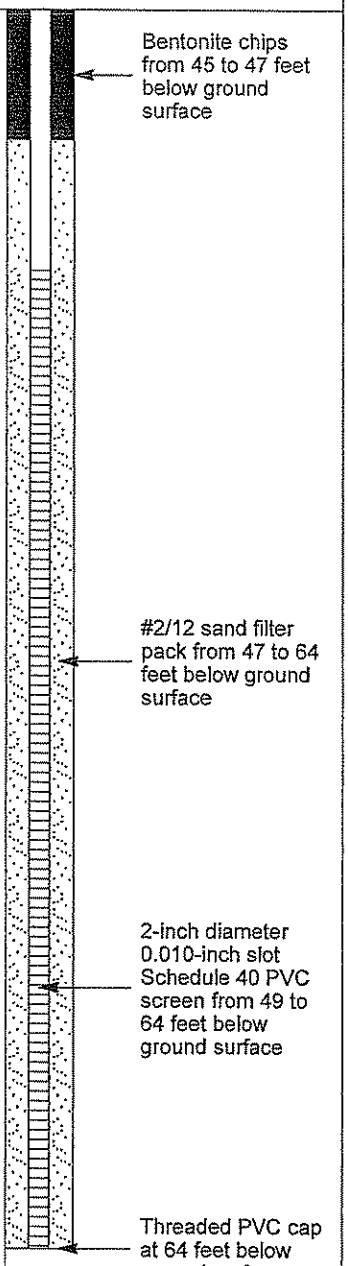
LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING: MW11

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	5 5 15	0.2	46	ML	**SILT WITH SOME SAND** - olive brown (2.5Y 4/1), very stiff, low plasticity, fine grained sand, very moist to wet.
				47		
18	18	8 22 30		48	SP	**POORLY GRADED SAND WITH SOME GRAVELS** - very dark grayish brown (10YR 3/2), dense, fine to medium grained, gravels up to 1.5 inches in diameter, wet.
				49		
				50		
12	5	9 50@6"		51		
				52		
12	10	20 50@6"		53	GP	**SANDY GRAVEL** - very dark grayish brown (10YR 3/2), very dense, fine to coarse grained sand, subrounded gravels up to 2 inches in diameter, wet.
				54		
				55		
12	0	12 50@6"		56		
				57		
12	12	12 50@6"		58	SW	**WELL GRADED SAND** - very dark grayish brown (10YR 3/2), very dense, fine to coarse grained, wet.
				59		
				60		
12	0	19 50@6"		61		
				62		
6	6	50@6"		63		
				64		Boring terminated at 64 feet below ground surface.
				65		
				66		
				67		
				68		
				69		
				70		



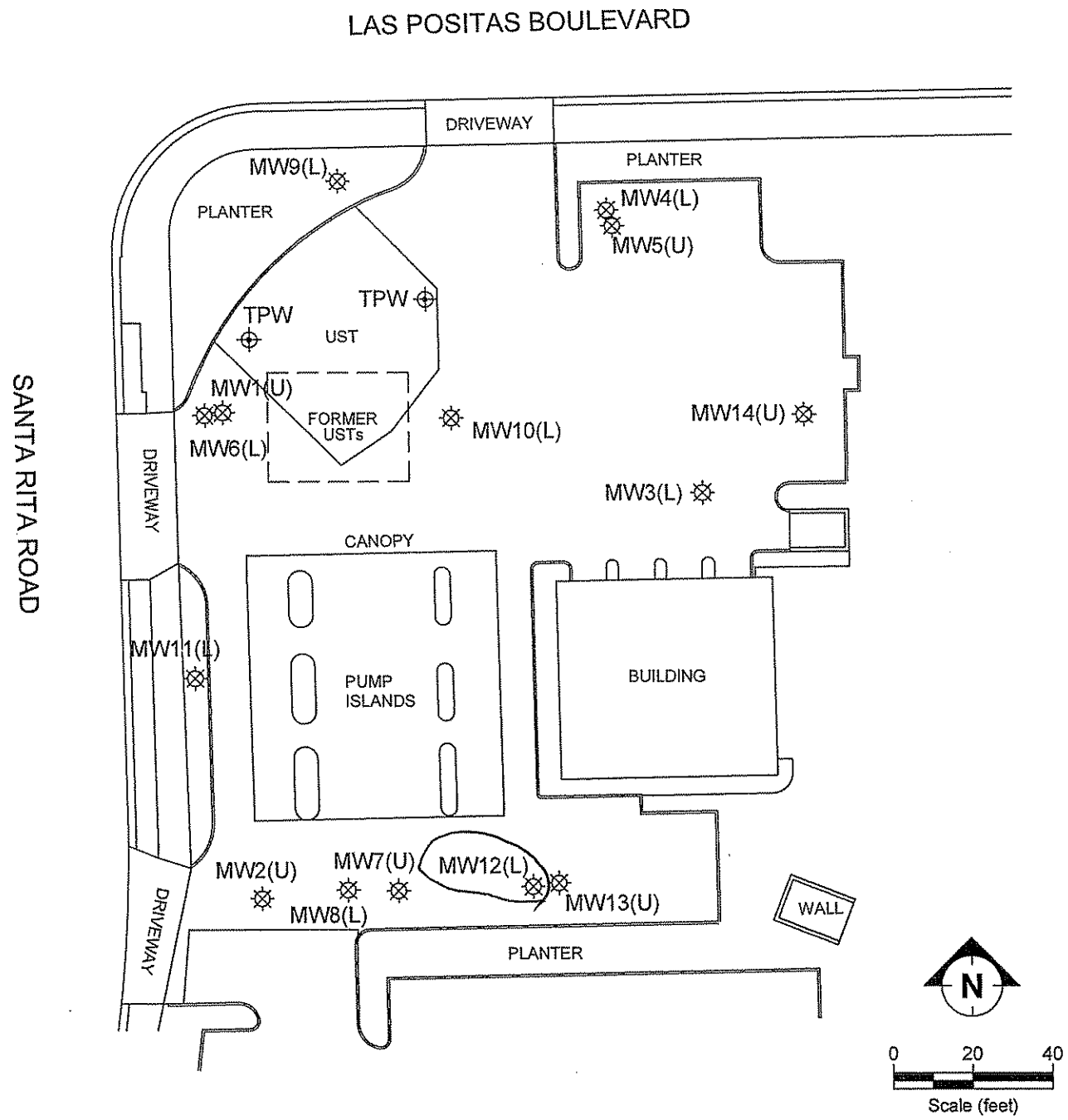
LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

