

Attn: Eric Aust, Architect
62 Balboa Coves
Newport Beach, CA
949-637-5220

May 30, 2018

Project: Balboa Coves
Newport Beach, CA
92663

BALBOA COVES

Study of all four (4) coves for dredging & replenishing

Introduction:

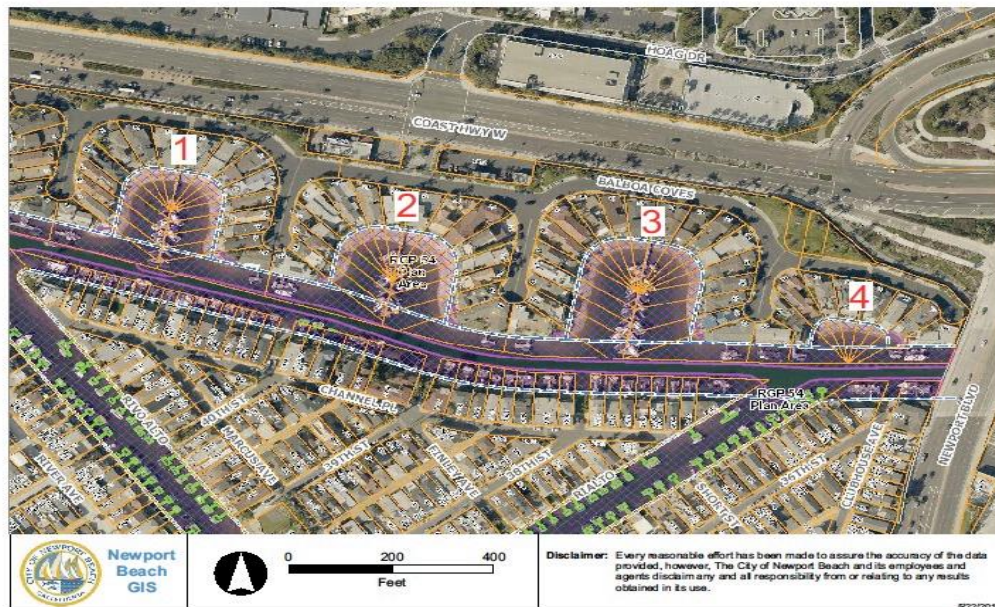
Associated Pacific Constructors is pleased to present the findings at all four (4) coves at Balboa Coves located at Newport Beach, CA. The work performed in for this project involves hydrographic surveys, topographic surveys, and grain size analysis samples on all the coves.

Description:

The common goal between all the coves is to give all residents a nice clean sand positioned at a natural slope. After performing the work mentioned above, Associated Pacific Constructors has studied each cove individually, but obtaining different results for each one.

APC recommends dredging each cove as needed (see findings down below), proposing both offshore disposal and Harbor Disposal, and replenish all coves with natural clean material from inside the Newport Beach Harbor. We have located a property which has agreed on hauling their sand for our replenishment purpose. Each of these coves is then described in this document below:

Location Map:



Findings:

Cove #1:

APC findings suggest:

- Approximately the first 0.5' to 1' of material down from existing mudline should be dredged to remove and dispose, taking away material not considered good and leaving room for importing good sand.
- The elevation of dredging & replenishment will be to -2 MLLW considering the lowest predicted tide for the year.
- Replenishment material will be placed between 1:5 and 1:8 slopes, near sand natural slope, to minimize material movement from the top to the bottom of the cove. Final grooming should be applied to imported material.
- Estimated profiles suggest that the quantities to be dredged are 1,445 cu yds. and to be imported are 1,210 cu yds.
- Grain Size analysis test results indicates that material to be dredged is suitable for in-harbor disposal only.

Cove #2:

APC findings suggest:

- Approximately the first 1.5' of material down from existing mudline should be dredged to remove and dispose, taking away material not considered good and leaving room for importing good sand.
- The elevation of dredging & replenishment will be to -2 MLLW considering the lowest predicted tide for the year.
- Replenishment material will be placed between 1:4 and 1:8 slopes, near sand natural slope, to minimize material movement from the top to the bottom of the cove. Final grooming should be applied to imported material.
- Estimated profiles suggest that the quantities to be dredged are 1,562 cu yds. and to be imported are 1,313 cu yds.
- Grain Size analysis test results indicates that material to be dredged is suitable for in-harbor disposal only.

Cove #3:

APC findings suggest:

- Approximately the first 1.5' of material down from existing mudline should be dredged to remove and dispose, taking away material not considered good and leaving room for importing good sand.
- The elevation of dredging & replenishment will be to -2 MLLW considering the lowest predicted tide for the year.

- Replenishment material will be placed between 1:6 and 1:9 slopes, near sand natural slope, to minimize material movement from the top to the bottom of the cove. Final grooming should be applied to imported material.
- Estimated profiles suggest that the quantities to be dredge are 1,695 cu yds. and to be imported are 1,077 cu yds.
- Grain Size analysis test results indicates that material to be dredged is suitable for in-harbor disposal only.

Cove #4:

APC findings suggest:

- Approximately the first 1.5' of material down from existing mudline should be dredged to remove and dispose, taking away material not considered good and leaving room for importing good sand.
- The elevation of dredging & replenishment will be to -2 MLLW considering the lowest predicted tide for the year.
- Replenishment material will be placed between 1:8 and 1:10 slopes, near sand natural slope, to minimize material movement from the top to the bottom of the cove. Final grooming should be applied to imported material.
- Estimated profiles suggest that the quantities to be dredge are 1,633 cu yds. and to be imported are 725 cu yds.
- Grain Size analysis test results indicates that material to be dredged is suitable for offshore disposal.

Our study estimates that total volume to be dredged between all four (4) coves is to be 5,335 cu yds. and volume of replenishment is to be 4,325 cu yds.

Dredging & disposal:

Grain Size analysis indicates if material can have offshore or In-Harbor Disposal, being the limit on 80% of sand content in the sample. If a test result has over 80% of sand content, it is considered "Good Sand" and it could not be disposed offshore, only inside the Harbor. Based on this information, offshore disposal can only be proposed for Cove #4. All other coves have a grain size content of over 80% of sand, which indicates In-Harbor Disposal is the only option.

Availability and disposal locations inside the Harbor will dictate when the project could be done, and it should be advised by the City of Newport Beach prior scheduling any work.

