WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 7H21096

Project: Carlsbad Desal Plant - WEEKLY

Attn: Peter Shen

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

Report Date: 8/29/2017
Received Date: 8/21/2017
Turnaround Time: Normal
Phones: 1(619) 487-0760
Fax:
P.O. #:
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 ● SCAQMD #93LA1006

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 8/21/17 with the Chain-of-Custody document. The samples were received in good condition, at 3.5 °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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Project Number: Carlsbad Desal Plant - WEEKLY

Project Manager: Peter Shen

Reported:
08/29/2017 12:29

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
M-001 (17-2695)	Kevin Curry / Vanessa Hayes	7H21096-01	Water	08/18/17 12:20	
M-INF (17-2696)	Kevin Curry / Vanessa Hayes	7H21096-02	Water	08/18/17 12:15	
M-002 (17-2697)	Kevin Curry / Vanessa Hayes	7H21096-03	Water	08/18/17 12:05	

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 (17-2695) — Sampled: 08/18/17 12:20 by Kevin Curry / Vanessa Hayes

7H21096-01 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods							
Method: EPA 1664B	**Batch ID:** W7H1310		**Prepared:** 08/22/17 09:02				**Analyst:** joh
Oil & Grease (HEM)	ND	1.3	5.0	mg/l	1	08/22/17 16:08	
Method: SM 2520B	**Batch ID:** W7H1435		**Prepared:** 08/23/17 13:30				**Analyst:** stg
Salinity	**33**			ppt	1	08/23/17 14:05	
Method: SM 2540D	**Batch ID:** W7H1445		**Prepared:** 08/23/17 16:08				**Analyst:** ajk
Total Suspended Solids	**27**		5	mg/l	1	08/24/17 17:20	
Field Determinations							
Method: Field	**Batch ID:** W7H1290		**Prepared:** 08/18/17 12:20				**Analyst:** _clnt
pH	**7.78**			pH Units	1	08/18/17 12:20	
Temperature, Degrees F	**80.3**			°F	1	08/18/17 12:20	

Sample: M-INF (17-2696) — Sampled: 08/18/17 12:15 by Kevin Curry / Vanessa Hayes

7H21096-02 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods							
Method: SM 2520B	**Batch ID:** W7H1435		**Prepared:** 08/23/17 13:30				**Analyst:** stg
Salinity	**33**			ppt	1	08/23/17 14:05	
Field Determinations							
Method: Field	**Batch ID:** W7H1290		**Prepared:** 08/18/17 12:15				**Analyst:** _clnt
Temperature, Degrees F	**73.4**			°F	1	08/18/17 12:15	

Sample: M-002 (17-2697) — Sampled: 08/18/17 12:05 by Kevin Curry / Vanessa Hayes

7H21096-03 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods							
Method: SM 2520B	**Batch ID:** W7H1435		**Prepared:** 08/23/17 13:30				**Analyst:** stg
Salinity	**33**			ppt	1	08/23/17 14:05	

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Quality Control Results

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

Analyte	Result	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W7H1310 - EPA 1664B										
Blank (W7H1310-BLK1)				**Prepared & Analyzed: 08/22/17**						
Oil & Grease (HEM)	ND	1.3	mg/l							
LCS (W7H1310-BS1)				**Prepared & Analyzed: 08/22/17**						
Oil & Grease (HEM)	17.1	1.3	mg/l	20.0		86	78-114			
LCS (W7H1310-BS2)				**Prepared & Analyzed: 08/22/17**						
Oil & Grease (HEM)	4.10	1.3	mg/l	5.00		82	78-114			J
LCS Dup (W7H1310-BSD1)				**Prepared & Analyzed: 08/22/17**						
Oil & Grease (HEM)	17.2	1.3	mg/l	20.0		86	78-114	0.6	18	
Matrix Spike (W7H1310-MS1)	**Source: 7H18079-01**			**Prepared & Analyzed: 08/22/17**						
Oil & Grease (HEM)	18.0	1.3	mg/l	21.4	ND	84	78-114			
Batch: W7H1435 - SM 2520B										
Duplicate (W7H1435-DUP1)	**Source: 7H21096-01**			**Prepared & Analyzed: 08/23/17**						
Salinity	33.0		ppt		33.1			0.2	20	
Batch: W7H1445 - SM 2540D										
Blank (W7H1445-BLK1)				**Prepared: 08/23/17 Analyzed: 08/24/17**						
Total Suspended Solids	ND		mg/l							
LCS (W7H1445-BS1)				**Prepared: 08/23/17 Analyzed: 08/24/17**						
Total Suspended Solids	69.0		mg/l	62.8		110	90-110			
Duplicate (W7H1445-DUP1)	**Source: 7H21032-01**			**Prepared: 08/23/17 Analyzed: 08/24/17**						
Total Suspended Solids	17.0		mg/l		15.0			12	20	
Duplicate (W7H1445-DUP2)	**Source: 7H21032-02**			**Prepared: 08/23/17 Analyzed: 08/24/17**						
Total Suspended Solids	17.0		mg/l		16.0			6	20	

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Notes and Definitions

Item	Definition
J	Estimated conc. detected <MRL and >MDL.
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.

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