LOG OF SOIL BORING: **MW12**

COORDINATES:

ELEVATION TOP OF CASING:

CASING BELOW SURFACE:

DRILLING COMPANY: Woodward Drilling, Inc.

LICENSE NUMBER: C57-710079

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

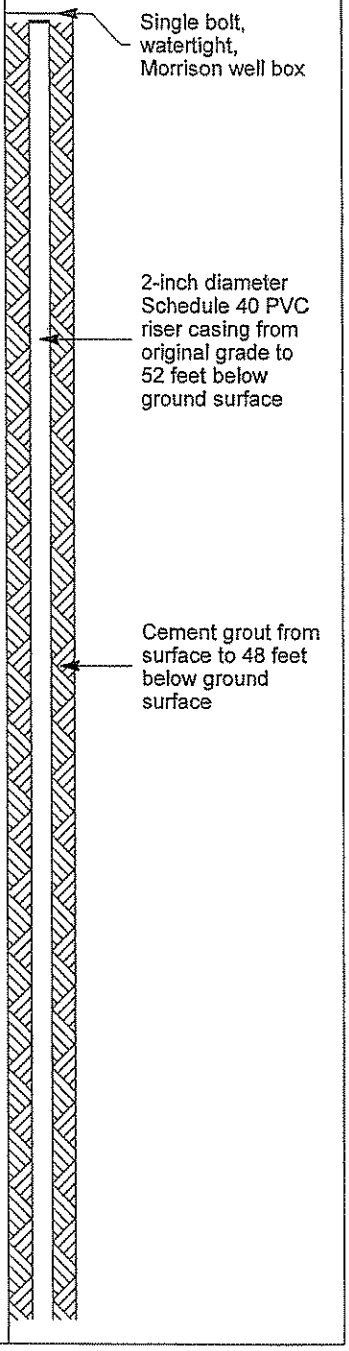
				START	FINISH
WATER LEVEL	▽ 45.7				
TIME	1330			TIME 1055	TIME 1520
DATE	12/11/08				
REFERENCE	GS			DATE 12/9/08	DATE 12/11/08

SURFACE CONDITIONS: Concrete

DESCRIPTION BY: Y. Mamiya

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE	RECOVERED	GRAPHIC LOG	DESCRIPTION
				0					AC/AB	**CONCRETE** - to 0.5 feet below ground surface. **AGGREGATE BASE** - from 0.5 to 0.75 feet below ground surface.
				1					ML	**CLAYEY SILT** - dark olive grayish brown (2.5Y 3/2), very stiff, low plasticity, slightly moist.
				2					CL	**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), very stiff, low plasticity, moist.
				3						
				4						
6	6			5						**CLAY** - very dark gray (2.5Y 3.1), hard, medium plasticity, moist.
				6						
				7					CL	
				8						
				9						
18	14	9		10						**SILTY SAND** - dark olive brown (2.5Y 3/3), medium dense, fine grained, moist.
		9		11						
		9	0.4	12					SM	
				13						
				14						
				15						
18	18	9								**CLAY WITH SOME SILT**- very dark gray (2.5Y 3/.1), very stiff, medium plasticity, moist.
		12		16						
		20	0.3	17					CL	
				18						
				19						
				20						