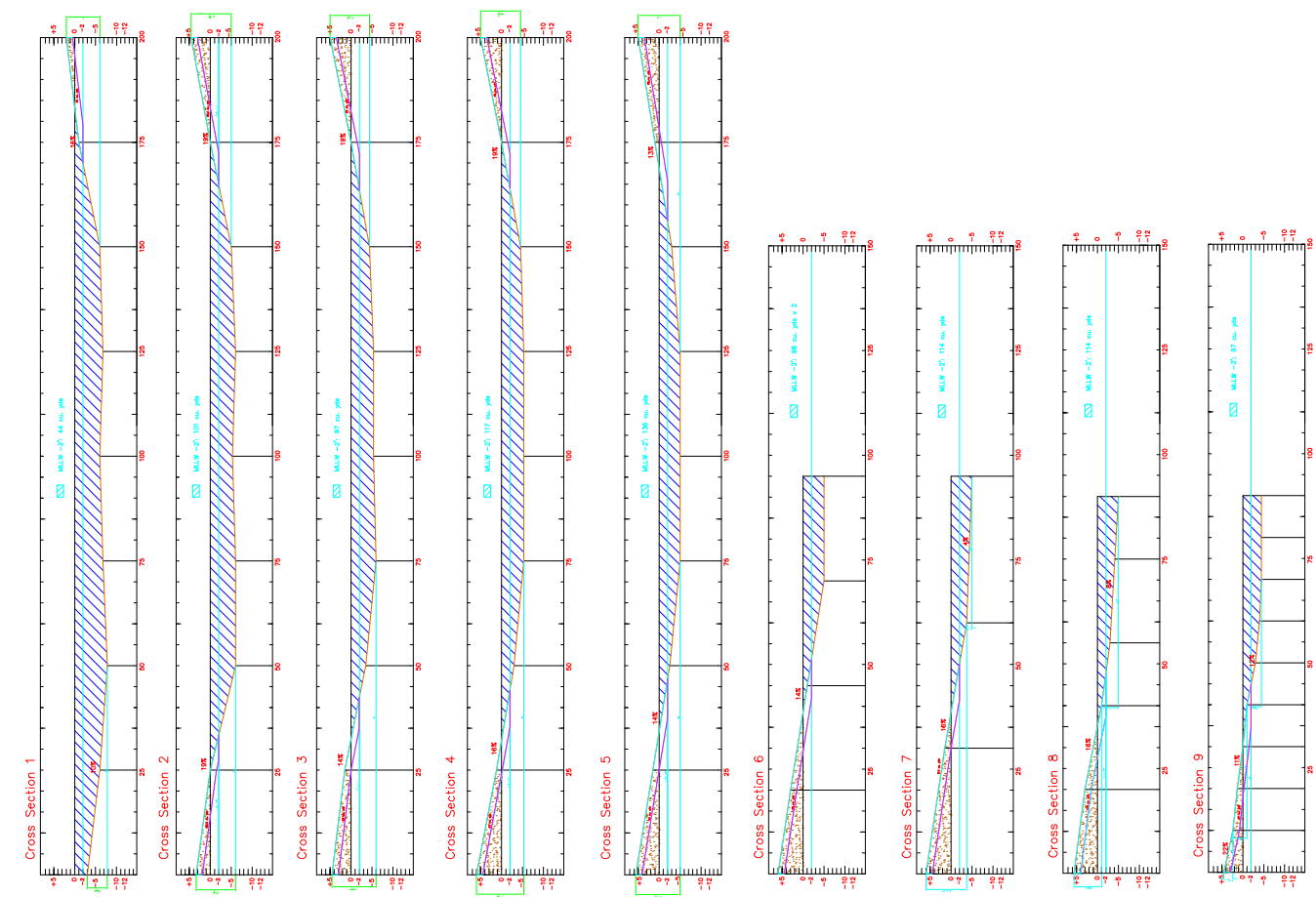
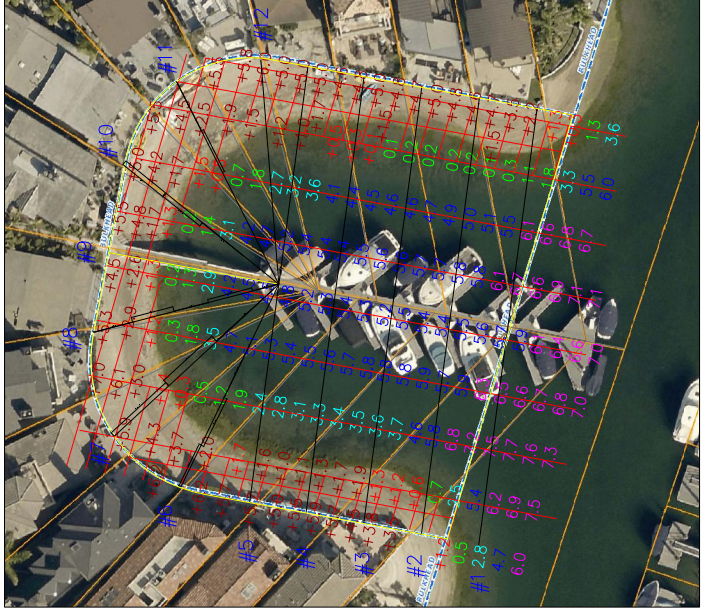
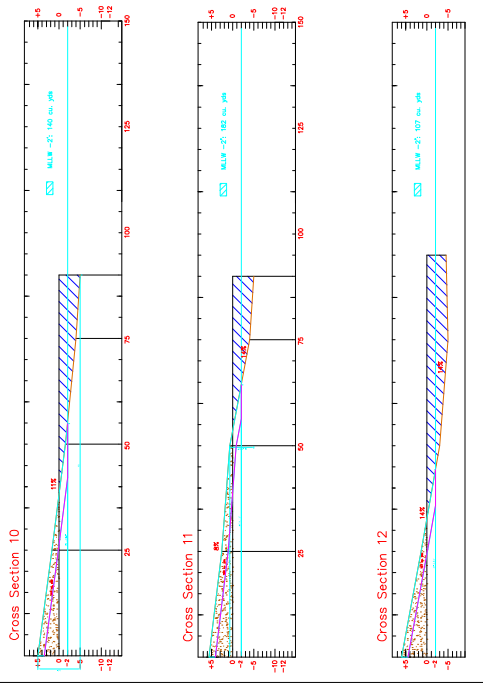
Beach Replenishment:

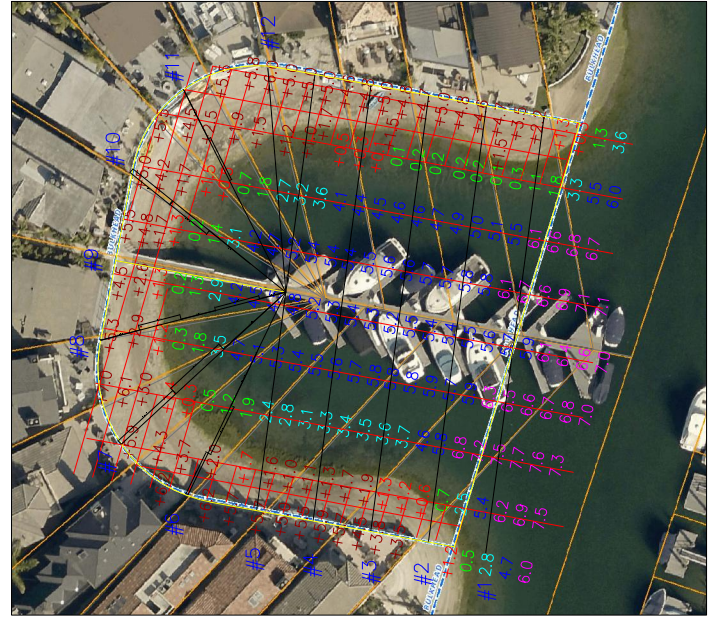
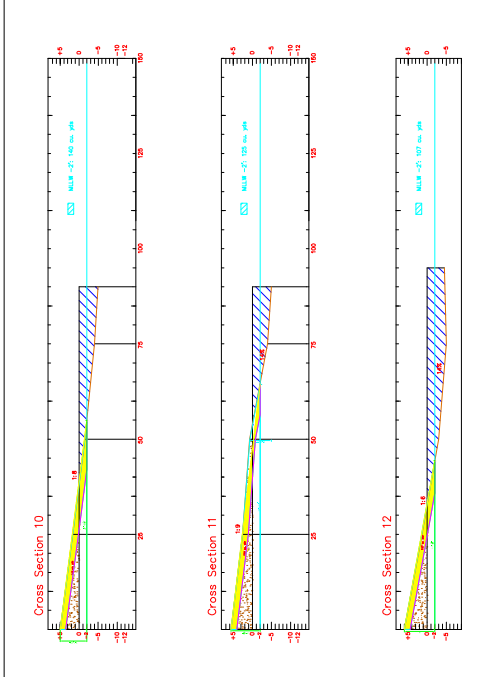
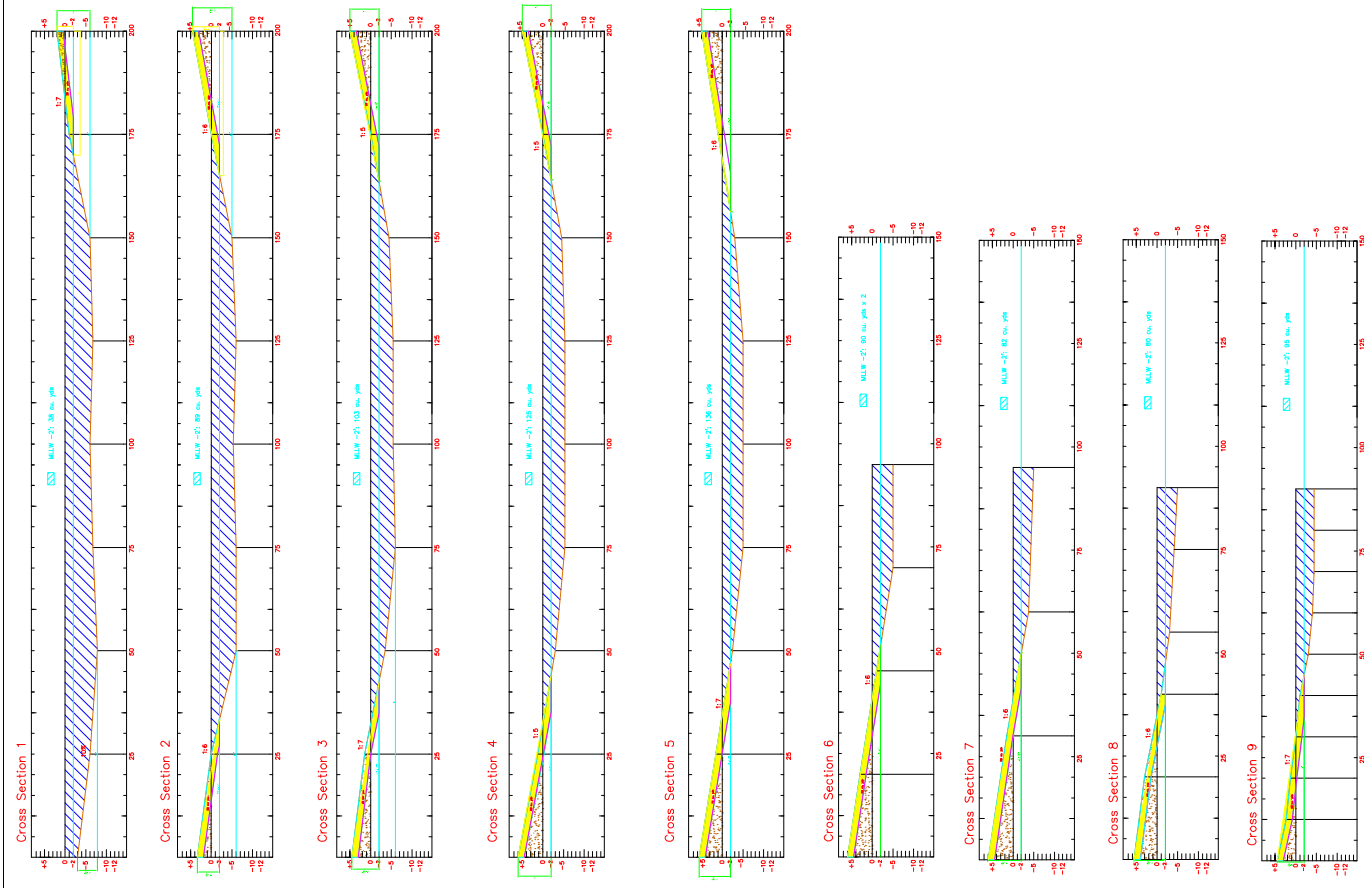
Associated Pacific Constructors has located a property inside the harbor that may have the required amount of Cu. Yds. necessary to satisfy the replenishment of all four (4) coves. Communications with the owner was established to develop a preliminary study at the property, and where he agreed on exporting material from his property for this project. If APC is chosen to perform this work, further surveys & studies will be developed to confirm that the property can indeed provide all necessary required material. If the property does not provide all material needed, we will work in conjunction with the City of Newport Beach to locate alternative sources to exporting good material


NOTES
- AREAS ARE APPROXIMATES IN THIS DRAWING - ESTIMATED DREDGING VOLUME: 1,445 CU YDS - DREDGING ELEVATION UP TO -2 MLLW.
STATUS
COMPLETED

OWNER
ERIC AUST
DESIGNER
ASSOCIATED PACIFIC CONSTRUCTORS

SITE
BALBOA COVES NEWPORT BEACH, CA 92663
TITLE
COVE 1 - DREDGING PROFILES
SCALE
N.T.S.
DATE
5-8-18
PROJECT NUMBER
998-059,200
DRAWING NUMBER
1
DESIGNED BY
AG
CHECKED BY
JT
REVISION







Associated Pacific Constructors, Inc.

• Offshore • Marshlands • Onshore

ADDRESS

2901 WEST COAST HWY
NEWPORT BEACH, CA
92663

PHONE

949-258-4410

WEBSITE

WWW.ASSOCIATEDPACIFIC.COM

NOTES

AREAS ARE APPROXIMATES IN THIS DRAWING

ESTIMATED IMPORTED VOLUME: 1,210 CU YDS

REPLENISHMENT ELEVATION UP TO -2 MLLW.

STATUS

COMPLETED

CLIENT

ERIC AUST

DESIGNER

ASSOCIATED PACIFIC CONSTRUCTORS

SITE

BALBOA COVES
NEWPORT BEACH, CA
92663

TITLE

COVE 1 - REPLENISHMENT PROFILES

SCALE

N.T.S.

