



Calscience

## Sample Summary

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Client:	Associated Pacific Constructors, Inc.	Work Order:	18-05-1110
	2901 West Coast Hwy, Suite 374	Project Name:	998-059.200 BALBOA COVES
	Newport Beach, CA 92663-4023	PO Number:	
		Date/Time Received:	05/11/18 16:02
		Number of Containers:	8

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Attn: Jorge Tomas

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #2-REPLENISHMENT	18-05-1110-4	05/11/18 13:00	1	Sediment

  
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## Analytical Report

Associated Pacific Constructors, Inc.  
2901 West Coast Hwy, Suite 374  
Newport Beach, CA 92663-4023

Date Received: 05/11/18  
Work Order: 18-05-1110  
Preparation: N/A  
Method: ASTM D4464 (M)  
Units: %

Project: 998-059.200 BALBOA COVES

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BALBOA COVE #2-REPLENISHMENT	18-05-1110-4-AA	05/11/18 13:00	Sediment	LPSA 1	N/A	05/23/18 19:53	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.55	
Silt (0.00391 to 0.0625mm)	3.48	
Total Silt and Clay (0 to 0.0625mm)	4.03	
Very Fine Sand (0.0625 to 0.125mm)	1.72	
Fine Sand (0.125 to 0.25mm)	10.84	
Medium Sand (0.25 to 0.5mm)	43.25	
Coarse Sand (0.5 to 1mm)	34.93	
Very Coarse Sand (1 to 2mm)	5.22	
Gravel (greater than 2mm)	ND	

95.96 % Sand

  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

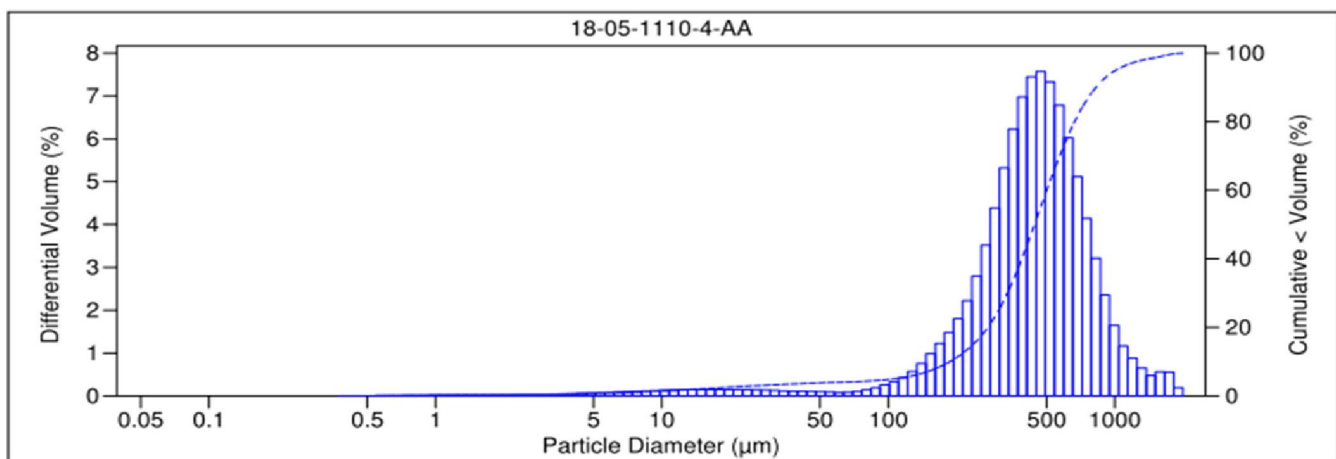
Date Sampled: 05/11/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

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Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #2-REPLENISHMENT		Medium Sand	0.488

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	5.22	34.93	43.25	10.84	1.72	3.48	0.55	4.03



V 3.0

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## Glossary of Terms and Qualifiers

Work Order: 18-05-1110

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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.