DETAILS



LOG OF SOIL B... J 7-3567.GPJ ETIC.GDT 1/22/09

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW12

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	5		20		
		7				
		10		21		
				22		
				23		
				24		
				25		
18	18	10				- increasing silt content, becoming very dark grayish brown (2.5Y 3/2).
		15	0.7	26		
		15				
				27		
				28		
				29		
				30	CL	
18	18	10				
		10	0.6	31		
		10				
				32		
				33		
				34		
				35		
18	18	10				
		12	0.3	36		
		20				
				37		
				38		
				39		
				40	ML	**CLAYEY SILT** - olive brown (2.5Y 4/3), stiff, low plasticity, very moist.
18	18	5				
		8	0.2	41		**CLAY WITH SILT** - olive brown (2.5 4/3), very stiff to stiff, low plasticity, very moist.
		10				
				42		
				43	CL	
				44		
				45		

LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

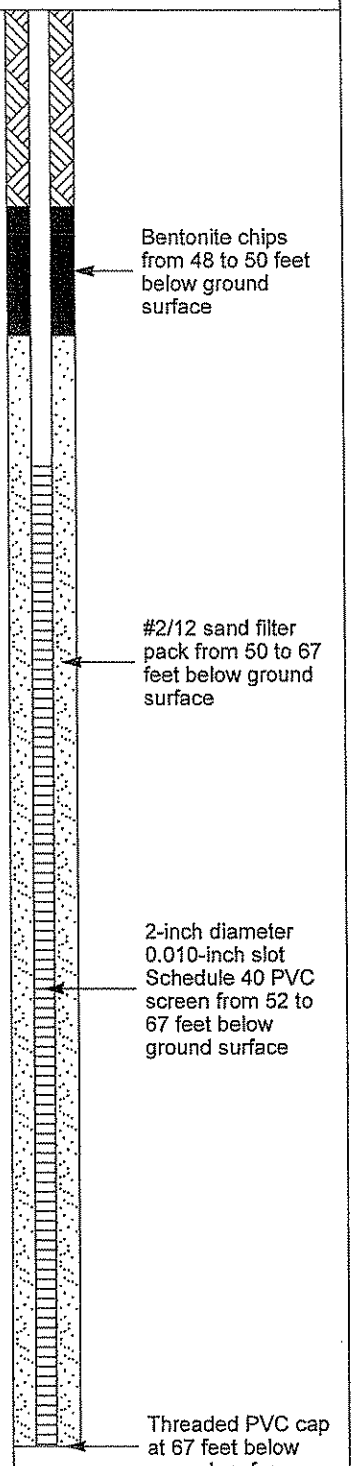
ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING: MW12

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	10	0.1	46	ML	**CLAYEY SILT WITH SAND** - olive brown (2.5Y 4/3), very stiff, low plasticity, very fine grained sand, very moist.
		10				
		20			ML	**SANDY SILT** - olive brown (2.5Y 4/3), medium dense, very fine grained sand, moist.
				47		
18		10		48		**POORLY GRADED SAND WITH CLAY** - olive brown (2.5Y 4/3), dense, medium grained, wet.
		20				
	9	21		49	SP	
				50		
18		6				**WELL GRADED GRAVELLY SAND** - olive brown (2.5Y 4/3), loose, fine to coarse grained, subrounded gravels up to 1 inch in diameter, wet.
	14	5	0.3	51	SW	
		5				
				52		
		12			GC	**CLAYEY GRAVEL** - olive brown (2.5Y 4/3), dense, gravels up to 1-inch in diameter, moist.
12	9	50@6"	0.1	53	SW	**GRAVELLY SAND** - olive brown (2.5T 4/3), loose, fine to coarse grained sand, gravels up to 1-inch in diameter, wet.
				54		
				55	ML	**CLAYEY SILT** - olive brown (2.5Y 4/3), stiff, low plasticity, moist.
18	16	17	0.1			**WELL GRADED SAND WITH GRAVEL** - olive brown (2.5Y 4/3), very dense, fine to coarse grained, gravels up to 1-inch in diameter, wet.
		22		56		
		50@2				
				57		
		9		58		- diminishing gravel content, becomes dense.
18	12	24	0.2			
		18		59		
				60		
18	0	12				
		26			SW	
		50@2"		61		- becoming very dense.
				62		
		7				
18		7		63		
	8	10	0.7			- becoming medium dense.
				64		
				65		
18		7				
		9				
	4	17	0.4	66	SP	**POORLY GRADED SAND** - olive brown (2.5Y 4/3), medium dense, fine grained, wet.
				67		Boring terminated at 67 feet below ground surface.
				68		
				69		
				70		

