May 1, 2019 Certified Mail 7016 2710 0000 2635 6192

Mr. Dean Soiland, President
BoDean Company, Inc.
1060 North Dutton Avenue
Santa Rosa, CA 95401
dsoiland@bodeanco.com

Dear Mr. Soiland:

Subject: **Notice of Violation** of State Water Resources Control Board Order No. 2014-0057-DWQ *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit) and Denial of Proposed Extension to Submit Level 2 ERA Technical Report

File: Mark West Quarry, 4611 Porter Creek Road, Sonoma County
WDID No. 1 49I009813

As the operator of the Mark West Quarry, you are hereby given notice that you violated the following provisions of the Industrial General Permit regarding storm water discharges to Porter Creek from the Mark West Quarry (Site):

- Section III. Discharge Prohibitions, Subsection C
- Section V. Effluent Limitations, Subsection A
- Section VI. Receiving Water Limitations Subsections A, B, and C

These unauthorized discharges also violate the federal Clean Water Act and may be subject to administrative liability pursuant to California Water Code section 13385, subdivision (c).

Additionally, your January 9, 2019 extension request for the submittal of a Level 2 Exceedance Response Action (ERA) Technical Report is hereby denied.

I. Background

The BoDean Company, Inc. owns, and you operate, the Site located at 4611 Porter Creek Road in Sonoma County, east of Santa Rosa. The Site is an upland hard rock quarry known as Mark West Quarry, adjacent to Porter Creek Road and Porter Creek. Mark West Quarry produces both crushed and broken stone at the Site.

On May 27, 2016, the Regional Water Board issued a Notice of Violation (2016 NOV) for violations of Discharge Prohibitions and Effluent Limitations of the Industrial General Permit, associated with discharges of turbid storm water from the Site into Porter Creek. The 2016 NOV described the discharges and acknowledged corrective actions you took to address the conditions of non-compliance with the Industrial General Permit.

According to Storm Water Multiple Application and Report Tracking System (SMARTS), the Site entered Level 2 status on August 8, 2017, due to exceedances of total suspended solids (TSS)

numeric action levels (NALs). In December 2017, BoDean Co, Inc submitted an ERA Level 2 Action Plan for the Mark West Quarry. The ERA included an evaluation of the Site drainage areas and potential pollutant sources, and provided a plan and schedule to evaluate additional Best Management Practices (BMPs) for implementation at the Site, with a final report proposed to be submitted January 1, 2019. On January 9, 2019, your consultant, Environmental Pollution Solutions, LLC, uploaded into SMARTS an amendment to the ERA proposing to extend the due date for the ERA Level 2 Technical Report from January 1, 2019, to July 1, 2019. The amendment provided no reasons for the proposed time extension.

On December 16, 2018, Regional Water Board staff observed an apparent discharge of sediment-laden water to Porter Creek, and forwarded photographs to the Regional Water Board's Stormwater unit, showing sediment in Porter Creek downstream of the Site (Attachment 1, Photos 1 and 2). On December 17, 2018, Regional Water Board staff inspected Porter Creek in the vicinity of the Site, and subsequently inspected the Site, in the company of Bryan Goodrich, a Site representative. During the December 17 inspection, Regional Water Board staff documented sediment accumulation below an outfall on the east side of the Site, adjacent to Porter Creek (December 17, 2018, inspection report [Attachment 1], Photo 3).

During a storm event on January 9, 2019, Regional Water Board staff inspected the eastern outfall from the Site into Porter Creek, in the company of site representatives Anthony Boyle and Bryan Goodrich. During the inspection, staff observed sediment-laden storm water flowing from the Site, down a drainage, into a culvert crossing Porter Creek Road, and discharging into Porter Creek (January 9, 2019, inspection report [Attachment 2], Photos 1 through 3). Staff collected water samples from Porter Creek, the eastern culvert, and the settling tanks, and subsequently had them tested for total suspended solids (TSS), suspended solids concentration (SSC), and turbidity. Attachment 2, Table A, shows the analytical results, demonstrating increased levels of all three parameters in Porter Creek downstream of the eastern outfall from the Site.

During a storm event on January 16, 2019, Regional Water Board staff inspected the eastern and western outfalls from the Site into Porter Creek. Again, staff observed sediment-laden storm water flowing from the Site, down the eastern drainage, and into Porter Creek (January 16, 2019, inspection report [Attachment 3], Photos 1 through 3). Staff again collected water samples and had them tested for turbidity. Attachment 3, Table A, shows the analytical results, demonstrating increased turbidity (approximately doubled) in Porter Creek downstream of the eastern outfall from the Site.

During a storm event on February 13, 2019, Regional Water Board staff again inspected the eastern and western outfalls into Porter Creek. Again, staff observed sediment-laden storm water flowing from the Site, down the eastern drainage, and into Porter Creek (February 13, 2019, inspection report [Attachment 4], Photos 1 through 5). Staff again collected water samples and had them tested for turbidity. Attachment 4, Table A, shows the analytical results, demonstrating increased turbidity (more than 20% higher) in Porter Creek downstream of the eastern outfall from the Site.

