RO 9

CAMBRIA

December 20, 2005

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

Re: **Monitoring Well Destruction Report**
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
SAP Code 129450
Incident No. 97093398
Fuel Leak Case No. RO0000009

Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the destruction of two on-site and three off-site groundwater monitoring wells (SR-1, S-1, S-4, S-5, and S-10) at the above referenced site. The destruction and replacement of missing well S-3 was not completed during the field activities as Cambria was unsuccessful in locating the well until after the completion of the above noted well destructions. The well destructions were performed in accordance with Alameda County Health Care Services Agency's (ACHCSA) approval letter dated August 22, 2005 in response to Cambria's *Site Investigation Work Plan*, dated August 4, 2005. The wells were destroyed in accordance with San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) and ACHCSA guidelines for monitoring well abandonment.

SITE DESCRIPTION

The site is former Shell service station located on the corner of the intersection of 28th Ave and Telegraph Avenue in Oakland, California (Figures 1 and 2) and is currently occupied by a Kentucky Fried Chicken (KFC) restaurant. The site is surrounded by mixed commercial and residential development.

Cambria Environmental Technology, Inc.

270 Perkins Street
Sonoma, CA 95476
Tel (707) 935-4850
Fax (707) 935-6649

WELL DESTRUCTION ACTIVITIES

Cambria obtained well destruction permits W2005-0901(S-10), 0902 (S-4), 0903 (S-5), 0904 (S-1/SR-1), and 0905 (S-3/SR-3) from Alameda County Public Works Agency (ACPWA) prior to the well destruction activities (Appendix A). The four wells were destroyed on November 11, 2005 by Gregg Drilling and Testing, Inc. of Martinez, California, under the observation of Cambria field staff. Wells SR-1, S-1, S-4, S-5, and S-10 (Figure 2) were destroyed by pressure grouting, with approval from ACHCSA and ACPWA. The well casings were filled with cement grout, pressure seals were placed on top of the well casings and additional cement grout was pumped under pressure into the well casings so as to force the grout through the well screens out into the filter pack material at approximately 25 pounds per square inch for 15 minutes. Once the wells were completely grouted, concrete was placed in the cavity to bring the surface to grade to match the existing site conditions. No soil cuttings were generated during the field activities.

The Department of Water Resources Well Completion Logs compliance reporting requirements have been completed and are included with the attachments in Appendix B.

DESTRUCTION AND REPLACEMENT OF WELL S-3

Preliminary efforts were not successful in locating the missing onsite well S-3 during pre-field activities, thus the destruction and replacement of missing well S-3 was not completed during the field activities. Cambria continued with efforts to locate the missing well after the well destruction activities were completed. With the assistance of a geophysical survey, the missing well S-3 was finally located in the planter adjacent to the sidewalk along 28th Street (Figure 2). The well, with 4-inch metal casing, was buried under approximately 1-foot of soil, with no well box or well cap. Attempts to gauge groundwater depth or observe groundwater conditions were not successful as the well was full of soil to approximately 4 feet below grade (fbg).

The well permit to destroy and replace well S-3 [Permit #W2005-0905 (S-3/SR-3)] was extended by ACPWA until early second quarter 2006. Cambria proposes to complete the destruction and replacement of well S-3, in accordance with Cambria's August 4, 2005 *Site Investigation Work Plan,* during the first quarter of 2006. ACHCSA will be notified prior to implementation of this work and Cambria will prepare well destruction and installation report to document the activities approximately 60 days after the results of the soil samples have been received.

CAMBRIA

CLOSING

If you have any questions regarding the contents of this document, please call Dennis Baertschi at (707) 268-3813.

Sincerely,
Cambria Environmental Technology, Inc.

Dennis Baertschi
FOR
Stewart A. Dalie IV
Senior Staff Scientist

Ana Friel
Senior Project Geologist
PG 6452

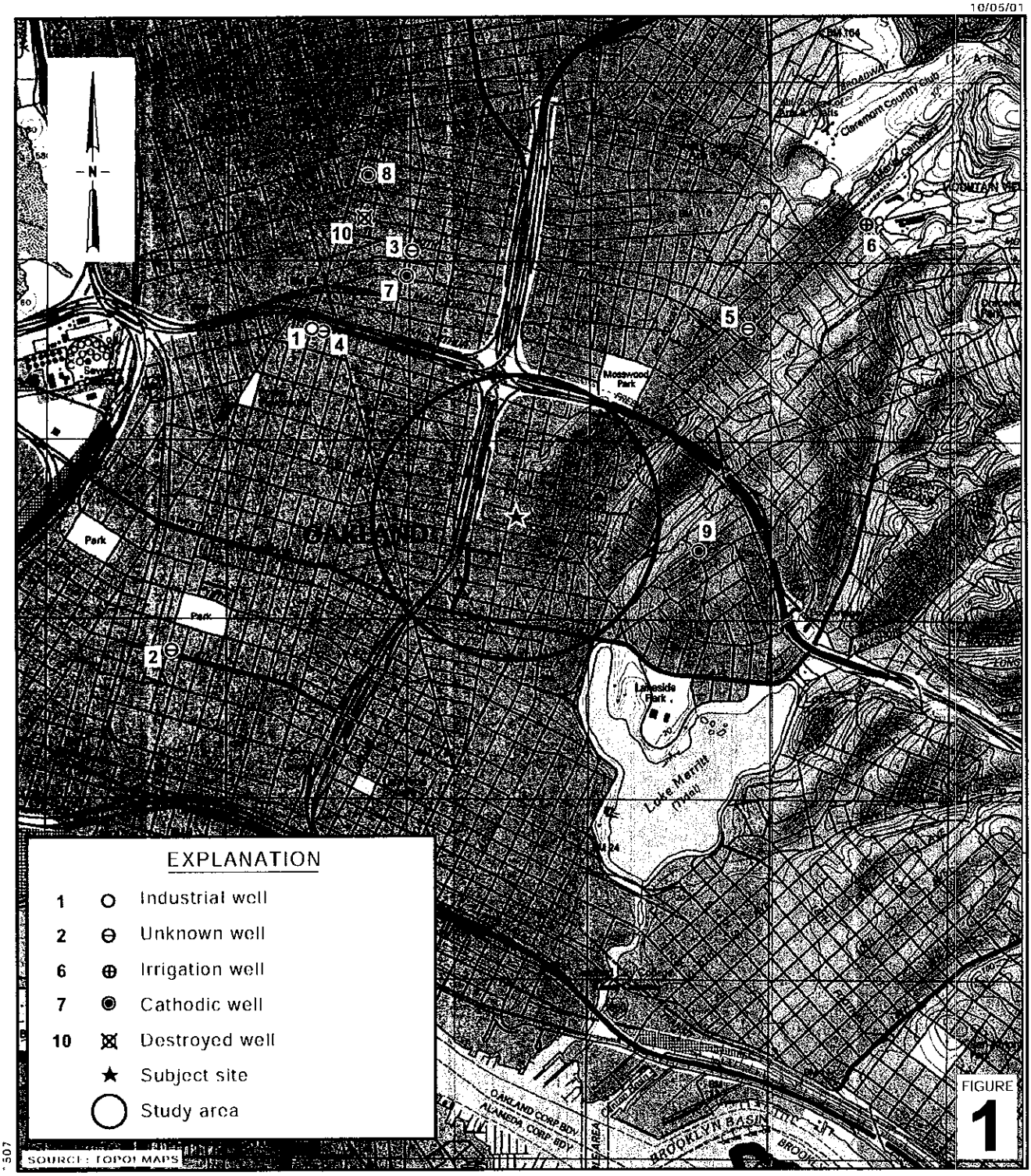
Attachments:

Figure 1. Site Vicinity/Well Location Map
Figure 2. Site Plan

Appendix A. Well Destruction Permits
Appendix B. Department of Water Resources Well Completion Reports (without attachments)

cc: Mr. Denis Brown, Shell
Harmon Management Corp

10/05/01



0 1/4 1/2 1 2

SCALE (MILES)

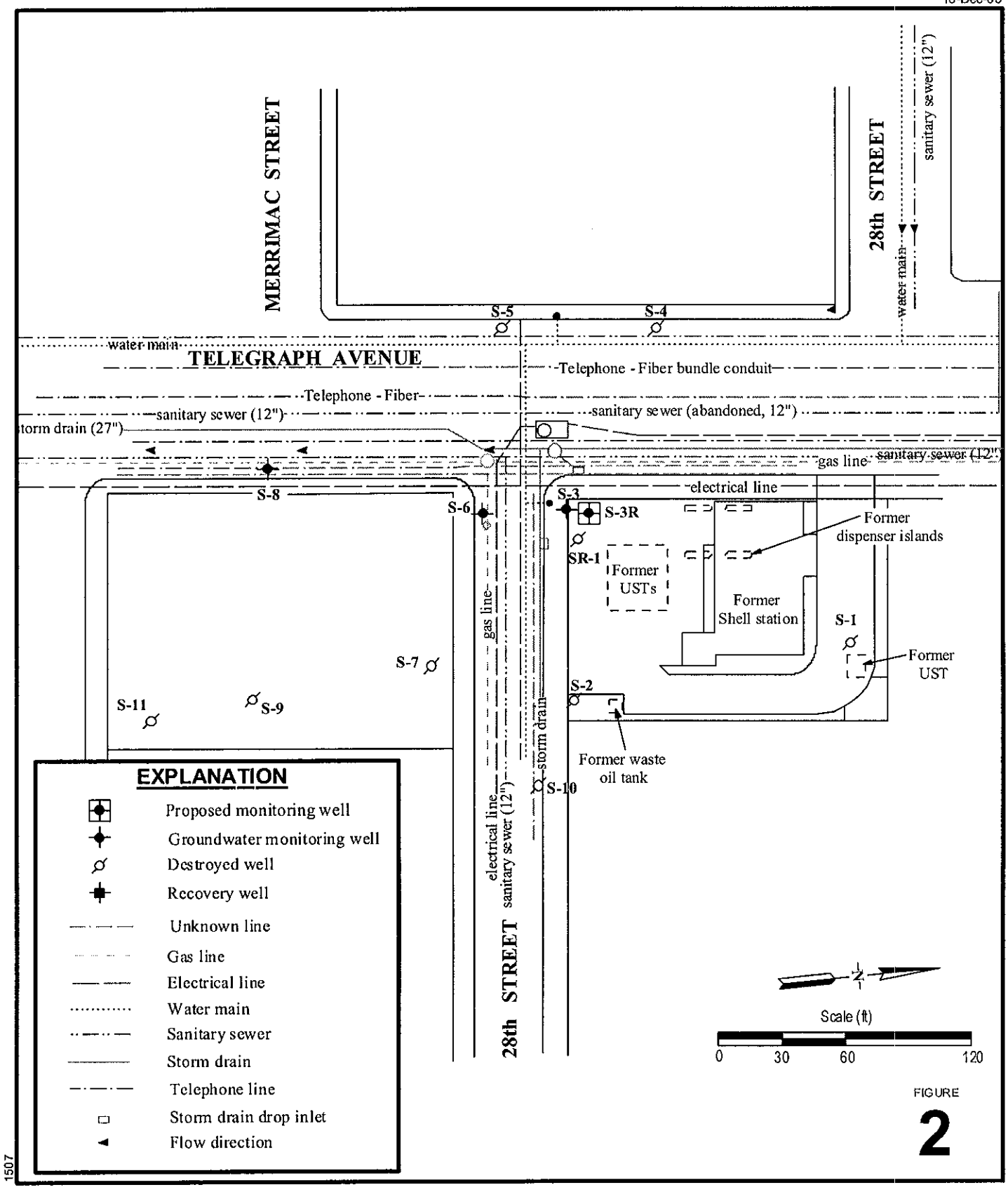
Former Shell Service Station / Current KFC Restaurant
2800 Telegraph Avenue
Oakland, California
Incident #97093398

CAMBRIA

Site Vicinity / Well Location Map

(1/2 Mile Radius)

13-Dec-05



FIGURE

2

1507

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

CAMBRIA

Site Plan

Appendix A

Well Destruction Permits

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/12/2005 By jamesy
Permits Issued: W2005-0901 to W2005-0905

Receipt Number: WR2005-2113
Permits Valid from 11/10/2005 to 11/11/2005

Application Id: 1126560438765
Site Location: 2800 Telegraph Avenue, Oakland, CA 94609
Project Start Date: 11/10/2005

City of Project Site: Oakland

Completion Date: 11/11/2005

Applicant: Cambria Environmental - Stewart A Dalie IV
5900 Hollis St #A, Emeryville, CA 94608
Phone: 510-420-3339