AIR SAMPLE | WATER SAMPLE | SOIL SAMPLE | RECOVERED



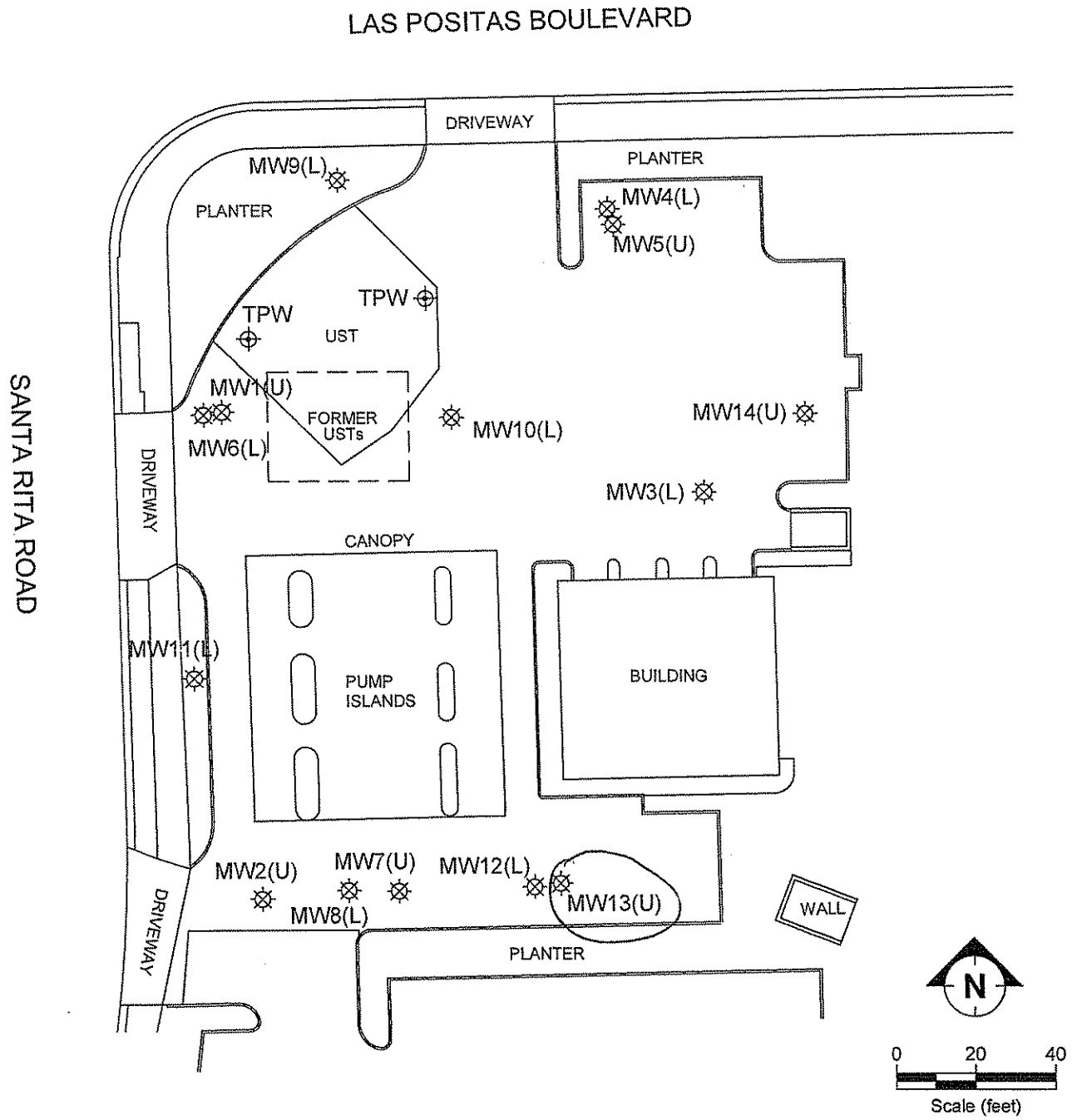
LOG OF SOIL BC , 7-3567.GPJ ETIC.GDT 1/22/09

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊗	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

LOG OF SOIL BORING: **MW13**

COORDINATES:
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:

DRILLING COMPANY: Woodward Drilling, Inc.
LICENSE NUMBER: C57-710079

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

				START	FINISH
WATER LEVEL					
TIME				TIME 1235	TIME 1500
DATE				DATE 12/9/08	DATE 12/15/08
REFERENCE					

SURFACE CONDITIONS: Concrete

DESCRIPTION BY: Y. Mamiya

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	DESCRIPTION
				0				AC/AB	**CONCRETE** - to 0.5 feet below ground surface. **AGGREGATE BASE** - from 0.5 to 0.75 feet below ground surface.
				1				ML	**CLAYEY SILT** - dark olive grayish brown (2.5Y 3/2), stiff, non-plastic, moist.
				2					
				3				CL	**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), stiff, low plasticity, moist.
				4					
6	6			5			X		
				6					**CLAY** - dark grayish brown (2.5Y 4/2), stiff, medium plasticity, moist.
				7				CL	
				8					
				9					
18		8		10					
		9							
	9	11	0.3	11			X		**SILTY CLAY** - dark grayish brown (2.5Y 4/2), very stiff, low plasticity, moist.
				12				CL	
		4							
18	18	6		13					- becoming stiff.
		10	0.0	14			X		
				15					
18		10							**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), very stiff, low to medium plasticity, moist.
		4	0.0	16			X		
	8	16							
				17				CL	
		8							
18	18	8		18					
		17	0.0	19			X		
				20					