II. Applicable Requirements

The Permittee is subject to the following Industrial General Permit requirements (see pages 19 and 21):

- **Section III. Discharge Prohibitions**
  - *C. Industrial storm water discharges and authorized [non-storm water discharges] that contain pollutants that cause or threaten to cause pollution, contamination, or nuisance as defined in section 13050 of the Water Code, are prohibited.*

- **Section V. Effluent Limitations**
  - *A. Dischargers shall implement BMPs [Best Management Practices] that comply with the Best Available Technology/Best Control Technology (BAT/BCT) requirements of this General Permit to reduce or prevent discharges of pollutants in their storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.*

- **Section VI. Receiving Water Limitations**
  - *A. Dischargers shall ensure that industrial storm water discharges and authorized [non-storm water discharges] do not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water.*
  - *B. Dischargers shall ensure that industrial storm water discharges and authorized non-storm water discharges (NSWDs) do not adversely affect human health or the environment.*
  - *C. Dischargers shall ensure that industrial storm water discharges and authorized NSWDs do not contain pollutants in quantities that threaten to cause pollution or a public nuisance.*

The Permittee is also subject to federal Clean Water Act discharge prohibitions:

- **Clean Water Act (CWA) section 301 (33 U.S.C. Sec. 1311)**
  Prohibits the discharge of any pollutant into waters of the United States except in compliance with the CWA.

III. Alleged Violations

On December 16 and 17, 2018, and on January 9 and 16, 2019, and February 13, 2019, you violated Discharge Prohibition C of the Industrial General Permit by discharging sediment-laden storm water runoff from the Site that caused or threatened to cause pollution, contamination, or nuisance. (Attachment 1, Photo 3; Attachment 2, Photos 2 and 3; and Attachment 3, Photos 1 and 2; Attachment 4, Photos 1, and 2).

On December 16 and 17, 2018, January 9 and 16, 2019, and February 13, 2019, you violated Effluent Limitations A of the Industrial General Permit by failing to implement appropriate BAT/BCT BMPs, which resulted in the discharge of sediment to Porter Creek (Attachment 1, Photo 3; Attachment 2, Photos 2 and 3; Attachment 3, Photos 1 and 2; and Attachment 4, Photos 1, and 2). Laboratory analytical results confirm sediment discharges from the Site (Attachment 2, 3, and 4, Table A).

On January 9 and 16, 2019, and February 13, 2019, you violated Receiving Water Limitations A, B, and C by discharging storm water to Porter Creek that increased downstream

measurements of turbidity more than the 20% allowed in the Basin Plan[1], and by failing to ensure that storm water discharges did not have an adverse affect on the environment or contain pollutants in quantities that threaten to cause pollution (Attachment 2, 3, and 4, Table A).

All sediment-laden discharges that were not authorized by the Industrial General Permit were discharged without permit coverage under the federal Clean Water Act section 301 (33 U.S.C. Sec. 1311).

IV. Technical Report Extension Denial

Industrial General Permit section XII. *Exceedance Response Actions (ERAs) D. Level 2 Status 2. Level 2 ERA Technical Report* requires that on January 1 of the reporting year following the submittal of a Level 2 ERA action plan, a discharger with Level 2 status shall certify and submit a Level 2 ERA technical report. Industrial General Permit subsection XII.D.5.a. allows for an extension to the deadline for submitting a Level 2 ERA technical report for up to six (6) months if the following items are submitted into SMARTS (see pages 51-52, 55):

> *i. Reasons for the time extension;*
>
> *ii. A revised Level 2 ERA Action Plan including a schedule and a detailed description of the necessary tasks still to be performed to complete the Level 2 ERA Technical Report; and*
>
> *iii. A description of any additional temporary BMPs that will be implemented while permanent BMPs are being constructed.*

Industrial General Permit subsection XII.D.5.b. states that:

> *The Regional Water Boards will review Level 2 ERA Implementation Extensions for completeness and adequacy. Requests for extensions that total more than six (6) months are not granted unless approved in writing by the Water Boards. The Water Boards may (1) reject or revise the time allowed to complete Level 2 ERA Implementation Extensions, (2) identify additional tasks necessary to complete the Level 2 ERA Technical Report, and/or (3) require the Discharger to implement additional temporary BMPs*.

My staff and I have reviewed the January 9, 2019, ERA Action Plan Amendment proposing a six-month extension. Upon review, staff and I find the extension proposal to be neither complete nor adequate, and do not concur that the proposed extension for ERA technical report submission is appropriate. I hereby deny the proposed extension. Furthermore, due to the documented violations of Receiving Water Limitations, I have determined that you must take immediate steps to comply with the provisions of Industrial General Permit section XX. *Special Conditions B. Water Quality Based Corrective Actions*.

[1] See Basin Plan section 3.3.17 Turbidity, page 3-6.

V. Future Enforcement Actions

Please note that correcting the conditions of non-compliance with the Industrial General Permit does not preclude enforcement action for the violations alleged in this notice. The Regional Water Board reserves its rights to fully enforce the law against any violation and threatened violation by taking enforcement actions such as issuing a cleanup and abatement order, time schedule order, seeking administrative civil liabilities, and/or referral to the California Attorney General. Administrative civil liabilities may be assessed beginning with the date that a violation first occurred. Violations of the Clean Water Act or Industrial General Permit may subject you to administrative civil liability up to $10,000 per day per violation, plus up to $10 per gallon discharged over 1,000 gallons not cleaned up pursuant to Water Code section 13385, subdivisions (a) and (c). Any violation of the requirements of the 13267 Order may subject you to administrative civil liability up to $1,000 per day per violation pursuant to Water Code section 13268.

Should you have any questions, please contact Paul Nelson of my staff at Paul.Nelson@waterboards.ca.gov by email or at (707) 576-2686.

