August 28, 2008
Project No. SCA809ST1
SAP: 135442

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Well Decommissioning Report
Shell-Branded Service Station
809 East Stanley Boulevard
Livermore, California

DELTA

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared this letter documenting the destruction of four monitoring wells (MW-1 through MW-4) associated with above referenced site. Former well locations are shown on Figure 1.

BACKGROUND

Following submittal of Delta's Soil and Groundwater Investigation Report and Request for Case Closure on April 2, 2007 the Alameda County Environmental Health (ACEH) and California Regional Water Quality Control Board granted case closure in a letter dated August 13, 2008 and requested that the monitoring wells at the site be properly decommissioned (Attachment A).

WELL DESTRUCTIONS

In order to obtain a remedial action completion certificate, Delta obtained well destruction permits from the Zone 7 Water Agency (Attachment B). The four monitoring wells (MW-1, MW-2, MW-3 and MW-4), completed to depths of 47.5 feet, were destroyed on August 13, 2008 utilizing a pressure grouting method as authorized by the well destruction permits. Gregg Drilling and Testing, Inc. (Gregg) (License C57-485165) provided the field equipment and materials. A Delta scientist oversaw and directed the well destruction activities.

On August 13, 2008 depth to groundwater in the 48 foot deep site wells was measured by Delta to be between 39.30 and 40.85 feet bgs (indicating approximately 8-feet of water in site wells). A cement/bentonite grout was pumped into the bottom of the well-casing by tremie pipe to approximately 0.5-feet below grade. During grout emplacement groundwater was not displaced out the top of the well casing. A steel fitting with hose connector was then attached to the wellhead. The grout hose was connected to the fitting and grout was pumped into the well under 5 pounds per square inch of pressure for approximately 5 minutes.

Following grout placement, the 6-inch deep well boxes were capped with concrete to match to the surrounding grade.

a member of: Inogen Environmental Alliance

312 PIERCY ROAD SAN JOSE, CALIFORNIA 95138 USA
PHONE +1 408.224.4724 / USA TOLL FREE 800.477.7411
FAX +1 408.225.8506 WWW.DELTAENV.COM

RECOMMENDATION

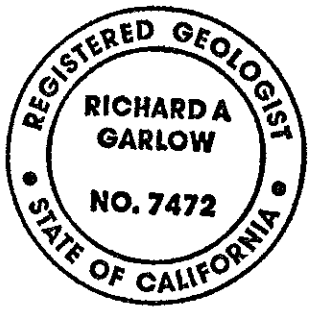
In completion of the destruction of the groundwater monitoring wells at this site Delta recommends a Remedial Action Completion Certificate be issued for this site as stated in the Alameda County Health Care Services Agency letter of August 13, 2008 (Attachment A).

REMARKS

The information contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Please call if you have any questions regarding the contents of this letter.

