

SUPPORT DOCUMENTS

Santa Barbara County EHS Letter (June 11, 2014) - Work Plan Approval

Santa Barbara County EHS monitoring well permits (17358, 17359, 17360, 17361, 17362, 17363, 17364)

EHS Letter (March 31, 2014)

DEH SAM Manual Table 5-8

EHS Email (August 27, 2014)

DES Email (August 26, 2014)

Well Development Logs (August 26, 2014)

Well Purging/Sampling Logs (September 16, 2014)

J.B. Dixon Land Surveying, Inc. - GEO_XY and GEO_Z Geotracker Survey Files

Santa Barbara County Fire Department LUFT Manual page F-5

Soil-Safe Non-Hazardous Waste Manifest No. 44256

Groundwater Non-Hazardous Waste Manifest No. 710600

Geotracker Upload Confirmations

Santa Barbara County
PUBLIC Health
DEPARTMENT



Environmental Health Services

225 Camino del Remedio • Santa Barbara, CA 93110
805/681-4900 • FAX 805/681-4901

Takeshi M. Wada, MD, MPH Director/Health Officer
Anne M. Fearon Deputy Director
Suzanne Jacobson, CPA Chief Financial Officer
Susan Klein-Rothchild, MSW Deputy Director
Elizabeth Snyder, MHA Deputy Director
Charity Thoman, MD Medical Director - Acting

2125 S. Centerpointe Pkwy. #333 • Santa Maria, CA 93455-1340
805/346-8460 • FAX 805/346-8485

Lawrence D. Fay, Jr. Director of Environmental Health

June 11, 2014

Jack Bodger
Bodger Seeds
P.O. Box 2709
Lompoc, CA 93438-2709

Dear Mr. Bodger:

Subject: 1851 W. Olive Avenue, Lompoc, California; Bodger Seeds
LUFT Site# 80024

The Santa Barbara County Public Health Department, Environmental Health Services Division has reviewed the documents titled *Site Assessment Work Plan*, dated May 5, 2014, and the *Interim Remedial Action Plan (IRAP)*, dated May 6, 2014.

EHS approves the *Site Assessment Work Plan*, with the following conditions:

- A. Submit well permit applications to EHS for each well prior to field work. See:<https://www.countyofsb.org/uploadedFiles/phd/EHS/Mon%20well%20App%2004-23-14.pdf>. LUFT sites are fee exempt for monitoring wells.
- B. Notify the undersigned via email one week prior to field work.
- C. Dependent upon these assessment results, additional work may or may not be required.
- D. EHS concurs with your consultant's proposal to redevelop the existing wells at the site. Please incorporate this into your work plan.

EHS approves the *Interim Remedial Action Plan*, with the following conditions:

- A. Submit well permit applications to EHS for each well prior to field work. See: <https://www.countyofsb.org/uploadedFiles/phd/EHS/Mon%20well%20App%2004-23-14.pdf>. LUFT sites are fee exempt for treatment wells such as DE1, DV1.
- B. Obtain any required permits from the Santa Barbara County Air Pollution Control District (APCD). Please note this review may take up to 180 days prior to receiving comments.
- C. Submit a Pilot Test report upon completion of these activities.

EHS directs you to not perform any soil gas risk analysis for potential vapor intrusion until after the remedial actions have been satisfactorily completed and the general goals of the Low Threat Closure Policy have been reached. While soil gas surveys can be helpful in delineating a groundwater plume, due to this site having shallow tight soils, silts and clays in the first 30 feet below ground surface, this approach does not appear beneficial at this site.

If you have any questions regarding this letter, please feel free to contact me at (805) 346-8344, or via email at steve.nailor@sbcphd.org. Please submit correspondence to me at Santa Barbara County Public Health Department, Environmental Health Services Division, 2125 S. Centerpointe Parkway, Suite# 333, Santa Maria, CA 93455.

Respectfully yours,



E. Steven Nailor
Senior Hazardous Materials Specialist
LUFT Program

esn:2014-06-12_ltr_80024.docx

Attachment

ec: Mr. Andy Donan, Donan Environmental Services, Inc.
Geotracker

Permit #	Site Address	City	Site #	Site APN	Owner	Driller	Permit Date	Well ID	Abandonment Permit #	Abandonment Date	Abandonment Driller	Abandonment Log Date	Driller's Log Date
16419	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	Test	1/12/5/08	MW1	A16419	02/29/12	S&G Drilling	10/25/12	
16420	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	America Test	1/12/5/08	MW2	A16420	02/29/12	S&G Drilling	10/25/12	
16421	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	America Test	1/12/5/08	MW3	A16421	02/29/12	S&G Drilling	10/25/12	
16422	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	America Test	1/12/5/08	MW4	A16422	02/29/12	S&G Drilling	10/25/12	
16423	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW1p					
16424	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW2p					
16425	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW3p					
16426	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW4p					
16427	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW5p					
16428	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW6p					
16429	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	2/29/12	MW7p					
17358	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DW8					
17359	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DW9					
17360	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DW10					
17361	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DW11					
17362	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DW12					
17363	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DV1					
17364	Olive St, W, 1851	Lmpc	80024	093-111-011	John Bodger & Sons	S&G Drilling	8/12/14	DE1					



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 • (805) 681-4800
2125 S. Centerpointe Pkwy., #333 • Santa Maria, CA 93455-1340 • (805) 346-8480

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well	[4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well	[4681]	
		[4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well	[4682]	Abandonment – Complete filling of the well
	\$157 additional well	[4683]	
		[4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17358
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property Owner (Required for all permits) John Badger and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Street Lompoc City CA 93438 State/Zip Code

If applicant is other than Property Owner:
Owner Environmental Services, Inc. Phone: 760 858-761-3611 Email: GDR.DESX.YZ.COM
 Applicant's Name John Badger and Sons Co. Phone: (805) 639 - 3600 Cell: 639 - 3600 Email: GDR.DESX.YZ.COM Fax: 760-639-3603

Applicant's Address: PO Box 1839 Street Vista City CA 92085 State Zip Code

Site Location: 1851 W. Olive St. Street Lompoc City CA 93436 State/Zip Code

Assessor's Parcel Number 0 9 3 - 1 1 1 - 0 0 9 Start: / / Finish: / /

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

Proposed Depth <u>65/45 ft.</u> Well Bore Diam. <u>10/8 in.</u> Screen Interval <u>20-45/45-65 ft bgs</u> Sealing Material <input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay <input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW2, DW4, DW10, DW11, DW12</u> Well ID # <u>DV1, DV1'</u>	Casing Information Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <u>DW8</u> Wall Thickness <u>Sch 40</u> Diameter <u>2 1/4 in.</u> Annular Seal Depth <u>19/44 ft.</u> Additional Work Description _____ If destruction by pressure grout, grout volume _____
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LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION
I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code (B. & P.C.) as a well drilling contractor (C-57 license) and such license is in full force and effect.

W. Randall Glaze 7/3/14

Lic. No. 61134 Office Telephone 805 735 3454 Cell Phone: 805 717 0937
 Business Name: S/G Drilling Co. Address 308 N. 1st St. Lompoc, CA 93430

(Checklist 'A' or 'B')
A. WORKERS' COMPENSATION DECLARATION
 I hereby affirm one of the following:
 I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
 I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:
 Carrier State Fund Policy No. 902 7835

Applicant Signature *[Signature]* Date 7/3/14

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE
 I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant Signature *[Signature]* Date _____

Notice to Applicant: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

When signed by the Hazardous Materials Specialist or Professional Geologist, this application shall be deemed a permit only for the work described and is not a "permit for development" as that term is used in the California Subdivision Map Act. Please note additional permits (e.g., electrical installation, waste discharge requirements, land use clearance, grading, Santa Barbara City well permit) may also be required from other agencies. THIS PERMIT IS VALID FOR ONE YEAR FROM THE DATE OF ISSUANCE FOR THE WORK APPROVED HEREIN. No changes from the approved plan are permitted without prior written approval by Environmental Health Services. Final clearance will not be issued until all fees are paid and a copy of the driller's log is submitted to Environmental Health Services.

I hereby agree to comply with all regulations of the County of Santa Barbara and California Well Standards pertaining to well construction, repair, modification, destruction and inactivation. The property owner, well driller, or agent will furnish Environmental Health Services a copy of a completed well log upon completion of well construction, destruction, or modification.

I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of wells;
3. Any operation stipulated on the permit to address special or unusual conditions;
4. Final clearance of the well, will be issued upon receipt of the driller's well log.

Signed Great Delon *[Signature]* Date 8-12-2014 P.G. #6983
 Applicant's Signature (PCGS) 7/28/14

Signed *[Signature]* Date 8-12-2014 DWS
 Environmental Health Specialist DWS

APPLICATION/DISPOSITION: Approved Denied

FOR DEPARTMENT USE ONLY			
Paid Fee Rec'd by:	Date:	Amt. \$	□ Cash □ Check
Receipt No. _____			
Permit Conditions: _____			
First Construction Approved by: _____		Date: _____	
Final Clearance by: _____		Date: _____	

Page #2 of 2



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 • (805) 681-4900
2125 S. Centerpointe Pkwy., #333 • Santa Maria, CA 93455-1340 • (805) 346-8460

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well [4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4681] [4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well [4682] \$157 additional well [4683]	Abandonment – Complete filling of the well
<input type="checkbox"/> LUFT-Fee Exempt	[4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Perm t #	17359
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property owner (Required for all permits) John Baugher and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Lompoc CA 93438
Street Street Name City State/Zip Code

If applicant is other than Property Owner:
Applicant's Name Deanna Environmental Services, Inc. Phone: (805) 689 - 3600 Cell: 805-761-3611 Email: GDR.DESXYZ.COM Fax: 805-689-3603

Applicant's Address: PO Box 1839 Vista CA 92085
Street Direction Street Name City State/Zip Code

Site Location: 1851 W. Olive St. Lompoc CA 93436
Street Direction Street Name City State/Zip Code

Assessor's Parcel Number 0 9 3 - 1 1 1 - 0 0 9 Start: / / Finish: / /

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 Extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

<p>Proposed Depth <u>65/45 ft.</u> Well Bore Diam. <u>10 1/8 in.</u> Screen Interval <u>20-45/45-65 ft bgs</u> Sealing Material <input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay <input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW8, DW9, DW10, DW11, DW12</u> Well ID # <u>DW1, DW1'</u></p>	<p style="text-align: center;">DW9</p> <p>Casing Information</p> <p>Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other _____</p> <p>Wall Thickness <u>Sch 40</u> Diameter <u>2 1/4</u> in. Annular Seal Depth <u>19/44 ft.</u></p> <p>Additional Work Description _____</p> <p>If destruction by pressure grout, grout volume _____</p>
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LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION

I hereby affirm that I am licensed under the provisions of Chapter 9 (concerning with Sec. 7000) of Division 3 of the Business and Professions Code (B.P.C.) as a well drilling contractor (C-7 license) and such license is in full force and effect.

L.D. Randall Glaze

Signature of Owner

*7/3/14*Lic. No. 611394Office Telephone 805 735-3454 Cell Phone: 805 7170937Business Name: S/G Drilling Co.Address 308 N. 1st St. Lompoc, CA 93436

(Complete 'A' or 'B')

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:

Carrier State FundPolicy No. 902 7835Applicant Signature *[Signature]*Date 7/3/14

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant Signature _____

Date _____

Notice to Applicant: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

When signed by the Hazardous Materials Specialist or Professional Geologist, this application shall be deemed a permit only for the work described and is not a "permit for development" as that term is used in the California Subdivision Map Act. Please note additional permits (e.g., electrical installation, waste discharge requirements, land use clearance, grading, Santa Barbara City well permits) may also be required from other agencies. THIS PERMIT IS VALID FOR ONE YEAR FROM THE DATE OF ISSUANCE FOR THE WORK APPROVED HEREIN. No changes from the approved plan are permitted without prior written approval by Environmental Health Services. Final clearance will not be issued until all fees are paid and a copy of the driller's log is submitted to Environmental Health Services.

I hereby agree to comply with all regulations of the County of Santa Barbara and California Well Standards pertaining to well construction, repair, modification, destruction and inactivation. The property owner, well driller, or agent will furnish Environmental Health Services a copy of a completed well log upon completion of well construction, destruction, or modification.

I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of wells;
3. Any operation stipulated on the permit to address special or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

Signed Greg Nelson

Applicant's Signature

Applicant's Signature (DCS)

*P.G. #6983**7/28/14*APPLICATION DISPOSITION: Approved DeniedSigned *[Signature]*

Environmental Health Specialist

*8-12-2014**OW9*

FOR DEPARTMENT USE ONLY

Fees Paid Rec'd by: NA Date 07/03/14 Amnt. \$0.00 Cash Check # _____Receipt No. _____

Permit Conditions: _____

Final Construction Approved by: _____ Date: _____

Final Clearance by: _____ Date: _____

Page #2 of 2



Environmental Health Services

225 Camino Del Renedio, Santa Barbara, CA 93110 • (805) 681-4900
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MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well [4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4681] [4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well [4682] \$157 additional well [4683]	Abandonment – Complete filling of the well
<input type="checkbox"/> LUFT-Fee Exempt	[4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17360
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property Owner (Required for all permits) John Boderer and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Street Lompoc City CA 93438 State/Zip Code

(If applicant is other than Property Owner):

Applicant's Name Down Environmental Services, Inc. Phone: (760) 639 - 3600 Cell: 805 - 761 - 3611 Email: GDE@DESXYZ.COM Fax: 760 - 639 - 3603

Applicant's Address: PO Box 1839 Street Vista City CA 92085 State/Zip Code

Site Location: 1851 W. Olive St. Street Lompoc City CA 93436 State/Zip Code

Assessor's Parcel Number 0 9 3 - 1 1 1 - 0 0 9 Start: / / Finish: / /

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

Proposed Depth <u>65/45 ft.</u> Well Bore Diam. <u>10/8 in.</u> Screen Interval <u>20-45 ft bgs</u> Sealing Material <input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay <input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW8, DW9, DW10, DW11, DW12</u> Well ID # <u>DW1, DE1</u>	<p>Casing Information</p> <p>Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <u>DW10</u></p> <p>Wall Thickness <u>Sch 40</u> Diameter <u>2/4 in.</u> Annular Seal Depth <u>14/44 ft.</u></p> <p>Additional Work Description _____</p> <p>If destruction by pressure grout, grout volume _____</p>
---	--

LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION

I hereby affirm that I am licensed under the provisions of Chapter 9 (concerning oil wells) of Division 3 of the Business and Professions Code (B.P.C.) as a well drilling contractor (C-57 license) and such license is in full force and effect.

