

WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 7L01071

Report Date: 12/05/2017

Received Date: 12/1/2017

Project: Seawater - Carlsbad Desal Plant - WEEKLY

Turnaround Time: Normal

Phones: 1(619) 487-0760

Fax:

Attn: Peter Shen

P.O. #:

Client: IDE Americas, Inc. - Carlsbad CA
4590 Carlsbad Blvd
Carlsbad, CA 92008

Billing Code:

DoD-ELAP #L2457 • ELAP-CA #1132 • EPA-UCMR #CA00211 • Guam-EPA #17-008R • HW-DOH # • ISO 17025 #L2457.01 •
LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

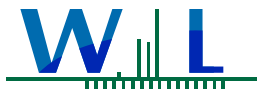
Dear Peter Shen,

Enclosed are the results of analyses for samples received 12/01/17 with the Chain-of-Custody document. The samples were received in good condition, at 1.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Kim G. Tu
Project Manager





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Reported:

12/05/2017 14:24

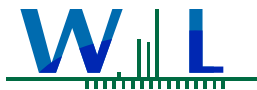
Project Manager: Peter Shen

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
M-001 (17-3424)	Kevin Curry	7L01071-01	Water	12/01/17 09:20	
M-INF (17-3425)	Kevin Curry	7L01071-02	Water	12/01/17 07:20	
M-002 (17-3426)	Kevin Curry	7L01071-03	Water	12/01/17 10:40	

Not Certified Analyses Summary

Analyte	CAS #	Not Accredited By
Field in Water		
pH	PH	NELAP
Temperature, Degrees F		NELAP
SM 2520B in Water		
Salinity		NELAP



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Sample Results

Sample: M-001 (17-3424) Sampled: 12/01/17 9:20 by Kevin Curry

7L01071-01 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 1664B **Batch ID:** W7L0056 **Prepared:** 12/04/17 09:57 **Analyst:** joh
Oil & Grease (HEM) ND 1.3 5.0 mg/l 1 12/04/17 14:47

Method: SM 2520B **Batch ID:** W7L0106 **Prepared:** 12/04/17 10:19 **Analyst:** stg
Salinity 60 ppt 1 12/04/17 11:06

Method: SM 2540D **Batch ID:** W7L0119 **Prepared:** 12/04/17 13:24 **Analyst:** mic
Total Suspended Solids 42 5 mg/l 1 12/04/17 15:31

Field Determinations

Method: Field **Batch ID:** W7L0058 **Prepared:** 12/01/17 09:20 **Analyst:** _clnt
pH 7.83 pH Units 1 12/01/17 09:20

Temperature, Degrees F 62.1 °F 1 12/01/17 09:20

Sample: M-INF (17-3425) Sampled: 12/01/17 7:20 by Kevin Curry

7L01071-02 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 2520B **Batch ID:** W7L0106 **Prepared:** 12/04/17 10:19 **Analyst:** stg
Salinity 33 ppt 1 12/04/17 11:06

Field Determinations

Method: Field **Batch ID:** W7L0058 **Prepared:** 12/01/17 07:20 **Analyst:** _clnt
Temperature, Degrees F 61.0 °F 1 12/01/17 07:20

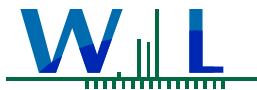
Sample: M-002 (17-3426) Sampled: 12/01/17 10:40 by Kevin Curry

7L01071-03 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 2520B **Batch ID:** W7L0106 **Prepared:** 12/04/17 10:19 **Analyst:** stg
Salinity 38 ppt 1 12/04/17 11:06



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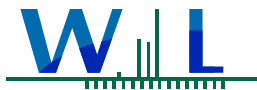
Project Manager: Peter Shen



Quality Control Results

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W7L0056 - EPA 1664B											
Blank (W7L0056-BLK1)					Prepared & Analyzed: 12/04/17						
Oil & Grease (HEM)	ND	1.3	5.0	mg/l							
LCS (W7L0056-BS1)					Prepared & Analyzed: 12/04/17						
Oil & Grease (HEM)	17.3	1.3	5.0	mg/l	20.0		86	78-114			
LCS (W7L0056-BS2)					Prepared & Analyzed: 12/04/17						
Oil & Grease (HEM)	4.50	1.3	5.0	mg/l	5.00		90	78-114			J
LCS Dup (W7L0056-BSD1)					Prepared & Analyzed: 12/04/17						
Oil & Grease (HEM)	17.0	1.3	5.0	mg/l	20.0		85	78-114	2	18	
Matrix Spike (W7L0056-MS1)					Prepared & Analyzed: 12/04/17						
Oil & Grease (HEM)	21.0	1.3	5.0	mg/l	23.2	ND	91	78-114			
Batch: W7L0106 - SM 2520B											
Duplicate (W7L0106-DUP1)					Prepared & Analyzed: 12/04/17						
Salinity	59.3			ppt		59.6			0.4	20	
Batch: W7L0119 - SM 2540D											
Blank (W7L0119-BLK1)					Prepared & Analyzed: 12/04/17						
Total Suspended Solids	ND		5	mg/l							
LCS (W7L0119-BS1)					Prepared & Analyzed: 12/04/17						
Total Suspended Solids	56.0		5	mg/l	52.9		106	90-110			
Duplicate (W7L0119-DUP1)					Prepared & Analyzed: 12/04/17						
Total Suspended Solids	ND		5	mg/l		1.00			200	20	R-03
Duplicate (W7L0119-DUP2)					Prepared & Analyzed: 12/04/17						
Total Suspended Solids	1.00		5	mg/l		ND			200	20	R-03, J



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Notes and Definitions

Item	Definition
J	Estimated conc. detected <MRL and >MDL.
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Source	Sample that was matrix spiked or duplicated.
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR)
MDA	Minimum Detectable Activity
NR	Not Reportable
TIC	Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.