Sincerely,
Delta Consultants



Matt Lambert
Senior Staff Scientist

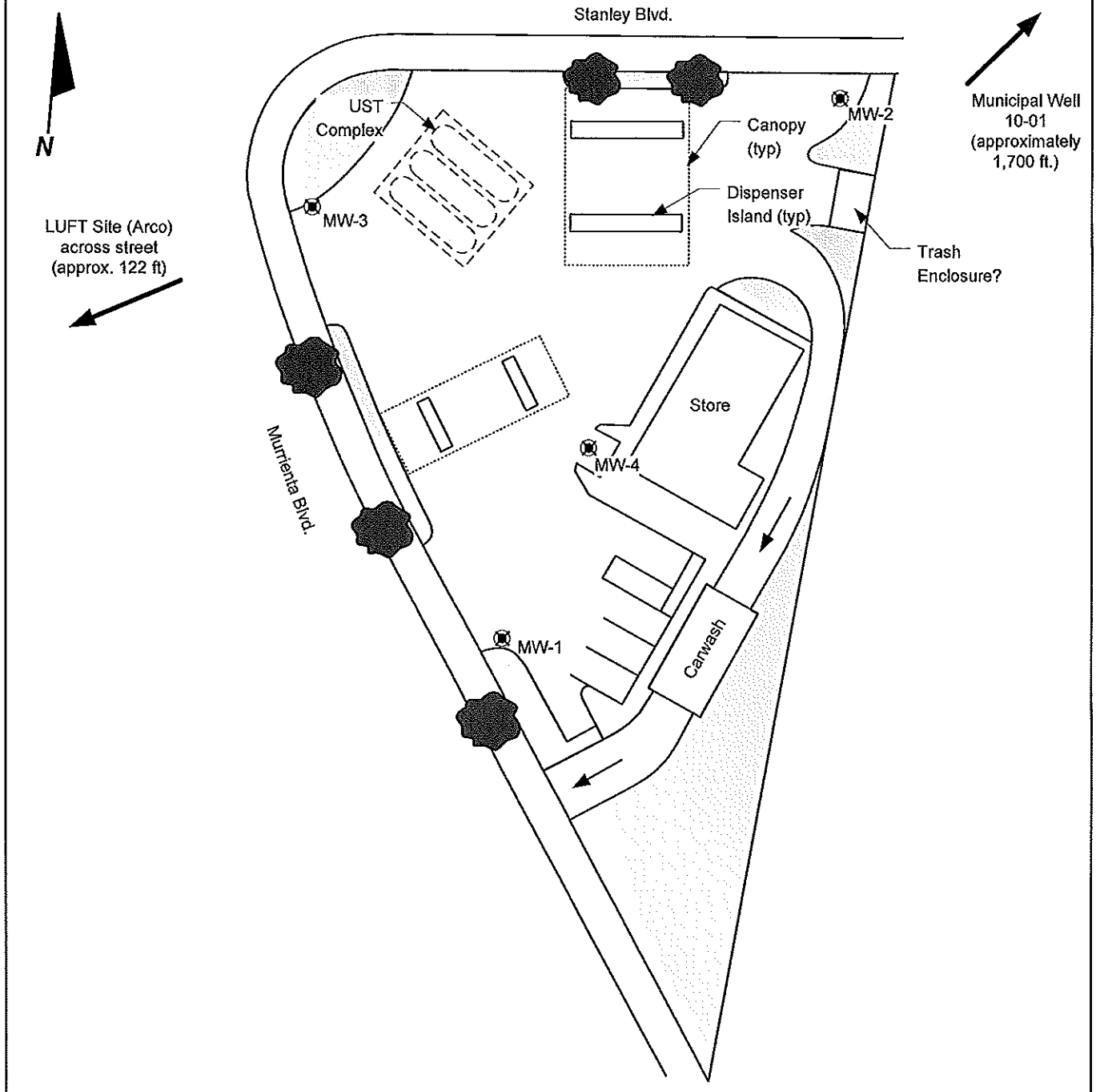
Richard A. Garlow, M.S., P.G.
Project Specialist

Attachments:

Figure 1 – Site Map

Attachment A – ACEH Case Closure Letter
Attachment B – Zone 7 Water Agency –Well Destruction Permit
Attachment C – Department of Water Resources Well Completion Report

cc: Denis Brown, Shell Oil Products US, Carson
Betty Graham, RWQCB – Oakland



0 40 FT

APPROX. SCALE

LEGEND

MW-1 ⊗ **FORMER GROUNDWATER MONITORING WELL**

FIGURE 1

FORMER WELL LOCATIONS MAP

Shell-branded Service Station
809 East Stanley Ave.
Livermore, California

PROJECT NO. SCA809ST	DRAWN BY ML 08/22/08
FILE NO. SCA809ST	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

Attachment A

ALAMEDA COUNTY ENVIRONMENTAL HEALTH CLOSURE LETTER

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

August 13, 2008

Mr. Denis Brown
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810-1039

Subject: Fuel Leak Case No. RO0002524 and Geotracker Global ID T0600162619, Shell#13-5442, 809 East Stanley Boulevard, Livermore, CA 94550 – Request for Well Decommissioning

Dear Mr. Brown:

In correspondence dated March 28, 2008, Alameda County Environmental Health (ACEH) notified you that your fuel leak case had been reviewed by ACEH and California Regional Water Quality Control Board staff and that no further action related to the underground storage tank fuel release was required at that time. Prior to issuance of a remedial action completion certificate and case closure, we requested that the monitoring wells at the site be properly decommissioned, should the monitoring wells have no further use at the site. To date, we have not received a report documenting the well decommissioning. Therefore, the fuel leak case remains open. In order to close out this fuel leak case, please decommission the monitoring wells and provide documentation of the well decommissioning to this office. A remedial action completion certificate will be issued following receipt of the documentation.

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.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **September 29, 2008** – Well Decommissioning Report

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/cleanup/electronic_reporting).

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.

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

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, QIC 80201
Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551

Danielle Stefani
Livermore-Pleasanton Fire Department
3560 Nevada Street
Pleasanton, CA 94566

Richard Garlow
Delta Environmental Consultants, Inc.
175 Bernal Road
San Jose, CA 95119

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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

Effective January 31, 2006, 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 Alicia Lam-Finneke.
   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 at 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)

Attachment B

ZONE 7 WATER AGENCY – WELL DESTRUCTION PERMIT

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486 PHONE (925) 454-5000

July 7, 2008

Mr. Matt Lambert
Delta Consultants
312 Piercy Road
San Jose, CA 95138

Dear Mr. Lambert:

Enclosed is drilling permit 28088 for the destruction of monitoring wells 3S/2E-17D4 to 3S/2E-17D7 (MW-1 to MW-4) at 809 East Stanley Boulevard in Livermore for Shell Oil Products. Also enclosed is a current drilling permit application for you files. Drilling permit applications for future projects can also be downloaded from our web site (www.zone7water.com).