L. Randall Glaze

7/3/14

Lic. No.: 611394 Office Telephone: 805 735 8454 Call Phone: 805 717 0937
 Business Name: S/G Drilling Co. Address: 308 W. 1st St. Lompoc, CA 93436

(Complete "A" or "B")

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

- I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:
 Carrier: State Fund Policy No. 9027835

Applicant Signature

Date 7/3/14

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant Signature

Date _____

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1. The sealing of the annular space on a well;
2. The destruction of wells;]
3. Any operation stipulated on the permit to address special or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

P.G. #6983

Signed Greg Denson

Applicant (Print Name)

Applicant's Signature (PCPS)

7/28/14 Date

Signed C. Hau Hailey

Environmental Health Specialist

APPLICATION DISPOSITION: Approved Denied

8-12-2014 Date

DW18

FOR DEPARTMENT USE ONLY

Fixed Fee Rec'd by: N/A Date: LUFT Amt.\$ 5 Cash Check # _____

Receipt No. # _____

Permit Conditions: _____

Final Construction Approved by: _____

Date: _____

Final Clearance by: _____

Date: _____

Page #2 of 2



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 • (805) 681-4900
2125 S. Centerpointe Pkwy., #333 • Santa Maria, CA 93455-1340 • (805) 346-8460

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well	[4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well,
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well	[4681]	
		[4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well	[4682]	Abandonment – Complete filling of the well
	\$157 additional well	[4683]	
<input type="checkbox"/> LUFT-Fee Exempt		[4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17361
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (Authorized in writing)

Property Owner (Required for all permits) John Dodger and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Lompoc CA 93438
Street Street Name City State/Zip Code

(If applicant is other than Property Owner):

Applicant's Name DODGER Environmental Services, Inc. Phone: (760) 639-3611 Cell: 858-761-3611 Email: GOD@DESXYZ.COM Fax: 760-639-3603

Applicant's Address: PO Box 1839 Vista CA 92085
Street Direction Street Name City State Zip Code

Site Location: 1851 W. Olive St. Lompoc CA 93436
Street Direction Street Name City State/Zip Code

Assessor's Parcel Number 093-111-009 Start: _____ / _____ / _____ Finish: _____ / _____ / _____

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

Proposed Depth <u>65/45 ft.</u>	Casing Information
Well Bore Diam. <u>10/8 in.</u>	Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <u>DW 11</u>
Screen Interval <u>20-45/45-65 ft bgs</u>	Wall Thickness <u>5in 40</u> Diameter <u>2/4</u> in. Annular Seal Depth <u>19/44 ft.</u>
Sealing Material	Additional Work Description _____
<input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay	If destruction by pressure grout, grout volume _____
<input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW8, DW10, DW10, DW11, DW12</u>	
Well ID # <u>DW1, DW1'</u>	

LEGAL DECLARATION**LICENSED CONTRACTOR DECLARATION**

I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code (B. & P.C.) as a well drilling contractor (C-37 license) and such license is in full force and effect.

*W. Randall Glaze**7/3/14*

Print Name of Contractor *Signature of Contractor*
Lic. No. 6111394 **Office Telephone** 805 7353454 **Cell Phone:** 805 7170937
Business Name: S/G Drilling Co. **Address** 308 W. 1st St. Lompoc, CA 93436

(Complete "A" or "B")

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

- I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:
CARRIER State Fund **POLICY NO.** 9007835

Applicant's Signature *[Signature]*Date *7/3/14***B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE**

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant's Signature *[Signature]*

Date _____

NOTES TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

When signed by the Hazardous Materials Specialist or Professional Geologist, this application shall be deemed a permit only for the work described and is not a "permit for development" as that term is used in the California Subdivision Map Act. Please note additional permits (e.g. electrical installation, waste discharge requirements, land use clearance, grading, Santa Barbara City well permits) may also be required from other agencies. THIS PERMIT IS VALID FOR ONE YEAR FROM THE DATE OF ISSUANCE FOR THE WORK APPROVED HEREIN. No changes from the approved plan are permitted without prior written approval by Environmental Health Services. Final clearance will not be issued until all fees are paid and a copy of the driller's log is submitted to Environmental Health Services.

I hereby agree to comply with all regulations of the County of Santa Barbara and California Well Standards pertaining to well construction, repair, modification, destruction and inactivation. The property owner, well driller, or agent will furnish Environmental Health Services a copy of a completed well log upon completion of well construction, destruction, or modification.

I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of wells;
3. Any operation stipulated on the permit to address special or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

Signed Gretel Nelson *[Signature]* **Applicant/Permit Holder** *P.G. #6983* **Date** 7/28/14

Signed Ethan Taylor *[Signature]* **Environmental Health Specialist** **APPLICATION DISPOSITION:** **Approved** **Denied** *8-12-2014* **Date** *0W11*

FOR DEPARTMENT USE ONLY
Fixed Fee Rec'd by: <u>N/A</u> Date: <u>1/1/14</u> Amt \$ <u>0</u> <input type="checkbox"/> Cash <input type="checkbox"/> Check # _____

Receipt No. # _____

Permit Conditions: _____

First Construction Approved by: _____ Date: _____

Final Clearance by: _____ Date: _____

Page #1 of 2



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 ♦ (805) 681-4900
2125 S. Centerpointe Pkwy., #333 ♦ Santa Maria, CA 93455-1340 ♦ (805) 346-8460

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well [4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing - construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4681] [4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well [4682]	Abandonment - Complete filling of the well
<input type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4683] [4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17362
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property Owner (Required for all permits) John Barger and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Lompoc CA 93438
Street Street Name City State/Zip Code

(If applicant is other than Property Owner):

Applicant's Name Dolan Environmental Services, Inc. Phone: 760 639-3611 Cell: 808-761-3611 Email: GODLESXYZ.COM Fax: 760-639-3603

Applicant's Address: PO Box 1839 Vista CA 92085
Street Direction Street Name City State/Zip Code

Site Location: 1851 W. Olive St. Lompoc CA 93436
Street Direction Street Name City State/Zip Code

Assessor's Parcel Number 093-111-009 Start: / / Finish: / /

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

<p>Proposed Depth <u>65/45</u> ft.</p> <p>Well Bore Diam. <u>10/8</u> in.</p> <p>Screen Interval <u>20-45 45-65</u> ft bgs</p> <p>Sealing Material</p> <p><input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay</p> <p><input type="checkbox"/> Cement Grout: <input type="checkbox"/> Concrete <u>DW8, DW9, DW10, DW11, DW12</u></p> <p>Well ID # <u>DW1, DE1</u></p>	<p>Casing Information</p> <p>Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <u>DW12</u></p> <p>Wall Thickness <u>sch 40</u> Diameter <u>2/4</u> in. Annular Seal Depth <u>19/44</u> ft.</p> <p>Additional Work Description _____</p> <p>If destruction by pressure grout, grout volume _____</p>
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LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION

I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code (B.P.C.) as a well drilling contractor (C-57 license) and such license is in full force and effect.

LJ. Randall Glaze7/3/14

PAPER NAME OF DRILLER PERMIT NUMBER
Lic. No. 611394 Office Telephone 805 7353454 Cell Phone: 805 7170937
Business Name: S/G Drilling Co. Address 308 N. 1st St. Lompoc, CA 93436

(Complete 'A' or 'B')

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

- I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:
Carrier: State Fund Policy No. 900 7835

Applicant Signature: LJ. Randall GlazeDate 7/3/14

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant Signature: LJ. Randall Glaze

Date _____

Notice to Applicant: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

When signed by the Hazardous Materials Specialist or Professional Geologist, this application shall be deemed a permit only for the work described and is not a "permit for development" as that term is used in the California Subdivision Map Act. Please note additional permits (e.g. electrical installation, waste discharge requirements, land use clearance, grading, Santa Barbara City well permits) may also be required from other agencies. THIS PERMIT IS VALID FOR ONE YEAR FROM THE DATE OF ISSUANCE FOR THE WORK APPROVED HEREIN. No changes from the approved plan are permitted without prior written approval by Environmental Health Services. Final clearance will not be issued until all fees are paid and a copy of the driller's log is submitted to Environmental Health Services.

I hereby agree to comply with all regulations of the County of Santa Barbara and California Well Standards pertaining to well construction, repair, modification, destruction and inactivation. The property owner, well driller, or agent will furnish Environmental Health Services a copy of a completed well log upon completion of well construction, destruction, or modification.

I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of walls;
3. Any operation stipulated on the permit to address special or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

P.G. #6983Signed Gretel DelsonApplicant's Print NameApplicant's Signature7/28/14APPLICATION DISPOSITION: Approved DeniedSigned C. H. GlazeEnvironmental Health Specialist8-12-2014

Date

DW12

FOR DEPARTMENT USE ONLY

Fixed Fee Rec'd by: LJFT Date: 7/17 Amt.: 0 Cash Check # _____

Receipt No. # _____

Permit Conditions: _____

Final Construction Approved by: _____ Date: _____

Final Clearance by: _____ Date: _____

Page #2 of 2



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 • (805) 681-4900
2125 S. Centerpointe Pkwy., #333 • Santa Maria, CA 93455-1340 • (805) 346-8460

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well	[4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well	[4681]	
		[4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well	[4682]	Abandonment – Complete filling of the well
	\$157 additional well	[4683]	
		[4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17363
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property Owner (Required for all permits) John Borger and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Lompoc CA 93438
Street Street Name City State/Zip Code

(If applicant is other than Property Owner):

Applicant's Name Dyan Environmental Services, Inc. Phone: (760) 639 - 3600 Cell: 858-761-3611 Email: GDE@DESXYZ.COM Fax: 760-639-3603

Applicant's Address: PO Box 1839 Vista CA 92085
Street Direction Street Name City State/Zip Code

Site Location: 1851 W. Olive St. Lompoc CA 93436
Street Direction Street Name City State/Zip Code

Assessor's Parcel Number 0 9 3 - 1 1 1 - 0 0 9 Start: 1 Finish: 1

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

Proposed Depth <u>65/45 ft.</u>	<u>Casing Information</u>	
Well Bore Diam. <u>10/8 in.</u>	Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other	<u>DV1</u>
Screen Interval <u>20-45 / 45-65 ft bgs</u>	Wall Thickness <u>Sch 40</u>	Diameter <u>2/4</u> in. Annular Seal Depth <u>19/44 ft.</u>
Sealing Material	Additional Work Description _____	
<input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay		
<input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW8, DW4, DW10, DW11, DW12</u>	If destruction by pressure grout, grout volume _____	
Well ID# <u>DV1/D E 1'</u>		

LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION

I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code (B.P.C.) as a well drilling contractor (C-37 license) and such license is in full force and effect.

*W. Randall Glaze**7/3/14*

Print Name of Contractor

Signature of Notary

Date

Lic No. 611394Office Telephone 805 735 8454Cell Phone 805 717 0937Business Name S/G Drilling Co.Address 308 N. 1st St. Lompoc, CA 93436

(Complete "A" or "B")

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

- I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:

Carrier State FundPolicy No. 902 7835Applicant Signature *[Signature]*Date *7/3/14*

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to basque subject to the Worker's Compensation Laws of California.

Applicant Signature *[Signature]*

Date _____

Notes to Applicant: If after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

When signed by the Hazardous Materials Specialist or Professional Geologist, this application shall be deemed a permit only for the work described and is not a "permit for development" as that term is used in the California Subdivision Map Act. Please note additional permits (e.g., electrical installation, waste discharge requirements, land use clearance, grading, Santa Barbara City well permits) may also be required from other agencies. THIS PERMIT IS VALID FOR ONE YEAR FROM THE DATE OF ISSUANCE FOR THE WORK APPROVED HEREIN. No changes from the approved plan are permitted without prior written approval by Environmental Health Services. Final clearance will not be issued until all fees are paid and a copy of the driller's log is submitted to Environmental Health Services.

I hereby agree to comply with all regulations of the County of Santa Barbara and California Well Standards pertaining to well construction, repair, modification, destruction and inactivation. The property owner, well driller, or agent will furnish Environmental Health Services a copy of a completed well log upon completion of well construction, destruction, or modification.

I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of wells; []
3. Any operations stipulated on the permit to address specific or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

*P.G. #6983*Signed *[Signature]*

Applicant's Printed Name

Applicant's Signature *[Signature]*

(PCGS)

Date *7/28/14*Signed *[Signature]*

Environmental Health Specialist

APPLICATION DISPOSITION: Approved DeniedDate *8-12-2014*

OUZ

FOR DEPARTMENT USE ONLY	
Permit Fee Rec'd by:	<i>NA</i>
Receipt No.:	<i>LHFI</i>
Date:	<i>7/03/14</i>
AMT \$	
<input type="checkbox"/> Cash <input type="checkbox"/> Check # _____	
Permit Conditions:	<i>[Signature]</i>
Final Construction Approved by:	<i>[Signature]</i>
Final Clearance by:	<i>[Signature]</i>
Date: _____	
Date: _____	

Page #2 of 2



Environmental Health Services

225 Camino Del Remedio, Santa Barbara, CA 93110 • (805) 681-4800
2125 S. Centerpointe Pkwy., #333 • Santa Maria, CA 93455-1340 • (805) 346-8460

MONITORING WELL PERMIT APPLICATION

TYPE OF PERMIT (Please check the appropriate box below)

<input type="checkbox"/> Construction or Modification	\$629 (4 hrs) * first well [4680]	"Modification" means the deepening of a well, reperforation, sealing or replacement of well casing – construction of one completed well.
<input checked="" type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4681] [4688]	
<input type="checkbox"/> Well Destruction	\$471 (3 hrs) * first well [4682]	Abandonment – Complete filling of the well
<input type="checkbox"/> LUFT-Fee Exempt	\$157 additional well [4683] [4689]	

FOR OFFICE USE ONLY	
Rec'd Date:	8-11-14
Rec'd By:	ESN
Permit #	17364
Site #	80024

* An hourly rate fee of \$157 will be added for those projects that require staff time in excess of that noted above. Final project approval will not be issued until all fees are paid.

Required Attachments: Plot plan indicating the location of the well with respect to the following items:

1. Property lines
2. Below grade utilities, piping, USTs, etc.
3. Access roads and easements (water, sewer, utility, roadway)
4. Existing and/or proposed structures.
5. Sewage disposal systems or works carrying or containing sewage or industrial wastes within the vicinity of the proposed well
6. All perennial, seasonal, natural, or artificial water bodies or watercourses, if applicable

APPLICANT: Property Owner Responsible Party Licensed Well Drilling Contractor Owner's Agent (*Authorized in writing*)

Property Owner (Required for all permits) John Bender and Sons Co. Telephone No. (805) 735 - 6705

Mailing Address: PO Box 2709 Street Lompoc City CA 93438 State/Zip Code

If applicant is other than Property Owner:
Dunn Environmental Services, Inc. Applicant's Name 760-639-3603 Phone: 760-639-3603 Cell: 858-761-3611 Email: GDRDES@Y2.CC.M Fax: 760-639-3603

Applicant's Address: PO Box 1839 Street Vista City CA 92085 State/Zip Code

Site Location: 1851 W. Olive St. Street Lompoc City CA 93436 State/Zip Code

Assessor's Parcel Number 0 9 3 - 1 1 1 - 0 0 9 Start: / / Finish: / /

Well Use: Monitoring Vapor Sparging Extraction Other 5 monitoring, 2 extraction

Drilling Method: Hollow Stem Auger Mud Rotary Air Rotary Sonic Direct Push Other _____

<p>Proposed Depth <u>65/45 ft.</u></p> <p>Well Bore Diam. <u>10/8 in.</u></p> <p>Screen Interval <u>10-45/45-65 ft bgs</u></p> <p>Sealing Material</p> <p><input type="checkbox"/> Neat Cement <input type="checkbox"/> Clay</p> <p><input type="checkbox"/> Cement Grout <input type="checkbox"/> Concrete <u>DW3, DW4, DW10, DW11, DW12</u></p> <p>Well ID # <u>DVI, DEI</u></p>	<p>Casing Information</p> <p>Type: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <u>DEI</u></p> <p>Wall Thickness <u>Sch 40</u> Diameter <u>2/4</u> in. Annular Seal Depth <u>19/44 ft</u></p> <p>Additional Work Description _____</p> <p>If destruction by pressure grout, grout volume _____</p>
--	--

LEGAL DECLARATION

LICENSED CONTRACTOR DECLARATION

I hereby affirm that I am licensed under the provisions of Chapter 9 (concerning oil and gas, 7000) of Division 3 of the Business and Professions Code (B.P.C.) as a well drilling contractor (C-57 license) and such license is in full force and effect.

