

**E**

Type



Plans

**Wel 16-0420**

Permit Number

**12800**

Street Number

**Hwy 1**

Street Name

**Jen**

Community Code

**099-030-010**

APN

State of California - **Well Permit Application**

Right of Way

WLS-031

approx. 12800 Hwy 1  
 Site Address **501 Muniz Ranch Rd**  
 City/Town **JEN** State Zip

Permit Number **WEL16-0420**  
 Assessor's Parcel Number **099-030-034 R.O.W** - 010

Applicant **Cal Trans - Right of Way**  
 Owner Name **District 4**  
 Mailing Address **111 Grand Ave**  
 City/Town **Oakland** State **CA** Zip **94612**  
 Phone **(510) 286-4444**  
 Contact Person

Well Driller Name **Fugro Consultants**  
 Mailing Address **469 Roland way**  
 City/Town **Oakland, CA** State Zip **94612**  
 License Number **909719**  
 Phone **510-430-8851** Fax

The validity of this permit depends upon the accuracy of the information provided by the applicant. A site plan must accompany this application. In addition to the information required on the Minimum Standard Site Plan (Form CSS-019), the site plan shall also include the proposed well location, existing well(s) location(s), GPS coordinates of proposed well, sewer mains and laterals, and other potential sources of contamination. If an inadequate site plan is provided and a second field visit is required, a charge at the current hourly rate will be assessed. The precise site location of the proposed well must be staked with the driller's name.

**INDICATE TYPE AND NUMBER OF PROPOSED WELLS/BORINGS:**

Indicate use:  Residential  Community  Irrigation  Industrial  
 Reason for new well: Geotechnical Exploration 50°

Destruct  Class I Well  Class II Well  Reconstruction Reason for Class II:  
**(3)**  Geotechnical Borings [ ] Geoexchange [ ] Monitoring [ ] Cathodic [ ] Dewatering  
 [ ] Performance Well [ ] Piezometer [ ] Inclinator [ ] Other:

Total number of wells on property: \_\_\_\_\_ Number in use: \_\_\_\_\_ Number inactive: \_\_\_\_\_ Number abandoned: \_\_\_\_\_

Well located within an existing public water system boundary: Yes  No  Name of System: \_\_\_\_\_

**CONSTRUCTION PROPOSED:**

Casing: Diameter: \_\_\_\_\_ Gauge: \_\_\_\_\_ Material: \_\_\_\_\_ Gravel Pack  Conductor: Yes  No   
 Sand Pack   
 Annular Space: Size: \_\_\_\_\_ Depth of Seal: \_\_\_\_\_ Seal Material: \_\_\_\_\_  
 Method of Disinfection: \_\_\_\_\_ Method of Sealing: \_\_\_\_\_ Type of Joint: \_\_\_\_\_  
 Access Opening: \_\_\_\_\_

**DESTRUCTION PROPOSED:** Well Diameter: \_\_\_\_\_ Well Depth: \_\_\_\_\_ Well Casing: \_\_\_\_\_

Method of Destruction: NEAT CEMENT GROUT FULL DEPTH BY TREMIE METHOD

<p><b>WORKER'S COMPENSATION DECLARATION</b>                  I hereby affirm under penalty of perjury one of the following declarations:  <input type="checkbox"/> I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.  <input checked="" type="checkbox"/> I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:                  Carrier <u>LIBERTY INSURANCE CORPORATION</u>                  Policy No. <u>WA7-640-005066-086</u>                  (This section need not be completed if the permit is for one hundred dollars (\$100) or less).</p>	<p>I hereby agree to comply with all laws and regulations of the County of Sonoma and State of California pertaining to water well construction. I will telephone (707) 565-1694 to notify the Environmental Health Specialist 24 hours prior to commencing this work. I will furnish the Permit and Resource Management Department and the owner a copy of the State Well Completion Report within thirty (30) days in order to obtain final approval on this well as required by SONOMA COUNTY CODE, CHAPTER 25B. I acknowledge that the application will become a permit only after site approval and payment of fee. I understand that this permit is not transferrable and expires one year from the date of issuance.                  Signature of Well Driller: <u>[Signature]</u> Date <u>10/6/16</u></p>
---	--

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

DO NOT WRITE BELOW THIS LINE - To Be Completed by PRMD Staff U

Site approved by: <u>[Signature]</u>	Date: <u>10/6/16</u>	Seal Inspection Date: _____	EHS
Finalized by: <u>FINAL BASED ON WELL REPORT</u>	Date: <u>12/6/16</u>	GW Zone: 1 2 3 4	
Comments			

**Sonoma County Permit and Resource Management Department**

2550 Ventura Avenue ♦ Santa Rosa, CA ♦ 95403-2829 ♦ (707) 565-1900 ♦ Fax (707) 565-1399

# BOREHOLE BACKFILL DATA SHEET

Borehole/sounding completion Date: 10/11/16  
Sealing/Backfill Date: 10/11/16

## PROJECT INFORMATION

Larry Wilson

916-849-2331

Michael Morgan

18OCT2016 *MM*

Drilling Leadworker/CPT Technician Printed Name / Signature		Phone No.	Drilling Services/GIB Branch Chief Name/Initial		Phone No.
Declaration of Seal Verification: I confirm I have installed seals in accordance with the California Water Code, Local Enforcement Agency requirements and Geotechnical Services Directive GS-01 in order to protect the subsurface environment and that our work was done conscientiously to the best of my ability.		District	County	Route	Post Mile
		04	SON	001	24.27/24.39

0414000527	Storm Damage	All Kaddoura	<i>Chirou</i> N. Nikouli
Project I.D	Project Name	On-Site Geoprofessional or Consultant Printed Name / Initial	Design Branch Chief Name/Initial

LEA: SON COUNTY LEA Inspector: Maria Carranza LEA Phone No.: 707-565-2127

Did the LEA perform an inspection?  Yes  No C-57 Work?  Yes  No C-57 License No.: 909719

### Drilling/Push:

Boring Number: A-16-001 Depth to Groundwater (ft): 26'  GW not encountered  
Boring Type:  CPT  Mud Rotary  Hollow Stem Augers Other: \_\_\_\_\_  
Hole diameter: 6 (in) Total Depth: 50 (ft)  Vertical Inclined: \_\_\_\_\_ (degrees)  
Slope Inclinator Installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout  
Geophysical pipe installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout

### Sealing Materials:

Sealed full depth?  Yes  No If no, sealing interval: From: \_\_\_\_\_ (ft bgs<sup>2</sup>) To: \_\_\_\_\_ (ft bgs)

Proportions used: 6 gallons of water per 94# sack of cement XXX % Bentonite (if allowed)

Calculated Grout Volume<sup>3</sup>: 74 (gallons) Actual Grout Volume: 73 (gallons)

Bentonite Chips: diameter: \_\_\_\_\_ (in) Calculated bags needed<sup>4</sup>: \_\_\_\_\_ Actual bags used: \_\_\_\_\_

### Placement:

From Surface:  or Tremie:  Flush Thread:  or Drill Steel:  Diameter: \_\_\_\_\_ (in)

Revisit Site for Settlement: Date of Visit: 10/12/16 Sketch:

Settlement: 2.5 (ft) Grout to top off: \_\_\_\_\_ (gallons)

Backfill date: 10/12/16

Backfilled by: Wilson Checked by: Alk

### Comments:

Backfill with Bentonite Chips to 6", cap with Quikrete

### Directions:

This form is to be completed for each borehole and sounding by the individual logging the boring/sounding or the CPT Technician. This form is to be archived on GeoDOG by the Design Branch Chief or GIB Chief.

<sup>1</sup> If a Slope Inclinator was installed and it has drilled holes or slots to measure water, then it is a Stand Pipe Piezometer then a Well Completion Report is required instead of a BBDS.

<sup>2</sup> BGS means Below Ground Surface

<sup>3</sup> hole dia 6 (in) times hole dia 6 (in) times total depth 50 (ft) times 0.0408 = 73.45 gallons

<sup>4</sup> See the information on the back of the Bentonite Chip bag

# BOREHOLE BACKFILL DATA SHEET

Borehole/sounding completion Date: 10/11/16  
Sealing/Backfill Date: 10/12/16

## PROJECT INFORMATION

Larry Wilson [Signature] 916-849-2331 Michael Morgan 18OCT2016 [Signature]

Drilling Leadworker/CPT Technician Printed Name / Signature Phone No. Drilling Services/GIB Branch Chief Name/Initial Phone No.

Declaration of Seal Verification: I confirm I have installed seals in accordance with the California Water Code, Local Enforcement Agency requirements and Geotechnical Services Directive GS-01 in order to protect the subsurface environment and that our work was done conscientiously to the best of my ability.