**SAMPLE RECEIPT CHECKLIST**COOLER 1 OF 1CLIENT: Associated Pacific ConstructorsDATE: 05/11/2018**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.8 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: gwr**CUSTODY SEAL:**Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: gwrSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 1053**SAMPLE CONDITION:**Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☒ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☐ Yes ☐ No ☒ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A**CONTAINER TYPE:**

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na</sub> ☐ 100PJ ☐ 100PJ<sub>na</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> (pH 2) ☐ 250PB ☐ 250PB<sub>n</sub> (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> (pH 2) ☐ 500PB☐ 1AGB ☐ 1AGB<sub>na</sub> ☐ 1AGB<sub>s</sub> (pH 2) ☐ 1AGB<sub>s</sub> (O&G) ☐ 1PB ☐ 1PB<sub>na</sub> (pH 12) ☐ \_\_\_\_\_Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® (\_\_\_\_) ☐ TerraCores® (\_\_\_\_) ☒ 28oz PB (\_\_\_\_)Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_) ☐ \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>·H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 718





Calscience

Supplemental Report 4



**WORK ORDER NUMBER: 18-05-1110**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

### Analytical Report For

**Client:** Associated Pacific Constructors, Inc.

**Client Project Name:** 998-059.200 BALBOA COVES

**Attention:** Jorge Tomas  
2901 West Coast Hwy  
Suite 374  
Newport Beach, CA 92663-4023

*Kathleen M. Burney* FOR

Approved for release on 05/25/2018 by:  
Carla Hollowell  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 18-05-1110

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**Work Order Narrative**

Work Order: 18-05-1110

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 05/11/18. They were assigned to Work Order 18-05-1110.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



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**Sample Summary**

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Client:	Associated Pacific Constructors, Inc.	Work Order:	18-05-1110
	2901 West Coast Hwy, Suite 374	Project Name:	998-059.200 BALBOA COVES
	Newport Beach, CA 92663-4023	PO Number:	
		Date/Time Received:	05/11/18 16:02
		Number of Containers:	8

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Attn: Jorge Tomas

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Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #3-DREDGING	18-05-1110-5	04/30/18 13:30	1	Sediment

  
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## Analytical Report

Associated Pacific Constructors, Inc.  
2901 West Coast Hwy, Suite 374  
Newport Beach, CA 92663-4023

Date Received: 05/11/18  
Work Order: 18-05-1110  
Preparation: N/A  
Method: ASTM D4464 (M)  
Units: %

Project: 998-059.200 BALBOA COVES

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BALBOA COVE #3-DREDGING	18-05-1110-5-AA	04/30/18 13:30	Sediment	LPSA 1	N/A	05/23/18 20:03	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.62	
Silt (0.00391 to 0.0625mm)	4.90	
Total Silt and Clay (0 to 0.0625mm)	5.52	
Very Fine Sand (0.0625 to 0.125mm)	1.75	
Fine Sand (0.125 to 0.25mm)	11.29	
Medium Sand (0.25 to 0.5mm)	43.30	
Coarse Sand (0.5 to 1mm)	34.58	
Very Coarse Sand (1 to 2mm)	3.56	
Gravel (greater than 2mm)	ND	