DETAILS

- Single bolt, watertight, Morrison well box
- 2-inch diameter Schedule 40 PVC riser casing from original grade to 28 feet below ground surface
- Cement grout from surface to 24 feet below ground surface

LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

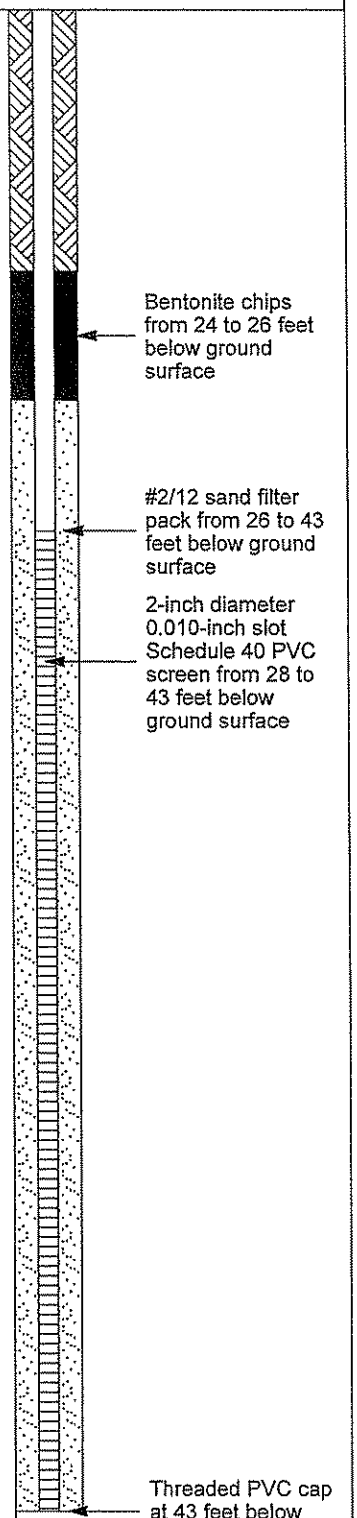
ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW13

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	15	5, 6		21	CL	- becoming very dark gray (2.5Y 3/1).
		10	0.0	22		
				23		**SILT WITH CLAY** - olive brown (2.5Y 4/2), very stiff, low plasticity, slightly moist.
18		10				
	13	10, 10	0.0	24		
				25	ML	
18		9, 9				
	4	15		26		
				27		
18	18	6, 10, 10	0.1	28		**SILTY CLAY** - olive brown (2.5Y 4/2), very stiff, low plasticity, moist.
				29	CL	
18		12, 12		30		
	9	17		31		
				32		
18	18	7, 9, 14		33		**CLAY WITH SOME SILT** - very dark gray (2.5Y 3/1), very stiff, medium plasticity, moist.
				34		
18	18	5, 7, 10	0.1	35	CL	
				36		- becoming stiff, pervasive caliche.
				37		
18	18	10, 10, 17	0.1	38		**CLAY** - olive brown (2.5Y 4/2), very stiff, medium plasticity, slightly moist. pervasive caliche.
				39	CL	
18	18	10, 12	0.1	40		
				41	ML / CL	**SANDY SILT** - olive brown (2.5Y 4/2), medium soft, low plasticity, fine grained sand, very moist. **CLAY WITH SOME SILT** - olive brown (2.5Y 4/2), very, low to medium plasticity, moist, pervasive caliche.
18	18	16, 10, 14, 17	0.2	42	ML / CL	**CLAYEY SILT WITH TRACE SAND** - olive brown (2.5Y 4/2), soft, low plasticity, fine grained sand, moist. **CLAY WITH SOME SILT** - olive brown (2.5Y 4/2), very stiff, low plasticity, moist. Boring terminated at 43 feet below ground surface.
				43		
				44		
				45		