W. Randall Glaze

7/3/14

FINGERPRINTS

FINGERPRINTS

LIC. NO.: 611394OFFICE TELEPHONE 805 735 3454CELL PHONE 805 717 0937BUSINESS NAME: S/G Drilling Co.ADDRESS 308 N. 1st St. Lompoc, CA 93436

(Complete "A" or "B")

A. WORKERS' COMPENSATION DECLARATION

I hereby affirm one of the following:

- I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- I have and will maintain workers' compensation insurance, as provided for by Section 3700 of the Labor Code, for the performance of work for which this permit is issued. My insurance carrier and policy number are:

Carrier State FundPolicy No. 902 7835Applicant Signature [Signature]Date 7/3/14

B. CERTIFICATION OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of work for which this permit is issued, I shall not employ any person in a manner so as to become subject to the Worker's Compensation Laws of California.

Applicant Signature _____

Date _____

Notes to Applicant: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

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I certify that I have read this application and declare under penalty of perjury that the information contained herein is true, correct and complete. I hereby authorize representatives of Environmental Health Services to enter the premises for the purpose of inspecting the site and work described herein for compliance with county requirements.

REQUIRED INSPECTIONS / FINAL CLEARANCE: After permit approval, and prior to covering any components, an inspection must be scheduled directly with the approving Hazardous Materials Specialist or Professional Geologist at least two (2) business days in advance for:

1. The sealing of the annular space on a well;
2. The destruction of wells;
3. Any operation stipulated on the permit to address special or unusual conditions.
4. Final clearance of the well will be issued upon receipt of the driller's well log.

Signed

Gretchen Denson

Applicant (Name)

Applicant's Signature

(DCSS)

P.G. #6983

7/28/14

Date

Signed

Cherie Miller

Environmental Health Specialist

APPLICATION DISPOSITION: Approved Denied

8-12-2014

DEI

Date

FOR DEPARTMENT USE ONLY

Fees Paid Rec'd by:

Date _____ Amt. \$ _____ Cash Check # _____

Receipt No. #:

Permit Conditions:

Final Construction Approved by: _____ Date: _____

Final Clearance by: _____ Date: _____

Page #2 of 2



Environmental Health Services

Takeshi M. Wada, MD, MPH Director/Health Officer
Anne M. Fenton Deputy Director
Suzanne Jacobson, CPA Chief Financial Officer
Susan Klein-Rothchild, MSW Deputy Director
Elizabeth Snyder, MHA Deputy Director
Charity Thomen, MD Medical Director - Acting

225 Camino del Remedio • Santa Barbara, CA 93110
805/681-4900 • FAX 805/681-4901

2125 S. Centerpointe Pkwy. #333 • Santa Maria, CA 93455-1340
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Lawrence D. Fay, Jr. Director of Environmental Health

March 31, 2014

Jack Bodger
Bodger Seeds
P.O. Box 2709
Lompoc, CA 93438-2709

Dear Mr. Bodger:

Subject: 1851 W. Olive Avenue, Lompoc, California; Bodger Seeds
LUFT Site# 80024

The Santa Barbara County Public Health Department, Environmental Health Services Division has reviewed the documents titled *2nd Quarter 2013 Groundwater Assessment and Site Conceptual Impact Model (SCM)*, dated December 20, 2013 and *Fourth Quarter 2013 Groundwater Assessment (GWA)*, dated February 18, 2014. EHS summarizes the following data presented in Section 6 and 7 of the *SCM*:

- A. Your consultant obtained chromatograms from assessment work performed in 2008 and 2012. They placed multiple chromatograms together in several charts and appear to have aligned the run time (x-axis) for all of the chromatograms depicted on these charts in order to allow for direct comparison of these chromatograms. Each chart also includes a chromatogram for a "diesel standard" for comparison to the sample results.
 1. Chart 1 presents 2012 data from MW1P, located at the former gasoline UST pit location.
 2. Chart 2 presents 2012 data from MW3P, located ~55' down gradient of MW-1P.
 3. Chart 3 presents 2012 data from MW4P, the former diesel AST location, ~25' from MW-1P.
 4. Chart 4 presents 2008 data from MW1, located at the former gasoline pit location.
 5. Chart 5 presents 2008 data from MW3, located ~55' down gradient, of MW-1.
 6. Chart 6 presents 2008 data from MW4, the former diesel AST location, ~25' from MW-1.
- B. The *SCM* presents figures and cross section drawings that include the analytical results, soil type, and a revised conceptual model depicting the pathway of gasoline to groundwater. Your consultant's analysis and conclusions per the Charts in the *SCM* are noted as follows:
 1. Chart 1:
 - a. "The carbon range... represents the impact from downward migration of contamination from the former gasoline UST tank pit."
 - b. "The carbon ranges represent... the migration of the impacts from the gasoline UST down into the water table."
 - c. "The hydrocarbon range for the diesel standard does not match the hydrocarbon range for the release contaminants in MW1P."
 2. Chart 2:
 - a. "The hydrocarbons ranges in MW3P have the same indications as those indicated for MW1P as discussed for Chart 1 above."
 - b. "By comparing Charts 1 and 2 it is evident that MW1P and MNW3P are impacted by gasoline with the same hydrocarbon range."

- c. "The hydrocarbon range for the diesel standard does not match the hydrocarbon range for the release contaminants in MW3P."
 - d. "The chromatograms from MW3P represent the hydrocarbon impact signature of a gasoline plume migrating in the groundwater. Vertical smearing of the contamination from 55-65 feet bgs is due to fluctuations on the water table."
3. Chart 3:
- a. "The hydrocarbon ranges in MW4P, at the former diesel AST location, have the same indications as those indicated for MW1P and MW3P as discussed for Charts 1 and 2 above."
 - b. "By comparing Charts 1, 2, and 3 it is evident that MW1P, MW3P, and MW4P are impacted by gasoline with the same hydrocarbon range."
 - c. "The hydrocarbon range for the diesel standard does not match the hydrocarbon range for the release contaminants in MW4P."
 - d. "Like MW3P, the chromatograms from MW4P represent the hydrocarbon impact signature of a gasoline plume migrating in the groundwater. Vertical smearing of the contamination from 55-65 feet bgs is due to fluctuations on the water table, and not the downward migration of a non-reported release from the former diesel AST fueling system."
4. Chart 4, 5, and 6 present chromatograms, arranged vertically from the soil samples collected from the pilot borings advanced in 2008, which became wells MW1, MW3 and MW4. "There were different labs used in 2008 and 2012, therefore the data from 2008 looks different than the data from 2012. However, the Charts show the same findings as the 2012 data."
5. Charts 1-6 were reviewed by a third-party State certified analytical laboratory, Chemtek Environmental Laboratories, Inc.
- a. "The enclosed Chemtek Letter dated November 22, 2013, concurs that the previous TPH data were not representative of a diesel standard."
 - b. "Furthermore, the chromatograms appear to show a grouping of hydrocarbons extended from gasoline reporting range of C2 to C10."
 - c. "The hydrocarbon chromatograms are consistent with the appearance of a gasoline release."
 - d. "Therefore, since (*sic*) the previously-reported heavier hydrocarbons were from the gasoline release, and not a separate diesel release."
- C. The *SCM* evaluation included topics to support the conclusions presented in the *SCM*, including:
- 1. "Naphthalene is evaluated in response to the concern identified by the SBFPD and because it is part of the heavier carbon range in gasoline... Evaluating naphthalene as a bridge between previously-reported TPHg and TPHd data provides another line of evidence that the previously reported TPHd likely represents the heavier hydrocarbons in the gasoline hydrocarbon range and not a separate diesel release."
 - 2. "Figure 11 shows... This previously-reported alleged diesel result is actually a gasoline result, as addressed above."
 - 3. "Figure(s) 9, 11, and 13 shows...impacts at MW1 from ... 55-65 feet bgs... suggests that the water table likely fluctuated during the history of the release and caused a product smear zone from 55-65 feet bgs."
 - 4. "Figure(s) 10 and 11 show that in MW4 and MW4P TPHd was only detected at the water table smear zone depth of 55-65 feet bgs. No downward migration of TPHd from the former above ground storage tank location at MW4 is evident. TPHd impacts originated at the former UST and dispenser system and migrated in the same manner as the TPHg and naphthalene. The previously-reported TPHd data represent the heavier portion of the gasoline release; therefore, management of TPHd impacts should not be excluded under the UST Fund."

EHS has the following comments regarding the data presented in the *SCM* and *GWA*:

1. The 2008 and 2012 data presented in the Charts and Figures suggest the hydrocarbon ranges for the soil samples at depth appears to represent a "weathered gasoline" release, not a diesel release, has impacted soils and groundwater.
 - 1.1. The chromatograms in the Charts suggest all of the carbon ranges are similar between 2008 and 2012 sampling results, and do not compare to the diesel standard.
 - 1.2. The impacts found at depth appear to be the heavier fraction of gasoline (weathered gasoline) and not diesel, as noted in previous reports.
 - 1.3. Borings located near the former diesel ASTs, MW4, MW4P and MW6P, only have impacts found at depths between 55-65 feet. There appears to be no evidence of downward migration of diesel in these borings, as depicted in Figure 10. The SCM concludes that the smear zone, due to groundwater table fluctuation over the years, which was created by the gasoline release plume and not a release from the diesel ASTs, which they further support in Charts 1, 2 and 3.
 - 1.4. EHS generally concurs with this evaluation, but also acknowledges that minimal diesel spills, which appear to have been confined to shallow soils only, may also have occurred at the site.
2. The extent of groundwater impacts have not yet been delineated to an acceptable extent. There appears to be a visible sheen on 3 or 4 of the 7 wells at this site.
 - 2.1. The report proposes installing additional wells to delineate the groundwater plume.
 - 2.2. Based upon a review of your proposed well locations one additional well stepped out farther down gradient may be required.
3. The recent groundwater assessment reports fail to include results for the following compounds:
 - 3.1. EDB, EDC and EHS's recalcitrant gasoline compounds.
 - 3.2. Please refer to the attached list for recalcitrant compounds.
4. The reports recommend performing a soil gas risk assessment.

EHS has the following requirements for this site:

- I) EHS concurs that more groundwater assessment is required. The plume is undefined in several directions, making it impossible to evaluate plume stability, per the Low Threat Closure Policy.
 - a. EHS concurs with your consultant's proposal to submit a brief work plan for the installation of multiple wells to delineate the extent of the plume to the guidelines of the Low Threat Closure Policy. Submit a work plan this to EHS by **April 25, 2014**.
 - b. EHS concurs with your consultant's proposal to redevelop the existing wells at the site. Please incorporate this into your work plan.
- II) EHS concurs with your consultant's general proposal to submit an Interim Remedial Plan (IRP) to utilize Dual Phase Extraction (DPE) at this site.
 - a. EHS requires that you complete a public notice in the local newspaper, and have a 30-day comment period prior to implementing a remedial action, per Title 23, Div. 3, Ch. 16, Article 11, Section 2728 Public Participation.
 - b. EHS recommends that you perform a pilot test utilizing existing wells to evaluate the appropriateness and effectiveness of DPE at this site, and help develop data for submittal to the local Air Pollution Control District.
 - c. Submit an interim remedial plan to EHS by **April 25, 2014**.
- III) Several compounds were not included in the groundwater sample results.
 - a. EDC has historically been detected. EDB and EDC shall be included in future sampling events until otherwise directed.

- b. Recalcitrant gasoline compounds are found at older gasoline releases. EHS has a list of compounds that shall be included in future groundwater sampling events until otherwise directed.
- IV) EHS directs you to not perform any soil gas risk analysis for potential vapor intrusion until after the remedial actions have been satisfactorily completed and the general goals of the Low Threat Closure Policy have been reached. While soil gas surveys can be helpful in delineating a groundwater plume, due to this site having shallow tight soils, silts and clays in the first 30 feet below ground surface, this approach does not appear beneficial at this site.

If you have any questions regarding this letter, please feel free to contact me at (805) 346-8344, or via email at steve.nailor@sbcphd.org. Please submit correspondence to me at Santa Barbara County Public Health Department, Environmental Health Services Division, 2125 S. Centerpointe Parkway, Suite# 333, Santa Maria, CA 93455.

Respectfully yours,



E. Steven Nailor
Senior Hazardous Materials Specialist
LUFT Program

esn:2014-03-31_ltr_80024.docx

Attachment

ec: Mr. Andy Donan, Donan Environmental Services, Inc.
Geotracker

TABLE 5-8
Petroleum Residual NAPL Saturation Based
on
Soil Type in Sedimentary Environments

Soil Type ASTM-D2487	Approx. Particle Size (mm)	K_{sw} (cm/sec)	θ (dim)	S_{rw} (dim)	ρ_b (gm/cm ³)	TPH Concentration (mg/kg)			
						Gasoline / Naphtha (mg/kg)	Kerosene / JP-4 (mg/kg)	Diesel #2 (mg/kg)	Fuel Oil (mg/kg)
Gravel	76.2-4.75	100	0.30	0.001	2.00	560	780	1000	1400
Sandy Gravel	Based on % fines	5.0	0.36	0.005	1.86	1,500	2,100	2,800	3,800
M-Coarse Sand	4.75-0.425	1.0	0.37	0.007	1.83	2,300	3,200	4,400	5,900
Fine Sand	0.425-0.074	0.5	0.38	0.009	1.81	2,900	4,000	5,400	7,300
Silty Sand	Based on % fines	0.05	0.41	0.018	1.76	5,600	7,800	10,000	14,000
Silt	0.074-0.005	0.0005	0.48	0.10	1.65	19,000	27,000	36,000	49,000
Clay	<0.005	0.000005	0.56	0.39	1.56	44,000	61,000	82,000	110,000

1. The critical flow rate (q_c) used to calculate the above values was 1×10^{-7} cm/sec.

This table does not apply in fractured crystalline rock environments

2. The TPH concentration values were determined by using Equations 5-3 and 5-4.

NAPL characterization requires an approach that is distinctly different from dissolved-phase characterization because immiscible flow is controlled by parameters not addressed in a dissolved-phase assessment. These parameters include the fluid properties of the NAPL and the capillary properties of the porous media.

There are many ways to determine the presence of NAPL. A more detailed discussion of the following techniques can be found in Cohen (1993) and Pankow (1996).

From: "Nailor, Steve" <Steve.Nailor@sbcphd.org>
Subject: RE: Question on Proposed Geotech analysis for 1851 Olive St, Bodger Seed - LUFT# 80024
Date: August 27, 2014 8:25:39 AM PDT
To: 'Greg' <gd@DESxyz.com>

Greg,

I recommended doing a sieve analysis to Brandon as I believe there is value in knowing the true soil type for SVE.

For this site Brandon noted that his descriptions were different than previous consultants, thus I offered it as a suggestion to help you confirm soil types for a CAP/RAP. I see a sieve analysis as a cheap way to confirm soil type. I do not see a real advantage to the other tests, but if you do, then you may do so at your own discretion.

I believe a soil vapor extraction test will provide your best design data, and of course may change the saturation, of soils etc.

If you have any questions, please contact me.

Thank you, Steven

E. Steven Nailor

Hazardous Materials Specialist Senior
County of Santa Barbara, Public Health Department, Environmental Health Services Division
2125 S. Centerpointe Parkway, Suite #333 Santa Maria, CA 93455
Phone (805) 346-8344 FAX (805) 805-346-8485
Email: steve.nailor@sbcphd.org

From: Greg [mailto:gd@DESxyz.com]
Sent: Tuesday, August 26, 2014 10:35 AM
To: Nailor, Steve
Cc: AD
Subject: Question on Proposed Geotech analysis for 1851 Olive St, Bodger Seed - LUFT# 80024

Hi Steve,

Thanks for visiting the Site during drilling last week on August 20, 2014.

My field Geologist, Brandon, told me that you suggested doing a sieve analysis on an available soil sample.

We will be submitting a sample from DW10 that covers depths from 45 to 50 feet bgs (to represent the vadose zone) to the geotech laboratory to do the analysis. Geotech analysis could not be done on samples from extraction well DE1 because the geotech lab is not accustomed to managing product-contaminated soils.