94.48% Sand

  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

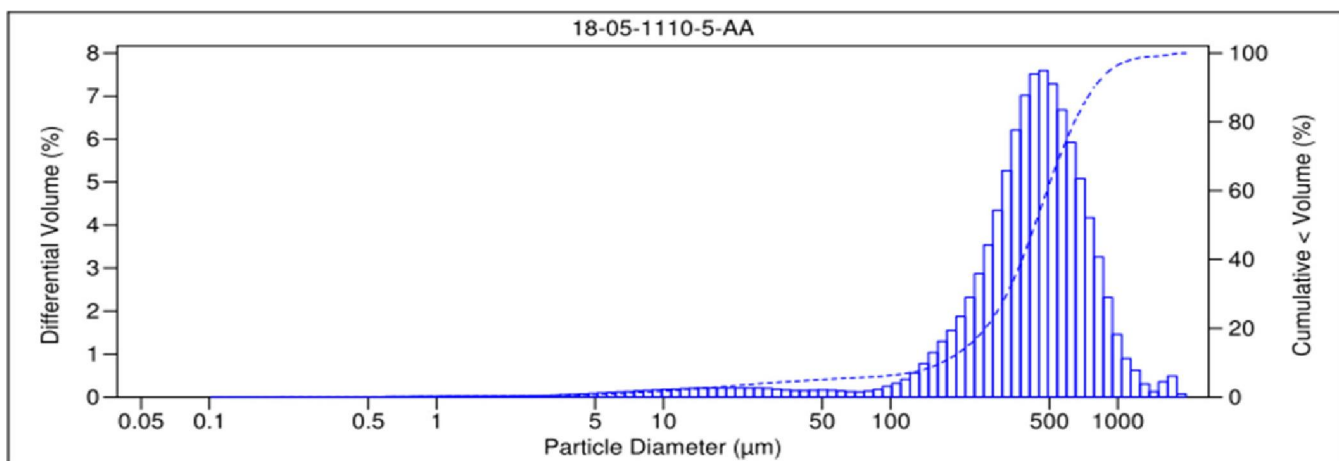
Date Sampled: 04/30/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

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Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #3-DREDGING		Medium Sand	0.464

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	3.56	34.58	43.30	11.29	1.75	4.90	0.62	5.52



V 3.0



## Glossary of Terms and Qualifiers

Work Order: 18-05-1110

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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.





For a complete guide to the world of insurance, visit [www.insurance.com](http://www.insurance.com) or call 1-800-4-A-INSURANCE.

For counter service / sample drop off information, contact: 800-235-2262

LABORATORY CLIENTS

ASSOCIATED PACIFIC CONSTRUCTORS

29001 WEST COAST HIGHWAY SUITE 374

STATE: ZIP:

E-MAIL:

!TOMAS@ASSOCIATEDPACIFIC.COM

**TURNAROUND TIME (Push surcharges may apply to any TAT not "STANDARD")**

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☒ STANDARD

05115000

**SPECIAL INSTRUCTIONS:**

**Please provide individual analysis report for each sample.**

[illegible]

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Received by: (Signature/Affiliation)

Received by: (Signature/Affiliation)

Date:      /      /      Time:      :      :     

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Time:

Time:

Time:



**SAMPLE RECEIPT CHECKLIST**COOLER 1 OF 1CLIENT: Associated Pacific ConstructorsDATE: 05/11/2018**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.8 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: gwr**CUSTODY SEAL:**Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: gwrSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 1053**SAMPLE CONDITION:**Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☒ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☐ Yes ☐ No ☒ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A**CONTAINER TYPE:**

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na</sub> ☐ 100PJ ☐ 100PJ<sub>na</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> (pH 2) ☐ 250PB ☐ 250PB<sub>n</sub> (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> (pH 2) ☐ 500PB☐ 1AGB ☐ 1AGB<sub>na</sub> ☐ 1AGB<sub>s</sub> (pH 2) ☐ 1AGB<sub>s</sub> (O&G) ☐ 1PB ☐ 1PB<sub>na</sub> (pH 12) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® (\_\_\_\_) ☐ TerraCores® (\_\_\_\_) ☒ 28oz PB (\_\_\_\_) ☐ \_\_\_\_\_Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>·H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 718





Calscience

Supplemental Report 5

**WORK ORDER NUMBER: 18-05-1110***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For****Client:** Associated Pacific Constructors, Inc.**Client Project Name:** 998-059.200 BALBOA COVES

**Attention:** Jorge Tomas  
 2901 West Coast Hwy  
 Suite 374  
 Newport Beach, CA 92663-4023

  
Kathleen M. Burney

Approved for release on 05/25/2018 by:  
 Carla Hollowell  
 Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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 Work Order Number: 18-05-1110