DATE

5-8-18

PROJECT NUMBER

998-059.200

DRAWN BY

AG

CHECKED BY

JT

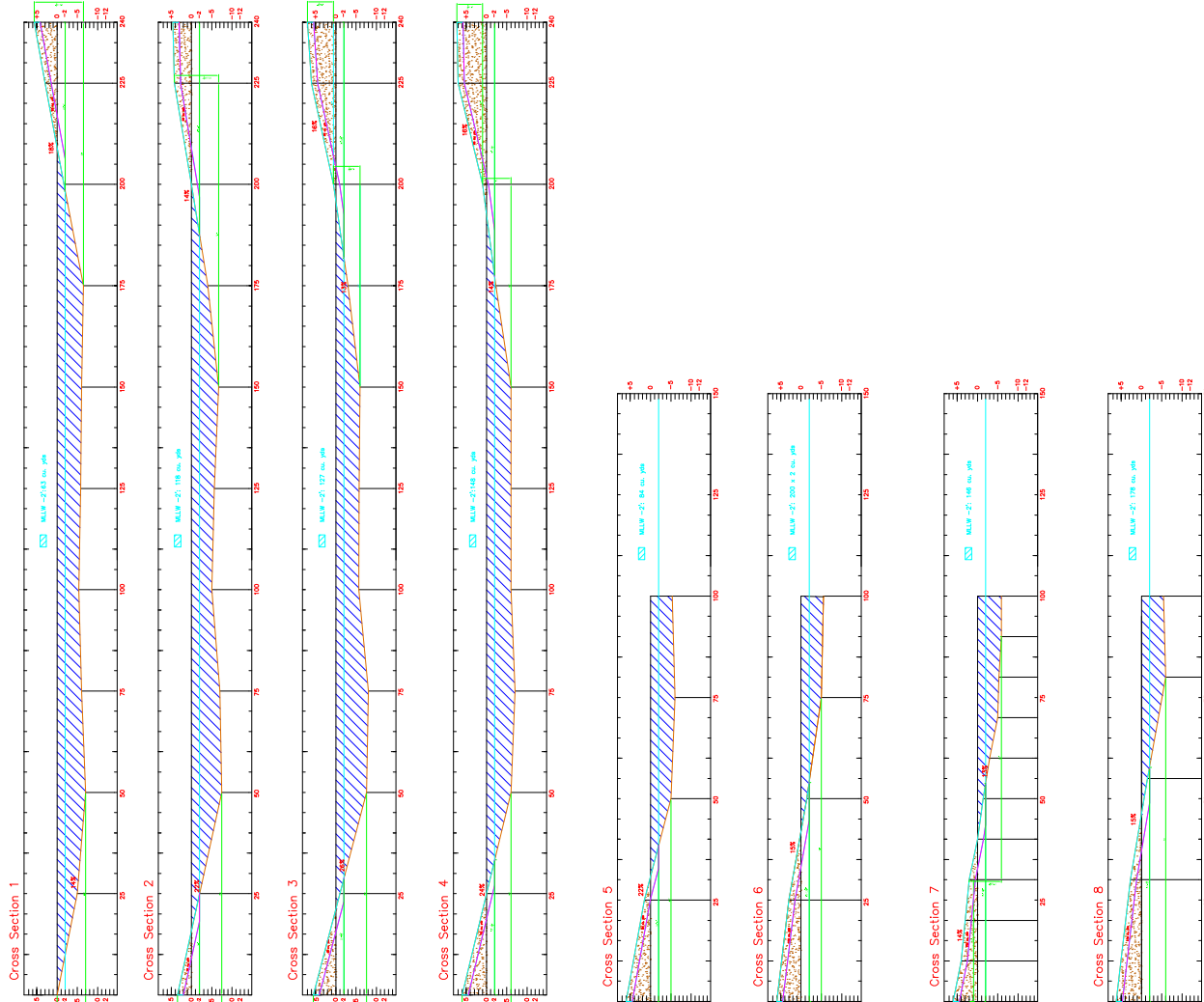
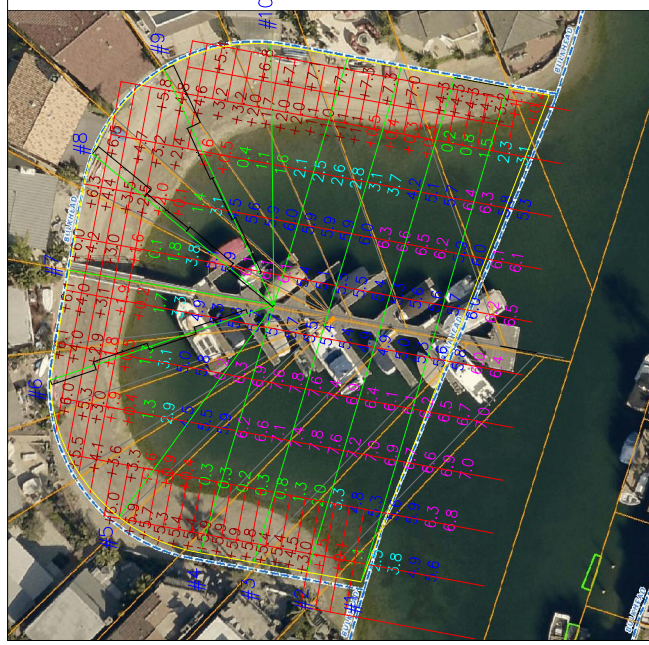
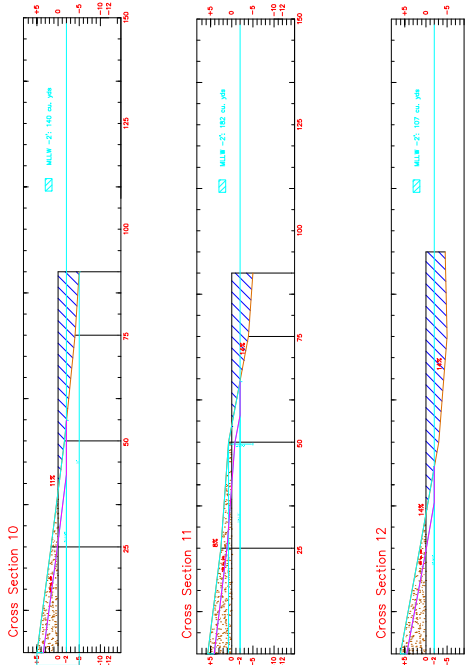
DESIGNED BY

1



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NEWPORT BEACH, CA
92663

949-258-4410
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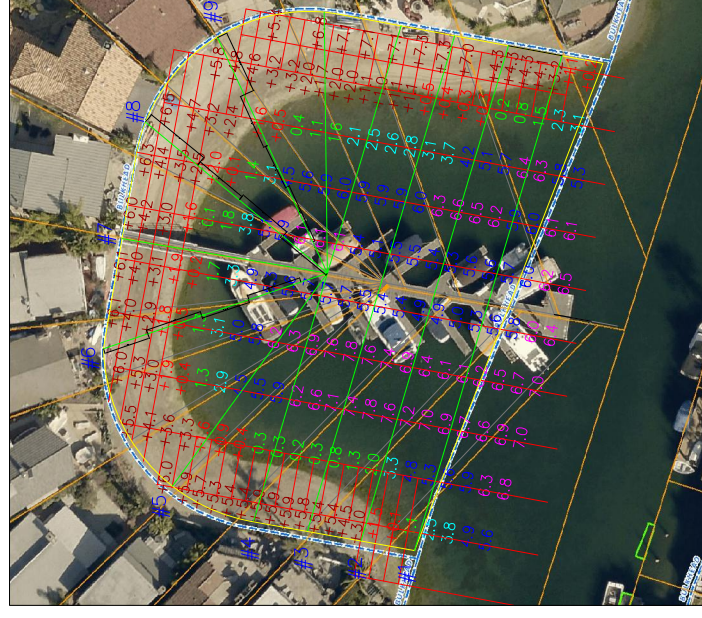
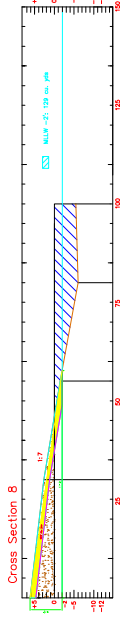
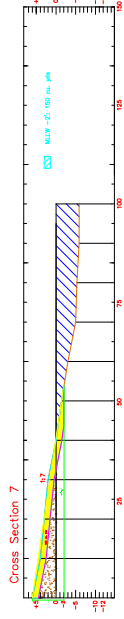
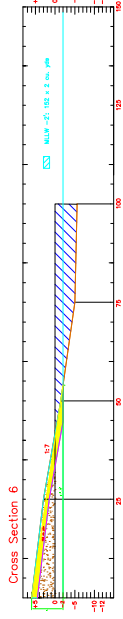
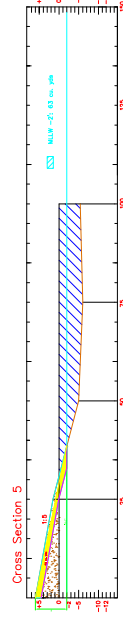
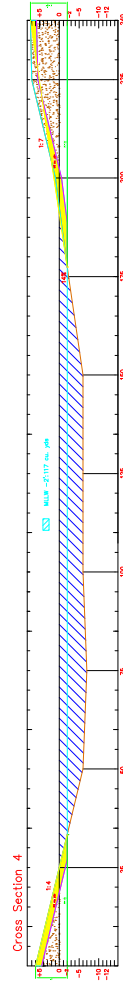
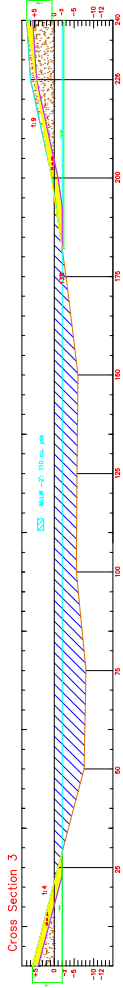
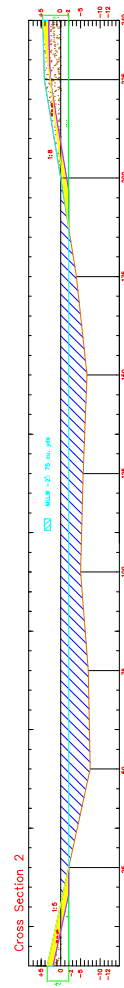
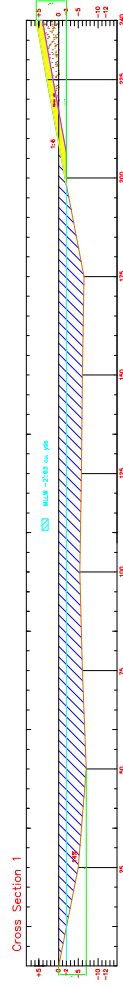
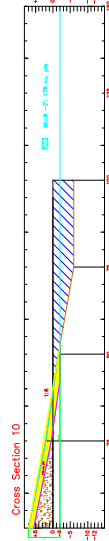
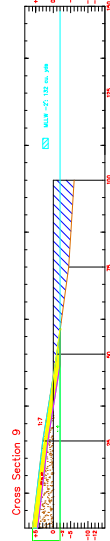
NOTES	
-	AREAS ARE APPROXIMATES IN THIS DRAWING
-	ESTIMATED DREDGING VOLUME: 1,562 CU YDS
-	DREDGING ELEVATION UP TO -2 MLLW.
STATUS	COMPLETED