Since we will be sending the sample to the geotech lab, let me know if we should also do the following suite of analyses that we typically do when evaluating contamination migration in the vadose zone and when gathering data for remedial design:

- 1) Bulk Density by ASTM Method D7263

- 2) Total Porosity by ASTM Method D2487
- 3) Water-Filled Porosity (water content) by ASTM Method D2487
- 4) Air-Filled Porosity by ASTM Method D2487
- 5) Weight Fraction of Organic Carbon (organic carbon content) by ASTM Method D2974

Weight Fraction of Organic Carbon (TOC) is especially interesting because TOC values have a significant effect on risk modeling.

Let me know if we should move forward with these proposed analyses. I will hold on to the sample until I get a confirmation.

Best Regards,

Greg Delson, PG
DONAN ENVIRONMENTAL SERVICES, INC.
ph: 760-639-3600
cell: 858-761-3611
fax: 760-639-3603
email: gd@DESxyz.com

On Aug 12, 2014, at 10:00 AM, Greg wrote:

Hi Steve,

Thanks for taking my call today. Just to document what we talked about, I understand we are approved to start the drilling on Monday August 18, 2014. I understand you have approved our permit application and will be emailing it to me.

If you have any more questions or concerns, please feel free to give me a call at 760-639-3600.

Best Regards,

Greg Delson, PG
DONAN ENVIRONMENTAL SERVICES, INC.
ph: 760-639-3600
cell: 858-761-3611
fax: 760-639-3603
email: gd@DESxyz.com

On Aug 11, 2014, at 4:27 PM, Greg wrote:

Hi Steve,

I am just emailing this to you again to make sure you got it. We would like to schedule this drilling to start on

DES

MONITORING WELL GAUGING LOG

Page. of

Project Number:

Date: 8/26/14

Well Development

Bogdan

Field Representative:
Checked By:

Notes:

- elevation adjusted by adding 1.75 x Product Thickness**

SHEEN = discontinuous, non-measurable thickness of LPH
TRACE = continuous, non-measurable thickness of LPH

well Development



Donan Environmental Services, Inc.

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (In.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804

Well Development

 Donan Environmental Services, Inc.	WELL PURGING/SAMPLING LOG							
	Project Name: <u>B23ree 4</u>			Well No.: <u>DCW9</u>				
	Project Number:			Date: <u>8/26/14</u>				
	Project Address: <u>1851 W. Olive Ave Longac</u>							
	Well GPS: Latitude:		Longitude:					
	Sampled by:		Checked by:		License #:			
	WELL SPECIFICATIONS & MEASUREMENTS				PURGING & SAMPLING EQUIPMENT			
	Borehole Diameter (in.) (BD): <u>6 8 10 12</u>				Water Level Meter Type and ID:			
	Casing Diameter (in.) (CD): <u>2 4 6 8</u>				Purging Equipment/Method: <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Bailer <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other			
	Total Well Depth (ft.) (WD): <u>65.6</u>		Product thickness (ft.):		pH/Temp/Conductivity Meter Type and ID:			
Static Water Level (ft.) (SWL): <u>61.3</u>		Time measured: <u>10:00</u>						
Water Column (ft.) (WC=WD-SWL): <u>4.3</u>		Filter Pack Porosity (P):		<input type="checkbox"/> Teflon Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Sampler Type: <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other: <input type="checkbox"/> Steam/High Pressure Wash <input type="checkbox"/> Decontamination Method: <input type="checkbox"/> 3 Stage (Alconox, tap water & DI rinse) <input type="checkbox"/> Other:				
Borehole Volume (BV) Calculations								
$BV \text{ (gal)} = 0.041 [CD^3 + P(BD^2 - CD^2)](WC)$								
This equation applies to wells constructed straddling the water table only. For submerged screens, document all calculations. Porosity is expressed in decimal form. $BV = 3.87$ gallons								
PURGING AND SAMPLING METHODOLOGIES								
Well Recovery Type								
Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5				Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5				
PURGING METHODS								
Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.								
Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.								
Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.								
List the date and time the pump was installed: Date: _____ Time: _____								
Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.								
Method 5, non-purge method. Only with prior written approval from SAM								
PURGING INFORMATION								
Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (μmhos)	Dissolved Oxygen	pH	Turbidity	
10:00	61.3	4.1	4	3.15		8.0	19.9	
12:15	62.1	3.9	3	5.2		7.7	19.5	
2:30	61.8	3.2	3	5.17		8.1	17.8	
Borehole Volume: <u>3.3</u> (gal)				Total Volume Purge Water: <u>10</u> (gal)		Average pumping rate: _____ (gpm)		
RECOVERY CALCULATIONS								
Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)								
SAMPLING INFORMATION								
Date & Time Sampled:		Depth to water at time of sampling (feet):						
Quantity	Container Type	Filtered (Y/N)	Sample Preservatives		Analytical Methods to Perform			
BV Factor to multiply by WC to get BV								
Casing/Boring Dia. (in.)		2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12	
BV Factor		0.902	1.345	1.246	1.689	2.263	2.804	

Well development

BV Factor to multiply by WC to get BY

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804

Well Development

 Donan Environmental Services, Inc.		WELL PURGING/SAMPLING LOG						
			Project Name: <i>Bodger et</i>		Well No.: DW12			
			Project Number:		Date: 9/26/14			
			Project Address: 1851 W. Olive Ave, Bompas					
			Well GPS: Latitude:	Longitude:				
			Sampled by:	Checked by:		License #:		
WELL SPECIFICATIONS & MEASUREMENTS			PURGING & SAMPLING EQUIPMENT					
Borehole Diameter (in.) (BD): <u>6</u> <u>8</u> <u>10</u> <u>12</u>			Water Level Meter Type and ID:					
Casing Diameter (in.) (CD): <u>7</u> <u>4</u> <u>6</u> <u>8</u>			Purging Equipment/Method: <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Bailer <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other					
Total Well Depth (ft.) (WD): <u>65.4</u>			pH/Temp/Conductivity Meter Type and ID:					
Static Water Level (ft.) (SWL): <u>60.5</u>			Time measured: <u>9:45</u>					
Water Column (ft.) (WC=WD-SWL): <u>4.89</u>			Filter Pack Porosity (P): <input type="checkbox"/> Teflon Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other					
Borehole Volume (BV) Calculations			PURGING AND SAMPLING METHODOLOGIES					
BV (gal) = 0.041 [CD ² + P (BD ² -CD ²)](WC)			Decontamination Method: <input type="checkbox"/> Steam/High Pressure Wash <input type="checkbox"/> 3 Stage (Alconox, tap water & DI rinse) <input type="checkbox"/> Other:					
This equation applies to wells constructed straddling the water table only. For submerged screens, document all calculations. Porosity is expressed in decimal form. BV = <u>4.4</u> gallons								
Well Recovery Type								
<input type="checkbox"/> Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5			<input type="checkbox"/> Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5					
PURGING METHODS								
Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.								
Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.								
Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.								
List the date and time the pump was installed: Date: _____ Time: _____								
Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.								
Method 5, non-purge method. Only with prior written approval from SAM								
PURGING INFORMATION								
Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (µmhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
<u>9:45</u>	<u>60.51</u>	<u>6.9</u> <u>3.1</u>	<u>3</u>	<u>4.23</u>		<u>9.2</u>		<u>20.2</u>
<u>12:00</u>	<u>62.1</u>	<u>6.3</u> <u>2</u>	<u>3</u>	<u>4.19</u>		<u>8.6</u>		<u>20.1</u>
<u>2:15</u>	<u>62.2</u>	<u>3.1</u>	<u>3</u>	<u>4.21</u>		<u>8.4</u>		<u>20.3</u>
Borehole Volume: <u>4</u> (gal)		Total Volume Purge Water: <u>9</u> (gal)		Average pumping rate: _____ (gpm)				
RECOVERY CALCULATIONS								
Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)								
SAMPLING INFORMATION								
Date & Time Sampled:			Depth to water at time of sampling (feet):					
Quantity	Container Type	Filtered (Y/N)	Sample Preservatives		Analytical Methods to Perform			
BV Factor to multiply by WC to get BV								
Casing/Boring Dia. (in.)	<u>2 / 8</u>	<u>2 / 10</u>	<u>4 / 8</u>	<u>4 / 10</u>	<u>6 / 10</u>	<u>6 / 12</u>		
BV Factor	<u>0.902</u>	<u>1.345</u>	<u>1.246</u>	<u>1.689</u>	<u>2.263</u>	<u>2.804</u>		

Well Development						
			WELL PURGING/SAMPLING LOG			
 Donan Environmental Services, Inc.			Project Name: <u>Boulder 4</u> Well No.: <u>DE1</u> Project Number: _____ Date: <u>8/26/14</u> Project Address: <u>1831 W. Olive Ave. Longmont CO</u> Well GPS: _____ Latitude: _____ Longitude: _____			
Sampled by:			Checked by:		License #:	
WELL SPECIFICATIONS & MEASUREMENTS			PURGING & SAMPLING EQUIPMENT			
Borehole Diameter (in.) (BD): <u>6 8 10 12</u>			Water Level Meter Type and ID:			
Casing Diameter (in.) (CD): <u>2 4 6 8</u>			Purging Equipment/Method: <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Bailer <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other			
Total Well Depth (ft.) (WD): <u>63.5</u>			pH/Temp/Conductivity Meter Type and ID:			
Static Water Level (ft.) (SWL): <u>61.5</u>			<input type="checkbox"/> Teflon Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Sampler Type: Bladder Pump <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other: _____ <input type="checkbox"/> Steam/High Pressure Wash <input type="checkbox"/> Decontamination Method: 3 Stage (Alconox, tap water & DI rinse) <input type="checkbox"/> Other: _____			
Water Column (ft.) (WC=WD-SWL): <u>1.0</u>						
Borehole Volume (BV) Calculations						
BV (gal) = $0.041 [CD^2 + P(BD^2 - CD^2)](WC)$						
This equation applies to wells constructed straddling the water table only. For submerged screens, document all calculations. Porosity is expressed in decimal form. BV = <u>3.8</u> gallons						
PURGING AND SAMPLING METHODOLOGIES						
Well Recovery Type <input type="checkbox"/> Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5 <input type="checkbox"/> Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5						
PURGING METHODS						
Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.						
Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.						
Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.						
List the date and time the pump was installed: Date: _____ Time: _____						
Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.						
Method 5, non-purge method. Only with prior written approval from SAM						
PURGING INFORMATION						
Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters		
				Conductivity (μmhos)	Dissolved Oxygen	pH
10:30	61.5	3.7	4	5.19	8.1	19.7
12:50	62.1	3.0	3	5.20	8.0	19.8
17:15	62.2	3.0	3	5.21	8.1	19.8
Borehole Volume: <u>3.8</u> (gal)		Total Volume Purge Water: <u>12</u> (gal)		Average pumping rate: _____ (gpm)		
RECOVERY CALCULATIONS						
Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)						
SAMPLING INFORMATION						
Date & Time Sampled:			Depth to water at time of sampling (feet): _____			
Quantity	Container Type	Filtered (Y/N)	Sample Preservatives	Analytical Methods to Perform		
BV Factor to multiply by WC to get BV						
Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804

MONITORING WELL GAUGING LOG

Site Name/Facility #: Bodyer

Project Number: _____

Date: 9/16/14Field Representative: Banahan

Checked By: _____

Well Number	Previous QTR DTW	Gauging Time	Depth to Floating Product	Depth to Water (ft)	Floating Product Thickness (ft)	Total Casing Depth (ft)	Casing Elevation ¹	Groundwater Elevation ¹	Corrected Groundwater Elevation ¹	Comments
Dw12		8:30	—	60.52	6.47	65.41				
Dug	9:00	—	61.32	—	—	65.47				
Dw9	9:20		61.15			65.5				
Mw7P	9:30		59.8			66.1				
Mw2P	10:00		60.98			66.0				
Dw10	10:20		61.65			65.4				
Mw6P	10:30		63.95			66.0				
Mw1P	10:50	60.81	67.35	4.16	66.0					
DE1	11:00	—	59.98	—	—	65.0				
Mw3P	11:10	—	61.35	—	—	66.0				
Mw5P	11:30	61.4	62.0	4.60	66.0					

Notes: ¹ = Feet above mean sea level unless noted otherwise= elevation adjusted by adding (.75 x Product Thickness) to measured water elevation
Mw4P 11:45 62.01SHEEN = discontinuous, non-measurable thickness of LPH
TRACE = continuous, non-measurable thickness of LPH
Sheen F/P



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG						
Project Name: <i>Boulder and Sons</i>				Well No.: <i>MW2P</i>		
Project Number: <i>Rocher 4</i>				Date: <i>9/16/14</i>		
Project Address: <i>1851 W. Olive Ave. Lampoc CA</i>						
Well GPS:		Latitude:		Longitude:		
Sampled by:		Checked by:		License #:		
WELL SPECIFICATIONS & MEASUREMENTS				PURGING & SAMPLING EQUIPMENT		
Borehole Diameter (in.) (BD): <i>6 8 10 12</i>				Water Level Meter Type and ID: <i>S.1inst 122</i>		
Casing Diameter (in.) (CD): <i>2 4 6 8</i>				Purging Equipment/Method: <input checked="" type="checkbox"/> Bladder Pump <input type="checkbox"/> Baile <input checked="" type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other		
Total Well Depth (ft.) (WD): <i>66.0</i>				pH/Temp/Conductivity Meter Type and ID: <i>Hanna</i>		
Static Water Level (ft.) (SWL): <i>60.78</i>				Time measured: <i>10:20</i>		
Water Column (ft.) (WC=WD-SWL): <i>5.2</i>				Filter Pack Porosity (P): <i>.30</i>		
Borehole Volume (BV) Calculations				Sampler Type: <input type="checkbox"/> Teflon Baile <input checked="" type="checkbox"/> Disposable Baile <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other		
$BV (\text{gal}) = 0.041 [CD^2 + P(BD^2 - CD^2)](WC)$				Decontamination Method: <input type="checkbox"/> Steam/High Pressure Wash <input checked="" type="checkbox"/> 3 Stage (Alconox, tap water & DI rinse) <input type="checkbox"/> Other:		
This equation applies to wells constructed straddling the water table only. For submerged screens, document all calculations. Porosity is expressed in decimal form. $BV = 4.5$ gallons						

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5

 Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

 Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.

Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (μmhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
10:20	60.98	4.2	3	3.1		7.9		18.2

Borehole Volume: *(gal)* Total Volume Purge Water: *(gal)* Average pumping rate: *(gpm)*

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <i>9/16/14 12:15</i>	Depth to water at time of sampling (feet): <i>64.1</i>
Quantity	Container Type
3	Vial
+	Amber

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: *Bogger and Sons* Well No.: *MWTP*
 Project Number: *Rocher 4* Date: *9/16/19*
 Project Address: *1051 W. Olive Ave. Lampoc CA*

Well GPS: Latitude: Longitude:

Sampled by: Checked by: License #:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in.) (BD): 6 8 10 12

Casing Diameter (in.) (CD): 7 4 6 8

Total Well Depth (ft.) (WD): 66 1

Product thickness (ft.):

Static Water Level (ft.) (SWL): 59 .8

Time measured: 9:30

Water Column (ft.) (WC=WD-SWL): 6.3

Filter Pack Porosity (P):

Borehole Volume (BV) Calculations

$$BV (\text{gal}) = 0.041 [CD^2 + P(BD^2 - CD^2)](WC)$$

This equation applies to wells constructed straddling the water table only.
For submerged screens, document all calculations. Porosity is expressed
in decimal form. BV = 5.7 gallons

PURGING & SAMPLING EQUIPMENT

Water Level Meter Type and ID: *Solinst 122*

Purging Equipment/Method: Bladder Pump Bailer

Centrifugal Pump Other

pH/Temp/Conductivity Meter Type and ID: *HGM19*

Sampler Type: Teflon Bailer Disposable Bailer

Bladder Pump Centrifugal Pump

Other:

Steam/High Pressure Wash

Decontamination Method: 3 Stage (Alconox, tap water & DI rinse)

Other:

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5

Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.

Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (µmhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
9:30	57.3	6.3	3	3.2		7.8		18.1

Borehole Volume: 5 (gal) Total Volume Purge Water: 3 (gal) Average pumping rate: 0.902 (gpm)

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <i>9/16/19 11:30</i>	Depth to water at time of sampling (feet): <i>63.1</i>
Quantity	Container Type
3	Vac
<i>Amber</i>	N
	HCL

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Doran Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: *Rocher and Sons* Well No.: *Dw8*
 Project Number: *Rocher 4* Date: *9/16/14*
 Project Address: *1051 W. olive Ave. Lampoc CA*

Well GPS: Latitude: Longitude:

Sampled by: Checked by: License #:

WELL SPECIFICATIONS & MEASUREMENTSBorehole Diameter (in.) (BD): *6 1/8 10 12*Casing Diameter (in.) (CD): *3 4 6 8*Total Well Depth (ft.) (WD): *65.5* Product thickness (ft.): *-*Static Water Level (ft.) (SWL): *61.15* Time measured: *7:20*Water Column (ft.) (WC=WD-SWL): *4.35* Filter Pack Porosity (P): *-***PURGING & SAMPLING EQUIPMENT**Water Level Meter Type and ID: *Solinst 122*Purging Equipment/Method: Bladder Pump Bailer Centrifugal Pump Other pH/Temp/Conductivity Meter Type and ID: *HGM9*Sampler Type: Teflon Bailer Disposable Bailer Bladder Pump Centrifugal Pump Other: Steam/High Pressure Wash Decontamination Method: 3 Stage (Alconox, tap water & DI rinse) Other: **Borehole Volume (BV) Calculations**

$$BV (\text{gal}) = 0.041 [CD^2 + P(BD^2 - CD^2)](WC)$$

This equation applies to wells constructed straddling the water table only.
 For submerged screens, document all calculations. Porosity is expressed
 in decimal form. BV = *3.72* gallons

Decontamination

Method: 3 Stage (Alconox, tap water & DI rinse) Other: **PURGING AND SAMPLING METHODOLOGIES****Well Recovery Type** Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5 Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5**PURGING METHODS**

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: *7:20* Time: *-* Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.

Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (umhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
<i>7:20</i>	<i>61.15</i>	<i>3.7</i>	<i>3</i>	<i>3.34</i>		<i>7.9</i>		<i>17.2</i>

Borehole Volume: *(gal)* Total Volume Purge Water: *(gal)* Average pumping rate: *(gpm)***RECOVERY CALCULATIONS**

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <i>7/16/14 7:30</i>	Depth to water at time of sampling (feet): <i>63.1</i>
Quantity	Container Type
<i>3</i>	<i>1/2</i>
<i>✓</i>	<i>██████</i>

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: Bogger and Sons Well No.: Dw 9
 Project Number: Rogger 4 Date: 1/16/19
 Project Address: 1051 W. olive Ave. Lampson CA
 Well GPS: Latitude: Longitude:

Sampled by:	Checked by:	License #:
WELL SPECIFICATIONS & MEASUREMENTS		
Borehole Diameter (in.) (BD): <u>6 1/8</u> 10 12	PURGING & SAMPLING EQUIPMENT	
Casing Diameter (in.) (CD): <u>2 1/4</u> 6 8	Water Level Meter Type and ID: <u>S-inst 122</u>	<input type="checkbox"/> Bladder Pump <input checked="" type="checkbox"/> Bailer X
Total Well Depth (ft.) (WD): <u>65.47</u> Product thickness (ft.): -	Purging Equipment/Method: <input type="checkbox"/> Bladder Pump <input checked="" type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other	<input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other
Static Water Level (ft.) (SWL): <u>61.32</u> Time measured: <u>9:00</u>	pH/Temp/Conductivity Meter Type and ID: <u>Hgmaq</u>	
Water Column (ft.) (WC=WD-SWL): <u>4.15</u>	Sampler Type: <input type="checkbox"/> Teflon Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Bladder Pump <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other:	<input type="checkbox"/> Steam/High Pressure Wash
Borehole Volume (BV) Calculations		
BV (gal) = $0.041 [CD^2 + P(BD^2 - CD^2)](WC)$	Decontamination Method: <input checked="" type="checkbox"/> 3 Stage (Alconox, tap water & DI rinse) <input type="checkbox"/> Other:	
This equation applies to wells constructed straddling the water table only. For submerged screens, document all calculations. Porosity is expressed in decimal form. BV = <u>3.75</u> gallons		

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

 Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5 Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

 Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown. Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown. Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

 Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method. Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (umhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
9:00	61.32	3.7	3	2.41		7.9		17.2

Borehole Volume: (gal) Total Volume Purge Water: (gal) Average pumping rate: (gpm)

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <u>9/16/19 9:10</u>			Depth to water at time of sampling (feet):		
Quantity	Container Type	Filtered (Y/N)	Sample Preservatives	Analytical Methods to Perform	
3	1/2				
+	4/4				

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: Bogger and Sons Well No.: DW12
 Project Number: Rogger 4 Date: 9/16/14
 Project Address: 1051 W. olive Ave. Lampas CA

Well GPS: Latitude: Longitude:

Sampled by:

Checked by:

License #:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in.) (BD): 6 8 10 12Casing Diameter (in.) (CD): 2 4 6 8Total Well Depth (ft.) (WD): 65.4 Product thickness (ft.): -Static Water Level (ft.) (SWL): 61.65 Time measured: 10.25Water Column (ft.) (WC=WD-SWL): 3.75 Filter Pack Porosity (P): .20

PURGING & SAMPLING EQUIPMENT

Water Level Meter Type and ID: S. inst 122Purging Equipment/Method: Bladder Pump Baile Centrifugal Pump Other pH/Temp/Conductivity Meter Type and ID: HGM19Sampler Type: Teflon Baile Disposable Baile Bladder Pump Centrifugal Pump Other: Steam/High Pressure Wash Decontamination Method: 3 Stage (Alconox, tap water & DI rinse) Other:

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5

Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

 Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method. Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (umhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
10.25	61.65	2.9	1.5	3.5		8.1		18.5

Borehole Volume: (gal) Total Volume Purge Water: (gal) Average pumping rate: (gpm)

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <u>9/16/14 12:30</u>	Depth to water at time of sampling (feet): <u>63.7</u>
Quantity	Container Type
3	Jug
<u> </u>	<u>Amber</u>

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: Boulder and Sons Well No.: DW12
 Project Number: Boulder 4 Date: 9/16/14
 Project Address: 1051 W. olive Ave. Lampasas TX

Well GPS: Latitude: Longitude:

Sampled by: Checked by: License #:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in.) (BD): 6 (8) 10 12

Casing Diameter (in.) (CD): (2) 4 6 8

Total Well Depth (ft.) (WD): 65 +/- Product thickness (ft.): -

Static Water Level (ft.) (SWL): 60.52 Time measured: 8:30

Water Column (ft.) (WC=WD-SWL): 4.89 Filter Pack Porosity (P): .30

PURGING & SAMPLING EQUIPMENT

Water Level Meter Type and ID: S-Tinst 122

Purging Equipment/Method: Bladder Pump Bailer
 Centrifugal Pump Other

pH/Temp/Conductivity Meter Type and ID: HGM14

Sampler Type: Teflon Bailer Disposable Bailer
 Bladder Pump Centrifugal Pump
 Other:

Steam/High Pressure Wash

Decontamination Method: 3 Stage (Alconox, tap water & DI rinse)

Other:

Borehole Volume (BV) Calculations

$$BV (\text{gal}) = 0.041 [CD^2 + P(BD^2 - CD^2)]/(WC)$$

This equation applies to wells constructed straddling the water table only.
 For submerged screens, document all calculations. Porosity is expressed
 in decimal form. BV = 4.4 gallons

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5

Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.

Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (µmhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
8:30	60.52	9.1	3	3.41		7.5		17.1

Borehole Volume: (gal) Total Volume Purge Water: (gal) Average pumping rate: (gpm)

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled: <u>9/16/14 10:30</u>	Depth to water at time of sampling (feet): <u>62.1</u>
Quantity	Container Type
3	Vac
Amber	Amber

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804



Donan Environmental Services, Inc.

WELL PURGING/SAMPLING LOG

Project Name: Bogger and Sons Well No.: D21
 Project Number: Rogger 4 Date: 2/16/14
 Project Address: 1051 W. Olive Ave. Lampasas TX

Well GPS: Latitude: Longitude:

Sampled by: Checked by: License #:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in.) (BD): 6 1/8 10 12

Casing Diameter (in.) (CD): 2 1/4 6 8

Total Well Depth (ft.) (WD): 65.00 Product thickness (ft.): -

Static Water Level (ft.) (SWL): 59.40 Time measured: 11:00

Water Column (ft.) (WC=WD-SWL): 5.02 Filter Pack Porosity (P):

Borehole Volume (BV) Calculations

$$BV (\text{gal}) = 0.041 [CD^2 + P(BD^2 - CD^2)]/(WC)$$

This equation applies to wells constructed straddling the water table only.
 For submerged screens, document all calculations. Porosity is expressed
 in decimal form. BV = 4.50 gallons

PURGING & SAMPLING EQUIPMENT

Water Level Meter Type and ID: S2/inst 122

Purging Equipment/Method: Bladder Pump Bailer
 Centrifugal Pump Other

pH/Temp/Conductivity Meter Type and ID: Hanna

Sampler Type: Teflon Bailer Disposable Bailer
 Bladder Pump Centrifugal Pump
 Other

Steam/High Pressure Wash

3 Stage (Alconox, tap water & DI rinse)

Other: _____

PURGING AND SAMPLING METHODOLOGIES

Well Recovery Type

Fast - recovers 80% within 2 hours -Methods 1, 2, 3, & 5

Slow - more than 2 hours to recover 80% -Methods 3, 4, & 5

PURGING METHODS

Method 1, remove 3 BV, sample after well recovers 80% of total purged drawdown.

Method 2, remove 1 BV, test parameters until stable per SAM Manual, sample after well recovers 80% of total purged drawdown.

Method 3, Low-flow - install pump at least 2 hours prior to start of purging. Follow detailed methodology in SAM Manual.

List the date and time the pump was installed: Date: _____ Time: _____

Method 4, remove 1 BV, sample after 2 hours. Note - if well recovers 80% of total purged drawdown, use another method.

Method 5, non-purge method. Only with prior written approval from SAM

PURGING INFORMATION

Time	Water Level (feet below top of casing)	Drawdown (feet)	Water Volume Purged (gal)	Measured Parameters				
				Conductivity (μmhos)	Dissolved Oxygen	pH	Turbidity	Temp (°C)
Did not purge due to Sheen								

Borehole Volume: 4.50 (gal) Total Volume Purge Water: 4.50 (gal) Average pumping rate: 0.00 (gpm)

RECOVERY CALCULATIONS

Recovery of 80% of drawdown from purging = SWL + (0.2)(Maximum Drawdown during purging)

SAMPLING INFORMATION

Date & Time Sampled:	11:00	Depth to water at time of sampling (feet):	59.98	
Quantity	Container Type	Filtered (Y/N)	Sample Preservatives	Analytical Methods to Perform
3	1/2 Bottle	N	HCL	

BV Factor to multiply by WC to get BV

Casing/Boring Dia. (in.)	2 / 8	2 / 10	4 / 8	4 / 10	6 / 10	6 / 12
BV Factor	0.902	1.345	1.246	1.689	2.263	2.804

GEO_XY Survey Data for Geotracker
 John Bodger & Sons Co.
 1851 West Olive Avenue, Lompoc CA

GLOBAL_ID	FIELD_PT_NAME	FIELD_PT_CLASS	XY_SURVEY_DATE	LATITUDE	LONGITUDE	XY_METHOD	XY_DATUM	XY_ACC_VAL	XY_SURVEY_ORG
T100000000826	MW-1P	MW	12/28/14	34.634611	120.480141	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-2P	MW	12/28/14	34.634744	120.480322	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-3P	MW	12/28/14	34.634754	120.480060	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-4P	MW	12/28/14	34.634496	120.480154	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-5P	MW	12/28/14	34.634594	120.480016	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-6P	MW	12/28/14	34.634440	120.480152	CONV	NAD83	1	Dixon Engineering
T100000000826	MW-7P	MW	12/28/14	34.634943	120.480302	CONV	NAD83	1	Dixon Engineering
T100000000826	DW8	DW	12/28/14	34.634749	120.479885	CONV	NAD83	1	Dixon Engineering
T100000000826	DW9	DW	12/28/14	34.634659	120.479805	CONV	NAD83	1	Dixon Engineering
T100000000826	DW10	DW	12/28/14	34.634506	120.480380	CONV	NAD83	1	Dixon Engineering
T100000000826	DW11	DW	12/28/14	34.634143	120.480251	CONV	NAD83	1	Dixon Engineering
T100000000826	DW12	DW	12/28/14	34.634517	120.479831	CONV	NAD83	1	Dixon Engineering
T100000000826	DE1	DE	12/28/14	34.634661	120.480116	CONV	NAD83	1	Dixon Engineering
T100000000826	DV1	DY	12/28/14	34.634604	120.480146	CONV	NAD83	1	Dixon Engineering

GEO_Z Survey Data for Geotracker
 John Bodger & Sons Co.
 1851 West Olive Avenue, Lompoc CA

GLOBAL_ID	FIELD_PT_NAME	ELEV_SURVEY_DATE	ELEVATION	ELEV_METHOD	ELEV_DATUM	ELEV_ACC_VAL	ELEV_SURVEY_RISER_HT	ELEV_DESC
T100000000826	MW-1P	12/28/14	93.85	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-2P	12/28/14	92.47	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-3P	12/28/14	92.08	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-4P	12/28/14	95.50	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-5P	12/28/14	93.27	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-6P	12/28/14	96.84	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	MW-7P	12/28/14	90.33	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DW8	12/28/14	91.18	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DW9	12/28/14	91.88	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DW10	12/28/14	94.62	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DW11	12/28/14	101.72	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DW12	12/28/14	93.24	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DE1	12/28/14	92.42	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125
T100000000826	DV1	12/28/14	93.94	DIG	29	1	Dixon Engineering	R/S 172/5 pts 24 & 125

TABLE F-3 - Investigation Levels for the FPD Sites

Constituent	Groundwater µg/L	Soil mg/kg
Total Petroleum Hydrocarbons		
Aggregate of all Carbon Chains (C4-C40)	1000	+
Aromatic Compounds		
Benzene	1	0.044*
Toluene	150	2.9
Ethylbenzene	300	2.3
Xylenes	1,750	2.3
Fuel Oxygenates		
methyl tertiary butyl ether (MTBE)	5	0.023
tertiary butyl alcohol (TBA)	12	0.120
Lead Scavengers		
1,2-dichloroethane (EDC)	0.5	0.0045
1,2-dibromoethane (EDB)	0.05	0.00033
Older Gasoline Constituents		
n-butylbenzene	260	26
sec-butylbenzene	260	26
tert-butylbenzene	260	26
Naphthalene	17	1.3
Isopropylbenzene	770	77
n-propylbenzene	260	26
1,2,4-trimethylbenzene	330	33
1,3,5-trimethylbenzene	330	33
Total Lead	15	50
Soluble Lead in soil (mg/L)	--	5

† If soil contamination is <50 feet from groundwater the investigation level for TPH is 100 mg/kg

† If soil contamination is >50 feet from groundwater the investigation level for TPH is 200 mg/kg

* If soil contamination is >100 feet from groundwater, the investigation level for Benzene is 0.2 mg/kg.