Sincerely,

Digitally signed by Claudia Villacorta
Date: 2019.05.01 15:48:59 -07'00'

Claudia E. Villacorta, P.E.
Assistant Executive Officer

190501_PBN_er_MarkWestQuarryNOV.docx

Attachment 1: December 17, 2018 Inspection Memo
Attachment 2: January 9, 2019 Inspection Memo
Attachment 3: January 16, 2019 Inspection Memo
Attachment 4: February 13, 2019 Inspection Memo

Certified – Return Receipt requested

cc: (Via e-mail only)
Matt St. John, Regional Water Board, Matt.St.John@waterboards.ca.gov
Nathan Jacobsen, State Water Board, Nathan.Jacobsen@waterboards.ca.gov
Laura Drabandt, State Water Board, Laura.Drabandt@waterboards.ca.gov
Catherine Hawe, State Water Board, Catherine.Hawe@waterboards.ca.gov
Heaven Moore, Regional Water Board, Heaven.Moore@waterboards.ca.gov
Charles Reed, Regional Water Board, Charles.Reed@waterboards.ca.gov
Jeremiah Puget, Regional Water Board, Jeremiah.Puget@waterboards.ca.gov
Heidi Bauer, Regional Water Board, Heidi.M.Bauer@waterboards.ca.gov
Paul Nelson, Regional Water Board, Paul.Nelson@waterobards.ca.gov
Greg Gholson, USEPA, Gholson.Greg@epa.gov
Anthony Boyle, Mark West Quarry, aboyle@bodeanco.com
Arthur Deicke, EPS, epssolns@gmail.com

Attachment 1

December 17, 2018

Inspection Memo

Name and Location of Facility Inspected Mark West Quarry, 4611 Porter Creek Road, Santa Rosa CA **Industrial General Permit** **WDID #:** 1 49I009813 **App ID**: 178843	**Inspection Date** December 17, 2018	**Inspection Time** 9:30 am-12:30 pm
Names & Titles of Operator and Site Contact Dean Soiland Anthony Boyle Bryan Goodrich	**Consent Provided?** Yes X No □	**Notified of Inspection?** Yes □ No X
Inspector Name & Title Paul Nelson Engineering Geologist, Regional Water Board Josh Luders Water Resources Control Engineer, Regional Water Board ***Referred to as inspection team**		
Weather Conditions at the Time of the Inspection: Overcast	**Facility Receiving Water Names:** Porter Creek	
Prepared By: Paul Nelson, 12/17/2018		

I. Background

The Mark West Quarry is on an unincorporated 120-acre site located at 4611 Porter Creek Road in eastern Sonoma County, California. The latitude and longitude is 38.55256°N and 122.65312°W. The facility operations consist of hard rock mining and materials processing.

This project is a Level 2 site for Total Suspended Solids under the Industrial General Permit due to a high sediment risk factor for discharges to tributaries of the Russian River. The Russian River is identified as impaired on the Clean Water Act Section 303(d) list for sediment and temperature.

II. Inspection Narrative

On December 16, 2018, Kason Grady, a Regional Water Board Supervisor, notified the Stormwater Unit of a discharge of sediment to Porter Creek. Kason Grady sent photographs to Regional Water Board staff indicating highly turbid water in Porter Creek near the facility.

Site map with photo locations.

Photos 1 and 2: Photographs of Porter Creek approximately 2,000 feet downstream of the Mark West Quarry taken by Kason Grady and sent to Regional Board staff on December 16, 2018, prior to the December 17, 2018 inspection documented in this memo.

Based in the photographs supplied by Kason Grady, Regional Water Board staff Josh Luders and I visited the site at approximately 9:40 am on December 17, 2018, to inspect the outfalls to Porter Creek. At the time of the inspection, water at each of the three outfalls from the quarry appeared relatively clear. However, sediment was observed at the Porter Creek outfall to the east of the quarry entrance.

Photo 3: Eastern outfall from Mark West Quarry to Porter Creek showing turbid water in pool below pipe. Photograph taken by Paul Nelson.

Photo 4: Photograph of sediment below eastern outfall pipe from Mark West Quarry to Porter Creek taken by Paul Nelson.

At approximately 12:00 pm Regional Water Board staff signed in at the main facility office and met with site representative, Bryan Goodrich, to inspect the area above the discharge location.

Regional Water Board staff and Bryan Goodrich inspected the stormwater settling structures and drainage location. All of the tanks in the settling system were full of turbid water. The water discharging from the last tank appeared relatively clear. Bryan Goodrich indicated that the pump in the last tank had failed over the weekend. The system is designed to transfer water from the last tank to a larger clean water tank for use in processing operations. Bryan Goodrich stated that when the pump failed, sediment-laden water overwhelmed the settling system and discharged to Porter Creek at the eastern outfall location. The pump was scheduled to be repaired at the time of this inspection.

Photo 5: Photograph of settling tanks. Tank at upper right discharges to eastern outfall. Photograph taken by Paul Nelson.

Attachment 2

January 9, 2019

Inspection Memo

Name and Location of Facility Inspected Mark West Quarry, 4611 Porter Creek Road, Santa Rosa CA **Industrial General Permit** **WDID #:** 1 49I009813 **App ID**: 178843	**Inspection Date** January 9, 2019	**Inspection Time** 13:30 pm
Names & Titles of Operator and Site Contact Dean Soiland Anthony Boyle Bryan Goodrich	**Consent Provided?** Yes X No ☐	**Notified of Inspection?** Yes ☐ No X
Inspector Name & Title Paul Nelson, P.G., C.Hg. Engineering Geologist, Regional Water Board Josh Luders Water Resources Control Engineer, Regional Water Board Jeremiah Puget Senior Environmental Scientist, Regional Water Board Heidi Bauer, P.G. Engineering Geologist, Regional Water Board ***Referred to as inspection team**		
Weather Conditions at the Time of the Inspection: Raining	**Facility Receiving Water Names:** Porter Creek	
Prepared By: Paul Nelson, P.G., C.Hg., 1/22/2019		

I. Background

The Mark West Quarry is on an unincorporated 120-acre site located at 4611 Porter Creek Road in eastern Sonoma County, California. The latitude and longitude are 38.55256°N and 122.65312°W. The facility operations consist of hard rock mining and materials processing.

This project is a Level 2 site for Total Suspended Solids under the Industrial General Permit due to a high sediment risk factor for discharges to tributaries of the Russian River. The Russian River is identified as impaired on the Clean Water Act Section 303(d) list for sediment and temperature.

II. Inspection Narrative

On January 9, 2019, Regional Water Board staff (inspection team) arrived at the site and observed turbid water discharging from the eastern culvert to Porter Creek. The water was a greyish tan color indicative of elevated levels of suspended sediment. Porter Creek at the discharge location was discolored (compared to upstream) at the zone of mixing.

The inspection team proceeded to collect water samples from the area of discharge (see site map below). The water samples were collected directly from the settling tanks, culvert discharge and Porter Creek using a sample dipper and laboratory-supplied sample containers. The samples were logged on a chain of custody form and placed under secured refrigerated conditions pending delivery to Delta Labs, a state certified analytical laboratory located in Benicia, California. The samples were analyzed for total suspended solids (TSS) and suspended sediment concentration

(SSC) by the laboratory. The samples were also analyzed by the Regional Water Board for turbidity using a Hach 2100N laboratory meter.

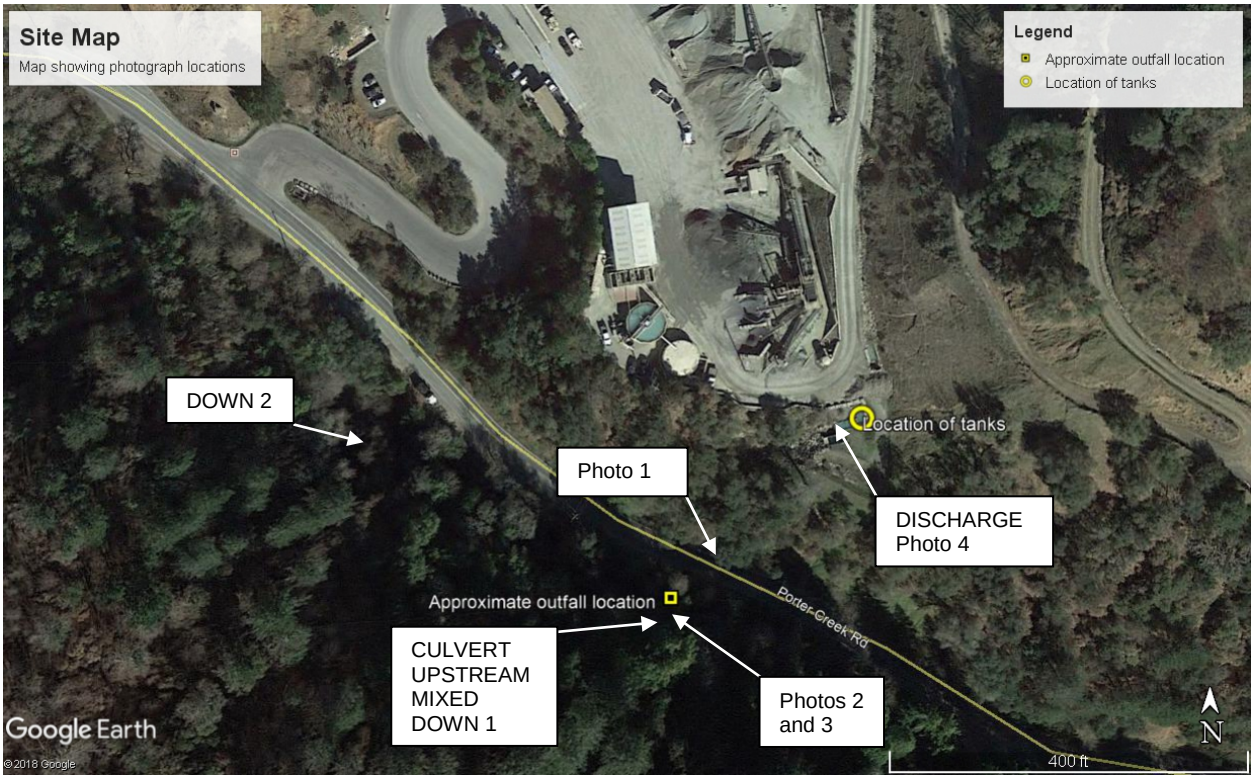
The analytical results for the water samples are summarized in the following table and included in the certified analytical report attached to this report.

TABLE A

Sample ID	Location Description	TSS (mg/L)	SSC (mg/L)	TURBIDITY[(1)] (NTU)
CULVERT	Discharge from eastern outfall to Porter Creek	613	599	1,068
UPSTREAM	Receiving water approx. 40' upstream of eastern outfall	85.0	84.0	61.7
MIXED	Within discharge/receiving water mixing zone	856	955	1,684
DOWN 1	Receiving water approx. 50' downstream of eastern outfall	120	121	93.9
DOWN 2	Receiving water approx. 200' downstream of eastern outfall	102	108	79.0
DISCHARGE	Discharge from settling tanks prior to entering drainage to eastern outfall	2,890	2,880	>4,000

TSS = Total suspended solids
SSC = Suspended sediment concentration
mg/L = Milligrams per liter
(1) = Analyzed in Regional Water Board laboratory using a Hach 2100N meter
NTU – Nephelometric turbidity units

The inspection team signed in at the facility office and met with site representatives Bryan Goodrich and Anthony Boyle. We then proceeded to the eastern settling tank location and observed the discharge of stormwater from the settling tanks to the drainage on the eastern side of the site (see map and photograph below). Staff were accompanied by site representatives Anthony Boyle and Bryan Goodrich during the site inspection.



Site Map showing sample and photograph locations.

Photo 1: View of stormwater from site drainage on the north side of Porter Creek Road. Photographed by Paul Nelson.

Photo 2: East culvert discharge to Porter Creek looking south from Porter Creek Road. Elevated sediment content is evident in the discharging water and confirmed by the analytical results. Photographed by Paul Nelson.

Photo 3: East culvert discharge to Porter Creek looking downstream (west). Note mixing zone at left side of photograph. Photographed by Josh Luders.

Photo 4: View of discharge from settling tanks at the top of east culvert drainage. Runoff from the site exceeded the capacity of the collection and settling system. Photographed by Josh Luders.

Delta Environmental Laboratories
685 Stone Road Ste. 9 - 12
Benicia, CA 94510
T: 707.747.6081
F: 707.361.5689
www.deltaenvironmentallab.com

February 11, 2019

Analytical Report

Client:	**Water Board** 2005 Nimbus Road Ranch Cordova, CA 95670
Attn:	**Jeremiah Puget**
Work Order #:	1901061
Project:	Mark West Quarry
Project #:	[none]
P.O. Number:	
Project Received:	January 11, 2019 8:50
Project Reported:	February 11, 2019 10:50

Sincerely,

Timea Majoros

Timea Majoros, Ph.D.
Laboratory Director / President

25 YEARS
Trusted Service Testing
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Delta Environmental Laboratories
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Benicia, CA 94510
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F: 707.361.5689
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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Summary

Lab ID	Sample	Matrix	Date Sampled	Date Received
1901061-01	Culvert	Aqueous	January 8, 2019 13:38	January 11, 2019 8:50
1901061-02	Upstream	Aqueous	January 8, 2019 13:40	January 11, 2019 8:50
1901061-03	Mixed	Aqueous	January 8, 2019 13:42	January 11, 2019 8:50
1901061-04	Down 1	Aqueous	January 8, 2019 13:44	January 11, 2019 8:50
1901061-05	Down 2	Aqueous	January 8, 2019 13:46	January 11, 2019 8:50
1901061-06	Discharge	Aqueous	January 8, 2019 14:05	January 11, 2019 8:50

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Benicia, CA 94510
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F: 707.361.5689
www.deltaenvironmentallab.com

WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results

Sample Date: January 8, 2019 13:38

Sample: **Culvert**
1901061-01 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**613**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:38

Sample: **Culvert (Continued)**
1901061-01 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**599**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:40

Sample: **Upstream**
1901061-02 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**85.0**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:40

Sample: Upstream (Continued)
1901061-02 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**84.0**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:42

Sample: **Mixed**
1901061-03 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**856**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:42

Sample: Mixed (Continued)
1901061-03 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**955**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:44

Sample: **Down 1**
1901061-04 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**120**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:44

Sample: **Down 1 (Continued)**
1901061-04 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**121**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:46

Sample: **Down 2**
1901061-05 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**102**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 13:46

Sample: **Down 2 (Continued)**
1901061-05 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**108**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

Delta Environmental Laboratories
685 Stone Road Ste. 9 - 12
Benicia, CA 94510
T: 707.747.6081
F: 707.361.5689
www.deltaenvironmentallab.com

WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 14:05

Sample: **Discharge**
1901061-06 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 11:13

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Wet Chemistry								
Total Suspended Solids	1.00		**2890**	mg/L	1	1/11/19	SM 2540 D	19A0091/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Sample Results
(Continued)

Sample Date: January 8, 2019 14:05

Sample: **Discharge (Continued)**
1901061-06 (Aqueous) **Sample Type:** **Prep Date:** January 11, 2019 9:11

Analyte	Reporting Limit	Qual	Result	Unit	Dilution Factor	Date Analyzed	Method	Batch/ Analyst
Sediment Concentration by ASTM D3977								
Suspended Sediment Concentration, SSC	1.00		**2880**	mg/L	1	1/11/19	ASTM D3977	19A0153/MG

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Quality Control

Wet Chemistry

Prepared & Analyzed: Jan-11-19

Analyte	Source Result	Result	Qual	Reporting Limit	Unit	Spike Level	% REC	%REC Limits	RPD	RPD Limit
Batch: 19A0091										**Analyst:** MG
Blank (19A0091-BLK1)										
Total Suspended Solids		**ND**		1.00	mg/L					
LCS (19A0091-BS1)										
Total Suspended Solids		**1950**		1.00	mg/L	2000	97.5	80-120		
LCS Dup (19A0091-BSD1)										
Total Suspended Solids		**1990**		1.00	mg/L	2000	99.7	80-120	2.23	20
Duplicate (19A0091-DUP1)		**Source: 1901060-01**								
Total Suspended Solids	20.3	**19.9**		1.00	mg/L				2.04	20

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Quality Control
(Continued)

Sediment Concentration by ASTM D3977 **Prepared & Analyzed: Jan-11-19**

Analyte	Source Result	Result	Qual	Reporting Limit	Unit	Spike Level	% REC	%REC Limits	RPD	RPD Limit
Batch: 19A0153										**Analyst:** MG
Blank (19A0153-BLK1)										
Suspended Sediment Concentration, SSC		**ND**		1.00	mg/L					
LCS (19A0153-BS1)										
Suspended Sediment Concentration, SSC		**1950**		20.0	mg/L	2000	97.5	80-120		
LCS Dup (19A0153-BSD2)										
Suspended Sediment Concentration, SSC		**1990**		20.0	mg/L	2000	99.7	80-120		20