Please note that permit condition A-2 requires that a well destruction report (DWR Form 188) be submitted after completion of the work. The report should include a description of methods and materials used to destroy the wells, location sketch, date of destruction, and permit number. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact me at extension 5056 or Matt Katen at extension 5071.

Sincerely,

Wyman Hong

Wyman Hong
Water Resources Specialist

Enc.

P:\WRE\GPOs\GPO1\GPO1.DESTRUCTION.wpd

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

FOR OFFICE USE

LOCATION OF PROJECT 809 East Stanley Ave
Livermore, CA

Coordinates Source _____ ft. Accuracy _____ ft.
LAT: _____ ft. LONG: _____ ft.
APN 49-256-8

CLIENT
Name Shell Oil Products US (A.)
Address 20945 S. Wilmington Ave Phone 707-865-0251
City Carson Zip 90810

APPLICANT
Name Delta Consultants (Matt Lambert)
Email mlambert@deltaenv.com Fax 408-225-8506
Address 312 Piercy Rd Phone 408-826-1872
City San Jose Zip 95138

TYPE OF PROJECT:

Well Construction	9	Geotechnical Investigation	9
Well Destruction	X	Contamination Investigation	9
Cathodic Protection	9	Other _____	9

PROPOSED WELL USE:

Domestic	9	Irrigation	9
Municipal	9	Remediation	9
Industrial	9	Groundwater Monitoring	9
Dewatering	9	Other _____	9

DRILLING METHOD:

Mud Rotary	9	Air Rotary	9	Hollow Stem Auger	9
Cable Tool	9	Direct Push	9	Other _____	9

DRILLING COMPANY WDC Exploration & Wells
DRILLER'S LICENSE NO. C57-783326
WELL SPECIFICATIONS:
Drill Hole Diameter _____ in. Maximum
Casing Diameter 2 in. Depth _____ ft.
Surface Seal Depth _____ ft. Number MW-1 through MW-4 (4 wells)

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

ESTIMATED STARTING DATE June 30, 2008
ESTIMATED COMPLETION DATE July 1, 2008

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

APPLICANT'S SIGNATURE _____ Date 6/10/08
Matt Lambert

ATTACH SITE PLAN OR SKETCH

PERMIT NUMBER 28088
WELL NUMBER 3S/2E-17D4 to 17D7 (MW-1 to MW-4)
APN 099-0256-008-00

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.

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 6/24/08
Wyman Hong

Revised: April 23, 2008

June 24, 2008

Zone 7
Water Resources Engineering
Groundwater Protection Ordinance

Shell Oil Products
809 E. Stanley Boulevard
Livermore
Wells 3S/2E-17D4 (MW-1), 3S/2E-17D5 (MW-2), 3S/2E-17D6 (MW-3) &
3S/2E-17D7 (MW-4)
Permit 28088

Destruction Requirements:

1. Clean out all bridged or poorly compacted materials to the bottom of the well.

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

3. Pressure grout the casing to two feet below the finished grade or original ground, whichever is the lower elevation.

4. Remove the casing, seal, and gravel pack to two feet below the finished grade or original ground, whichever is the lower elevation (optional).