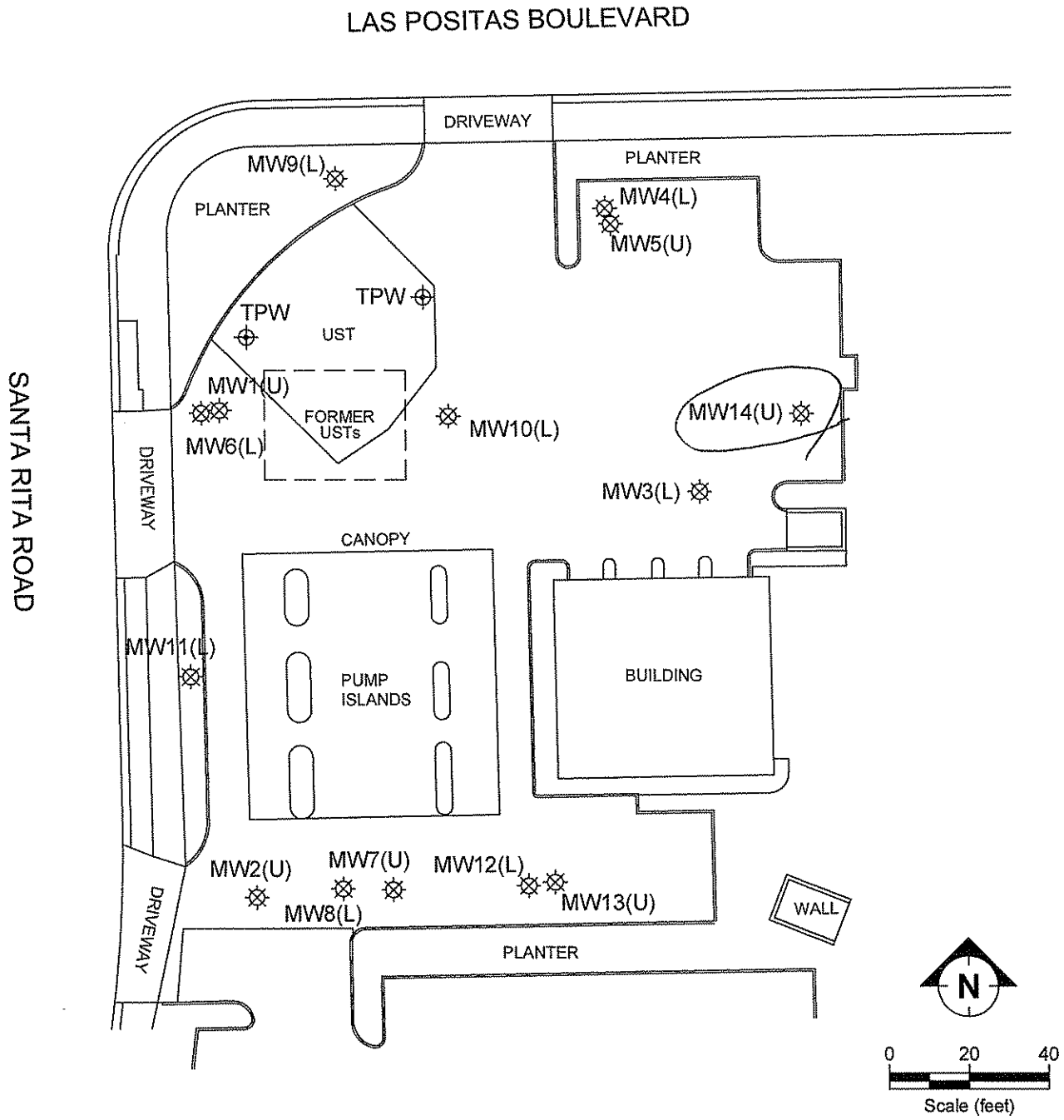
LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LEGEND	
⊛	Destroyed groundwater monitoring well
⊕	Tank pit well
(U)	Well screened in upper clay unit
(U/L)	Well screened across upper clay unit and lower sand and gravel unit
(L)	Well screened in lower sand and gravel unit



FILENAME: SITE1207.DWG 12/11/07

ETIC ENGINEERING

SITE MAP
FORMER EXXON RS 73567
3192 SANTA RITA ROAD
PLEASANTON, CALIFORNIA

FIGURE: 1

ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING: **MW14**

DRILLING AND SAMPLING METHODS: Cleared to 8 feet below ground surface using a soil vacuum and hand auger. Drilled using a hollow stem auger rig utilizing 8-inch augers. Sampled with a split spoon sampler.

COORDINATES:
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:

				START	FINISH
WATER LEVEL					
TIME				TIME 1100	TIME 1520
DATE				DATE 12/8/08	DATE 12/12/08
REFERENCE					

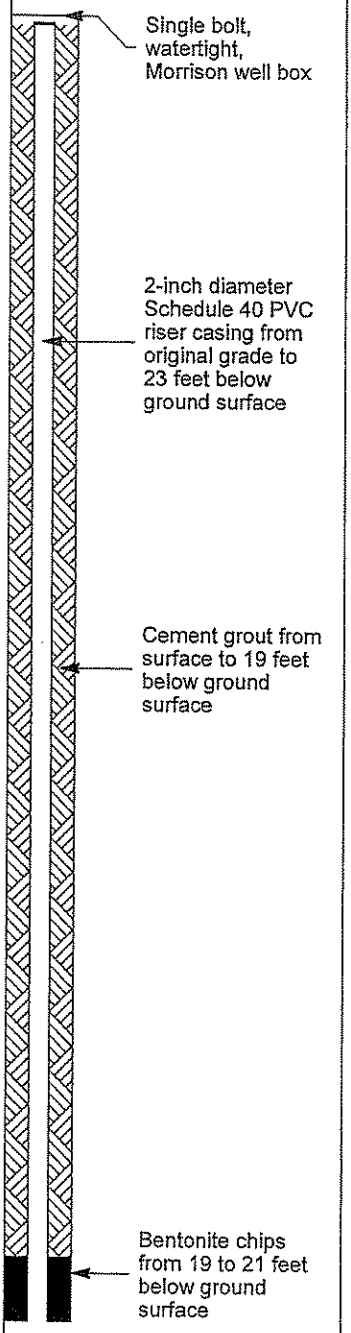
DRILLING COMPANY: Woodward Drilling, Inc.
LICENSE NUMBER: C57-710079