Analytical results for soil samples shall be reported in mg/kg or parts per million (ppm).

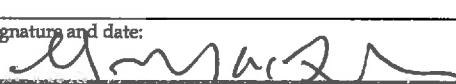
Analytical results for water samples shall be reported in µg/L or parts per billion (ppb).

Manifest

SOIL SAFE OF CA - TPST

Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment: / /	Responsible for Payment:	Transport Truck #:	Facility #: A07	Approval Number: 44256	Load #		
Generator's Name and Billing Address: JOHN BODGER & SONS CO. P.O. BOX 2709 LOMPOC, CA		Generator's Phone #: 805-735-6705					
		Person to Contact:					
		FAX#:	Customer Account Number				
Consultant's Name and Billing Address:		Consultant's Phone #:					
		Person to Contact:					
		FAX#:	Customer Account Number				
Generation Site (Transport from): (name & address) JOHN BODGER & SONS CO. 1861 W. OLIVE AVE. LOMPOC, CA 93438		Site Phone #:					
		Person to Contact:					
		FAX#:					
Designated Facility (Transport to): (name & address) SOIL SAFE 12328 HIBISCUS AVENUE ADELANTO, CA 92301		Facility Phone #: (800) 862-8001					
		Person to Contact: JOE PROVANSAL					
		FAX#: (760) 246-8004					
Transporter Name and Mailing Address: BELSHIRE 25971 TOWNE CENTRE DRIVE FOOTHILL RANCH, CA 92610 BESI: 253563		Transporter's Phone #: 949-460-5200	CAR000183913				
		Person to Contact: LARRY MOOTHART	450647				
		FAX#: 949-460-5210	Customer Account Number				
Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	DM				
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					
List any exception to items listed above: Scale Ticket #							
Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.							
Print or Type Name: Generator <input type="checkbox"/> Consultant <input checked="" type="checkbox"/> Greg Delson (DGS) Agent for Gene		Signature and date: 		Month <input type="text" value="4"/> Day <input type="text" value="10"/> Year <input type="text" value="15"/>			
Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.							
Print or Type Name:		Signature and date:		Month <input type="text"/> Day <input type="text"/> Year <input type="text"/>			
Discrepancies:							
Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:							
Print or Type Name: J. PROVANSAL		Signature and date:					

Please print or type.

FACILITY COPY

NO. 710600

NON-HAZARDOUS WASTE DATA FORM

BESI #
253563

GENERATOR	Generator's Name and Mailing Address JOHN BODGER & SONS CO. P.O. BOX 2709 LOMPOC, CA		Generator's Site Address (if different than mailing address) JOHN BODGER & SONS CO. 1851 W. OLIVE AVE. LOMPOC, CA 93436		
	Generator's Phone: 805-735-6705				
	Container type removed from site: <input checked="" type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____		Container type transported to receiving facility: <input type="checkbox"/> Drums <input checked="" type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____		
	Quantity _____		Quantity _____ Volume _____		
	WASTE DESCRIPTION NON-HAZARDOUS WATER		GENERATING PROCESS WELL PURGING / DECON WATER		
	COMPONENTS OF WASTE WATER 1. _____ 99-100%		COMPONENTS OF WASTE 3. _____		
	2. TPH <1%		4. _____		
	Waste Profile _____		PROPERTIES: pH 7-10 <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____		
	HANDLING INSTRUCTIONS: _____				
	Generator Printed/Typed Name <i>Greg Delson (CDES)</i> Agent for Generator		Signature <i>Mary W. Delson</i>		Month Day Year <i>14 10 15</i>
The Generator certifies that the waste as described is 100% non-hazardous					
TRANSPORTER	Transporter 1 Company Name BELSHIRE		Phone# 949-460-5200		
	Transporter 1 Printed/Typed Name		Signature		
					Month Day Year
	Transporter Acknowledgment of Receipt of Materials				
	Transporter 2 Company Name NIETO & SONS TRUCKING, INC.		Phone# 714-990-6855		
RECEIVING FACILITY	Transporter 2 Printed/Typed Name		Signature		
					Month Day Year
	Transporter Acknowledgment of Receipt of Materials				
Designated Facility Name and Site Address DEMENNO KERDOON 2000 N. ALAMEDA ST. COMPTON, CA 90222		Phone# 310-537-7100			
Printed/Typed Name		Signature		Month Day Year	
Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.					

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DW8
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DW8.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 9:41:39 AM
<u>Confirmation Number:</u>	7098451733

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<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DW9
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DW9.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 9:43:59 AM
<u>Confirmation Number:</u>	6655065953

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<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DW10
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DW10.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 9:53:03 AM
<u>Confirmation Number:</u>	2916555821

GEOTRACKER ESI

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<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DW11
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DW11b.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 10:27:12 AM
<u>Confirmation Number:</u>	9543650031

GEOTRACKER ESI

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SUCCESS

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<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DW12
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DW12b.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 10:32:07 AM
<u>Confirmation Number:</u>	2636259615

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<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DE1
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DE1.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 10:53:59 AM
<u>Confirmation Number:</u>	3350931525

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

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Your GEO_BORE file has been successfully submitted!

<u>Submittal Type:</u>	GEO_BORE
<u>Facility Global ID:</u>	T10000000826
<u>Field Point:</u>	DV1
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	DV1.pdf
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/27/2015 10:40:03 AM
<u>Confirmation Number:</u>	1789224982

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GEOTRACKER ESI

UPLOADING A GEO_XY FILE

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Processing is complete. No errors were found!
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Submittal Type: GEO_XY
Report Title: 2014 Q4 Bodger Geo_XY
Facility Global ID: T10000000826
Facility Name: Bodger Seeds
File Name: GEO_XY.txt.zip
Organization Name: Donan Environmental Services, Inc.
Username: DES
IP Address: 107.194.17.22
Submittal Date/Time: 4/21/2015 12:18:55 PM
Confirmation Number: **9540487706**

[VIEW GEO_XY SUBMITTAL DATA ON MAP](#)

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<u>Submittal Type:</u>	GEO_Z
<u>Report Title:</u>	2014 Q4 Han Geo_Z
<u>Facility Global ID:</u>	T10000000826
<u>Facility Name:</u>	Bodger Seeds
<u>File Name:</u>	GEO_Z.txt.zip
<u>Organization Name:</u>	Donan Environmental Services, Inc.
<u>Username:</u>	DES
<u>IP Address:</u>	107.194.17.22
<u>Submittal Date/Time:</u>	4/21/2015 12:23:23 PM
<u>Confirmation Number:</u>	4854148209

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Submittal Type: GEO_WELL
Report Title: 2014 Q4 Bodger Geo_Well
Facility Global ID: T10000000826
Facility Name: Bodger Seeds
File Name: GEO_WELL.txt.zip
Organization Name: Donan Environmental Services, Inc.
Username: DES
IP Address: 107.194.17.22
Submittal Date/Time: 4/21/2015 12:32:21 PM
Confirmation Number: **8587976813**



STATE WATER RESOURCES CONTROL BOARD
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UPLOADING A EDF FILE

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Submittal Type: EDF
Report Title: DES technical Report for BODGER SEED 3RD QUARTER 2014
Report Type: CAP/RAP - Other Report
Facility Global ID: T10000000826
Facility Name: Bodger Seeds
File Name: 408079-DES(BODGER)33FULL.zip
Organization Name: Chemtek Environmental Laboratories.,Inc.
Username: MARTIN
IP Address: 71.165.37.53
Submittal Date/Time: 10/31/2014 1:08:05 PM
Confirmation Number: **2861436963**

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Submittal Type: EDF
Report Title: DES technical Report for BODGER SEED 3RD QUARTER 2014 add on
Report Type: Monitoring Report - Quarterly
Facility Global ID: T10000000826
Facility Name: Bodger Seeds
File Name: 409061-des(bodger2).zip
Organization Name: Chemtek Environmental Laboratories.,Inc.
Username: MARTIN
IP Address: 71.189.37.42
Submittal Date/Time: 4/23/2015 2:52:38 PM
Confirmation Number: **6208839178**

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Processing is complete. No errors were found!
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Submittal Type: EDF
Report Title: DES technical Report for BODGER SEED 3RD QUARTER 2014
Report Type: Other Report / Document
Facility Global ID: T10000000826
Facility Name: Bodger Seeds
File Name: 409083-DES(BODGER)5SOILFULL.zip
Organization Name: Chemtek Environmental Laboratories.,Inc.
Username: MARTIN
IP Address: 71.165.37.53
Submittal Date/Time: 10/30/2014 3:34:24 PM
Confirmation Number: 2922960400

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LABORATORY REPORTS

Chemtek Report (September 3, 2014)
Chemtek Report (September 29, 2014)
Chemtek Report (October 2, 2014)
Testing Engineers - Vertical V Report (September 24, 2014)

CHEMTEK ENVIRONMENTAL LABORATORIES INC.

"An environment-friendly company"

13554 Larwin Circle, Santa Fe Springs, CA 90670

Tel. (562) 926-9848 FAX (562) 926-8324

CA Dept of Health Accredited. (ELAP No. 1435)

CERTIFICATE OF ANALYSIS

Job No. 408079

Date: 09-03-14

This is the Certificate of Analysis for the following samples:

Client : DES
Contact person : Andy Donan
Project : Bodger Seed
Project Site : 1851 W. Olive Ave Lompoc, CA
Date of sample : 08-18/21-14
Date received : 08-22-14
Number of samples : 33
Sample matrix : soil
Sample condition : Good

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>DATE SAMPLED</u>	<u>LABORATORY NUMBER</u>
DW8-50	08-18-14	408079-01A
DW8-55	08-18-14	408079-02A
DW8-58	08-18-14	408079-03A
DW8-60	08-18-14	408079-04A
DW8-65	08-18-14	408079-05A
DW9-50	08-19-14	408079-06A
DW9-55	08-19-14	408079-07A
DW9-58	08-19-14	408079-08A
DW9-60	08-19-14	408079-09A
DW9-65	08-19-14	408079-10A
DW12-50	08-19-14	408079-11A
DW12-55	08-19-14	408079-12A
DW12-58	08-19-14	408079-13A
DW12-60	08-19-14	408079-14A
DW12-65	08-19-14	408079-15A
DE1-5	08-20-14	408079-16A
DE1-10	08-20-14	408079-17A
DE1-15	08-20-14	408079-18A
DE1-20	08-20-14	408079-19A
DE1-25	08-20-14	408079-20A
DE1-30	08-20-14	408079-21A
DE1-35	08-20-14	408079-22A
DE1-40	08-20-14	408079-23A
DE1-45	08-20-14	408079-24A
DE1-50	08-20-14	408079-25A
DE1-55	08-20-14	408079-26A

CONTINUED ON THE NEXT PAGE...

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>DATE SAMPLED</u>	<u>LABORATORY NUMBER</u>
DE1-60	08-21-14	408079-27A
DE1-65	08-21-14	408079-28A
DW10-50	08-21-14	408079-29A
DW10-55	08-21-14	408079-30A
DW10-58	08-21-14	408079-31A
DW10-60	08-21-14	408079-32A
DW10-65	08-21-14	408079-33A

Reviewed and Approved



Michael C.C. Lu
Laboratory Director

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

**Client : DES
Project : Bodger Seed**

Job No. : 408079

Date: 09-03-14

Analysis: EPA 8260B(Volatile Organics by GC-MS) Unit: µg/kg or ppb
page 1 of 2

**Sample ID : See below Sample date : 08/18/14
Sample matrix : soil Analysis date : 08/22/14**

Continued on next page

CLIENT SAMPLE ID	DW8-50	DW9-55	DW12-55	DE1-50	DW10-60	Reporting Limit
DILUTION FACTOR	1	1	1	50	1	(ppb)
COMPOUND	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Benzene	ND	ND	ND	2,230	ND	1
Bromobenzene	ND	ND	ND	ND	ND	1
Bromoform	ND	ND	ND	ND	ND	1
Bromomethane	ND	ND	ND	ND	ND	1
n-Butylbenzene	ND	ND	ND	280	2	1
sec-Butylbenzene	1	ND	ND	167	11	1
tert-Butylbenzene	2	ND	ND	ND	ND	1
Carbon Tetrachloride	ND	ND	ND	ND	ND	1
Chlorobenzene	ND	ND	ND	ND	ND	1
Chloroethane	ND	ND	ND	ND	ND	1
Chloroform	ND	ND	ND	ND	ND	1
Chloromethane	ND	ND	ND	ND	ND	1
2-Chlorotoluene	ND	ND	ND	ND	ND	1
4-Chlorotoluene	ND	ND	ND	ND	ND	1
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	1
Dibromochloromethane	ND	ND	ND	ND	ND	1
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1
Dibromomethane	ND	ND	ND	ND	ND	1
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	1
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	1
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	1
Dichlorodifluoromethane	ND	ND	ND	ND	ND	1
1,1-Dichloroethane	ND	ND	ND	ND	ND	1
1,2-Dichloroethane	ND	ND	ND	ND	ND	1
1,1-Dichloroethene	ND	ND	ND	ND	ND	1
cis-1,2 Dichloroethene	ND	ND	ND	ND	ND	1
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1
1,2-Dichloropropane	ND	ND	ND	ND	ND	1
1,3-Dichloropropane	ND	ND	ND	ND	ND	1
2,2-Dichloropropane	ND	ND	ND	ND	ND	1
1,1-Dichloropropene	ND	ND	ND	ND	ND	1

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

Job No. : 408079

Date: 09-03-14

Analysis: EPA 8260B (Volatile Organics by GC-MS) Unit:ug/kg or ppb
page 2 of 2

Sample ID : See below
Sample matrix : soil

Sample date : 08/18-21/14
Analysis date : 08/22-27-14

CLIENT SAMPLE ID	DW8-50	DW9-55	DW12-55	DE1-50	DW10-60	Reporting
DILUTION FACTOR	1	1	1	50	1	Limit
COMPOUND	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1
Ethylbenzene	2	ND	ND	3,660	ND	1
Hexachlorobutadiene	ND	ND	ND	ND	ND	1
Isopropylbenzene	1	ND	ND	512	ND	1
4-Isopropyltoluene	1	ND	ND	220	ND	1
Methylene Chloride	ND	ND	ND	ND	ND	5
Naphthalene	5	ND	ND	1,040	4	1
n-propylbenzene	2	ND	ND	1,320	ND	1
Styrene	ND	ND	ND	ND	ND	1
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	1
Tetrachloroethene (PCE)	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	ND	1
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	1
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	1
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1
Trichloroethene (TCE)	ND	ND	ND	ND	ND	1
Trichlorofluoromethane	ND	ND	ND	ND	ND	1
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1
1,2,4-Trimethylbenzene	6	ND	ND	6,120	ND	1
1,3,5-Trimethylbenzene	ND	ND	ND	1,990	ND	1
Vinyl Chloride	ND	ND	ND	ND	ND	1
Total Xylenes	3	ND	ND	3,900	ND	2
Ethanol	ND	ND	ND	ND	ND	250
Methyl Tert. Butyl Ether(MTBE)	ND	ND	ND	ND	ND	1
Ethyl Tert. Butyl Ether (ETBE)	ND	ND	ND	ND	ND	1
Diisopropyl Ether (DIPE)	ND	ND	ND	ND	ND	1
Tert. Amyl Methyl Ether (TAME)	ND	ND	ND	ND	ND	1
T-Butyl Alcohol (TBA)	ND	ND	ND	ND	ND	20
2-Butanone (MEK)	ND	ND	ND	ND	ND	10
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	10
2-Hexanone	ND	ND	ND	ND	ND	10
Acetone	ND	ND	ND	ND	ND	40