Property Owner: Shell Oil Products Company
20945 Wilmington, Carson, CA 90810
Phone: 707-865-0251

Client: ** same as Property Owner **

Total Due: $1500.00
Total Amount Paid: $1500.00
Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 3 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: auger **Work Total: $900.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2005-0901	09/12/2005	02/08/2006	S10	10.00 in.	4.00 in.	15.00 ft	15.00 ft			
W2005-0902	09/12/2005	02/08/2006	S4	10.00 in.	4.00 in.	15.00 ft	15.00 ft			
W2005-0903	09/12/2005	02/08/2006	S5	10.00 in.	4.00 in.	15.00 ft	15.00 ft			

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

3. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

5. Applicant shall contact George Bolton for a inspection time at 510-670-5594 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Permitte, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statues regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. Pressure Grout with Cement (Less than 30 ft in depth)

8. Prior to installation of any monitoring wells into any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Tremie Grout with Cement (More than 30 ft in depth)

Well Construction-Monitoring-Monitoring - 2 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: drill **Work Total: $600.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2005-0904	09/12/2005	02/08/2006	S-1/SR-1	10.00 in.	4.00 in.	15.00 ft	15.00 ft
W2005-0905	09/12/2005	02/08/2006	S-3/SR-3	10.00 in.	4.00 in.	15.00 ft	15.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statues regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or to the City and follow all City or County Ordinances No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Drill out & Replace with New Well

6. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

7. Applicant shall contact George Bolton for a inspection time at 510-670-5594 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

8. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

9. Minimum surface seal thickness is two inches of cement grout placed by tremie

10. Minimum seal depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

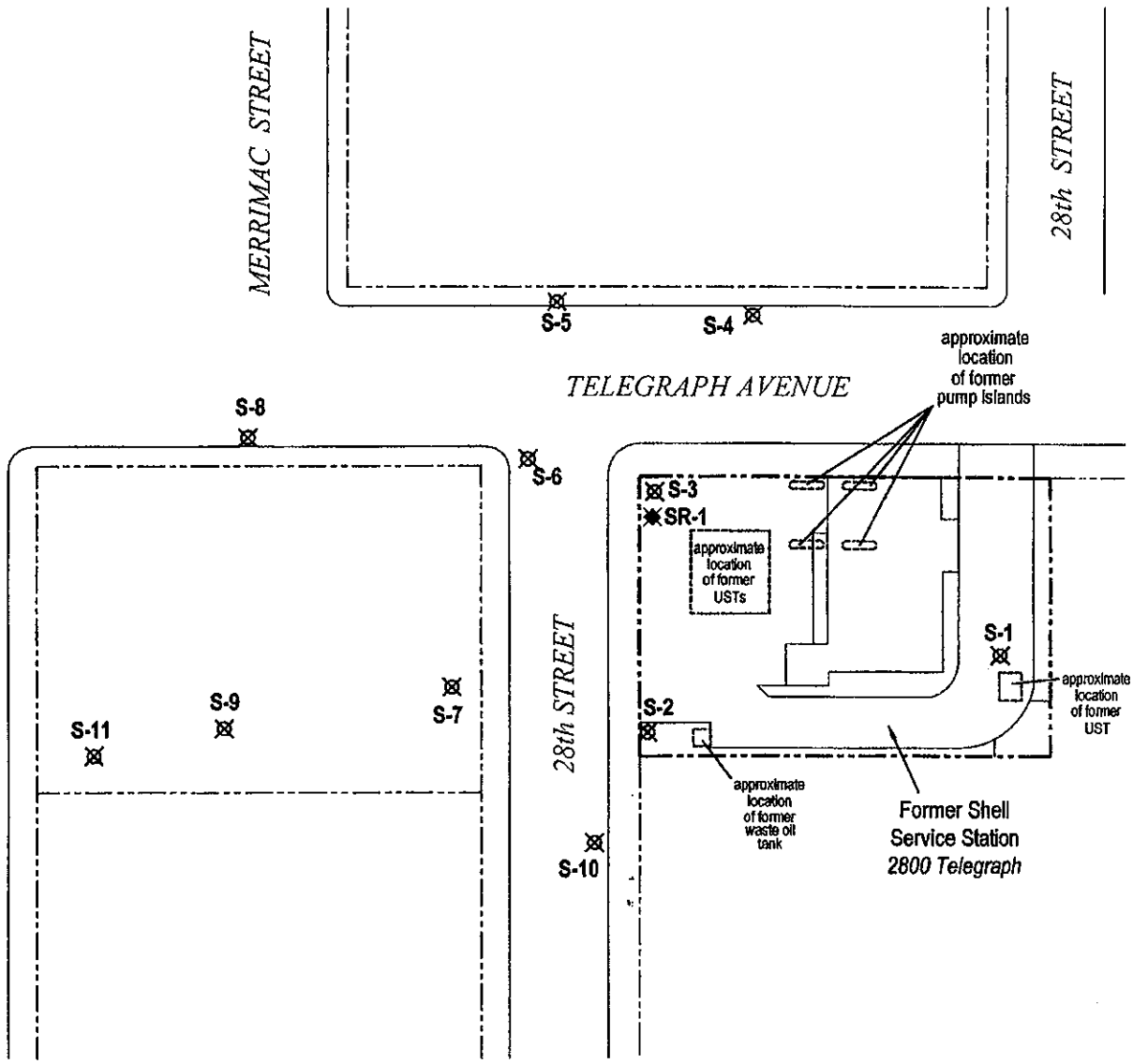
Appendix B

Department of Water Resources Well Completion Reports (with attachments)

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✱ Destroyed recovery well location

0 30 60

Scale (ft)

FIGURE

1

Base map taken from Weiss Associates Site Map

G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

Field location of boring:

(See Plate 2)

Project No.: 7610	Date: 10/03/89	Boring No: SR-1	
Client: Shell Oil Company			
Location: 2800 Telegraph Avenue			
City: Oakland, California		Sheet 1 of 2	
Logged by: T.J.W.	Driller: Bayland		

Drilling method: Hollow-Stem Auger

Hole diameter: 8-inch

Casing installation data: (See Well Completion Detail)

Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blowsft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				FILL - Gravels, Sands, Silts, Clays (GM) - very dark brown (10YR 2/2), stiff, damp; no chemical odor.
96								
				2				
				3				Pea Gravel
				4				
	100	S&H						CLAYEY SILT with SAND (ML) - very dark grayish brown (10YR 3/2), medium stiff, damp; moderate chemical odor.
130	100	push	SR-1-	5				
	150		5.5					
				6				
				7				
				8				
				9				
	100	S&H						
295	100	push	SR-1-	10				COLOR CHANGE to olive (2.5 4/4), medium stiff, damp; mottled with gray; moderate to strong chemical odor.
	100		10.5					
				11				
				12				
				13				
				14				
	5	S&H						SAND (SP) - very dark grayish brown (2.5Y 3/2), medium dense, saturated; medium sand; trace silt; no chemical odor.
19.0	10		SR-1-	15				
	19		15.5					
				16				
				17				
								SAND with GRAVEL (SW) - brown (10YR 5/3), medium dense, saturated; 25-30% fine gravel.
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. SR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	CMP CEG 1262	10/89		

Field location of boring: (See Plate 2)

Project No.:	7610
Date:	10/03/89
Client:	Shell Oil Company
Location:	2600 Telegraph Avenue
City:	Oakland, California
Logged by:	T.J.W.
Driller:	Bayland
Boring No.:	SR-1
Sheet	2 of 2

Drilling method: Hollow-Stem Auger
Hole diameter: 8-inch
Casing installation data: (See Well Completion Detail)
Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blowct. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	7	S&H		20				
N/A	7		SR-1-20.5					
	9			21				
				22				
				23				
				24				
	2	S&H		25				COLOR CHANGE to yellowish brown (10YR 5/6); 15-25% fine gravel; no chemical odor.
N/A	7		SR-1-25.5					
	8			26				
				27				
				28				
				29				
	3	S&H		30				SILTY SAND (SM) - yellowish brown (10YR 5/4), loose, saturated; very fine sand; 20-30% silt; no chemical odor.
N/A	5		SR-1-30.5					
	19			31				
				32				GRAVEL with SAND (GW) - yellowish brown (10YR 5/6), medium dense, saturated; fine gravel; 20-30% fine to coarse sand; no chemical odor.
				33				
				34				
	8	S&H		35				SAND with SILT and GRAVEL (SW) - brown (10YR 5/3), dense, saturated; 50-60% very fine sand; 15% fine gravel; 15% silt; rootholes contained moisture; trace clay; no chemical odor.
N/A	14		SR-1-35.5					
	20			36				
				37				Bottom of boring at 35.5 feet.
				38				Bottom of sample at 35.5 feet.
				39				10/03/89

Remarks:

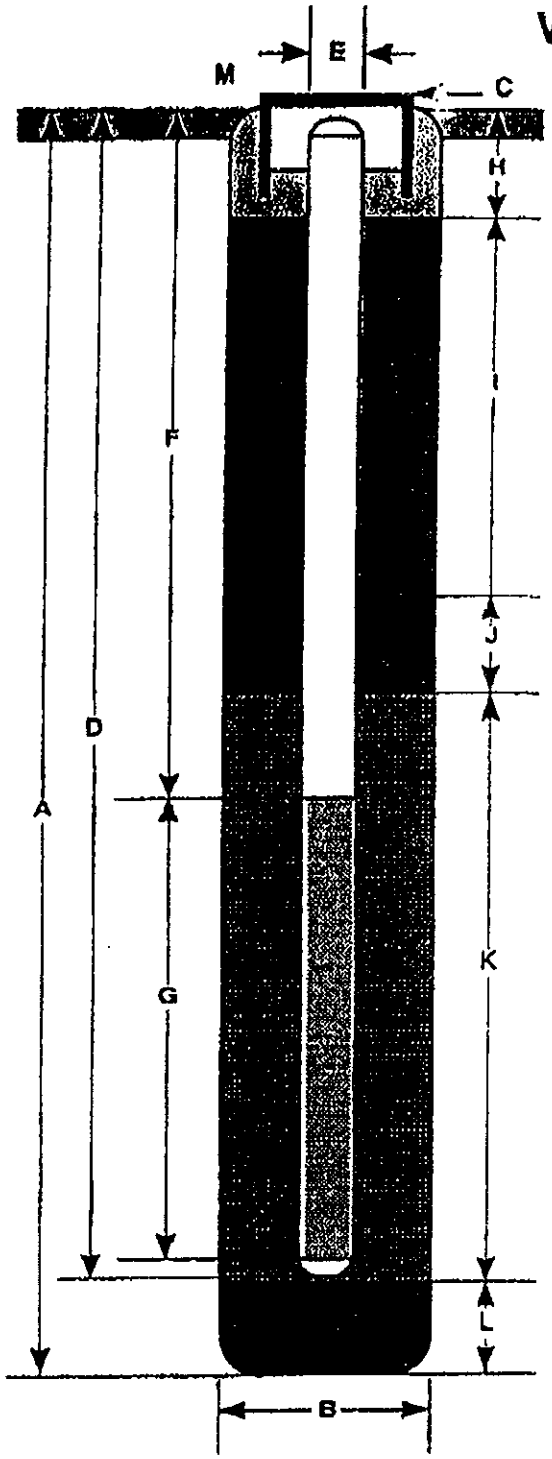
GeoStrategies Inc.

Log of Boring

BORING NO. SR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	CWP CEG 1262	10/89		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35 ft.

B Diameter of Boring 20 in.
Drilling Method Bucket Auger

C Top of Box Elevation ft.
☐ Referenced to Mean Sea Level
☐ Referenced to Project Datum

D Casing Length 35 ft.
Material Schedule 40 PVC

E Casing Diameter 6 in.

F Depth to Top Perforations 10 ft.