SURFACE CONDITIONS: Concrete

DESCRIPTION BY: E. Appel, Y. Mamiya

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION
				0	AC/AB	**CONCRETE** - to 0.5 feet below ground surface. **AGGREGATE BASE** - from 0.5 to 1 feet below ground surface. **CLAY WITH SILT** - very dark gray (2.5Y 3/1), very stiff, medium plasticity, moist.
				1		
				2		
				3	CL	
				4		
6	6			5		
				6		**SILTY CLAY** - dark grayish brown (2.5Y 4/2), stiff, low plasticity, moist.
				7		
				8	CL	
				9		
18	15	5 6 10	0.0	10		**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), stiff, low plasticity, moist. - with trace fine grained sand.
				11	CL	
				12		
18	13	6 9 12		13	SP	**POORLY GRADED SAND** - dark gray (2.5Y 4/1), medium dense, fine grained, slightly moist. **SILT WITH SOME CLAY** - dark gray (2.5Y 4/1), stiff, non-plastic, slightly moist.
				14	CL	
18	18	5 5 8	0.0	15		**SILTY CLAY** - dark olive brown (2.5Y 3/3), stiff, low plasticity, moist.
				16	CL	
18	18	6 7 9	0.0	17		**CLAY** - dark olive brown (2.5Y 4/2), stiff, medium plasticity, moist, pervasive caliche.
				18		
				19	CL	
				20		

DETAILS



LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

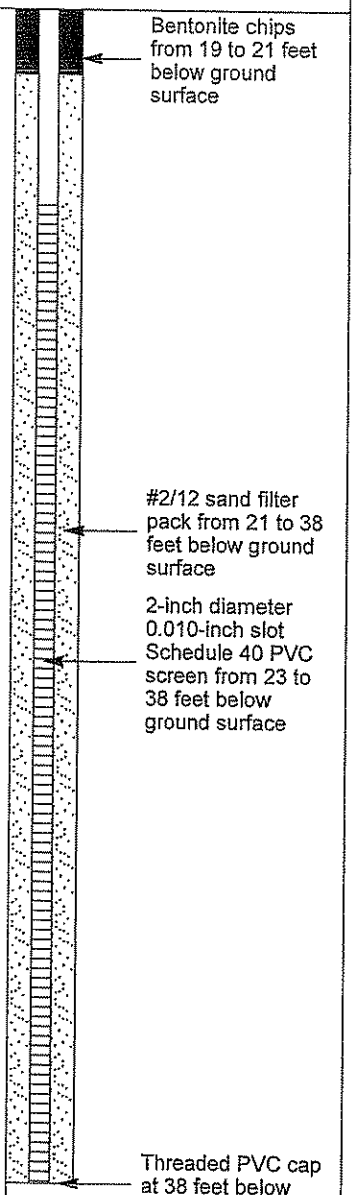
ETIC ENGINEERING

CLIENT	SITE NUMBER	LOCATION
ExxonMobil	73567	3192 Santa Rita Road, Pleasanton, California

LOG OF SOIL BORING:

MW14

INCHES DRIVEN	INCHES RECOVER	BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	GRAPHIC LOG	
18	18	8, 9, 12		21–24	CL	- increasing silt content, becoming very dark gray (2.5Y 3/1).
18	18	8, 15, 20	0.0	23–25	CL	
18	18	9, 14, 15	0.1	25–28	CL	**SILTY CLAY** - dark grayish brown (2.4Y 4/2), stiff, low plasticity, moist.
18	12	17, 9, 15		28–30	CL	
18	17	8, 8, 9		30–32	CL	**CLAY WITH SILT** - dark grayish brown (2.5Y 4/2), stiff, low plasticity, moist.
18	18	6, 9, 11		32–34	CL	- becoming very stiff.
18	18	6, 9, 12		34–37	CL	**SILTY CLAY** - olive brown (4/2), very stiff, low plasticity, very moist.
				37–38	CL	Boring terminated at 38 feet below ground surface.