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**Work Order Narrative**

Work Order: 18-05-1110

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 05/11/18. They were assigned to Work Order 18-05-1110.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



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## Sample Summary

---

Client:	Associated Pacific Constructors, Inc.	Work Order:	18-05-1110
	2901 West Coast Hwy, Suite 374	Project Name:	998-059.200 BALBOA COVES
	Newport Beach, CA 92663-4023	PO Number:	
		Date/Time Received:	05/11/18 16:02
		Number of Containers:	8

---

Attn: Jorge Tomas

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #3-REPLENISHMENT	18-05-1110-6	05/11/18 13:10	1	Sediment

  
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Calscience

## Analytical Report

Associated Pacific Constructors, Inc.  
2901 West Coast Hwy, Suite 374  
Newport Beach, CA 92663-4023

Date Received: 05/11/18  
Work Order: 18-05-1110  
Preparation: N/A  
Method: ASTM D4464 (M)  
Units: %

Project: 998-059.200 BALBOA COVES

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BALBOA COVE #3-REPLENISHMENT	18-05-1110-6-AA	05/11/18 13:10	Sediment	LPSA 1	N/A	05/23/18 20:14	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.21	
Silt (0.00391 to 0.0625mm)	0.37	
Total Silt and Clay (0 to 0.0625mm)	0.58	
Very Fine Sand (0.0625 to 0.125mm)	1.84	
Fine Sand (0.125 to 0.25mm)	10.26	
Medium Sand (0.25 to 0.5mm)	35.70	
Coarse Sand (0.5 to 1mm)	36.49	
Very Coarse Sand (1 to 2mm)	11.91	
Gravel (greater than 2mm)	3.23	

96.2% Sand

  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

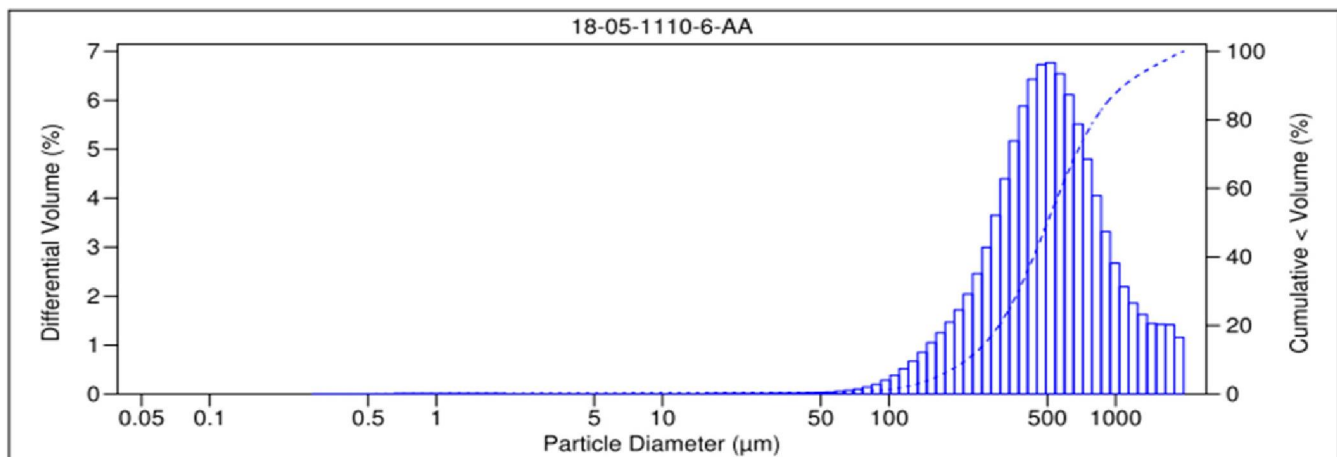
Date Sampled: 05/11/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

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Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #3-REPLENISHMENT		Coarse Sand	0.687

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
3.23	11.91	36.49	35.70	10.26	1.84	0.37	0.21	0.58



V 3.0

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## Glossary of Terms and Qualifiers

Work Order: 18-05-1110

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.







**SAMPLE RECEIPT CHECKLIST**COOLER 1 OF 1CLIENT: Associated Pacific ConstructorsDATE: 05/11/2018**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.8 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: gwr**CUSTODY SEAL:**Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: gwrSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 1053**SAMPLE CONDITION:**Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☒ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☐ Yes ☐ No ☒ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A**CONTAINER TYPE:**

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na</sub> ☐ 100PJ ☐ 100PJ<sub>na</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> (pH 2) ☐ 250PB ☐ 250PB<sub>n</sub> (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> (pH 2) ☐ 500PB☐ 1AGB ☐ 1AGB<sub>na</sub> ☐ 1AGB<sub>s</sub> (pH 2) ☐ 1AGB<sub>s</sub> (O&G) ☐ 1PB ☐ 1PB<sub>na</sub> (pH 12) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® (\_\_\_\_) ☐ TerraCores® (\_\_\_\_) ☒ 28oz PB (\_\_\_\_) ☐ \_\_\_\_\_Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>·H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 718





Calscience

Supplemental Report 6



**WORK ORDER NUMBER: 18-05-1110**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

### Analytical Report For

**Client:** Associated Pacific Constructors, Inc.

**Client Project Name:** 998-059.200 BALBOA COVES

**Attention:** Jorge Tomas  
2901 West Coast Hwy  
Suite 374  
Newport Beach, CA 92663-4023

*Kathleen M. Burney* FOR

Approved for release on 05/25/2018 by:  
Carla Hollowell  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

# Contents

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 Work Order Number: 18-05-1110

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**Work Order Narrative**

Work Order: 18-05-1110

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 05/11/18. They were assigned to Work Order 18-05-1110.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



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**Sample Summary**

---

Client:	Associated Pacific Constructors, Inc.	Work Order:	18-05-1110
	2901 West Coast Hwy, Suite 374	Project Name:	998-059.200 BALBOA COVES
	Newport Beach, CA 92663-4023	PO Number:	
		Date/Time Received:	05/11/18 16:02
		Number of Containers:	8

---

Attn: Jorge Tomas

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #4-DREDGING	18-05-1110-7	04/30/18 13:40	1	Sediment

  
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Calscience

## Analytical Report

Associated Pacific Constructors, Inc.  
2901 West Coast Hwy, Suite 374  
Newport Beach, CA 92663-4023

Date Received: 05/11/18  
Work Order: 18-05-1110  
Preparation: N/A  
Method: ASTM D4464 (M)  
Units: %

Project: 998-059.200 BALBOA COVES

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BALBOA COVE #4-DREDGING	18-05-1110-7-AA	04/30/18 13:40	Sediment	LPSA 1	N/A	05/23/18 20:48	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	2.15	
Silt (0.00391 to 0.0625mm)	18.24	
Total Silt and Clay (0 to 0.0625mm)	20.39	
Very Fine Sand (0.0625 to 0.125mm)	7.61	
Fine Sand (0.125 to 0.25mm)	30.35	
Medium Sand (0.25 to 0.5mm)	33.93	
Coarse Sand (0.5 to 1mm)	7.71	79.6 % Sand
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

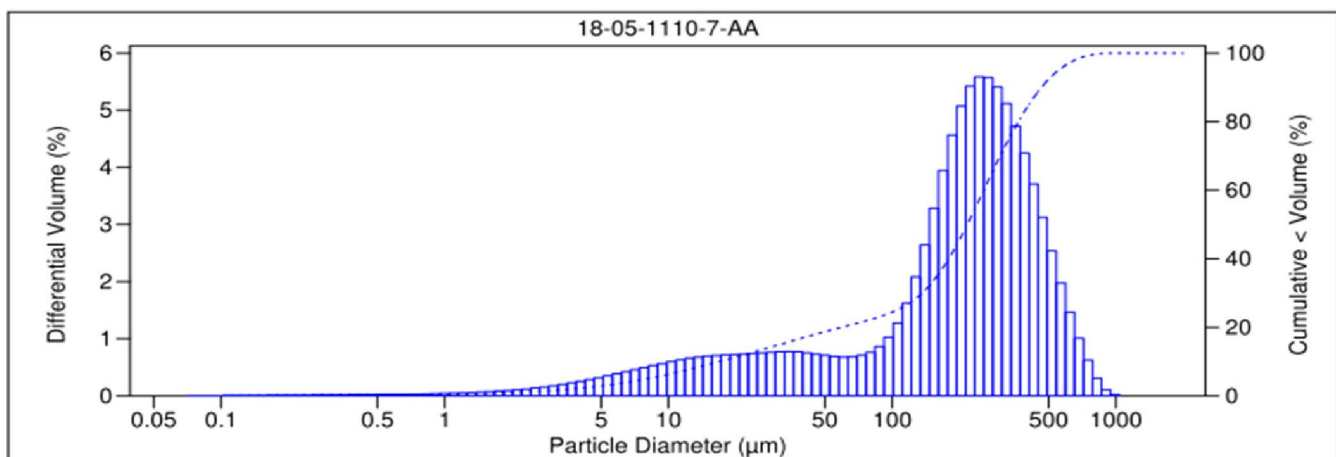
Date Sampled: 04/30/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

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Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #4-DREDGING		Fine Sand	0.234

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.01	7.71	33.93	30.35	7.61	18.24	2.15	20.39



V 3.0

## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

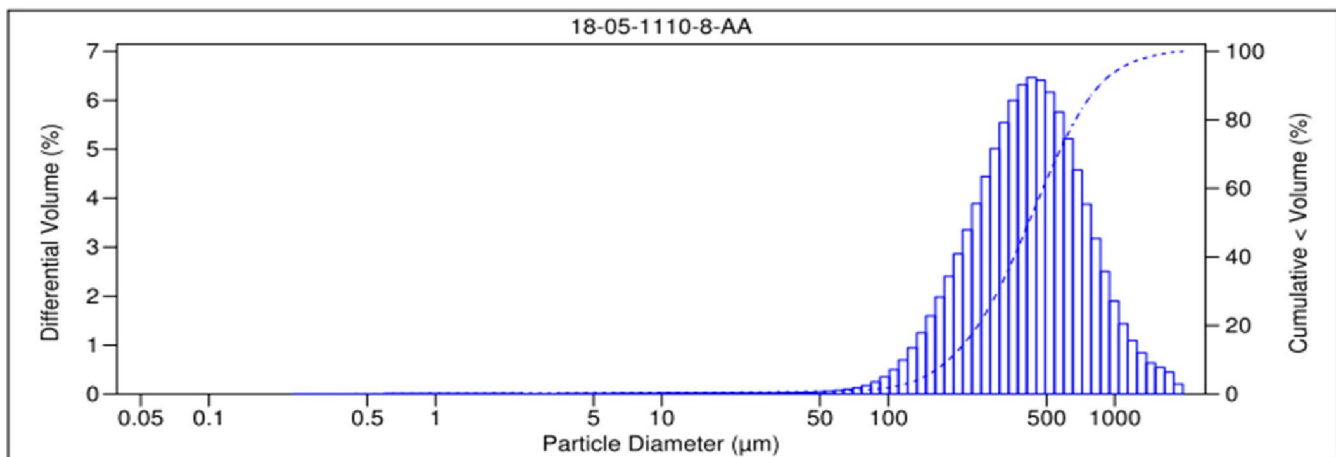
Date Sampled: 05/11/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

Page 8 of 8

Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #4-REPLENISHMENT		Coarse Sand	0.588

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
3.52	5.84	30.42	40.69	16.27	2.37	0.65	0.24	0.89



V 3.0

## Glossary of Terms and Qualifiers

Work Order: 18-05-1110

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.







**SAMPLE RECEIPT CHECKLIST**COOLER 1 OF 1CLIENT: Associated Pacific ConstructorsDATE: 05/11/2018**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.8 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: gwr**CUSTODY SEAL:**Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: gwrSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 1053**SAMPLE CONDITION:**Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☒ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☐ Yes ☐ No ☒ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A**CONTAINER TYPE:**

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na</sub> ☐ 100PJ ☐ 100PJ<sub>na</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> (pH\_9)☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH\_2) ☐ 250PB ☐ 250PB<sub>n</sub> (pH\_2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH\_2) ☐ 500PB☐ 1AGB ☐ 1AGB<sub>na</sub> ☐ 1AGBs (pH\_2) ☐ 1AGBs (O&G) ☐ 1PB ☐ 1PB<sub>na</sub> (pH\_12) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® (\_\_\_\_) ☐ TerraCores® (\_\_\_\_) ☒ 28oz PB (\_\_\_\_)Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>·H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 718





Calscience

Supplemental Report 7



**WORK ORDER NUMBER: 18-05-1110**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

### Analytical Report For

**Client:** Associated Pacific Constructors, Inc.

**Client Project Name:** 998-059.200 BALBOA COVES

**Attention:** Jorge Tomas  
2901 West Coast Hwy  
Suite 374  
Newport Beach, CA 92663-4023

*Kathleen M. Burney* FOR

Approved for release on 05/25/2018 by:  
Carla Hollowell  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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 Work Order Number: 18-05-1110

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**Work Order Narrative**

Work Order: 18-05-1110

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 05/11/18. They were assigned to Work Order 18-05-1110.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of  $\leq 15$  minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**DoD Projects:**

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.



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**Sample Summary**

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Client: Associated Pacific Constructors, Inc. 2901 West Coast Hwy, Suite 374 Newport Beach, CA 92663-4023	Work Order: 18-05-1110 Project Name: 998-059.200 BALBOA COVES PO Number: Date/Time Received: 05/11/18 16:02 Number of Containers: 8
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Attn: Jorge Tomas

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Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #4-REPLENISHMENT	18-05-1110-8	05/11/18 13:20	1	Sediment

  
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## Analytical Report

Associated Pacific Constructors, Inc.  
2901 West Coast Hwy, Suite 374  
Newport Beach, CA 92663-4023

Date Received: 05/11/18  
Work Order: 18-05-1110  
Preparation: N/A  
Method: ASTM D4464 (M)  
Units: %

Project: 998-059.200 BALBOA COVES

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
BALBOA COVE #4-REPLENISHMENT	18-05-1110-8-AA	05/11/18 13:20	Sediment	LPSA 1	N/A	05/23/18 21:06	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.24	
Silt (0.00391 to 0.0625mm)	0.65	
Total Silt and Clay (0 to 0.0625mm)	0.89	
Very Fine Sand (0.0625 to 0.125mm)	2.37	
Fine Sand (0.125 to 0.25mm)	16.27	
Medium Sand (0.25 to 0.5mm)	40.69	
Coarse Sand (0.5 to 1mm)	30.42	
Very Coarse Sand (1 to 2mm)	5.84	
Gravel (greater than 2mm)	3.52	95.59% sand

  
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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

## PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

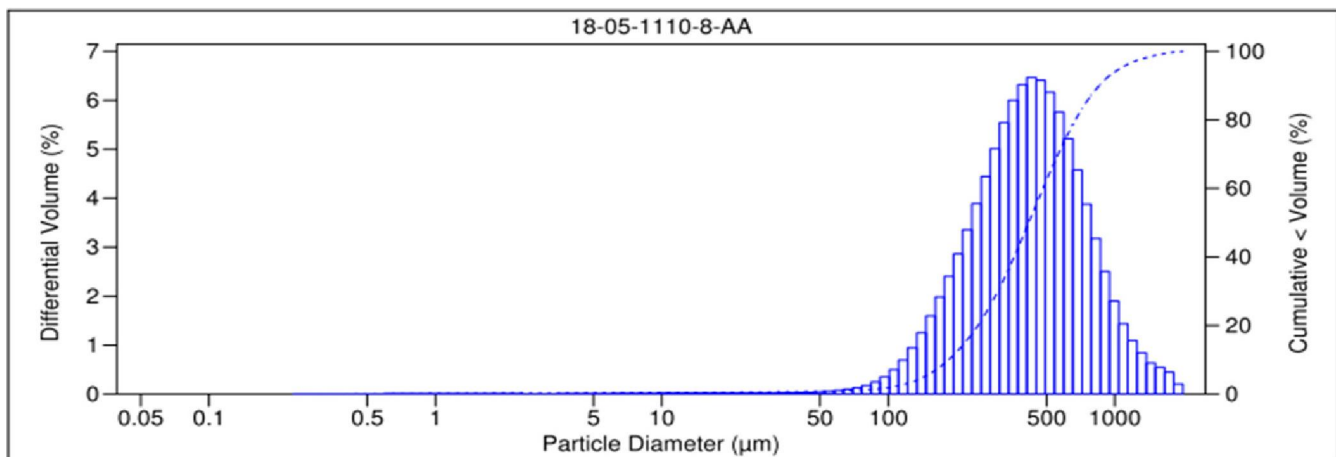
Date Sampled: 05/11/18  
 Date Received: 05/11/18  
 Work Order No: 18-05-1110  
 Date Analyzed: 05/23/18  
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

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Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #4-REPLENISHMENT		Coarse Sand	0.588

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
3.52	5.84	30.42	40.69	16.27	2.37	0.65	0.24	0.89



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## Glossary of Terms and Qualifiers

Work Order: 18-05-1110

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Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.





For a complete guide to the world of insurance, visit [www.insurance.com](http://www.insurance.com) or call 1-800-368-6868.

For counter service / sample drop off information, contact: 800-235-2262

LABORATORY CLIENTS

ASSOCIATED PACIFIC CONSTRUCTORS

29001 WEST COAST HIGHWAY SUITE 374

STATE: ZIP:

E-MAIL:

!TOMAS@ASSOCIATEDPACIFIC.COM

**TURNAROUND TIME (Push surcharges may apply to any TAT not "STANDARD")**

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☒ STANDARD

05115000

**SPECIAL INSTRUCTIONS:**

**Please provide individual analysis report for each sample.**

[illegible]

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Received by: (Signature/Affiliation)

Received by: (Signature/Affiliation)

Date:      /      /      Time:      :      :     

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Time:

Time:

Time:



**SAMPLE RECEIPT CHECKLIST**COOLER 1 OF 1CLIENT: Associated Pacific ConstructorsDATE: 05/11/2018**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: +0.1°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.8 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: gwr**CUSTODY SEAL:**Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: gwrSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 1053**SAMPLE CONDITION:**Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☒ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☐ Yes ☐ No ☒ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A**CONTAINER TYPE:**

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na</sub> ☐ 100PJ ☐ 100PJ<sub>na</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> (pH 2) ☐ 250PB ☐ 250PB<sub>n</sub> (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> (pH 2) ☐ 500PB☐ 1AGB ☐ 1AGB<sub>na</sub> ☐ 1AGB<sub>s</sub> (pH 2) ☐ 1AGB<sub>s</sub> (O&G) ☐ 1PB ☐ 1PB<sub>na</sub> (pH 12) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® (\_\_\_\_) ☐ TerraCores® (\_\_\_\_) ☒ 28oz PB (\_\_\_\_) ☐ \_\_\_\_\_Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1053s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>·H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 718