G Perforated Length 25 ft.
Perforated Interval from 10 to 35 ft.
Perforation Type Machine Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1 ft.
Seal Material Concrete

I Backfill from 1 to 51/2 ft.
Backfill Material Cement Grout

J Seal from 51/2 to 61/2 ft.
Seal Material Bentonite pellets

K Gravel Pack from 61/2 to 35 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M Christy Box

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

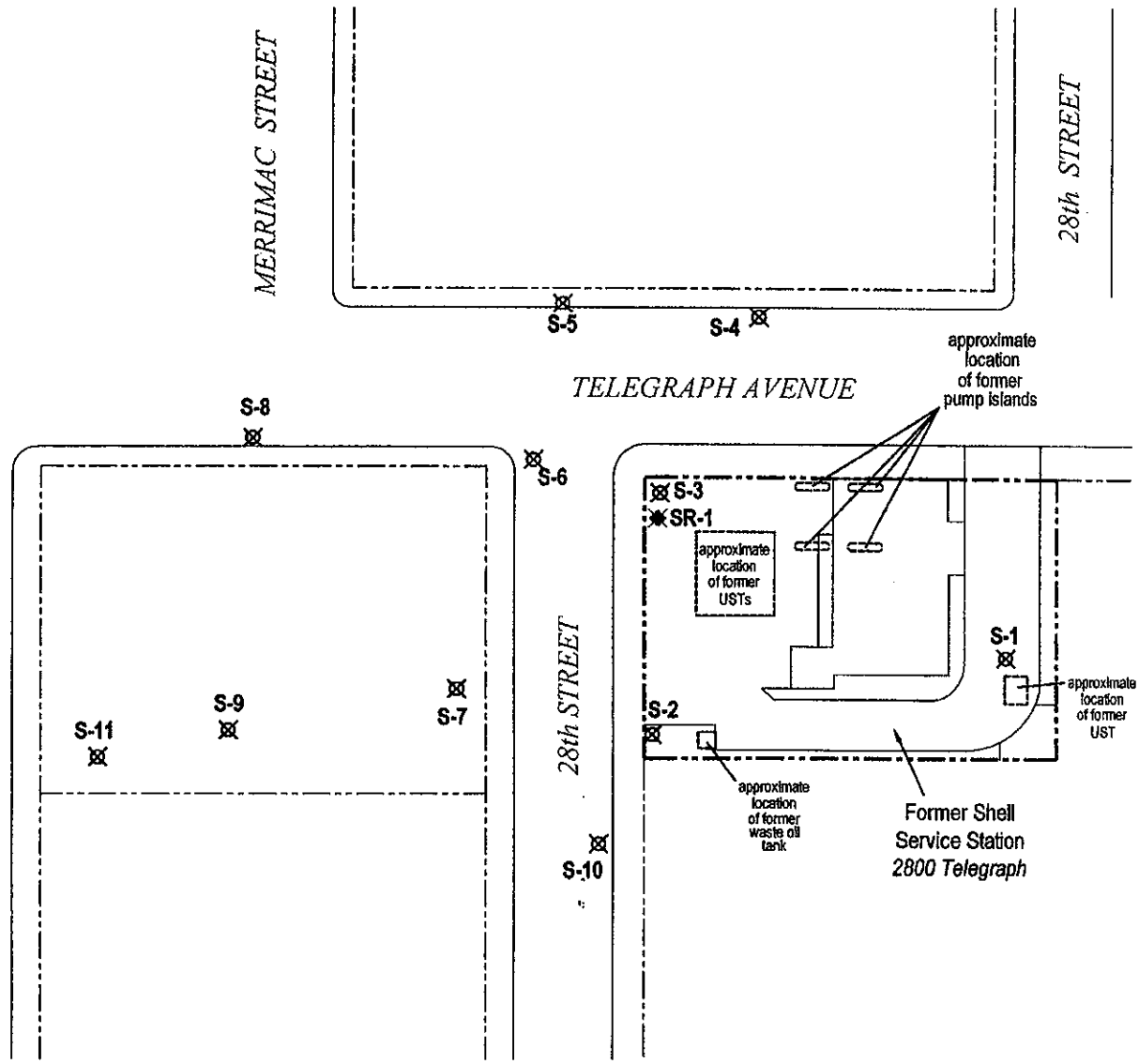
WELL NO.
SR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	RG/CEG 12/02	10/89		

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✱ Destroyed recovery well location

N

0 30 60

Scale (ft)

FIGURE

1

Base map taken from Weiss Associates Site Map

G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

Woodward-Clyde Consultants PROJECT NAME GETTLER RYAN NO. 8620011A

MONITORING WELL LOCATION 2800 Telegraph Avenue, Oakland CA: S-1		ELEVATION AND DATUM	
DRILLING AGENCY Bay Land Drilling	DRILLER	DATE STARTED / DATE FINISHED 4/22/88	
DRILLING EQUIPMENT CME - 55 Truckmount		COMPLETION DEPTH 28.6'	SAMPLER Modified California Sampler
DRILLING METHOD 8" HSA	DRILL BIT CME Carbide	NO. OF SAMPLES DIST. 5	UNDIST.
SIZE AND TYPE OF CASING 3" PVC		WATER LEVEL FIRST 12'	COMPL. N/A 24 HRS.
TYPE OF PERFORATION 0.020" slotted	FROM 27.5 TO 3.5 FT.	LOGGED BY: S. Bluestone	CHECKED BY: M. Borkowski
SIZE AND TYPE OF PACK 12/20 Monterey Sand	FROM 28.6 TO 2.0 FT.		
TYPE OF SEAL NO. 1 Bentonite Pellets	FROM 2.0 TO 1.5 FT.		
NO. 2 Concrete Grout	FROM 1.5 TO G.S. FT.		