CLIENT	ERIC AUST
DESIGNER	ASSOCIATED PACIFIC CONSTRUCTORS

SITE	BALBOA COVES NEWPORT BEACH, CA 92663
TITLE	COVE 2 - DREDGING PROFILES
SCALE	N.T.S.
DATE	5-8-18
PROJECT NUMBER	998-059,200
DRAWING NUMBER	AG
REVISION	1

PHONE: 949-258-4410

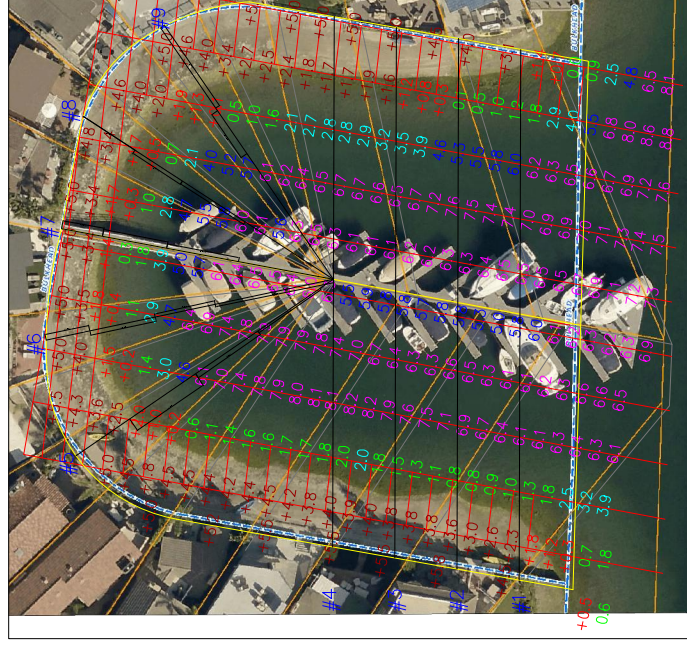
WEBSITE: WWW.ASSOCIATEDPACIFIC.COM



NOTES
— AREAS ARE APPROXIMATES IN THIS DRAWING
— ESTIMATED IMPORTED VOLUME: 1,313 CU YDS
— REPLENISHMENT ELEVATION UP TO -2 MLLW.
STATUS COMPLETED

CLIENT	ERIC AUST
DESIGNER	ASSOCIATED PACIFIC CONSTRUCTORS

BALBOA COVES NEWPORT BEACH, CA 92663	
TITLE: COVE 2 - REPLISHMENT PROFILES	
SCALE: N.T.S.	DATE: 5-8-18
PROJECT NUMBER: 998-059 200	DRAWING NUMBER: 1
CHECKED: JT	REVISION:



NOTES

- AREAS ARE APPROXIMATES IN THIS DRAWING
- ESTIMATED DREDGING VOLUME: 1,696 CU YDS
- DREDGING ELEVATION UP TO -2 MLLW

STATUS: COMPLETED

CLIENT: ERIC AUST

DESIGNER: ASSOCIATED PACIFIC
CONSTRUCTORS

SITE: BALBOA COVES
NEWPORT BEACH, CA
92663

FILE: COVE 3 - DREDGING PROFILES

SCALE: N.T.S.	DATE: 5-8-18	DRAWN BY: AG	CHECKED: JT
PROJECT NUMBER: 998-059.200	DRAWING NUMBER: 1		



WEBSITE:
WWW.ASSOCIATEDPACIFIC.COM

SCALE: N.T.S.	DATE: 5-8-18	DRAWN BY: AG	CHECKED: JT
PROJECT NUMBER: 998-059.200	DRAWING NUMBER: 1		
REVISION:			

ADDRESS
2901 WEST COAST HWY
NEWPORT BEACH, CA
92663

PHONE
949-258-4410

WEBSITE
WWW.ASSOCIATEDPACIFIC.COM

NOTES

- AREAS ARE APPROXIMATES IN THIS DRAWING
- ESTIMATED DREDGING VOLUME: 633 CU YDS
- DREDGING ELEVATION UP TO -2 MLLW.

STATUS
COMPLETED

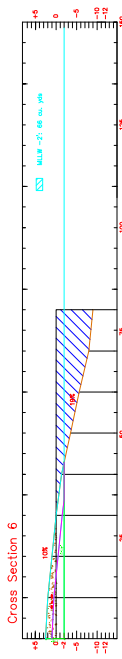
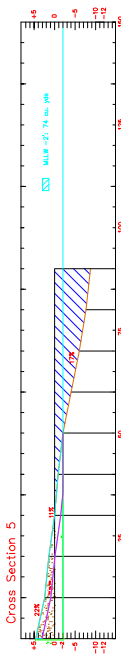
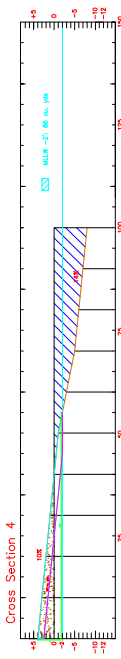
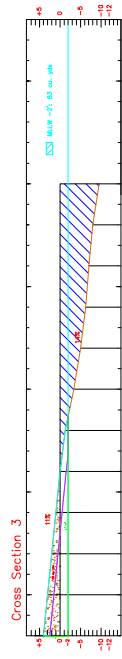
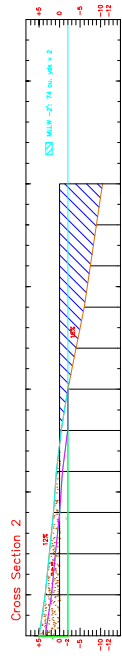
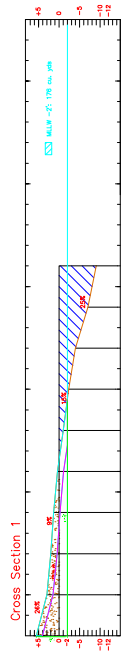
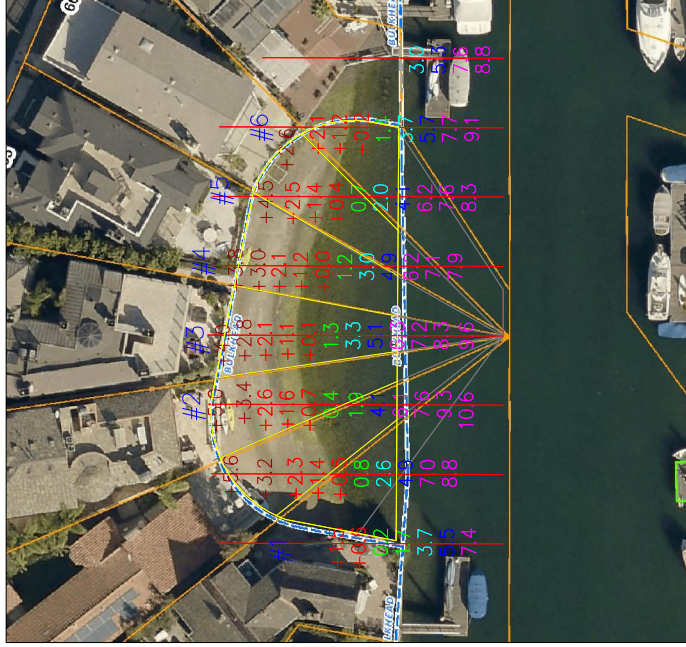
CLIENT
ERIC AUST

DESIGNER
ASSOCIATED PACIFIC
CONSTRUCTORS

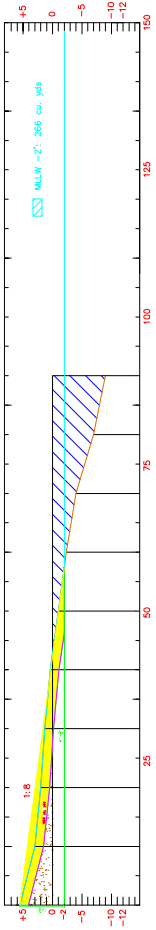
SITE
BALBOA COVES
NEWPORT BEACH, CA
92663

TITLE
COVE 4 - DREDGING PROFILES

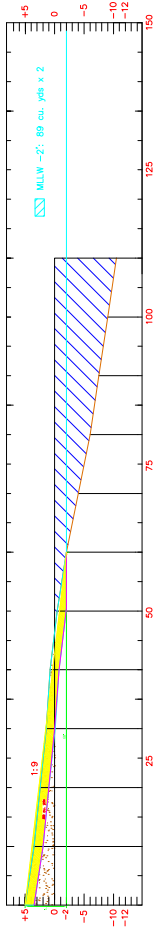
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PROJECT NUMBER	998-059,200	DRAWING NUMBER	1	REVISION			



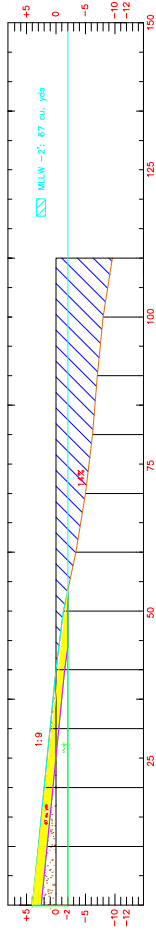
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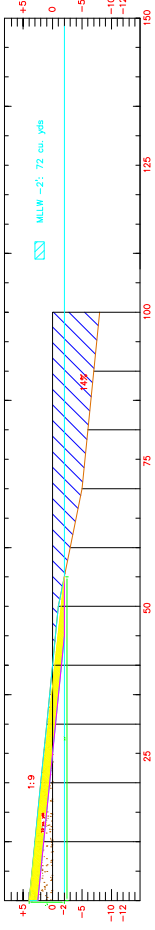
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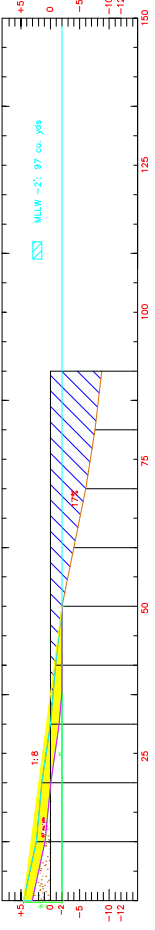
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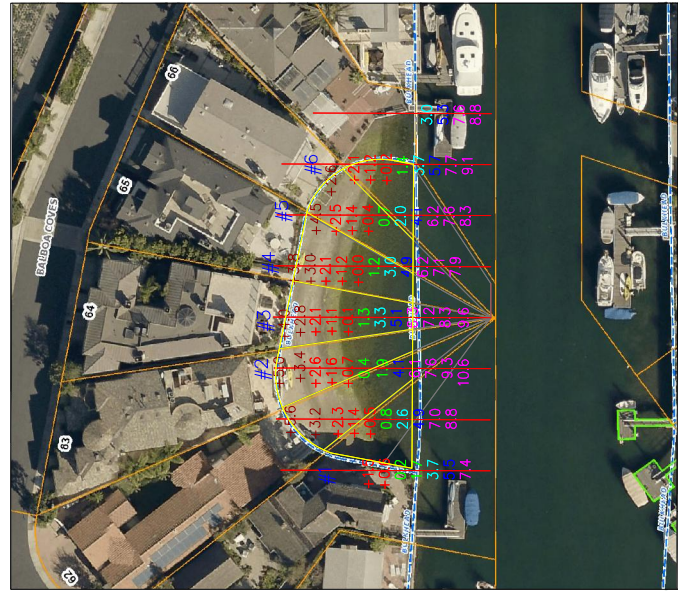
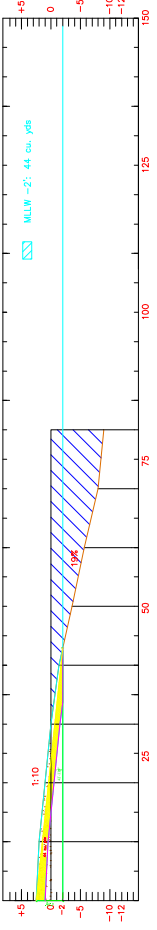
Cross Section 4



Cross Section 5



Cross Section 6



NOTES
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ESTIMATED IMPORTED VOLUME: 725 CU YDS
REPLENISHMENT ELEVATION UP TO -2 MLLW.
STATUS COMPLETED

CLIENT	ERIC AUST
DESIGNER	ASSOCIATED PACIFIC CONSTRUCTORS
SITE	BALBOA COVES NEWPORT BEACH, CA 92663
TITLE	COVE 4 - REPLENISHMENT PROFILES
SCALE	N.T.S.
DATE	5-8-18
PROJECT NUMBER	998-059.200
DRAWING NUMBER	1

Associated Pacific Constructors, Inc.

Offshore • Marshland • Onshore

ADDRESS
2901 WEST COAST HWY
NEWPORT BEACH, CA
92663

PHONE
949-258-4410

WEBSITE
WWW.ASSOCIATEDPACIFIC.COM



Calscience



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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4	Particle Size Summary - 18-05-1110.	6
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6	Chain-of-Custody/Sample Receipt Form.	15

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 ≤ 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.



Calscience

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 #1-DREDGING	18-05-1110-1	04/30/18 13:10	1	Sediment


Return to Contents



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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

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 #1-DREDGING	18-05-1110-1-AA	04/30/18 13:10	Sediment	LPSA 1	N/A	05/23/18 19:31	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.63	
Silt (0.00391 to 0.0625mm)	4.89	
Total Silt and Clay (0 to 0.0625mm)	5.52	
Very Fine Sand (0.0625 to 0.125mm)	3.38	
Fine Sand (0.125 to 0.25mm)	14.50	
Medium Sand (0.25 to 0.5mm)	38.60	
Coarse Sand (0.5 to 1mm)	29.86	
Very Coarse Sand (1 to 2mm)	8.14	
Gravel (greater than 2mm)	ND	

94.48 % Sand

Return to Contents

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

PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

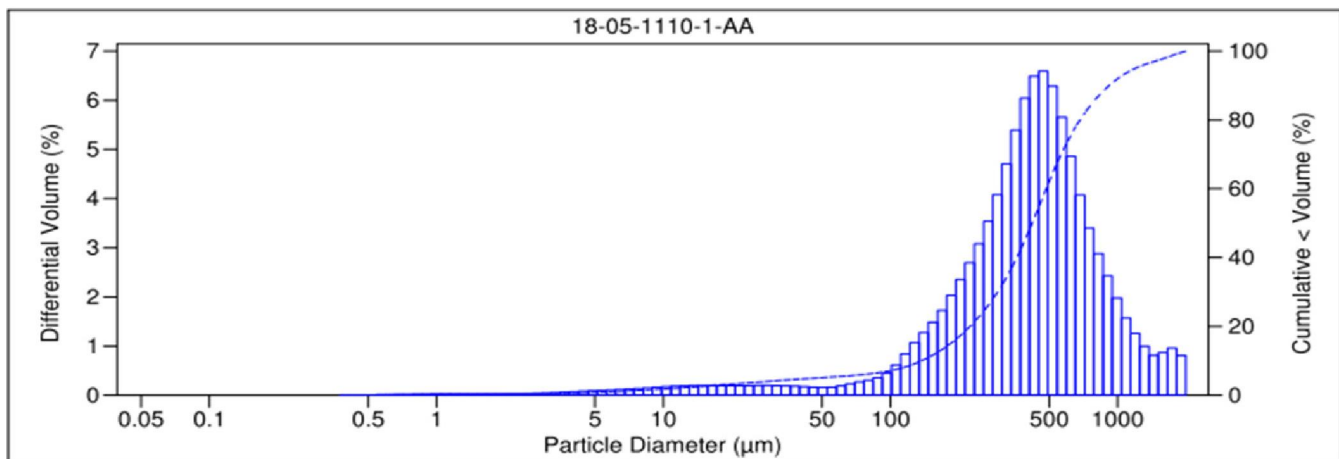
Date Sampled: 04/30/18
 Date Received: 05/11/18
 Work Order No: 18-05-1110
 Date Analyzed: 05/23/18
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

Page 1 of 8

Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #1-DREDGING		Medium Sand	0.490

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	8.14	29.86	38.60	14.50	3.38	4.89	0.63	5.52



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.



CalScience

CHAIN OF CUSTODY RECORD

DATE: 5-11-2018

PAGE: 1 OF 1

WO # / LAB USE ONLY
18-05-11107440 Lincoln Way, Garden Grove, CA 92641-1427 • (714) 895-5494
For courier service / sample drop off information, contact us28_sales@eurofins.com or call us.

LABORATORY CLIENT

ASSOCIATED PACIFIC CONSTRUCTORS

2901 WEST COAST HIGHWAY, SUITE 374

CITY: NEWPORT BEACH

STATE: CA

ZIP: 92663

TEL: 949-258-4410

E-MAIL: JTOMAS@ASSOCIATEDPACIFIC.COM

TURNAROUND TIME (rush surcharges may apply to any TAT not STANDARD)

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

GLOBAL ID:

LOG CODE:

SPECIAL INSTRUCTIONS:

Please provide individual analysis report for each sample.

ASTM D4464(M) Particle Size Laser

Unpreserved
Preserved
Field FilledLAB USE ONLY
SAMPLE ID
SAMPLING DATE
TIME
MATRIX
NO. OF CONT.

1 BALBOA COVE #1 - DREDGING 4-30-2018 13:10 S 1

2 BALBOA COVE #1 - REPLENISHMENT 5-11-2018 12:45 S 1

3 BALBOA COVE #2 - DREDGING 4-30-2018 13:20 S 1

4 BALBOA COVE #2 - REPLENISHMENT 5-11-2018 13:00 S 1

5 BALBOA COVE #3 - DREDGING 4-30-2018 13:30 S 1

6 BALBOA COVE #3 - REPLENISHMENT 5-11-2018 13:10 S 1

7 BALBOA COVE #4 - DREDGING 4-30-2018 13:40 S 1

8 BALBOA COVE #4 - REPLENISHMENT 5-11-2018 13:20 S 1

Relinquished by (Signature)

Relinquished by (Signature)

Relinquished by (Signature)

Received by (Signature/Affiliation)

Received by (Signature/Affiliation)

Received by (Signature/Affiliation)

REQUESTED ANALYSES

Please check box or fill in blank as needed.

Date: 5/11/18

Date: 5/11/18

Date: 5/11/18

Time: 1602

Time: 1602

Time: 1602

SAMPLE RECEIPT CHECKLISTCOOLER 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_h ☐ VOA_{na} ☐ 100PJ ☐ 100PJ_{na} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH_9)☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH_2) ☐ 250PB ☐ 250PB_n (pH_2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH_2) ☐ 500PB☐ 1AGB ☐ 1AGB_{na} ☐ 1AGB_s (pH_2) ☐ 1AGB_s (O&G) ☐ 1PB ☐ 1PB_{na} (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 = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄·H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 718



Calscience

Supplemental Report 1



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

Client Project Name: 998-059.200 BALBOA COVES
 Work Order Number: 18-05-1110

1	Work Order Narrative.	3
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	3.1 ASTM D4464 (M) Particle Size Laser (Solid).	5
4	Particle Size Summary - 18-05-1110.	6
5	Glossary of Terms and Qualifiers.	14
6	Chain-of-Custody/Sample Receipt Form.	15

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 ≤ 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.



Calscience

Sample Summary

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
---	---

Attn: Jorge Tomas

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
BALBOA COVE #1-REPLENISHMENT	18-05-1110-2	05/11/18 12:45	1	Sediment


Return to Contents



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 #1-REPLENISHMENT	18-05-1110-2-AA	05/11/18 12:45	Sediment	LPSA 1	N/A	05/23/18 19:38	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	0.91	
Silt (0.00391 to 0.0625mm)	4.24	
Total Silt and Clay (0 to 0.0625mm)	5.15	
Very Fine Sand (0.0625 to 0.125mm)	7.71	
Fine Sand (0.125 to 0.25mm)	24.81	
Medium Sand (0.25 to 0.5mm)	41.39	
Coarse Sand (0.5 to 1mm)	19.80	
Very Coarse Sand (1 to 2mm)	1.15	
Gravel (greater than 2mm)	ND	

94.86 % Sand

Return to Contents

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

PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

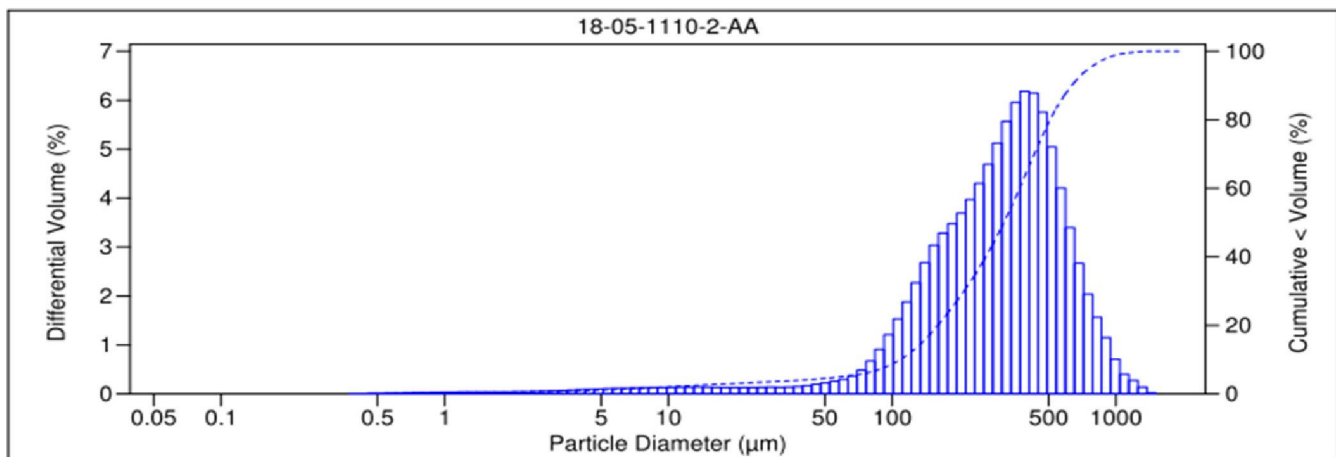
Date Sampled: 05/11/18
 Date Received: 05/11/18
 Work Order No: 18-05-1110
 Date Analyzed: 05/23/18
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

Page 2 of 8

Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #1-REPLENISHMENT		Medium Sand	0.348

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	1.15	19.80	41.39	24.81	7.71	4.24	0.91	5.15



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.