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WORK ORDER: 1901061 **COC Number:**

Water Board
2005 Nimbus Road
Ranch Cordova, CA 95670

Project: Mark West Quarry
PO Number:
Project Manager: Jeremiah Puget
Project #:[none]

Notes and Definitions

Item	Definition
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
%REC	Percent Recovery
DF	Dilution Factor
LCS	Lab Control Sample
LCSD	Lab Control Sample Duplicate
MDL	Minimum Detection Limit
MRL	Minimum Reporting Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated
J	Results > MDL but < MRL

1901061-

Delta Environmental Laboratories

685 Stone Road Ste. 9 & 12
Benicia, CA 94510
(707) 747-6081 FAX: (707) 361-5689 samples@deltalabmail.com

Chain of Custody (COC) Form

Result to: RWQCB - Jeremiah Puget
Company:
Address: 5550 Skylane Blvd. S.R.
Email: Jeremiah.puget@waterboards.ca.gov
Telephone: Fax:
SAMPLER (signature): (Print): Jeremiah Puget
Circle Turnaround: Rush 24 Hours 48 Hours 72 Hours Regular(5 Days or More)
Special Instructions:

Project Name: MarkWest Quarry
PO No:
Delta Lab ID:

#	Sample ID or Location	Date	Time	Matrix	Cont. Type	Preservative	No. of containers	TSS	SSC	Comments
	CULVERT	1/8/19	1335	W			2	x	x	STD TAT
	UPSTREAM		1340							
	MIXED		1342							
	DOWN 1		1344							
	DOWN 2		1346							
	DISCHARGE		1405							

Relinquished by:	Time	16:00	Date	1-09-19
Received By:	Time	16:00	Date	1/9/19
Relinquished by:	Time	8:50	Date	1/11/19
Received By:	Time		Date	
Relinquished by:	Time		Date	
Received By:	Time		Date	

1) Have all samples received been stored on ice? Yes
2) Did any VOA samples received have any head space? N/A
3) Were samples in appropriate containers and packaged properly? Yes
4) Were samples received in good condition? Yes
5) Temperature 4.8

**CONTAINER TYPES: GL = Glass 1 Liter; GHL = 500 ml Glass; GQL = 250 mL Glass; PL = 1 L Plastic; PHL = Plastic 500 mL; Plastic; PQL=250 mL Plastic ; 5 G= 5 gallon Plastic; SJ = Soil Jar; Sj4 = 4oz. Sj8=8 Oz; BACT+ 100 mL P; BT = Brass Tube; VOA = 40mL VOA; POL = Plastic One Liter ; P=plastic; G= glass; OTC - Other Type Container

*MATRIX: AQ = Aqueous Nondrinking Water, Digested Metals; FE = Low R.L.s, Aqueous Nondrinking Water, Digested Metals; DW = Drinking Water; SL = Soil Sludge, Solid ; FP = Free Product

* PRESERVATIVE: 1=HNO3; 2=HCl; 3=H2SO4; 4=Na2S2O3; 5=NAOH; 6=NH4Cl; 7=ZnAce

Attachment 3

January 16, 2019

Inspection Memo

Name and Location of Facility Inspected Mark West Quarry, 4611 Porter Creek Road, Santa Rosa CA **Industrial General Permit** **WDID #:** 1 49I009813 **App ID**: 178843	**Inspection Date** January 16, 2019	**Inspection Time** 10:45 am
Names & Titles of Operator and Site Contact Dean Soiland Anthony Boyle Bryan Goodrich	**Consent Provided?** Yes □ N/A X	**Notified of Inspection?** Yes □ No X
Inspector Name & Title Paul Nelson, P.G., C.Hg. Engineering Geologist, Regional Water Board Imtiaz-Ali Kalyan Water Resources Control Engineer, Regional Water Board *__Referred to as inspection team__		
Weather Conditions at the Time of the Inspection: Raining	**Facility Receiving Water Names:** Porter Creek	
Prepared By: Paul Nelson, P.G., C.Hg., 1/24/2019		

I. Background

The Mark West Quarry is on an unincorporated 120-acre site located at 4611 Porter Creek Road in eastern Sonoma County, California. The latitude and longitude are 38.55256°N and 122.65312°W. The facility operations consist of hard rock mining and materials processing.

This project is a Level 2 site for Total Suspended Solids under the Industrial General Permit due to a high sediment risk factor for discharges to tributaries of the Russian River. The Russian River is identified as impaired on the Clean Water Act Section 303(d) list for sediment and temperature.

II. Inspection Narrative

On January 16, 2019, Regional Water Board staff (inspection team) arrived at the site to perform a follow-up inspection. The inspection was conducted from a publicly accessible area along Porter Creek Road. The inspection team observed turbid water discharging from the eastern culvert to Porter Creek. The water was a greyish tan color indicative of elevated levels of suspended sediment. Porter Creek at the discharge location was discolored (compared to upstream) at the zone of mixing. These observations were consistent with the conditions that were observed during the January 9, 2019 inspection.