District	County	Route	Post Mile
04	SON	001	24.27/24.39

0414000527 Storm Damage Ali Kaddoura H. Nikouli [Signature]

Project I.D Project Name On-Site Geoprofessional or Consultant Printed Name / Initial Design Branch Chief Name/Initial

LEA: SON COUNTY LEA Inspector: Maria Carranza LEA Phone No.: 707-565-2127

Did the LEA perform an inspection?  Yes  No C-57 Work?  Yes  No C-57 License No.: 909719

### Drilling/Push:

Boring Number: A-16-002 Depth to Groundwater (ft): \_\_\_\_\_  GW not encountered  
Boring Type:  CPT  Mud Rotary  Hollow Stem Augers Other: \_\_\_\_\_  
Hole diameter: 6 (in) Total Depth: 25 (ft)  Vertical Inclined: \_\_\_\_\_ (degrees)  
Slope inclinometer installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout  
Geophysical pipe installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout

### Sealing Materials:

Sealed full depth?  Yes  No If no, sealing interval: From: \_\_\_\_\_ (ft bgs<sup>2</sup>) To: \_\_\_\_\_ (ft bgs)  
Proportions used: 6 gallons of water per 94# sack of cement XXX % Bentonite (if allowed)  
Calculated Grout Volume<sup>3</sup>: 37 (gallons) Actual Grout Volume: 37 (gallons)  
Bentonite Chips: diameter: \_\_\_\_\_ (in) Calculated bags needed<sup>4</sup>: \_\_\_\_\_ Actual bags used: \_\_\_\_\_

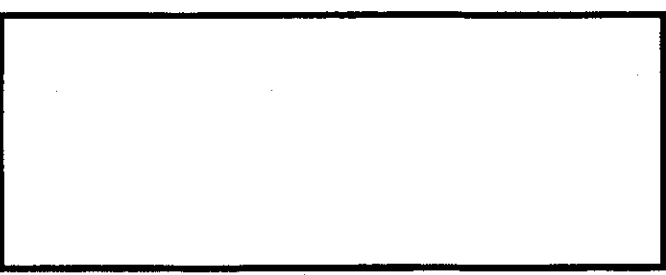
### Placement:

From Surface:  or Tremie:  Flush Thread:  or Drill Steel:  Diameter: \_\_\_\_\_ (in)

Revisit Site for Settlement: Date of Visit: 10/13/16 Sketch:

Settlement: 0.3 (ft) Grout to top off: \_\_\_\_\_ (gallons)  
Backfill date: 10/13/16  
Backfilled by: Wilson Checked by: Ali K

Comments:  
Backfill w / Native material



Directions:  
This form is to be completed for each borehole and sounding by the individual logging the boring/sounding or the CPT Technician.  
This form is to be archived on GeoDOG by the Design Branch Chief or GIB Chief.

<sup>1</sup> If a Slope inclinometer was installed and it has drilled holes or slots to measure water, then it is a Stand Pipe Piezometer then a Well Completion Report is required instead of a BBDS.  
<sup>2</sup> BGS means Below Ground Surface  
<sup>3</sup> hole dia \_\_\_\_\_ (in) times hole dia \_\_\_\_\_ (in) times total depth \_\_\_\_\_ (ft) times 0.0408 = \_\_\_\_\_ gallons  
<sup>4</sup> See the information on the back of the Bentonite Chip bag

# BOREHOLE BACKFILL DATA SHEET

Borehole/sounding completion Date: 10/12/16  
Sealing/Backfill Date: 10/12/16

## PROJECT INFORMATION

Larry Wilson *Larry Wilson* 916-849-2331

Michael Morgan  
18OCT2016 *MM*

Drilling Leadworker/CPT Technician Printed Name / Signature		Phone No.	Drilling Services/GIB Branch Chief Name/Initial		Phone No.
Declaration of Seal Verification: I confirm I have installed seals in accordance with the California Water Code, Local Enforcement Agency requirements and Geotechnical Services Directive GS-01 in order to protect the subsurface environment and that our work was done conscientiously to the best of my ability.		District	County	Route	Post Mile
		04	SON	001	24.27/24.39

0414000527 Storm Damage All Kaddoura *Ch. Nikoui*  
Project I.D. Project Name On-Site Geoprofessional or Consultant Printed Name / Initial Design Branch Chief Name/Initial

LEA: SON COUNTY LEA Inspector: Maria Carranza LEA Phone No.: 707-565-2127

Did the LEA perform an inspection?  Yes  No C-57 Work?  Yes  No C-57 License No. 909719

### Drilling/Push:

Boring Number: R-16-003 Depth to Groundwater (ft): \_\_\_\_\_  GW not encountered  
Boring Type:  CPT  Mud Rotary  Hollow Stem Augers Other: \_\_\_\_\_  
Hole diameter: 4.5 (in) Total Depth: 50 (ft)  Vertical Inclined: \_\_\_\_\_ (degrees)  
Slope Inclinator Installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout  
Geophysical pipe installed?  Yes  No Length: \_\_\_\_\_ (ft) Diameter: \_\_\_\_\_ (in)  Annulus grout  Inside grout

### Sealing Materials:

Sealed full depth?  Yes  No If no, sealing interval: From: \_\_\_\_\_ (ft bgs<sup>2</sup>) To: \_\_\_\_\_ (ft bgs)

Proportions used: 6 gallons of water per 94# sack of cement XXX % Bentonite (if allowed)

Calculated Grout Volume<sup>3</sup>: 41 (gallons) Actual Grout Volume: \_\_\_\_\_ (gallons)

Bentonite Chips: diameter: \_\_\_\_\_ (in) Calculated bags needed<sup>4</sup>: \_\_\_\_\_ Actual bags used: \_\_\_\_\_

### Placement:

From Surface:  or Tremie:  Flush Thread:  or Drill Steel:  Diameter: \_\_\_\_\_ (in)

Revisit Site for Settlement: Date of Visit: 10/13/16 Sketch:

Settlement: 2 (ft) Grout to top off: \_\_\_\_\_ (gallons)

Backfill date: 10/13/16

Backfilled by: Wilson Checked by: AK

### Comments:

*filled w/ Bentonite chips - Top 6" w/ Quicrete mx*

### Directions:

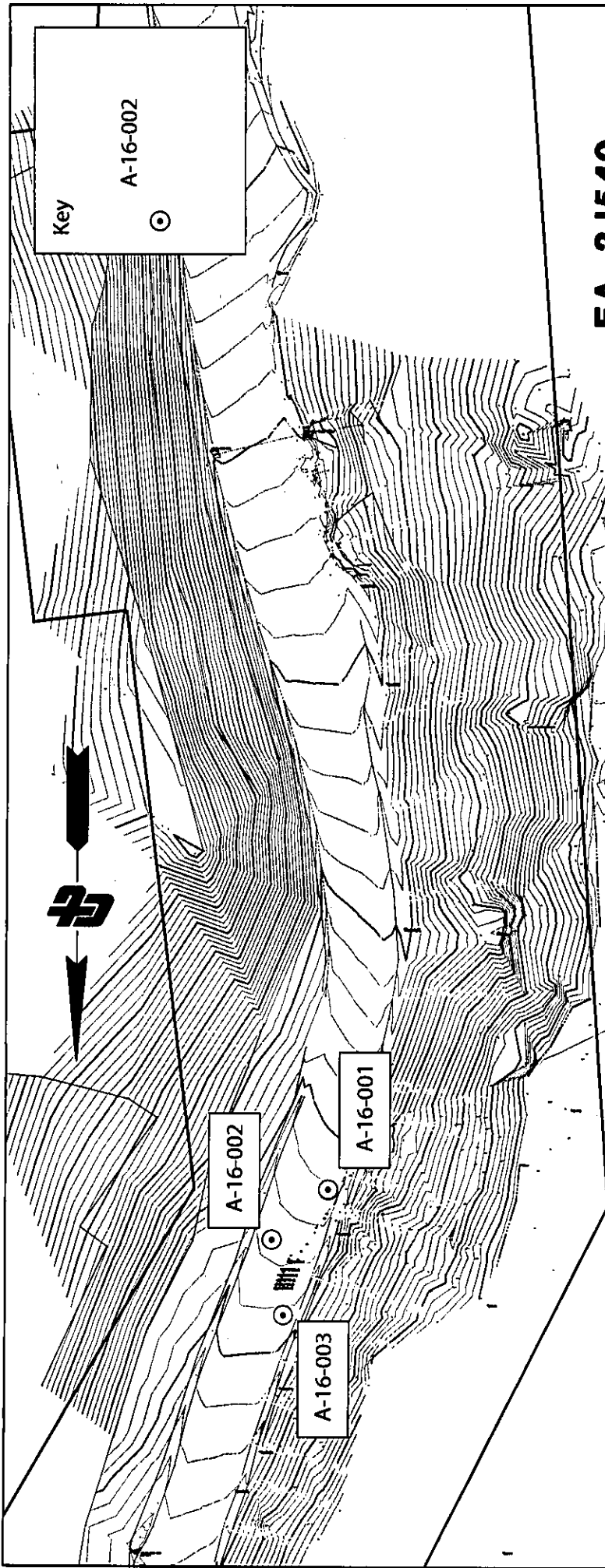
This form is to be completed for each borehole and sounding by the individual logging the boring/sounding or the CPT Technician. This form is to be archived on GeoDOG by the Design Branch Chief or GIB Chief.

1 If a Slope Inclinator was installed and it has drilled holes or slots to measure water, then it is a Stand Pipe Piezometer then a Well Completion Report is required instead of a BBDS.

2 BGS means Below Ground Surface

3 hole dia 4.5 (in) times hole dia 4.5 (in) times total depth 50 (ft) times 0.0408 = 41 gallons

4 See the information on the back of the Bentonite Chip bag



**EA 2J540**

**Scale 1" = 50'**

**9/2/2016**

*Sonoma Coast Beach*