LOG OF SOIL BORING 7-3567.GPJ ETIC.GDT 1/22/09

Well Destruction Permits

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306
E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Former Exxon RS 73567
3192 Santa Rita Road
Pleasanton, CA 94566

Coordinates Source _____ ft. Accuracy _____ ft.
LAT: _____ ft. LONG: _____ ft.
APN 946-1105-38-4

CLIENT
Name ExxonMobil Environmental Services Company
Address 4096 Piedmont Ave. #194 Phone (510) 547-8196
City Oakland Zip 94611

APPLICANT
Name Woodward Drilling Co., Inc.
Email scott@woodwarddrilling.com Fax (707) 374-5677
Address 550 River Road Phone (707) 374-4300
City Rio Vista Zip 94571

TYPE OF PROJECT:

Well Construction	__	Geotechnical Investigation	__
Well Destruction	X	Contamination Investigation	__
Cathodic Protection	__	Other	__

PROPOSED WELL USE:

Domestic	__	Irrigation	__
Municipal	__	Remediation	__
Industrial	__	Groundwater Monitoring	__
Dewatering	__	Other	__

DRILLING METHOD:
Mud Rotary __ Air Rotary __ Hollow Stem Auger __
Cable Tool __ Direct Push __ Other __

DRILLING COMPANY Woodward Drilling Co., Inc.
DRILLER'S LICENSE NO. C57-710079

WELL SPECIFICATIONS: See attached well details.
Drill Hole Diameter _____ in. Maximum
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number 14 (MW1-MW14)

SOIL BORINGS:
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 8 June 2010
ESTIMATED COMPLETION DATE 10 June 2010

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Geremy E Woodward Date 5-19-10

ATTACH SITE PLAN OR SKETCH

FOR OFFICE USE

PERMIT NUMBER 2010048
WELL NUMBER 3S/1E-9D10 to 9D23 (MW-1 to MW-14)
APN 946-1105-038-04

PERMIT CONDITIONS
(Circled Permit Requirements Apply)

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller.
3. Permit is void if project not begun within 90 days of approval date.
4. Notify Zone 7 at least 24 hours before the start of work.

B. WATER SUPPLY WELLS
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

(F.) WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.

Approved Wyman Hong Date 5/24/10
Wyman Hong

Revised: January 4, 2010

May 26, 2010

Zone 7
Water Resources Engineering
Groundwater Protection Ordinance

ExxonMobil Environmental Services Company
3192 Santa Rita Road
Pleasanton
Wells 3S/1E-9D10 to 3S/1E-9D23 (MW-1 to MW-14)
Permit 2010048

Preliminary Destruction Requirements:

1. Remove from the well any pump, appurtenances, debris, or other materials.

2. Sound the well as deeply as practicable and record for your report.

3. Fill casing with neat cement or cement grout sealing material to two feet below the finished grade and pressurize to 25 psi and maintain for 5 minutes, forcing the sealing material through the existing perforations and into the surrounding formation.

4. Release the pressure and refill the empty portion of the casing with grouting material allowing it to spill over the top of the casing to form a cap.

5. Cut and remove any casing(s) to two feet below the finished grade or original ground, whichever is the lower elevation.

6. After seal has set, backfill the remaining hole with compacted material.

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON RS 73567, 3192 SANTA RITA ROAD, PLEASANTON, CALIFORNIA

Well Number	Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
3S/1E-9D12 MW1	NS	36.5	35	8	2	20-35	0.200	19-36.5	#3 Sand
3S/1E-9D13 MW2	NS	41.5	35	8	2	20-35	0.020	19-35	#3 Sand
3S/1E-9D10 MW3	NS	51.5	50	8	2	35-50	0.020	34-51.5	#3 Sand
3S/1E-9D11 MW4	NS	51.5	50	8	2	35-50	0.020	34-51.5	#3 Sand
3S/1E-9D15 MW5	NS	31	30	8	2	20-30	0.020	19-31	#3 Sand
3S/1E-9D16 MW6	NS	54	53	8	2	43-53	0.020	42-54	#3 Sand
3S/1E-9D17 MW7	NS	50	49	8	2	39-49	0.020	38-50	#3 Sand
3S/1E-9D14 MW8	NS	70	70	8	2	55-70	0.020	55-70	#3 Sand
3S/1E-9D18 MW9	PVC	69	69	8	2	54-69	0.010	52-69	#2/12 Sand
3S/1E-9D19 MW10	PVC	67	67	8	2	52-67	0.010	50-67	#2/12 Sand
3S/1E-9D20 MW11	PVC	64	64	8	2	49-64	0.010	47-64	#2/12 Sand
3S/1E-9D21 MW12	PVC	67	67	8	2	52-67	0.010	50-67	#2/12 Sand
3S/1E-9D22 MW13	PVC	43	43	8	2	28-43	0.010	26-43	#2/12 Sand
3S/1E-9D23 MW14	PVC	38	38	8	2	23-38	0.010	21-38	#2/12 Sand

Notes:

NS Not specified.
PVC Polyvinyl chloride.