5. After the seal has set, backfill the remaining hole with compacted material (optional).

P:\WRE\Wyman\Pressure Grout.wpd

Attachment C

DEPARTMENT OF WATER RESOURCES WELL COMPLETION REPORT

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

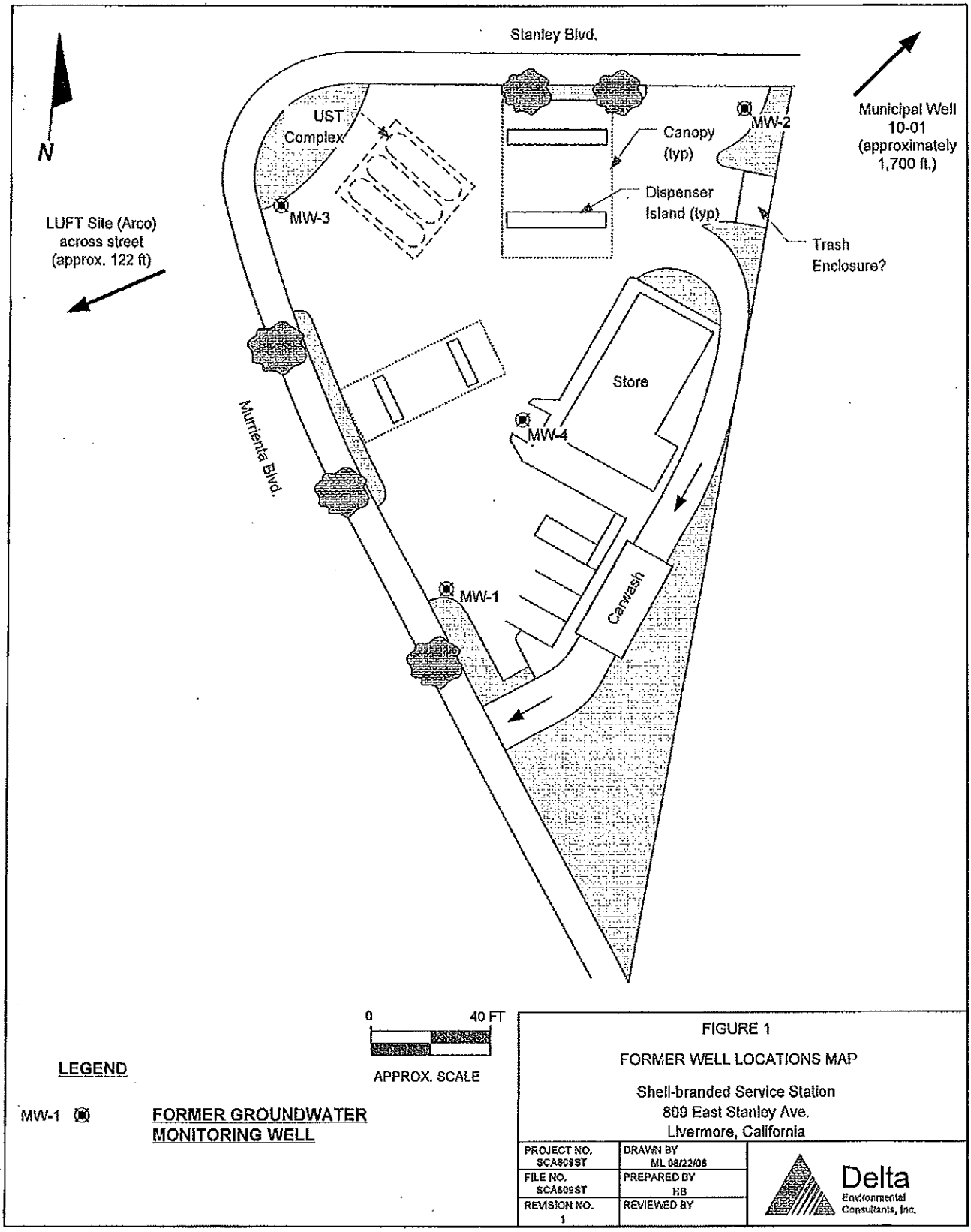


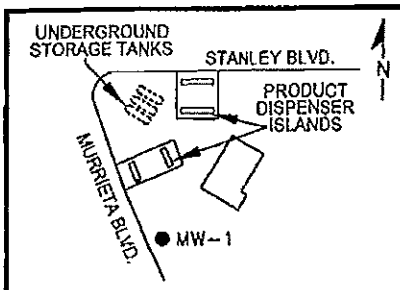
FIGURE 1

FORMER WELL LOCATIONS MAP

Shell-branded Service Station
809 East Stanley Ave.
Livermore, California

PROJECT NO. SCA809ST	DRAWN BY ML 08/22/06
FILE NO. SCA809ST	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



LOCATION MAP

IT CORPORATION

WELL NO. MW-1
PAGE 1 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: SCH 40 PVC
SLOT SIZE: 0.02"
GRAVEL PACK: NO.3

CLIENT: EQUIVA
DATE DRILLED: 9-21-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER: 8"
HOLE DEPTH: 47.5'
WELL DIAMETER: 2"
WELL DEPTH: 47.5'
CASING STICKUP: NA

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
								Asphalt
	No	Dmp	0.0		2		SW	GRAVELLY SAND: dark brown; 5-10% fines; 10% coarse gravel; 25-30% fine gravel; 25-30% medium to fine sand; 20-25% coarse sand; trace to 5% cobbles
					4			
	No	Mst	0.0	9			SW/SC	As above; fines increase with depth; loose to medium dense
	No	Mst	0.0	10	6			
				10				
	No	Mst		25				
	No	Mst	0.0	15				
	No	Mst		9	8			
	No	Mst/ Wet	0.0	6				
				6				
				4				
				3			SP	SAND: yellow-brown; 5-10% fines; 60% coarse sand; 25% fine gravel; 15% fine to medium sand; very loose
	No	Dmp	0.0	2	10			
	No			3				
	No	Dmp/Mst	0.0	3			CL	SILTY CLAY: medium brown; low plasticity; trace to 10% fine to medium sand; soft to firm
	No	Dmp		3				
	No	Dmp/Mst	0.0	5	12			
	No	Dmp/Mst		5				
	No	Dmp/Mst	0.0	3				
	No	Dmp/Mst		6				
				8	14			
				10				
	No	Dmp/Mst	0.0	3				
	No	Dmp/Mst		4				
	No	Dmp/Mst	0.0	7	16			
	No	Dmp/Mst		3				
	No	Dmp/Mst	0.0	4				
	No	Dmp/Mst		6				
	No	Dmp/Mst	0.0	2	18			
	No	Dmp/Mst		4				
	No	Dmp/Mst	0.0	7			CL	GRAVELLY SANDY CLAY: medium brown; low plasticity; 20% fine gravel; trace to 5% coarse gravel; 15% coarse sand; 5-10% fine to medium sand; firm to stiff
				9				
	No	Dmp/Mst	0.0	7	20			
	No	Dmp/Mst		12				
	No	Dmp/Mst	0.0	14			CL	SANDY SILTY CLAY: medium brown to gray-brown; low plasticity; 15-20% fine sand; trace to 10% coarse sand to fine gravel; firm to stiff
	No	Mst		5				
	No	Mst	0.0	8	22			