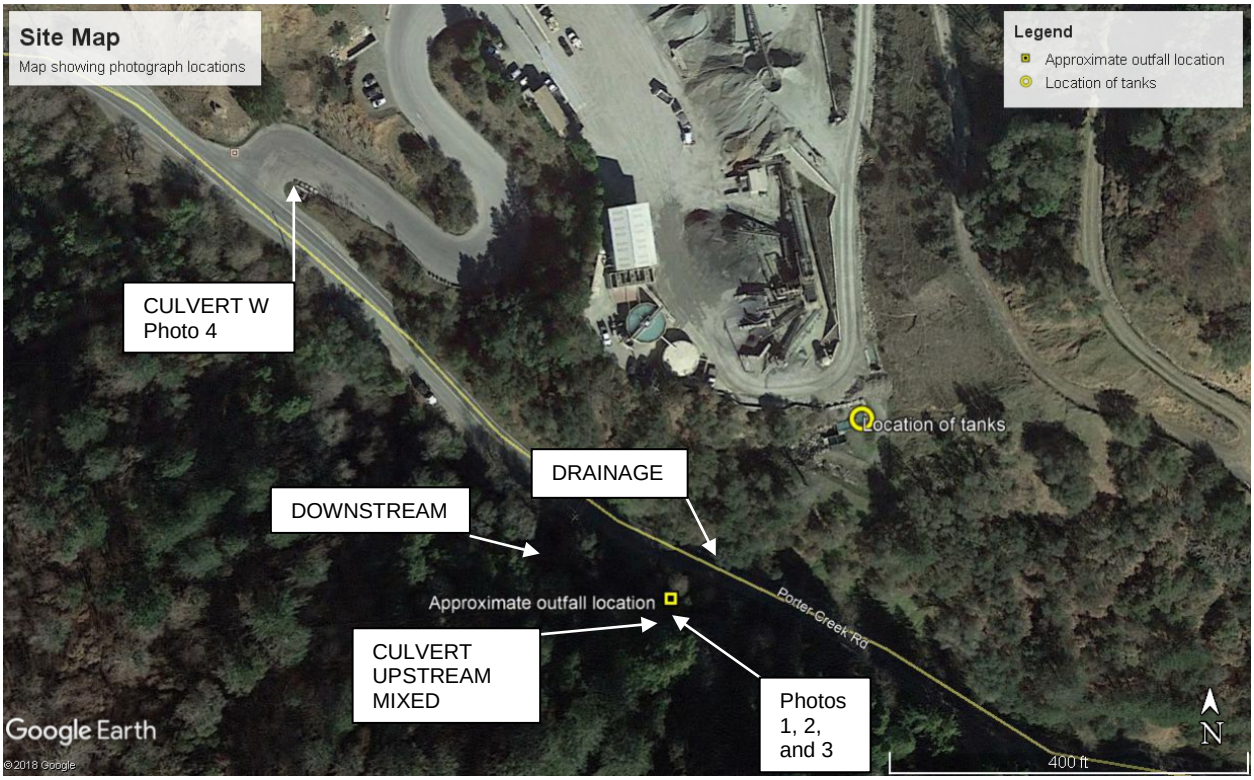
The inspection team proceeded to collect water samples from the area of discharge (see site map below) and the western discharge location (CULVERT W). The water samples were collected directly from the culvert discharges and Porter Creek using a sample dipper and laboratory-supplied sample containers. The samples were logged on a chain of custody form and placed under secured refrigerated conditions pending analysis at the Regional Water Board laboratory for turbidity.

The analytical results for the water samples are summarized in the following table.

TABLE A

Sample ID	Location Description	TURBIDITY[(1)] (NTU)
CULVERT	Discharge from eastern outfall to Porter Creek	887
UPSTREAM	Receiving water approx. 40' upstream of eastern outfall	23.5
MIXED	Within discharge/receiving water mixing zone	164
DOWNSTREAM	Receiving water approx. 50' downstream of eastern outfall	46.2
DRAINAGE	Drainage from settling tanks upstream of CULVERT	1,002
CULVERT W	Discharge from culvert on west side of site	197

[(1)] = Analyzed in Regional Water Board laboratory using a Hach 2100N meter
NTU – Nephelometric turbidity units



Site Map showing sample and photograph locations.

Photo 1: East culvert discharge to Porter Creek looking downstream (west). Note mixing zone at left side of photograph. Photographed by Paul Nelson.

Photo 2: East culvert discharge to Porter Creek looking south from Porter Creek Road. Elevated sediment content is evident in the discharging water and confirmed by the analytical results. Photographed by Paul Nelson.

Photo 3: View downstream from east culvert (west). Turbid water mixing with streamflow. Photographed by Paul Nelson.

Photo 4: View of west culvert (CULVERT W) and settling structure. Turbid water evident in outfall and confirmed by turbidity results. Photographed by Paul Nelson.

Attachment 4

February 13, 2019

Inspection Memo

Name and Location of Facility Inspected Mark West Quarry, 4611 Porter Creek Road, Santa Rosa CA **Industrial General Permit** **WDID #:** 1 49I009813 **App ID**: 178843	**Inspection Date** February 13, 2019	**Inspection Time** 10:00 am
Names & Titles of Operator and Site Contact Dean Soiland Anthony Boyle Bryan Goodrich	**Consent Provided?** Yes □ N/A X	**Notified of Inspection?** Yes □ No X
Inspector Name & Title Paul Nelson, P.G., C.Hg. — Engineering Geologist, Regional Water Board Jeremiah Puget — Senior Environmental Scientist, Regional Water Board ***Referred to as inspection team**		
Weather Conditions at the Time of the Inspection: Raining	**Facility Receiving Water Names:** Porter Creek	
Prepared By: Paul Nelson, P.G., C.Hg., 2/14/2019		

I. Background

The Mark West Quarry is on an unincorporated 120-acre site located at 4611 Porter Creek Road in eastern Sonoma County, California. The latitude and longitude are 38.55256°N and 122.65312°W. The facility operations consist of hard rock mining and materials processing.