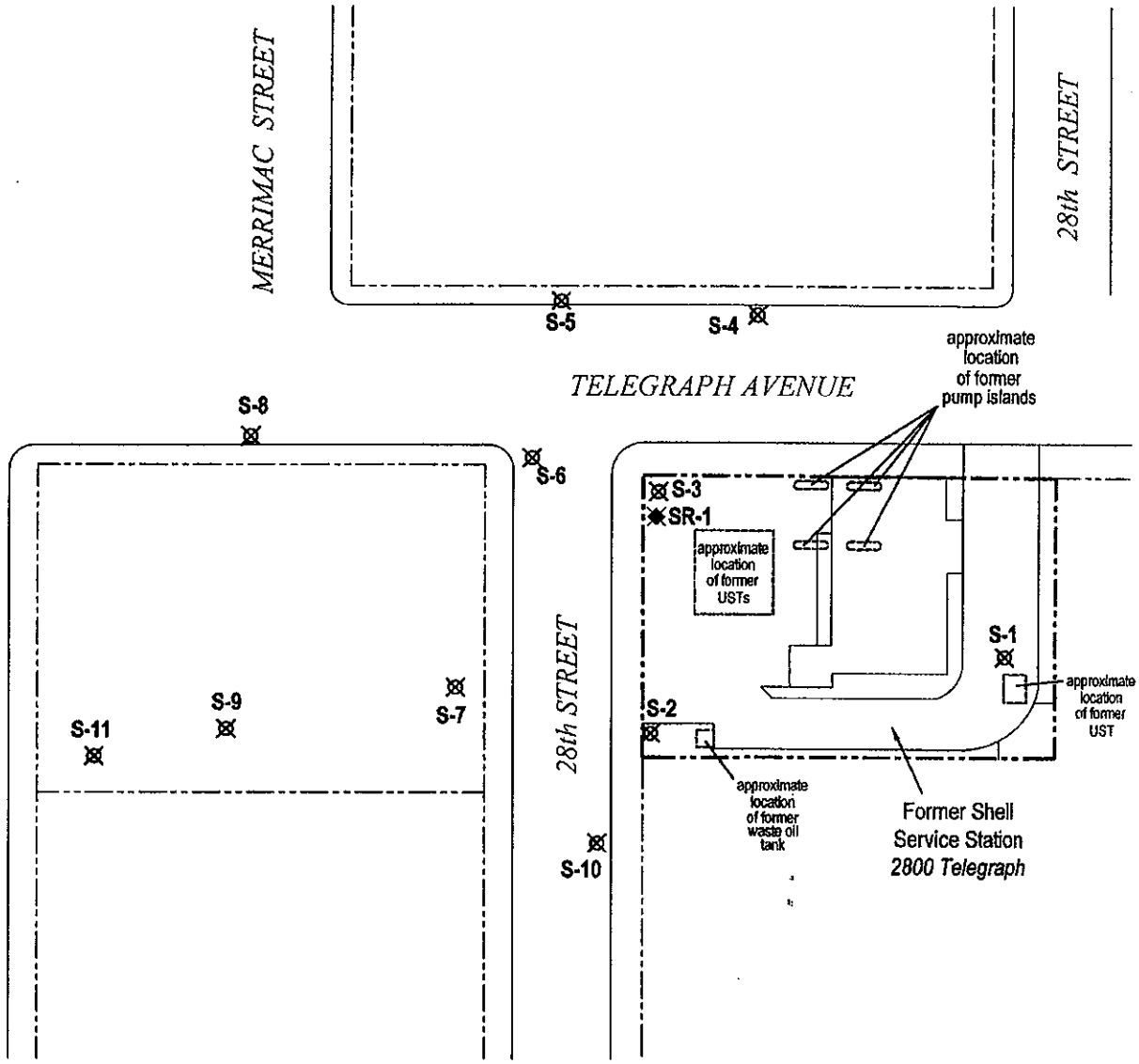
Depth (feet)	Samples	Blows	MATERIAL DESCRIPTION		USCS	Well Construction
			ASPHALT			
			SILTY SAND (Cuttings) dark brown, with fine to medium sand grains, little coarse sand, moist, loose		SM	
5	1	pushed abt 300 psi	SILTY CLAY light olive gray and brown mottled, little fine sand, low plasticity, soft, moist, appears to be interbedded with thin layers (0.5' - 1' thick) of Silty Sand, trace to little black organic debris	H Nu = 0 No Hydrocarbon odor	CL	
10	2	7 13	CLAY light brown to olive gray mottled, little fine sand, medium plasticity, stiff, wet	H Nu = 0 No Hydrocarbon odor	CL	
			CLAYEY GRAVEL? (Cuttings) (according to driller)		GC(?)	
15	3	9 25	CLAYEY SAND to SANDY CLAY light brown and gray mottled, little coarse sand, some medium to fine sand, little gravel to 1.5", moderate plasticity, medium dense	H Nu = 0 No Hydrocarbon odor	SC-CL	
20	4	6 10	CLAYEY GRAVEL to CLAYEY SAND with interbeds of SANDY CLAY to abt. 5" & SILTY SAND light brown to gray mottled, moderate plasticity saturated, medium dense, saturated	H Nu = 0 No Hydrocarbon odor	GC-SC, CL, SM	
			GRAVEL (according to driller)			
25	5	6 9 14	CLAYEY SAND to SANDY CLAY olive gray to light brown mottled, fine to medium sand, moderate plasticity, stiff (or med. dense), saturated	H Nu = 0 No Hydrocarbon odor	SC-CL	
30			Bottom of Well: 28.5 feet			

LOG OF MONITORING WELL NO. S-1 SHEET 1 OF 1

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✱ Destroyed recovery well location

Base map taken from Weiss Associates Site Map

N

0 30 60

Scale (ft)

FIGURE

1

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

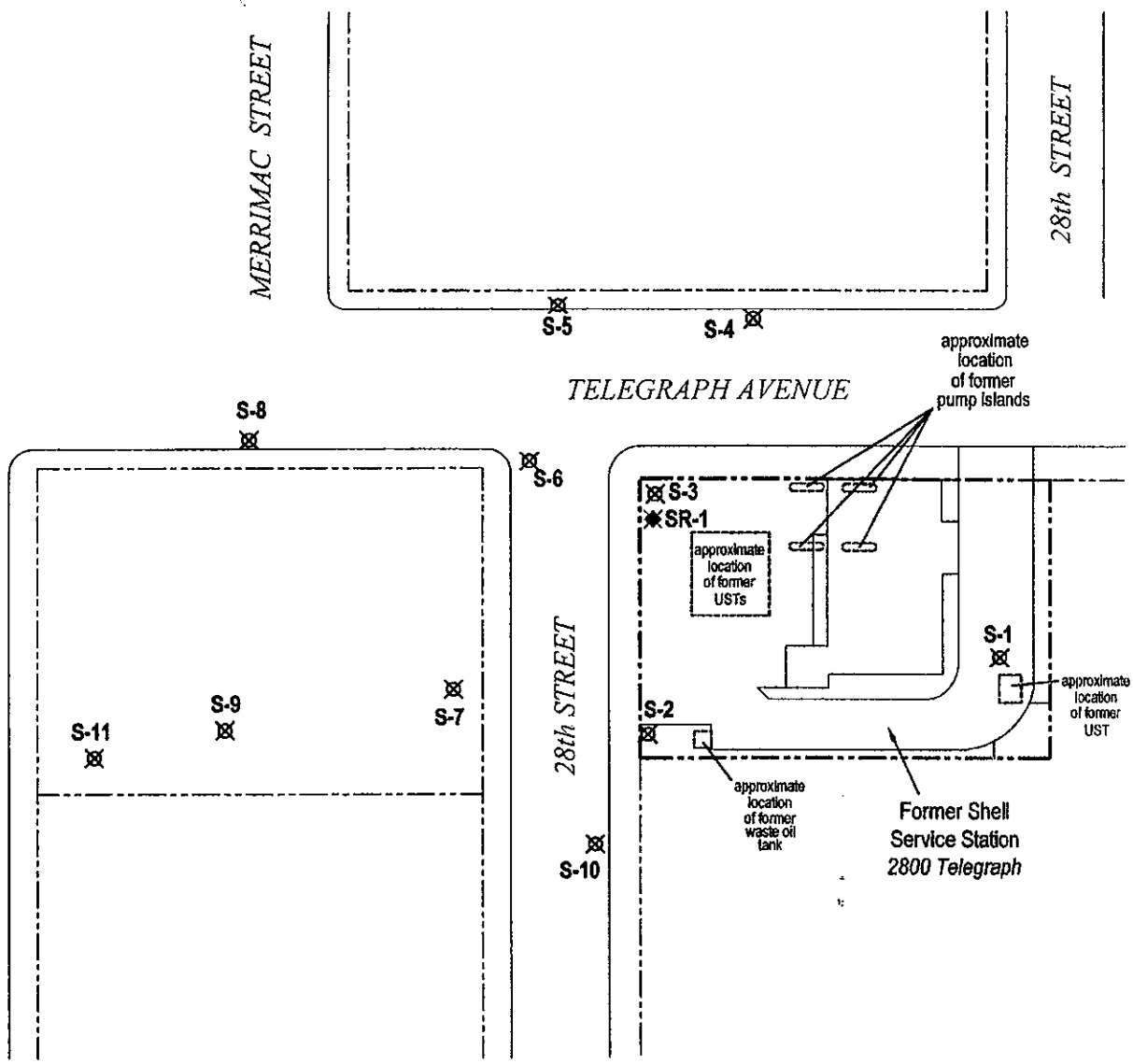
Site Plan

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

11/17/05



G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✱ Destroyed recovery well location

0 30 60

Scale (ft)

FIGURE

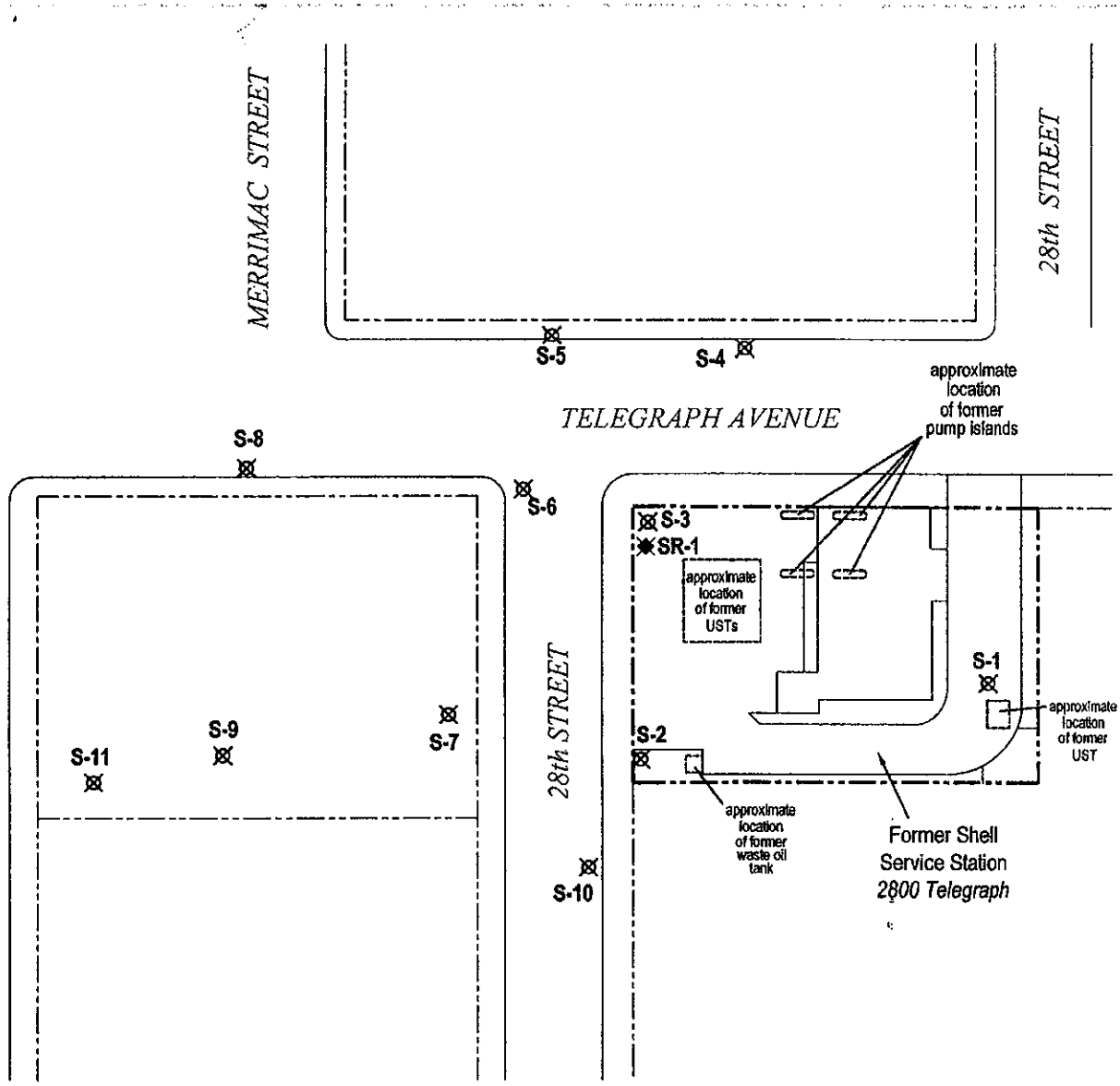
1

Base map taken from Weiss Associates Site Map

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan



G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✱ Destroyed recovery well location

Base map taken from Weiss Associates Site Map

N

0 30 60

Scale (ft)

FIGURE

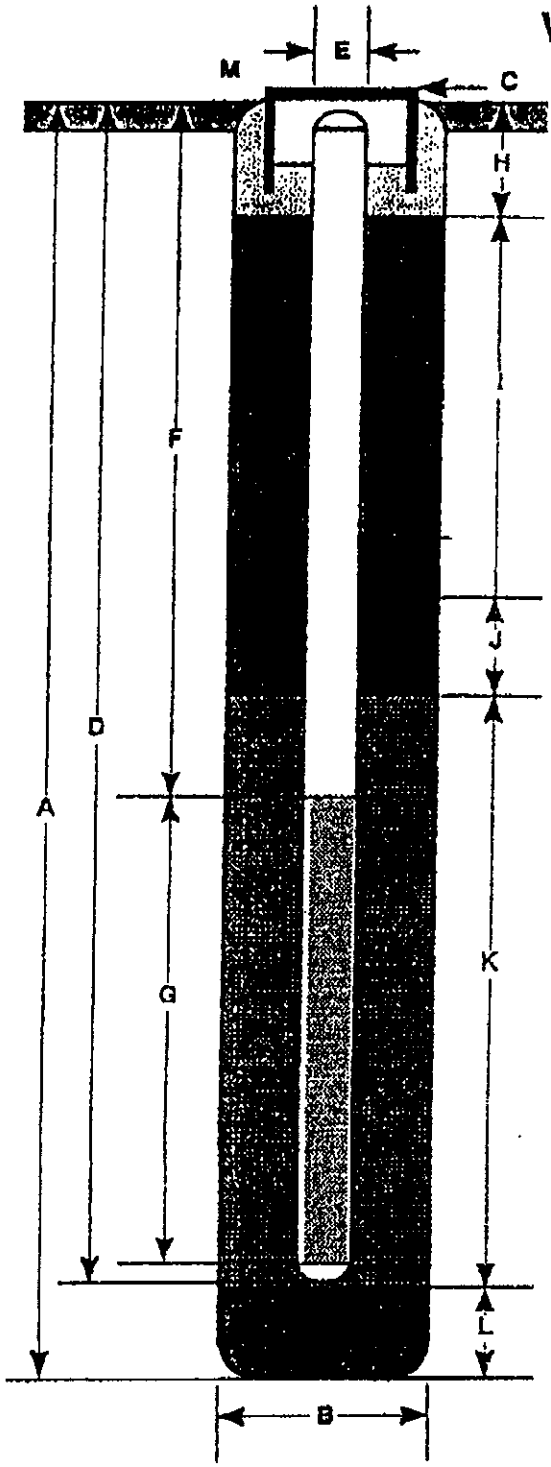
1

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 30.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 26.95 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 24 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 12 ft.

G Perforated Length 12 ft.
Perforated Interval from 24 to 12 ft.
Perforation Type Machine Slot
Perforation Size 0.02 in.

H Surface Seal from 0.5 to 0 ft.
Seal Material Concrete

I Backfill from 8.0 to 0.5 ft.
Backfill Material Concrete

J Seal from 10.0 to 8.0 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 24.0 to 10.0 ft.
Pack Material 2/12 Lonestar Sand

L Bottom Seal 6.5 ft.
Seal Material Bentonite Pellets

M Christy Box with locking well cap and lock

GeoStrategies Inc.

Well Construction Detail

WELL NO. S-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	RG CEG 1262	9/89		

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

Field location of boring: (See Plate 1)

Project No.: 7610	Date: 07/24/89	Boring No: S-10	
Client: Shell Oil Company			
Location: 2800 Telegraph Avenue			
City: Oakland, California		Sheet 1 of 2	
Logged by: J. Vargas	Driller: Bayland		

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inches

Top of Box Elevation: 26.95 Datum: Mean Sea-Level

Water Level			
Time			
Date			

PID (ppm)	Strength or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - Concrete/Base Rock/Sand
				2				FILL - sand (SP), loose, moist,95% fine to medium sand; 5% clay; trace concrete and debris
				3				
				4				
	150	S&H						
0	150	push	S-10-5	5				SANDY CLAY (CL) - very dark gray (5Y 3/1), medium stiff, damp; 60% clay; 30% fine sand; 10% silt; medium plasticity, roots, brown oxidation, trace subrounded coarse sand; no chemical odor.
				6				
				7				
				8				
				9				
	150	S&H						
0	150	push		10				CLAYEY SAND to SANDY CLAY (CL/SC) - gray (5Y 5/1), medium stiff, moist; 40-50% fine sand; 40-50% clay; trace coarse subrounded sand, brown oxidation stains; no chemical odor.
	150		S-10-10	11				
				12				
				13				
				14		▽ 14		
	12	S&H						
0	16			15				GRAVEL with CLAY and SAND (GP-GC) - olive brown (2.5Y 4/4), dense, saturated; 50-60% fine angular gravel; 30-40% fine to coarse sand; trace - 10% clay; no chemical odor.
	30		S-10-15	16				
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-10

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
7610	DMP 11/4/1262	9/89		

Field location of boring: (See Plate 1)

Project No.: 7610	Date: 07/24/89	Boring No: S-10
Client: Shell Oil Company		
Location: 2800 Telegraph Avenue		
City: Oakland, California		Sheet 2 of 2
Logged by: J. Vargas	Driller: Bayland	

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-inches

Top of Box Elevation: 26.95 Datum: Mean Sea-Level

Water Level		
Time		
Date		

PID (ppm)	Blowsft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	8	S&H		20				
0	13							interbedded fine to medium sand lamina at 19.5 feet.
	9		S-10-20					
				21				
				22				
				23				
								SANDY CLAY (CL) - yellowish brown (10YR 5/4),
				24				medium stiff, moist; 60-70% clay; 30% fine sand; trace
	6	S&H						silt, medium plasticity, interbedded fine gravel lamina
	3			25				which are saturated, trace subangular coarse gravels,
	7							worm burrows, brown oxidation; no chemical odor.
				26				
				27				
				28				
				29				
	6	S&H						becoming damp, increased brown staining.
	7			30				
	9							
				31				Bottom of boring at 29.0 feet.
								Bottom of sample at 30.5 feet.
				32				07/24/89
				33				
				34				
				35				
				36				
				39				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-10

JOB NUMBER	REVIEWED BY RGCEG	DATE	REVISED DATE	REVISED DATE
7610	CHP CEG 1262	9/89		