Neat Cement Grout

N:\Logs\830053\809Stanley\MW-1-1.dwg Thu, 24/Jan/02 01:27pm twahlgren

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-21-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
Neat Cement Grout	No	Mst		8			CL	SILTY CLAY: medium to gray-brown; low plasticity; 15-20% fine sand; trace to 10% coarse sand to fine gravel; firm to stiff
	No	Mst		5				
	No	Mst	0.0	7				
	No	Mst		8				
	No	Mst	0.0	10	24			
				5				
	No	Mst	0.0	5				
	No	Mst		9				
	No	Mst	0.0	5	26			
	No	Mst		7				
	No	Mst	0.0	9				
	No	Mst		5				
	No	Mst	0.0	7	28		CL	GRAVELLY SANDY CLAY: medium brown; low plasticity; 20-25% fine gravel; 20% fine to coarse sand; firm
	No	Mst		12				
Bentonite	No	Mst	0.0	14			CL	SILTY SANDY CLAY: medium to gray-brown; low plasticity; 10-20% fine sand; trace to 10% coarse sand to fine gravel; soft to stiff
				3	30			
	No	Mst	0.0	5				
	No	Mst		6				
	No	Mst	0.0	7				
	No	Mst		7				
	No	Mst	0.0	7	32			
	No	Mst		10				
	No	Mst	0.0	3				
	No	Mst		5				
	No	Mst	0.0	8	34			
	No	Mst		10				
	No	Mst	0.0	3				
	No	Mst		5				
	No	Mst	0.0	9	36			
	No	Mst		4				
	No	Mst	0.0	4				
	No	Mst		6				
Sand	No	Sat	0.0	17	38		SC	CLAYEY SAND: light brown; 15-20% fines; 35-40% medium sand; 25% coarse sand; 20% fine sand; trace fine gravel; medium dense
	No	Sat		17				
	No	Sat	0.0	18			CL	GRAVELLY CLAY: dark brown; low plasticity; 10-15% fine gravel; trace coarse gravel; very stiff
	No	Mst		20				
	No	Sat	0.0	15	40		SC	CLAYEY GRAVELLY SAND: medium yellow-brown; 25-40% fines; 20-25% fine gravel; 15-20% coarse sand; 25-30% medium to fine sand; trace to 10% coarse gravel; loose to medium dense
		Sat		17				
		Wet	0.0	21				
	No	Sat		12				
	No	Sat	0.0	15	42			
	No	Wet		17				
	No	Sat	0.0	12				
	No	Wet		14				
			0.0	17	44			

IT CORPORATION

WELL NO. MW-1
PAGE 3 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-21-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
Sand				17					SC	CLAYEY GRAVELLY SAND: medium yellow-brown; 25-40% fines; 20-25% fine gravel; 15-20% coarse sand; 25-30% medium to fine sand; trace to 10% coarse gravel; loose to medium dense
	No	Sat	0.0	24						
	No	Sat		7						
				12						
				21	46					
	No	Sat	0.0	8					SP	SAND (46.5'): dark brown; 5% fines; 75% fine to medium sand; 20% coarse sand; loose
	No	Sat		10					SW	SAND: grey-brown; 5% fines; 10% fine gravel; 40% coarse sand; 25% medium sand; 20% fine sand; loose
					48					BOTTOM OF HOLE=47.5'

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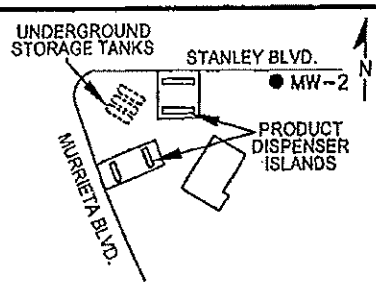

LOCATION MAP

IT CORPORATION

WELL NO. MW-2
PAGE 1 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: SCH 40 PVC
SLOT SIZE: 0.02"
GRAVEL PACK: NO.3

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER: 8"
HOLE DEPTH: 47.5'
WELL DIAMETER: 2"
WELL DEPTH: 47.5'
CASING STICKUP: NA

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
										Asphalt
	No	Dmp	0.0						CL	GRAVELLY SANDY CLAY: medium brown; low plasticity; 15% coarse sand; 10-15% fine gravel; trace to 10% coarse gravel
					2					
									SC	GRAVELLY CLAYEY SAND: dark brown; 15-20% fines; 5-10% coarse gravel; 25% fine gravel; 20% medium to fine sand; 30% coarse sand; very loose
					4					
	No	Dry		4						
	No	Dmp		4						
	No	Dmp		5	6					
					8					
									CL	CLAY: dark brown; low plasticity; 5-10% coarse sand; 10% medium sand; firm
	No	Dmp	0.0	7	10					
	No	Dmp		5						
	No	Dmp	0.0	4						
Neat Cement Grout					12				CL	SILTY SANDY CLAY: yellowish-brown; low plasticity; 10-15% medium sand; trace to 10% coarse sand; 15 to 20% fine sand; firm
					14					
									SC	CLAYEY SAND: dark to medium brown; 25% fines; trace to 10% fine gravel; trace coarse gravel; 35% coarse sand; 25-30% medium sand; 5-10% fine sand; loose to medium dense
	No	Dmp	0.0	6						
	No	Dmp		7						
	No	Dmp	0.0	15	16					
					18					
	No	Dmp/Ms	0.0	11	20					
	No	Dmp/Ms		16						
	No	Dmp/Ms	0.0	22						
					22					

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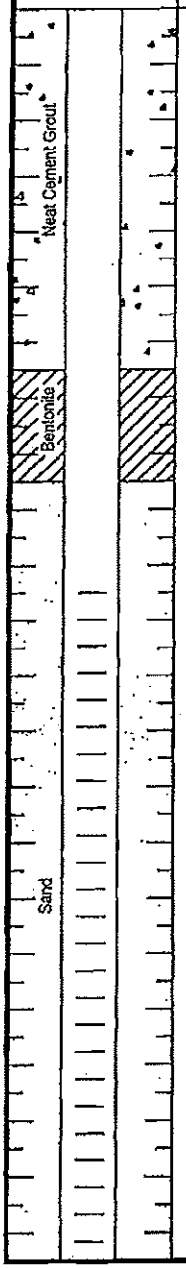
PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1



WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
							SC	CLAYEY SAND: dark to medium brown; 25% fines; trace to 10% fine gravel; trace coarse gravel; 35% coarse sand; 25-30% medium sand; 5-10% fine sand; loose to medium dense
	No	Mst/Wet	0.0	20	24			
	No	Mst/Wet		22				
	No	Mst	0.0	23			CL	SILTY CLAY: medium brown to yellowish orange; low plasticity; 5-10% medium sand; trace to 5% coarse sand; soft to firm
					26			
					28			
	No	Mst	0.0	3				
	No	Mst		4				
	No	Mst	0.0	5	30			
					32			
	No	Mst	0.0	3	34			As above
	No	Mst		3				
	No	Mst	0.0	5				
					36			
					38			
	No	Wet	0.0	3				As above with thin (<1/2") interbedded sand lenses
	No	Wet		4				
	No	Wet	0.0	6	40 ▽			
					42		CL	SANDY CLAY: medium brown to orangish brown; low plasticity; 15-20% medium sand; 10-15% coarse sand; trace to 10% fine gravel; firm
	No	Sat	0.0	3	44			
	No	Sat		7				

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WELL NO. MW-2
PAGE 3 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
Sand	No	Sat		7					CL	CLAY: medium brown to orangish brown; low plasticity; 15-20% medium sand; 10-15% coarse sand; trace to 10% fine gravel; firm
	No	Sat	0.0	10	46					
					48					BOTTOM OF HOLE=47.5'

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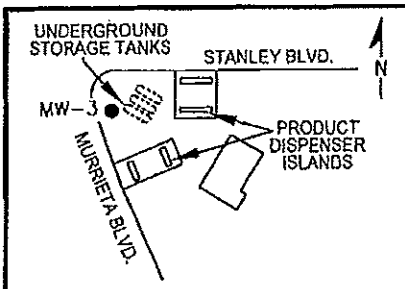

LOCATION MAP

IT CORPORATION

WELL NO. MW-3
PAGE 1 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: SCH 40 PVC
SLOT SIZE: 0.02"
GRAVEL PACK: NO.3

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER: 8"
HOLE DEPTH: 47.5'
WELL DIAMETER: 2"
WELL DEPTH: 47.5'
CASING STICKUP: NA

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
										Asphalt
	No	Dmp/Mst	0.0		2				SC	CLAYEY GRAVELLY SAND: dark brown; 35-40% fines; 30% fine to medium sand; 10-15% coarse sand; 15% fine gravel; trace to 10% coarse gravel
					4				SW/SC	GRAVELLY CLAYEY SAND: dark brown to gray brown; 10-15% fines; 25% coarse sand; 30% medium to fine sand; 20% fine gravel; 5-10% coarse gravel; loose to medium dense
	No	Dmp	0.0	14						
	No	Dmp	0.0	12	6					
	No	Dmp	0.0	12						
					8					
	No	Dmp	0.0	4						
	No	Dmp	0.0	7					CL	CLAY: dark brown; low plasticity; 10% medium sand; trace to 10% coarse sand; firm
	No	Dmp	0.0	8	10					
Neat Cement Grout					12				CL	SILTY SANDY CLAY: yellowish-brown; low plasticity; 10-15% medium sand; trace to 10% coarse sand; 15 to 20% fine sand; firm
	No	Dmp	0.0	4						
	No	Dmp	0.0	6	14					
	No	Dmp	0.0	6						
					16					
									SC	CLAYEY SAND: medium brown; 25-30% fines; 30% coarse sand; 25-30% fines; 30% coarse sand; 25-30% medium to fine sand; 5-10% fine gravel; trace to 10% coarse gravel; loose to medium dense
	No	Mst	0.0	5	18					
	No	Mst	0.0	11						
	No	Mst	0.0	14	20					
					22					

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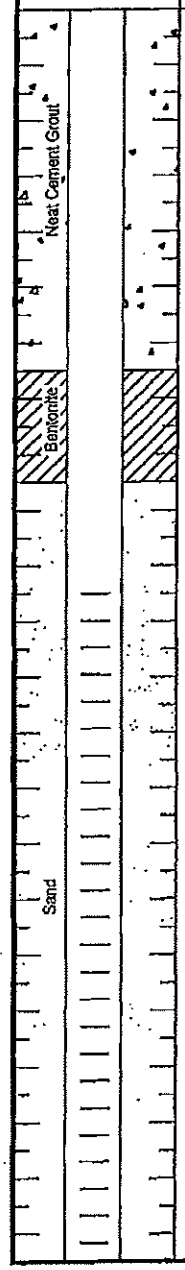
PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1



DEPTH (FEET)	PRODUCT ODOR	MOISTURE CONTENT	RECOVERY	PENETRATION (BLOWS/ 6")	SOIL TYPE	LITHOLOGY/REMARKS
					SC	CLAYEY SAND: medium brown; 25-30% fines; 30% coarse sand; 25-30% medium to fine sand; 5-10% fine gravel; trace to 10% coarse gravel; loose to medium dense
	No	Mst/Wet	0.0	5		
24	No	Mst/Wet	0.0	11		
	No	Mst/Wet	0.0	12		
26						
					CL	SILTY SANDY CLAY: gray-brown; low plasticity; 15-20% fine sand; trace to 10% coarse sand; trace to 5% fine to coarse gravel; firm
28						
	No	Mst	0.0	4		
	No	Mst	0.0	4		
30	No	Mst	0.0	5		
32						
					CL	SILTY CLAY: orangish-yellowish brown; low plasticity; trace to 10% medium to coarse sand; trace to 15% fine sand; greenish gray mottling; firm
	No	Dmp	0.0	4		
34	No	Dmp	0.0	5		
	No	Mst	0.0	5		
36						
38						
	No	Dmp/Mst	0.0	3		As above
	No	Dmp/Mst	0.0	6		
40	No	Dmp/Mst	0.0	7		
42						
					SP	SAND: gray-brown; 5% fines; trace to 5% fine gravel; 30-35% medium sand; 25% fine sand; 35-40% coarse sand; well sorted; very loose
						CLAYEY GRAVELLY SAND (~44.3'): orange-brown; 30% fines; 5% coarse gravel; 10% fine gravel; 35-40% medium to fine sand; 15-20% coarse sand; loose
	No	Sat	0.0	4		
44	No	Sat	0.0	6	SC	

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IT CORPORATION

WELL NO. MW-3
PAGE 3 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-24-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
Sand	No	Sat	0.0	6					SC	CLAYEY GRAVELLY SAND: orange-brown; 30% fines; 5% coarse gravel; 10% fine gravel; 35-40% medium to fine sand; 15-20% coarse sand; loose
	No	Sat	0.0	13	46					
					48					BOTTOM OF HOLE=47.5'

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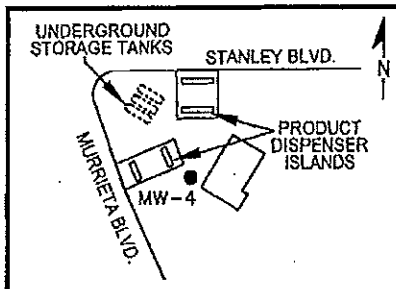

LOCATION MAP

IT CORPORATION

WELL NO. MW-4
PAGE 1 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: SCH 40 PVC
SLOT SIZE: 0.02"
GRAVEL PACK: NO.3