This project is a Level 2 site for Total Suspended Solids under the Industrial General Permit due to a high sediment risk factor for discharges to tributaries of the Russian River. The Russian River is identified as impaired on the Clean Water Act Section 303(d) list for sediment and temperature.

II. Inspection Narrative

On February 13, 2019, Regional Water Board staff (inspection team) arrived at the site to perform a follow-up inspection. The inspection was conducted from a publicly accessible area along Porter Creek Road. The inspection team observed turbid water discharging from the eastern culvert to Porter Creek. The water was a greyish tan color indicative of elevated levels of suspended sediment. Porter Creek at the discharge location was discolored (compared to upstream) at the zone of mixing. These observations were consistent with the conditions that were observed during the January 9, and January 16, 2019 inspections.

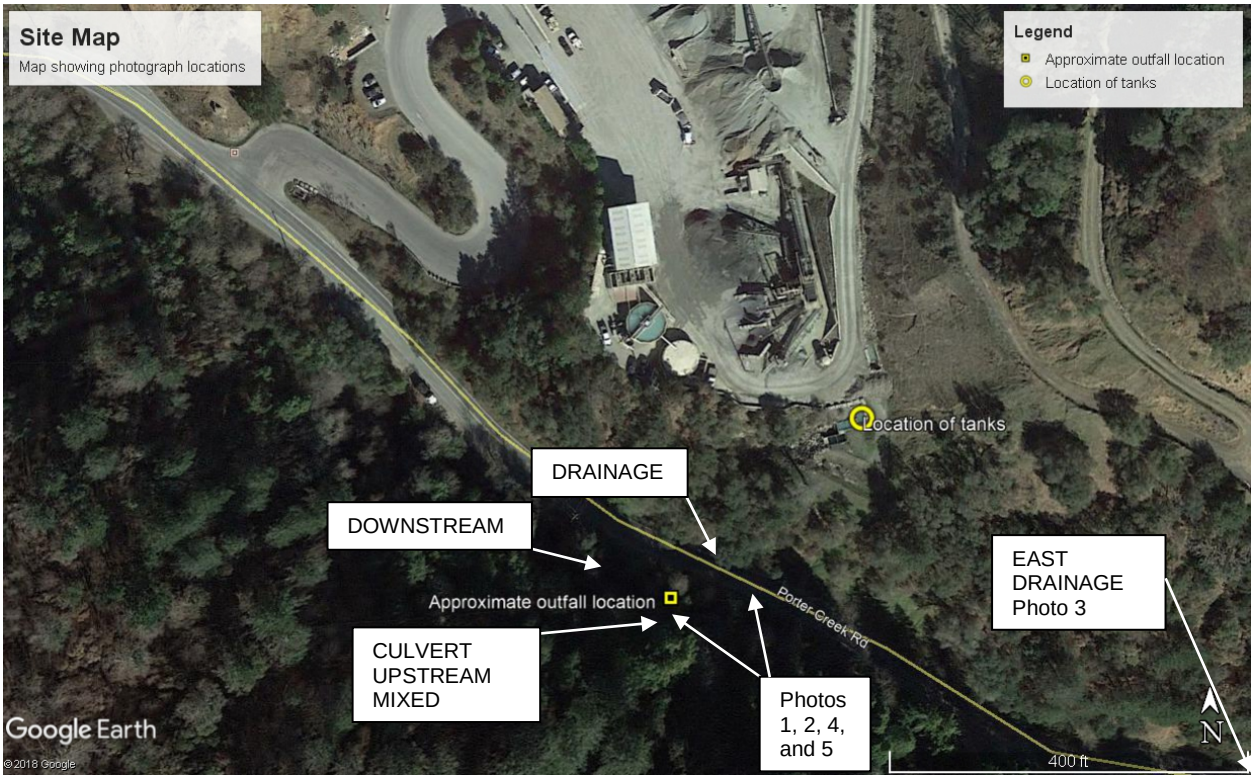
The inspection team proceeded to collect water samples from the areas of discharge (see site map below). The water samples were collected directly from the culvert discharges and Porter Creek using a sample dipper and laboratory-supplied sample containers. The samples were logged on a chain of custody form and placed under secured refrigerated conditions pending analysis at the Regional Water Board laboratory for turbidity.

The analytical results for the water samples are summarized in the following table.

TABLE A

Sample ID	Location Description	TURBIDITY[(1)] (NTU)
CULVERT	Discharge from outfall to Porter Creek	578
UPSTREAM	Receiving water approx. 40' upstream of outfall	46
MIXED	Within discharge/receiving water mixing zone	390
DOWNSTREAM	Receiving water approx. 50' downstream of outfall	56
DRAINAGE	Drainage from settling tanks upstream of CULVERT	686
EAST DRAINAGE	Discharge from site approximately 1,100 feet southeast of entrance	586

[(1)] = Analyzed in Regional Water Board laboratory using a Hach 2100N meter
NTU – Nephelometric turbidity units



Site Map showing sample and photograph locations.

Photo 1: East culvert discharge to Porter Creek looking from Porter Creek Road. Note mixing zone in central portion of photograph. Photographed by Paul Nelson.

Photo 2: East culvert discharge to Porter Creek looking upstream. Elevated sediment content is evident in the discharging water and confirmed by the turbidity measurements. Photographed by Paul Nelson.

Photos 3 and 4: View of eastern drainage. Water bypassing drop inlet and flowing along roadway. Photographed by Paul Nelson.

Photo 5: View of culvert and confluence of water from east drainage. Turbid water evident in drainage and confirmed by turbidity results. Photographed by Paul Nelson.