ND: NOT DETECTED BELOW (DF x Detection Limit)
DF: DILUTION FACTOR

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

**Client : DES
Project : Bodger Seed**

Job No. : 408079

Date: 09-03-14

Analysis: EPA 8015M (TPH Gas) Unit: mg/kg or ppm

Sample ID : See below

Sample matrix : soil

Sample ID	DF	Result	Sample Date	Analysis Date
DW8-50	1	1.08	08-18-14	08-22-14
DW8-55	1	0.23	08-18-14	08-22-14
DW8-58	1	ND	08-18-14	08-22-14
DW8-60	1	ND	08-18-14	08-22-14
DW8-65	1	ND	08-18-14	08-22-14
DW9-50	1	ND	08-19-14	08-22-14
DW9-55	1	0.80	08-19-14	08-22-14
DW9-58	1	ND	08-19-14	08-22-14
DW9-60	1	ND	08-19-14	08-22-14
DW9-65	1	ND	08-19-14	08-22-14
DW12-50	1	ND	08-19-14	08-25-14
DW12-55	1	ND	08-19-14	08-25-14
DW12-58	1	ND	08-19-14	08-25-14
DW12-60	1	ND	08-19-14	08-25-14
DW12-65	1	ND	08-19-14	08-25-14
DE1-5	1	ND	08-20-14	08-25-14
DE1-10	1	ND	08-20-14	08-25-14
DE1-15	1	ND	08-20-14	08-25-14
DE1-20	1	ND	08-20-14	08-25-14
DE1-25	1	ND	08-20-14	08-25-14
DE1-30	1	ND	08-20-14	08-25-14
DE1-35	1	1.40	08-20-14	08-25-14
DE1-40	1	0.60	08-20-14	08-27-14
DE1-45	20	69.7	08-20-14	08-27-14
DE1-50	50	800	08-20-14	08-27-14
DE1-55	200	459	08-20-14	09-03-14
DE1-60	10	3.56	08-21-14	08-29-14
DE1-65	40	22.1	08-21-14	09-03-14
DW10-50	2	ND	08-21-14	08-27-14
DW10-55	1	ND	08-21-14	08-27-14
DW10-58	1	2.14	08-21-14	08-27-14
DW10-60	1	16.9	08-21-14	08-27-14
DW10-65	1	ND	08-21-14	08-27-14
Method Blank		ND		08-27-14
Detection Limit		0.20		

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT

QA/QC REPORT

EPA 8260B
Unit: $\mu\text{g}/\text{kg}$

Job No. : 408079
Lab Sample ID : 408079-01A
Date Performed : 08-27-14

Analyte	Blk Res	%MS	%MSD	RPD	ACC
1,1-Dichloroethene	ND	100.6	126.9	23.1%	0-30
Benzene	ND	105.1	115.9	9.8%	0-30
Trichloroethylene	ND	101.2	114.4	12.2%	0-30
Toluene	ND	113.9	112.8	1.0%	0-30
Chlorobenzene	ND	86.9	84.8	2.4%	0-30

QA/QC REPORT

EPA 8015M (TPH GAS)
Unit: ppm or mg/KG

Job No. : 408079
Lab Sample ID : 408079-03A
Date Performed : 08-22-14

Analyte	Blk Result	%MS	%MSD	RPD	ACC
Gasoline (TPH)	ND	114.2	101.8	11.5%	0-30

%MS = % Matrix Spike Recovery *(Control Limits = 70% - 130%)
%MSD = % Matrix Spike Duplicate Recovery *(Control Limits = 70% - 130%)
RPD = Relative Percent Difference
ACC = Acceptance Control Criteria Limits

CHEMTEK Environmental Laboratories Inc.

CHAIN OF CUSTODY RECORD

四庫全書

1988/89 Spring, Soundings, CA 9088/8

Tel (562) 826-9848 FAX (562) 926-9224 Email: Chard@compuserve.com

CA Dept of Health Accredited. (ELAP No. 1435) & Mobile Lab (ELAP No. 2822)
P.O. Box 122, 125 15th St., LAX (312) 728-0324
Email: Chemieklaus@hotmail.com

CUSTOMER INFORMATION

PROJECT INFORMATION						ANALYSIS REQUIRED	
COMPANY NAME: Danner Environmental Services		PROJECT CONTACT: Greg Delson		ADDRESS: PO Box 1839			
CITY, STATE, ZIP: Visalia, CA	PHONE: 760-639-3600	EMAIL: ED@DES4X2.COM		FAX: 760 639-3603			
PROJECT INFORMATION PROJECT NAME: <u>Bucher Seeds</u> SITE ADDRESS: 1851 W. Olive Ave., Longac., CA SAMPLED BY: <u>ED@DES4X2.COM</u>						<input type="checkbox"/> EDF <input type="checkbox"/> TAT <input type="checkbox"/> NORM <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> Other NO. OF CONT	
SAMPLE ID	DATE	TIME	SAMPLED	TYPE *	REMARKS		
Dw850	8/16	10:35	50:1				
Dw855		11:23					
Dw858		11:35					
Dw860		11:50					
Dw865		12:15					
Dw950	8/19	8:18					
Dw955		8:57					
Dw958		9:15					
Dw960		9:23					
Dw965		9:47					
Dw1250		1:35					
Dw1255		1:50	2:15				
Dw1258		2:30					
Dw1260		2:45					
Dw1265		3:00					
DE110	8/20	12:00					
REINQUISITION BY: DES Bunker						PRINT NAME: Brandon Givens	SIGNATURE: <u>Brandon Givens</u>
RECEIVED BY:						RECEIVED FOR LABORATORY BY: <u>Martink</u>	
NOTE: Samples are discarded 30 days after results are reported unless otherwise specified.						DATE: 8/22/14 TIME: 5:45	
RELINQUISHED BY:						RELINQUISHED BY:	
RECEIVED BY:						RECEIVED FOR LABORATORY BY:	
CAM 17 Metals						Chen Li	
Sulfide, Cyanide, O&G						5/22/14 5:45	
PH, Conductivity, Turbidity						5/22/14 5:45	
COD / TSS						5/22/14 5:45	
TRPH (418.1)						5/22/14 5:45	
OXYGENATES (8260 B) SHORT						5/22/14 5:45	
VOCs (8260 B) FULL						5/22/14 5:45	
BTEX/MTBE (8021 B)						5/22/14 5:45	
8015M TPH D						5/22/14 5:45	
8015M TPH G						5/22/14 5:45	
Dw850						5/22/14 5:45	
Dw855						5/22/14 5:45	
Dw858						5/22/14 5:45	
Dw860						5/22/14 5:45	
Dw865						5/22/14 5:45	
Dw950						5/22/14 5:45	
Dw955						5/22/14 5:45	
Dw958						5/22/14 5:45	
Dw960						5/22/14 5:45	
Dw965						5/22/14 5:45	
Dw1250						5/22/14 5:45	
Dw1255						5/22/14 5:45	
Dw1258						5/22/14 5:45	
Dw1260						5/22/14 5:45	
Dw1265						5/22/14 5:45	
DE110						5/22/14 5:45	

Type: SO-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OI-Other

Coloration: **White** with **black** / **yellow** to **cheater** / **Pink** to **courier**

CHEMTEK Environmental Laboratories Inc.

13554 Larwin Circle, Santa Fe Springs, CA 90670

000670

CHAIN OF CUSTODY RECORD

Tel. (562) 926-9848 FAX (562) 926-8324 Email: ChemtekLabs@hotmail.com

CA Dept of Health Accredited. (ELAP No. 1435) & Mobile | qb (ELAP No. 2629)

CUSTOMER INFORMATION

CUSTOMER INFORMATION					
COMPANY NAME:	Dawn Environmental Services Inc				
PROJECT CONTACT:	Greg Delsoe				
ADDRESS:	PO Box 1839				
CITY, STATE, ZIP:	Vista, CA 92085				
PHONE:	760-639-3600				
EMAIL:	(714) 255-3603				
PROJECT INFORMATION					
PROJECT NAME	Boggs Seeds				
SITE ADDRESS:	1851 W. Olive Ave Lompoc				
SAMPLED BY:	Brandi				
SAMPLE ID	DATE	TIME	TYPE *	EDF	TAT
DEI 15	8/20	12:17	Soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 20		12:25		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 25		12:34		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 30		12:50		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 35		12:00	1:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 40		1:14		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 45		1:33		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 50		1:50		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 55		2:15		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 60		7:20		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEI 65		7:40		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DW1050		12:00		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DW1055		12:46		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DW1058		12:55		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DW1060		1:02		<input type="checkbox"/>	<input checked="" type="checkbox"/>
DW1065		1:30		<input type="checkbox"/>	<input checked="" type="checkbox"/>
SIGNATURE	PRINT NAME				
REINQUISITION BY:	DPS Branch of Dawn Environmental Services Inc				
RECEIVED BY:	Mitali				
REINQUISITION BY:	Dawn Environmental Services Inc				
RECEIVED BY:	Mitali				
NOTE: Samples are discarded 30 days after results are reported unless otherwise specified.					
DATE	TIME				
5/22/14	5:45pm				
DATE	TIME				
5/22/14	5:45pm				

*Type: SO-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OT-Other

DISTRIBUTION: **WHITE** with report / **YELLOW** to CHEMTEK / **PINK** to courier

CHEMTEK ENVIRONMENTAL LABORATORIES INC.

"An environment-friendly company"

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Tel. (562) 926-9848 FAX (562) 926-8324

CA Dept of Health Accredited. (ELAP No. 1435)

RECEIVED

OCT 27 2014

DONAN ENVIRONMENTAL
SERVICES

CERTIFICATE OF ANALYSIS

Job No. 409061

Date: 09-29-14

This is the Certificate of Analysis for the following samples:

Client : DES
Contact person : Andy Donan
Project : Bodger
 1851 W. Olive Ave
 Lompoc, CA
Date of sample : 09-16-14
Date received : 09-19-14
Number of samples : 12
Sample matrix : Groundwater
Sample condition : Good

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>DATE SAMPLED</u>	<u>LABORATORY NUMBER</u>
------------------------------	---------------------	--------------------------

MW6P	09/16/14	409061-01A
MW1P	09/16/14	409061-02A
DE1	09/16/14	409061-03A
MW3P	09/16/14	409061-04A
MW5P	09/16/14	409061-05A
MW4P	09/16/14	409061-06A
DW12	09/16/14	409061-07A
DW9	09/16/14	409061-08A
DW8	09/16/14	409061-09A
MW7P	09/16/14	409061-10A
MW2P	09/16/14	409061-11A
DW10	09/16/14	409061-12A

Reviewed and Approved

M

f

Michael C.C. Lu
Laboratory Director

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

**Client : DES
Project : Bodger**

Job No. : 409061

Date: 09-29-14

Analysis: EPA 8260B (Volatile Organics by GC-MS) Unit: ppb or ug/l

**Sample Received : 09-19-14
Sample matrix : Groundwater**

Compound	MW6P	MW1P	DE1	MW3P	MW5P	MW4P	DL
Benzene	3,380*	16,400*	5,240*	6,000*	11,700*	5,440*	1
Toluene	3	1,260	31	12	15	4	1
Ethylbenzene	1,180*	2,020	650*	1,160*	1,610*	1,370*	1
Total Xylenes	860	7,080	287	2,000*	4,200*	1,870*	2
MTBE	ND	ND	ND	ND	ND	ND	1
ETBE	ND	ND	ND	ND	ND	ND	1
DIPE	16	263	94	45	80	35	1
TAME	ND	ND	ND	ND	ND	ND	1
TBA	87	660	380	134	250	90	20
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	1
1,2-Dichloroethane	128	5,880*	3,080*	317	1,490*	413	1
n-Butylbenzene	10	26	6	11	15	17	1
Sec-Butylbenzene	6	ND	4	6	8	10	1
Tert-Butylbenzene	ND	ND	ND	ND	ND	ND	1
Naphthalene	361	476	153	732	580	650*	1
Isopropylbenzene	66	101	37	74	93	73	1
n-Propylbenzene	121	200	70	129	169	147	1
1,2,4-Trimethylbenzene	653*	1,300	72	1,320*	1,100	1,180*	1
1,3,5-Trimethylbenzene	203	340	113	227	281	246	1
4-Isopropyltoluene	11	20	7	11	14	17	1
Sample Date	09-16-14	09-16-14	09-16-14	09-16-14	09-16-14	09-16-14	
Analysis Date	09-23-14	09-30-14	09-23-14	09-23-14	09-30-14	09-23-14	
DF	2	20	2	2	5	2	
Additional Run	*100X	*100X	*100x	*500x	*100x	*100x	

DL: DETECTION LIMIT

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT

Client : DES
 Project : Bodger

Job No. : 409061

Date: 09-29-14

Analysis: EPA 8260B (Volatile Organics by GC-MS) Unit: ppb or ug/l

Sample Received : 09-19-14
 Sample matrix : Groundwater

Compound	DW12	DW9	DW8	MW7P	MW2P	DW10	DL
Benzene	2	ND	ND	ND	41	ND	1
Toluene	ND	ND	ND	ND	ND	ND	1
Ethylbenzene	14	ND	ND	ND	209	ND	1
Total Xylenes	7	ND	ND	ND	195	ND	2
MTBE	ND	ND	ND	ND	ND	ND	1
ETBE	ND	ND	ND	ND	ND	ND	1
DIPE	ND	ND	ND	ND	10	2	1
TAME	ND	ND	ND	ND	ND	ND	1
TBA	ND	ND	ND	ND	ND	ND	20
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	1
1,2-Dichloroethane	ND	ND	ND	ND	80	6	1
n-Butylbenzene	ND	ND	ND	ND	3	ND	1
Sec-Butylbenzene	3	ND	ND	ND	3	ND	1
Tert-Butylbenzene	3	ND	ND	ND	ND	ND	1
Naphthalene	6	ND	ND	ND	8	ND	1
Isopropylbenzene	7	ND	ND	ND	20	ND	1
n-Propylbenzene	9	ND	ND	ND	34	ND	1
1,2,4-Trimethylbenzene	15	ND	ND	ND	17	ND	1
1,3,5-Trimethylbenzene	ND	ND	ND	ND	19	ND	1
4-Isopropyltoluene	12	ND	ND	ND	5	ND	1
Sample Date	09-16-14	09-16-14	09-16-14	09-16-14	09-16-14	09-16-14	
Analysis Date	09-23-14	09-23-14	09-23-14	09-23-14	09-23-14	09-23-14	
DF	1	1	1	1	1	1	
Additional Run							

DL: DETECTION LIMIT

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

Client : DES
Project : Bodger

Job No. : 409061

Date: 09-29-14

Analysis: EPA 8015M (TPH Gas) Unit: mg/L or ppm

Sample Received : 09-19-14
Sample matrix : Groundwater

Sample ID	DF	Result	Sample Date	Analysis Date
MW6P	100	52.2	09-16-14	09-23-14
MW1P	20	88.1	09-16-14	09-23-14
DE1	100	23.5	09-16-14	09-23-14
MW3P	500	55.1	09-16-14	09-23-14
MW5P	100	53.2	09-16-14	09-23-14
MW4P	100	54.9	09-16-14	09-23-14
DW12	1	4.22	09-16-14	09-23-14
DW9	1	0.25	09-16-14	09-23-14
DW8	1	ND	09-16-14	09-23-14
MW7P	1	ND	09-16-14	09-23-14
MW2P	1	5.80	09-16-14	09-23-14
DW10	1	0.17	09-16-14	09-23-14
Method Blank		ND	09-23-14	09-23-14
Detection Limit		0.10		

DL: DETECTION LIMIT

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT

QA/QC REPORT

EPA 8260B
Unit: ppb

Job No. : 409061
Lab Sample ID : 409061-09A
Date Performed : 09-23-14

Analyte	Blank Result	Spike Conc	MS % Rec.	MSD % Rec	% RPD	% RPD Accept Limit	% Rec Accept Limit
1,1-Dichloroethene	ND	25	80.2	77.6	3.3%	30	70-130
Benzene	ND	25	102.7	99.6	3.1%	30	70-130
Trichloroethylene	ND	25	107.3	102.9	4.2%	30	70-130
Toluene	ND	25	105.5	98.8	6.6%	30	70-130
Chlorobenzene	ND	25	103.5	94.7	8.9%	30	70-130

QA/QC REPORT

EPA 8015M TPH Gas
Unit: ppm

Job No. : 409061
Lab Sample ID : 409061-09A
Date Performed : 09-23-14

Analyte	METHOD BLANK	MS % Rec.	MSD % Rec	% RPD	% RPD Accept Limit	% Rec Accept Limit
GAS (TPH)	ND	112.3	109.6	2.4%	30	70-130

CHEMTEK Environmental Laboratories Inc.