CLIENT: EQUIVA
DATE DRILLED: 9-25-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER: 8"
HOLE DEPTH: 47.5'
WELL DIAMETER: 2"
WELL DEPTH: 47.5'
CASING STICKUP: NA

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
										Asphalt
	No	Dry	0.0						SC	CLAYEY GRAVELLY SAND: dark brown; 35-40% fines; 35% fine to medium sand; 10% coarse sand; 10-15% fine gravel; trace to 10% coarse gravel
					2					
									SW/SC	GRAVELLY SAND: dark brown; 5-10% fines; 30-35% medium to fine sand; 25% coarse sand; 25-30% fine gravel; 5% coarse gravel; trace cobbles; loose
					4					
	No	Dmp	0.0	7						
	No	Dmp	0.0	12						
	No	Dmp	0.0	13	6					
					8					
	No	Dmp	0.0	7						
	No	Dmp	0.0	5					CL	CLAY: dark brown; low plasticity; 10% medium sand; trace to 10% coarse sand; firm
	No	Dmp	0.0	3	10					
Neat Cement Grout					12				CL	SILTY SANDY CLAY: medium brown to yellowish brown; low plasticity; 15-20% fine sand; 10-15% medium sand; trace to 10% coarse sand; firm
	No	Dmp	0.0	3						
	No	Dmp	0.0	4	14					
	No	Dmp	0.0	7						
					16					
									SC	CLAYEY SAND: dark to medium brown; 25-30% fines; 30-35% fine to medium sand; 25-30% coarse sand; 5-10% fine gravel; trace to 5% coarse gravel; loose to medium dense
					18					
	No	Dmp/Msl	0.0	12						
	No	Dmp/Msl	0.0	21						
	No	Dmp/Msl	0.0	26	20					
					22					

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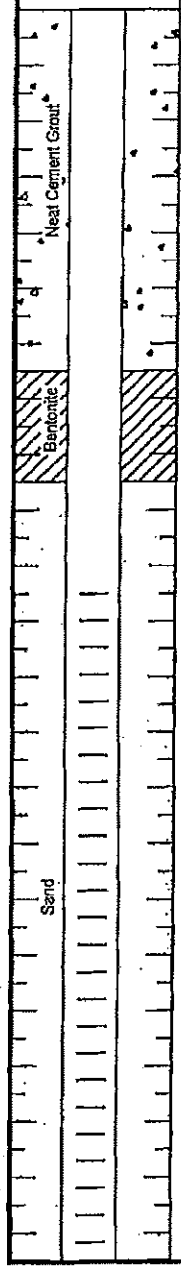
IT CORPORATION

WELL NO. MW-4
PAGE 2 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-25-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1



WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
								SC	CLAYEY SAND: dark to medium brown; 25-30% fines; 30-35% fine to medium sand; 25-30% coarse sand; 5-10% fine gravel; trace to 5% coarse gravel; loose to medium dense
	No	Mst	0.0	10	24				
	No	Mst	0.0	16					
	No	Mst	0.0	18	26				
									SILTY SANDY CLAY: gray-brown to medium brown; low plasticity; 5-15% fine sand; trace to 10% coarse sand to fine gravel; soft to firm
	No	Mst	0.0	3	28				
	No	Mst	0.0	3					
	No	Mst	0.0	4	30				
					32				
	V.Slt	Dmp	0.0	3	34			CL	As above: green-gray mottling; possibly old contamination
	V.Slt	Dmp/Mst	0.0	7					
	No	Mst	0.0	7	36				
					38				
	No	Mst	0.0	3					As above
	No	Mst/Wet	0.0	4					
	No	Wet	0.0	5	40				
					42			SC	CLAYEY GRAVELLY SAND: orange-brown; 30% fines; 5% coarse gravel; 10% fine gravel; 30-35% medium to fine sand; 20-25% coarse sand; loose to medium dense
	No	Sat	0.0	8	44				
	No	Sat	0.0	14					

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WELL NO. MW-4
PAGE 3 OF 3

PROJECT NO: 830053
LOGGED BY: RMB
DRILLER: WDC
DRILLING METHOD:
SAMPLING METHOD:
CASING TYPE:
SLOT SIZE:
GRAVEL PACK:

CLIENT: EQUIVA
DATE DRILLED: 9-25-01
LOCATION: 809 EAST STANLEY BOULEVARD
HOLE DIAMETER:
HOLE DEPTH:
WELL DIAMETER:
WELL DEPTH:
CASING STICKUP:

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
Sand	No	Sat	0.0	14				SC	CLAYEY GRAVELLY SAND: orange-brown; 30% fines; 5% coarse gravel; 10% fine gravel; 30-35% medium to fine sand; 20-25% coarse sand; loose to medium dense
	No	Sat	0.0	19	46				
					48				BOTTOM OF HOLE=47.5'

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