CLIENT: Associated Pacific Constructors

DATE: 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 ☐ Filter

Checked by: *gvr*

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: SW

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 1052

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples..... ☒ ☐ ☐

COC document(s) received complete ☒ ☐ ☐

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☐ ☒ ☐

Sample container label(s) consistent with COC ☒ ☐ ☐

Sample container(s) intact and in good condition ☒ ☐ ☐

Proper containers for analyses requested

Sufficient volume/mass for analyses requested ☒ ☐ ☐

Samples received within holding time ☒ ☐ ☐

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

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒

Proper preservation chemical(s) noted on COC and/or sample container ☐ ☐ ☒

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ ☐ ☒

Container(s) for certain analysis free of headspace..... ☐ ☐ ☒

☐ 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 ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☐ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB☐ 1AGB ☒ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☐ 1PB ☐ 1PBna (pH__12) ☐ _____ / ☐ _____ (*Ser II*) ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve () ☐ EnCores® () ☐ TerraCores® () ☒ 2802PJ ☐ () ☐ ()

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 = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄. Labeled/Checked by: 105 J

s = H_2SO_4 , u = ultra-pure, x = $\text{Na}_2\text{SO}_3 + \text{NaHSO}_4 \cdot \text{H}_2\text{O}$, znna = $\text{Zn}(\text{CH}_3\text{CO}_2)_2 + \text{NaOH}$

Reviewed by: 72X



Calscience

Supplemental Report 2



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

Client Project Name: 998-059.200 BALBOA COVES
 Work Order Number: 18-05-1110

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Client Sample Data.	5
	3.1 ASTM D4464 (M) Particle Size Laser (Solid).	5
4	Particle Size Summary - 18-05-1110.	6
5	Glossary of Terms and Qualifiers.	14
6	Chain-of-Custody/Sample Receipt Form.	15

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 ≤ 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.



Calscience

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 #2-DREDGING	18-05-1110-3	04/30/18 13:20	1	Sediment


Return to Contents

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 #2-DREDGING	18-05-1110-3-AA	04/30/18 13:20	Sediment	LPSA 1	N/A	05/23/18 19:44	

<u>Parameter</u>	<u>Result</u>	<u>Qualifiers</u>
Clay (less than 0.00391mm)	1.94	
Silt (0.00391 to 0.0625mm)	15.64	
Total Silt and Clay (0 to 0.0625mm)	17.58	
Very Fine Sand (0.0625 to 0.125mm)	5.47	
Fine Sand (0.125 to 0.25mm)	19.37	
Medium Sand (0.25 to 0.5mm)	37.66	
Coarse Sand (0.5 to 1mm)	19.40	
Very Coarse Sand (1 to 2mm)	0.52	
Gravel (greater than 2mm)	ND	

82.45 % Sand

Return to Contents

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

PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Associated Pacific Constructors, Inc.

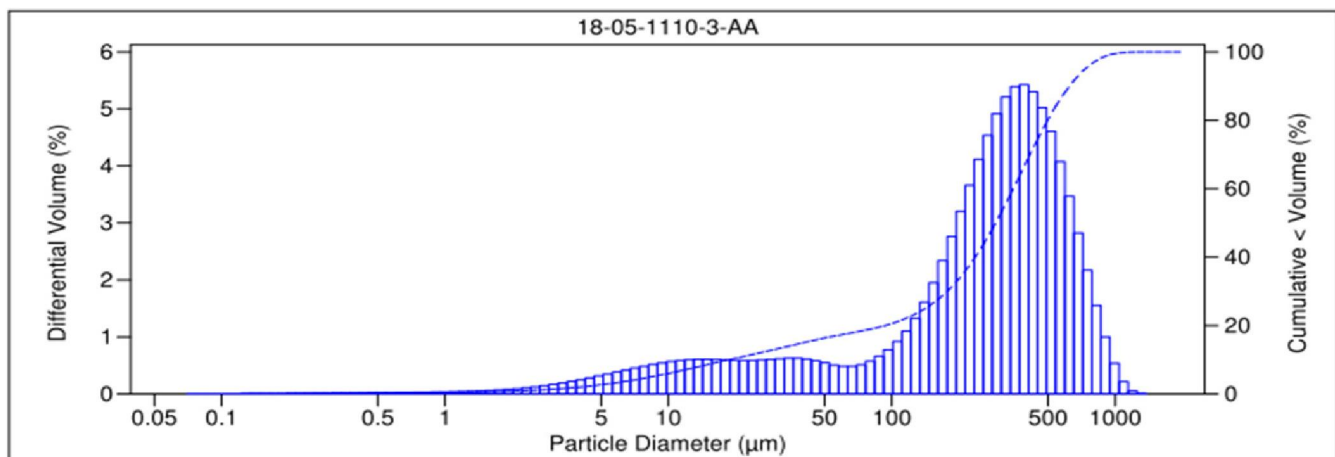
Date Sampled: 04/30/18
 Date Received: 05/11/18
 Work Order No: 18-05-1110
 Date Analyzed: 05/23/18
 Method: ASTM D4464M

Project: 998-059.200 BALBOA COVES

Page 3 of 8

Sample ID	Depth ft	Description	Mean Grain Size mm
BALBOA COVE #2-DREDGING		Medium Sand	0.314

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	0.52	19.40	37.66	19.37	5.47	15.64	1.94	17.58



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.



CalScience

CHAIN OF CUSTODY RECORD

DATE: 5-11-2018

PAGE: 1 OF 1

WO # / LAB USE ONLY
18-05-11107440 Lincoln Way, Garden Grove, CA 92641-1427 • (714) 895-5494
For courier service / sample drop off information, contact us28_sales@eurofins.com or call us.

LABORATORY CLIENT

ASSOCIATED PACIFIC CONSTRUCTORS

2901 WEST COAST HIGHWAY, SUITE 374

CITY: NEWPORT BEACH

STATE: CA

ZIP: 92663

E-MAIL

JTOMAS@ASSOCIATEDPACIFIC.COM

TEL: 949-258-4410

TURNAROUND TIME (rush surcharges may apply to any TAT not STANDARD)

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

GLOBAL ID:

LOG CODE

☐ COELT EDF

SPECIAL INSTRUCTIONS:

Please provide individual analysis report for each sample.

CLIENT PROJECT NAME / NUMBER
998-059.200 BALBOA COVES
P.O. NO.: 998-059.200
PROJECT CONTACT
JORGE TOMAS - 9492206387 - JTOMAS@ASSOCIATEDPACIFIC.COM
SAMPLER(S): (PRINT)

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE			Field Filled	Preserved	Unpreserved	ASTM D4464(M) Particle Size Laser													
		DATE	TIME																						

SAMPLE RECEIPT CHECKLISTCOOLER 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_h ☐ VOA_{na} ☐ 100PJ ☐ 100PJ_{na} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_z ☐ 125PB_z _{na} (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH 2) ☐ 250PB ☐ 250PB_n (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH 2) ☐ 500PB☐ 1AGB ☐ 1AGB_{na} ☐ 1AGB_s (pH 2) ☐ 1AGB_s (O&G) ☐ 1PB ☐ 1PB_{na} (pH 12) ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☒ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☒ 2802 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 = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053s = H₂SO₄, u = ultra-pure, x = Na₂SO₃ + NaHSO₄ · H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOHReviewed by: 718



Calscience

Supplemental Report 3



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 ≤ 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.