13554 Larwin Circle, Santa Fe Springs, CA 90670

90670

CHAIN OF CUSTODY RECORD

0/804

- 1 -

SCHISTOSIS 147

CUSTOMER INFORMATION		ANALYSIS REQUIRED											
COMPANY NAME:	Davis Environmental Services Inc.												
PROJECT CONTACT:	Gary Delsor												
ADDRESS:	P.O. Box 1835												
CITY, STATE, ZIP:	Vista, CA												
PHONE:	760-639-3600												
FAX:	760-639-3603												
EMAIL:	GD@DESXYZ.COM												
PROJECT INFORMATION													
PROJECT NAME	Rodger Z												
SITE ADDRESS:	1851 W. Olive Ave												
SAMPLED BY:	Benton Ginos	<input type="checkbox"/> EDF	<input checked="" type="checkbox"/> TAT	<input type="checkbox"/> NORM	<input type="checkbox"/> 24 hr	<input type="checkbox"/> 48 hr	<input type="checkbox"/> Other						
DATE													
SAMPLE ID	MW1P	SAMPLED	SAMPLED	TYPE *	REMARKS								
	9/16/14	10:30	CD	3 vials 5 voas each									
DE1		10:50											
MW2P		11:00											
MW3P			11:10										
MW5P			11:30										
MW4P				11:45									
DW12				10:36									
DW9				11:16									
DW8				11:15									
MW1P				11:36									
MW2P				12:15									
DW10				12:30	V								
RELINQUISHED BY:	Bimber J:		Bender firms		PRINT NAME		COMPANY NAME		DATE		TIME		
RECEIVED BY:	<u>Jeanne D</u>		Gretchen Delsor				Davis Environmental Services		9/18/14		1:30		
RELINQUISHED BY:	<u>Jeanne D</u>		Gretchen Delsor				Davis Environmental Services		9/18/14		1:30		
RECEIVED FOR LABORATORY BY:	<u>Jeanne D</u>		Gretchen Delsor				Davis Environmental Services		9/19/14		10:45		
RELINQUISHED BY:	<u>Jeanne D</u>		Gretchen Delsor				Davis Environmental Services		9/19/14		10:45		
Distribution:	WHITE with report / YELLOW to CHEMTEK / PINK												

CHEMTEK ENVIRONMENTAL LABORATORIES INC.

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Tel. (562) 926-9848 FAX (562) 926-8324

CA Dept of Health Accredited. (ELAP No. 1435)

CERTIFICATE OF ANALYSIS

Job No. 409083

Date: 10-02-14

This is the Certificate of Analysis for the following samples:

Client	:	DES	RECEIVED
Contact person	:	Andy Donan	OCT 27 2014
Project	:	Bodger Seed	DONAN ENVIRONMENTAL
Project Site	:	1851 W. Olive Ave Lompoc, CA	SERVICES
Date of sample	:	09-26-14	
Date received	:	09-29-14	
Number of samples	:	5	
Sample matrix	:	soil	
Sample condition	:	Good	

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>DATE SAMPLED</u>	<u>LABORATORY NUMBER</u>
------------------------------	---------------------	--------------------------

DW11-50	09-26-14	409083-01A
DW11-56	09-26-14	409083-02A
DW11-58	09-26-14	409083-03A
DW11-60	09-26-14	409083-04A
DW11-65	09-26-14	409083-05A

Reviewed and Approved:

For Michael C.C. Lu
Laboratory Director

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

Client : DES
Project : Bodger Seed

Jcb No. : 409083

Date: 10-02-14

Analysis: EPA 8260B (Volatile Organics by GC-MS) Unit: µg/kg or ppb
 page 1 of 2

Sample ID : See below **Sample date** : 09/26/14
Sample matrix : soil **Analysis date** : 09/30/14

CLIENT SAMPLE ID	DW11-50	DW11-55	DW11-58	DW11-60	DW11-65	Reporting
DILUTION FACTOR	1	1	1	1	1	Limit
COMPOUND	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Benzene	ND	ND	ND	ND	ND	1
Bromobenzene	ND	ND	ND	ND	ND	1
Bromoform	ND	ND	ND	ND	ND	1
Bromomethane	ND	ND	ND	ND	ND	1
n-Butylbenzene	ND	ND	ND	ND	ND	1
sec-Butylbenzene	ND	ND	ND	ND	ND	1
tert-Butylbenzene	ND	ND	ND	ND	ND	1
Carbon Tetrachloride	ND	ND	ND	ND	ND	1
Chlorobenzene	ND	ND	ND	ND	ND	1
Chloroethane	ND	ND	ND	ND	ND	1
Chloroform	ND	ND	ND	ND	ND	1
Chloromethane	ND	ND	ND	ND	ND	1
2-Chlorotoluene	ND	ND	ND	ND	ND	1
4-Chlorotoluene	ND	ND	ND	ND	ND	1
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	1
Dibromochloromethane	ND	ND	ND	ND	ND	1
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1
Dibromomethane	ND	ND	ND	ND	ND	1
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	1
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	1
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	1
Dichlorodifluoromethane	ND	ND	ND	ND	ND	1
1,1-Dichloroethane	ND	ND	ND	ND	ND	1
1,2-Dichloroethane	ND	ND	ND	ND	ND	1
1,1-Dichloroethene	ND	ND	ND	ND	ND	1
cis-1,2 Dichloroethene	ND	ND	ND	ND	ND	1
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1
1,2-Dichloropropane	ND	ND	ND	ND	ND	1
1,3-Dichloropropane	ND	ND	ND	ND	ND	1
2,2-Dichloropropane	ND	ND	ND	ND	ND	1
1,1-Dichloropropene	ND	ND	ND	ND	ND	1

ND : NOT DETECTED BELOW (DF x Detection Limit)

DF : DILUTION FACTOR

**CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT**

Job No. : 409083

Date: 10-02-14

Analysis: EPA 8260B (Volatile Organics by GC-MS) Unit:ug/kg or ppb
page 2 of 2

**Sample ID : See below
Sample matrix : soil**

**Sample date : 09-26-14
Analysis date : 09-30-14**

CLIENT SAMPLE ID	DW11-50	DW11-56	DW11-58	DW11-60	DW11-65	Reporting Limit
DILUTION FACTOR	1	1	1	1	1	
COMPOUND	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1
Ethylbenzene	ND	ND	ND	ND	ND	1
Hexachlorobutadiene	ND	ND	ND	ND	ND	1
Isopropylbenzene	ND	ND	ND	ND	ND	1
4-Isopropyltoluene	ND	ND	ND	ND	ND	1
Methylene Chloride	ND	ND	ND	ND	ND	5
Naphthalene	ND	ND	ND	ND	ND	1
n-propylbenzene	ND	ND	ND	ND	ND	1
Styrene	ND	ND	ND	ND	ND	1
1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	1
Tetrachloroethene (PCB)	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	ND	1
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	1
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	1
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1
Trichloroethene (TCE)	ND	ND	ND	ND	ND	1
Trichlorofluoromethane	ND	ND	ND	ND	ND	1
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	1
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1
Vinyl Chloride	ND	ND	ND	ND	ND	1
Total Xylenes	ND	ND	ND	ND	ND	2
Ethanol	ND	ND	ND	ND	ND	250
Methyl Tert. Butyl Ether(MTBE)	ND	ND	ND	ND	ND	1
Ethyl Tert. Butyl Ether (ETBE)	ND	ND	ND	ND	ND	1
Diisopropyl Ether (DIPE)	ND	ND	ND	ND	ND	1
Tert. Amyl Methyl Ether (TAME)	ND	ND	ND	ND	ND	1
T-Butyl Alcohol (TBA)	ND	ND	ND	ND	ND	20
2-Butanone (MEK)	ND	ND	ND	ND	ND	10
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	10
2-Hexanone	ND	ND	ND	ND	ND	10
Acetone	ND	ND	ND	ND	ND	40

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT

Client : DES
Project : Bodger Seed

Job No. : 409083

Date: 10-02-14

Analysis: EPA 8015M (TPH Gas) Unit: mg/kg or ppm

Sample ID : See below

Sample matrix : soil

Sample ID	DF	Result	Sample Date	Analysis Date
DW11-50	1	ND	09-26-14	09-30-14
DW11-56	1	ND	09-26-14	09-30-14
DW11-58	1	ND	09-26-14	09-30-14
DW11-60	1	ND	09-26-14	09-30-14
DW11-65	1	ND	09-26-14	09-30-14
Method Blank		ND	09-30-14	09-30-14
Detection Limit		0.20		

ND: NOT DETECTED BELOW (DF x Detection Limit)

DF: DILUTION FACTOR

CHEMTEK ENVIRONMENTAL LAB.
LABORATORY ANALYSIS REPORT

QA/QC REPORT

EPA 8260B
Unit: ppb

Job No. : 409083
Lab Sample ID : 409083-02A
Date Performed : 09-30-14

Analyte	Blank Result	Spike Conc	MS % Rec.	MSD % Rec	% RPD	% RPD Accept Limit	% Rec Accept Limit
1,1-Dichloroethene	ND	25	98.5	89.9	9.1%	30	70-130
Benzene	ND	25	119.6	101.9	16.0%	30	70-130
Trichloroethylene	ND	25	128.0	97.3	27.3%	30	70-130
Toluene	ND	25	96.3	81.8	16.3%	30	70-130
Chlorobenzene	ND	25	96.2	77.5	21.5%	30	70-130

QA/QC REPORT

EPA 8015M TPH Gas
Unit: ppm

Job No. : 409083
Lab Sample ID : 409083-01A
Date Performed : 09-30-14

Analyte	METHOD BLANK	MS % Rec.	MSD % Rec	% RPD	% RPD Accept Limit	% Rec Accept Limit
GAS (TPH)	ND	89.5	80.2	11.0%	30	70-130

CHEMTEK Environmental Laboratories Inc.

13554 Larwin Circle, Santa Fe Springs, CA 90670

0670

CHAIN OF CUSTODY RECORD

Tel. (562) 926-9848 FAX (562) 926-8324 Email: ChemtekLabs@hotmail.com

CA Dept of Health Accredited: (ELAP No. 1435) & Mobile Lab (ELAB No. 2628)

CUSTOMER INFORMATION

*Type: so-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OT-Other

Distribution: WHITE with report / YELLOW to CHEMTEK / PINK to courier



REPORT OF TESTING ON SOIL BULK MATERIAL

Date: September 24, 2014
Client: Donan Environmental Services
Address: 770 Sycamore Ave.
Vista, CA, 92083

Job No: 149052.00
Report No: 3423

Location: 1851 Olive St, Bodger Seed
Submitted: 8/28/2014 By: Client
Source of Material: Soil Sampled on 8/20/2014
Location Sampled: DW10
Type of Sample: Bulk

TEST STANDARDS ARE ASTM (unless otherwise specified)

TEST	Sample	TEST STD
	110559	AASHTO/ASTM
SPECIFIC GRAVITY	2.34	T100
WEIGHT FRACTION OF	5.78%	D2974
ORGANIC CARBON		

Gene Custenborder, CEG 1319

9-23-2014

Date

Donan Environmental Services
770 Sycamore Ave.
Vista, CA, 92083

September 24, 2014

JOB No:
Report No:

149052
3423

Project: Laboratory Testing

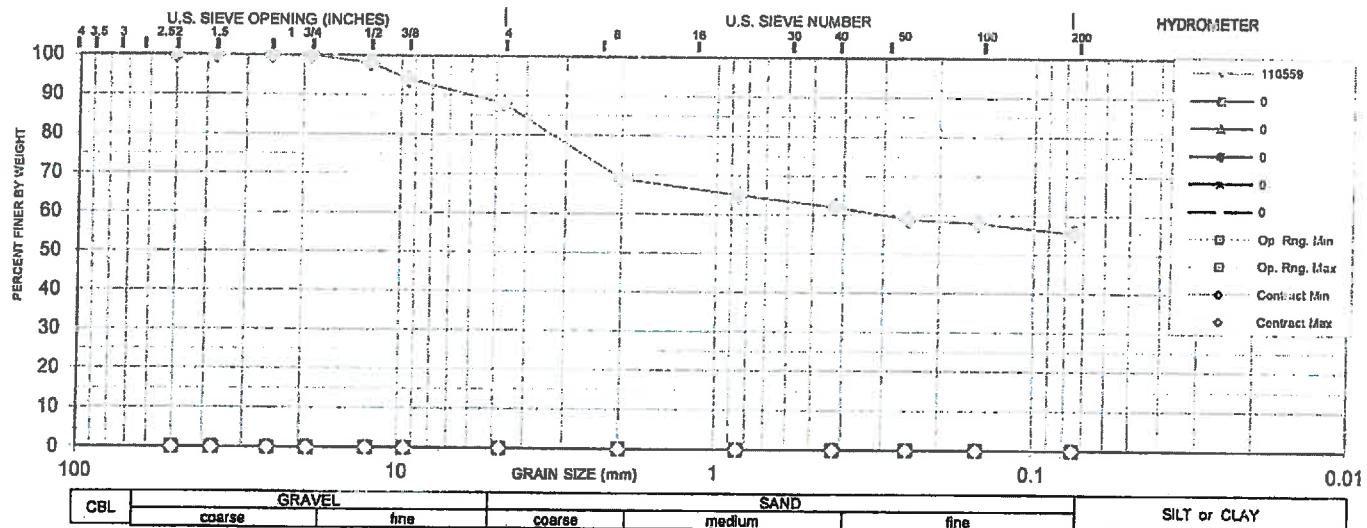
REPORT OF SIEVE ANALYSIS TEST

ASTM D422 - Soil

SAMPLE INFO:

110559

Material	NR						
Color	NR						
Sample Location	NR						
Date Sampled	8/20/2014						
Sampled By	Client						
Date Tested	9/2/2014						
Tested By	D. Delgado						



CBL	GRAVEL		SAND			SILT or CLAY
	coarse	fine	coarse	medium	fine	

Sample ID:	110559				
Sieve Size	% Passing				
63mm (2 1/2")					
50mm (2")					
37.5mm (1 1/2")	100				
25mm (1")	100				
19mm (3/4")	100				
12.5mm (1/2")	98				
9.5mm (3/8")	94				
4.75mm (#4)	88				
2.36mm (#8)	69				
1.18mm (#16)	65				
600 µm (#30)	62				
3000 µm (#50)	59				
150 µm (#100)	58				
75 µm (#200) washu	56				
Fineness Modulus	1.7				
Shape (sand & gravel)	N.R.				
Hardness (sand & gravel)	N.R.				
Specific Gravity	2.65				
Coef. of Curvature (C_C)	0.1				
Coef. of Uniformity (C_U)	1146.7				
% Gravel	12.0				
% Sand	32.5				
% Fines	55.5				
USCS Class:	Silt/Clay				

Notes: Hardness: H&D = Hard & Durable; W&F = Weathered & Friable
N.R.: Not Recorded; N/A: Not Available.

 Reviewed By: