

Work Orders: 8C02079

Project: MS4 - Storm Water Monitoring 2017-2018

Attn: Edmond G. Suher

Client: AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Report Date: 4/16/2018

Received Date: 3/2/2018

Turnaround Time: Normal

Phones: (818) 841-9004

Fax: (818) 841-8013

P.O. #:

Billing Code:

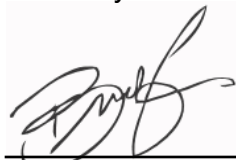
DoD-ELAP #L2457 • EPA-UCMR #CA00211 • Guam-EPA #17-008R • ISO 17025 #L2457.01 • LACSD #10143 • NJ-DEP #CA015

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 Edmond G. Suher,

Enclosed are the results of analyses for samples received 3/02/18 with the Chain-of-Custody document. The samples were received in good condition, at 12.4 °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:



Brandon Gee
Operations Manager/Senior PM





WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
Outfall #6 (LL)	ES/TM	8C02079-01	Water	03/02/18 11:00	
Outfall #7 (SG)	ES/TM	8C02079-02	Water	03/02/18 11:45	
Outfall #5 (RH)	ES/TM	8C02079-03	Water	03/02/18 13:00	

Not Certified Analyses Summary

Analyte	CAS #	Not Accredited By
Enterolert in Water		
Enterococcus		NELAP
EPA 625.1 in Water		
Naphthalene	91-20-3	NELAP
Acenaphthylene	208-96-8	NELAP
Acenaphthene	83-32-9	NELAP
Fluorene	86-73-7	NELAP
Phenanthrene	85-01-8	NELAP
Anthracene	120-12-7	NELAP
Fluoranthene	206-44-0	NELAP
Pyrene	129-00-0	NELAP
Benzo (a) anthracene	56-55-3	NELAP
Chrysene	218-01-9	NELAP
Benzo (b) fluoranthene	205-99-2	NELAP
Benzo (k) fluoranthene	207-08-9	NELAP
Benzo (a) pyrene	50-32-8	NELAP
Indeno (1,2,3-cd) pyrene	193-39-5	NELAP
Dibenzo (a,h) anthracene	53-70-3	NELAP
Benzo (g,h,i) perylene	191-24-2	NELAP
1,3-Dimethyl-2-nitrobenzene	81-20-9	NELAP
Perylene-d12	1520-96-3	NELAP
SM 9221B in Water		
Total Coliform		NELAP
SM 9221E in Water		
Fecal Coliform		NELAP
SM 9221F in Water		
E. coli		NELAP

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:
04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

Sample: Outfall #6 (LL) Sampled: 03/02/18 11:00 by ES/TM
8C02079-01 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Anions by IC, EPA Method 300.0

Method: EPA 300.0	Batch ID: W8C0120	Instr: LC12	Prepared: 03/02/18 14:33			Analyst: jan	
Chloride, Total	-----	5.0	0.10	0.50	mg/l	1	03/03/18 18:52
NO2+NO3 as N	-----	1.1	0.020	0.11	mg/l	1	03/03/18 18:52
Sulfate as SO4	-----	3.2	0.10	0.50	mg/l	1	03/03/18 18:52

Chlorinated Acids Herbicides by GC/ECD

Method: EPA 515.3	Batch ID: W8C0259	Instr: GC08	Prepared: 03/06/18 08:38	Analyst: rmr
2,4,5-T	ND	0.070	0.20 ug/l	1 03/13/18 05:27
2,4,5-TP (Silvex)	ND	0.090	0.20 ug/l	1 03/13/18 05:27
2,4-D	ND	0.070	0.40 ug/l	1 03/13/18 05:27
2,4-DB	ND	0.070	2.0 ug/l	1 03/13/18 05:27
3,5-Dichlorobenzoic acid	ND	0.090	1.0 ug/l	1 03/13/18 05:27
Acifluorfen	ND	0.060	0.40 ug/l	1 03/13/18 05:27
Bentazon	ND	0.11	2.0 ug/l	1 03/13/18 05:27
Dalapon	ND	0.10	0.40 ug/l	1 03/13/18 05:27
DCPA	ND	0.070	0.10 ug/l	1 03/13/18 05:27
Dicamba	ND	0.12	0.60 ug/l	1 03/13/18 05:27
Dichloroprop	ND	0.080	0.30 ug/l	1 03/13/18 05:27
Dinoseb	ND	0.14	0.40 ug/l	1 03/13/18 05:27
Pentachlorophenol	0.26	0.040	0.20 ug/l	1 03/13/18 05:27
Picloram	ND	0.050	0.60 ug/l	1 03/13/18 05:27
Surrogate(s)				
2,4-DCAA	101%	Conc: 10.1	70-130	03/13/18 05:27

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

Method: EPA 160.4	Batch ID: W8C0107	Instr: FURN01	Prepared: 03/02/18 12:37	Analyst: mic	
Volatile Suspended Solids		9.03.1	5.0mg/l1	03/05/18 12:30	
Method: EPA 180.1	Batch ID: W8C0132	Instr: TURB01	Prepared: 03/02/18 17:39	Analyst: mnq	
Turbidity		8.40.024	0.10NTU1	03/02/18 18:59	
Method: EPA 335.4	Batch ID: W8C0680	Instr: AA01	Prepared: 03/13/18 09:43	Analyst: AJK	
Cyanide, Total		ND2.7	5.0ug/l1	03/14/18 16:24	
Method: EPA 350.1	Batch ID: W8C0197	Instr: AA06	Prepared: 03/05/18 11:39	Analyst: mnq	
Ammonia as N		0.800.048	0.10mg/l1	03/06/18 18:32	
Method: EPA 351.2	Batch ID: W8C0678	Instr: AA06	Prepared: 03/13/18 09:19	Analyst: mnq	
TKN		2.60.050	0.10mg/l1	03/15/18 14:13	
Method: EPA 365.1	Batch ID: W8C0216	Instr: AA01	Prepared: 03/05/18 13:53	Analyst: nat	
Phosphorus as P, Total		0.470.0056	0.040mg/l2	03/08/18 15:58	M-02
Method: EPA 365.3	Batch ID: W8C0335	Instr: UVVIS04	Prepared: 03/06/18 16:41	Analyst: stg	
Phosphorus, Dissolved		0.190.00083	0.010mg/l1	03/12/18 14:18	



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Project Manager: Edmond G. Suher

Certificate of Analysis

FINAL REPORT

Reported:

04/16/2018 15:28

Sample Results

(Continued)

Sample: Outfall #6 (LL)

Sampled: 03/02/18 11:00 by ES/TM

8C02079-01 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)							
Method: EPA 410.4 Chemical Oxygen Demand	Batch ID: W8C0439 Instr: Inst 58	0.73	Prepared: 03/07/18 19:59 5.0	mg/l	1	Analyst: mnq 03/09/18 13:52	
Method: EPA 420.4 Phenolics	Batch ID: W8C0671 Instr: AA03 0.043	0.0042	Prepared: 03/13/18 08:14 0.010	mg/l	1	Analyst: YMT 03/15/18 17:58	
Method: SM 2320B Alkalinity as CaCO3	Batch ID: W8C0200 Instr: AA02 24	0.56	Prepared: 03/05/18 12:05 2.0	mg/l	1	Analyst: stg 03/05/18 15:47	
Method: SM 2510B Specific Conductance (EC)	Batch ID: W8C0388 Instr: AA02 75	0.23	Prepared: 03/07/18 12:54 2.0	umhos/cm	1	Analyst: stg 03/07/18 14:26	
Method: SM 2540C Total Dissolved Solids	Batch ID: W8C0298 Instr: Inst 60	4.0	Prepared: 03/06/18 13:56 10	mg/l	1	Analyst: ymt 03/08/18 09:30	
Method: SM 2540D Total Suspended Solids	Batch ID: W8C0106 Instr: OVEN11 21		Prepared: 03/02/18 12:35 5	mg/l	1	Analyst: mic 03/05/18 12:30	
Method: SM 4500O-G Dissolved Oxygen	Batch ID: W8C0117 Instr: Inst 9.80	0.500	Prepared: 03/02/18 14:25 1.00	mg/l	1	Analyst: mic 03/02/18 18:50	*
Method: SM 5210B Biochemical Oxygen Demand	Batch ID: W8C0102 Instr: Inst 12	2.0	Prepared: 03/02/18 12:26 2.0	mg/l	1	Analyst: mic 03/07/18 20:00	
Method: SM 5310B Total Organic Carbon (TOC)	Batch ID: W8C0370 Instr: TOC02 13	0.016	Prepared: 03/07/18 09:23 0.10	mg/l	1	Analyst: jlp 03/07/18 10:32	
Method: SM 5540C MBAS	Batch ID: W8C0129 Instr: UVVIS03 0.60	0.038	Prepared: 03/02/18 17:02 0.10	mg/l	2	Analyst: stg 03/02/18 19:30	
Hexavalent Chromium by IC							
Method: EPA 218.6 Chromium 6+	Batch ID: W8C0189 Instr: LC13 0.35	0.019	Prepared: 03/07/18 15:56 0.080	ug/l	4	Analyst: dil 03/08/18 15:22	M-05
Chromium 6+, Dissolved	0.36	0.019	0.080	ug/l	4	03/08/18 15:34	M-05
Hydrocarbons by GC/FID							
Method: EPA 8015D Diesel Range Organics	Batch ID: W8C0424 Instr: GC04 2.4	0.024	Prepared: 03/07/18 16:53 0.10	mg/l	1	Analyst: cam 03/14/18 03:33	
Oil Range Organics	2.9	0.33	0.50	mg/l	1	03/14/18 03:33	
Surrogate(s)							
n-Tetracosane	112%	Conc: 0.281	64-155	03/14/18 03:33			
Metals by EPA 200 Series Methods							
Method: EPA 200.7 Calcium Hardness as CaCO3	Batch ID: [CALC] Instr: [CALC] 18.2		Prepared: 03/15/18 09:43 0.250	mg/l	1	Analyst: JCK 03/19/18 17:25	
Method: EPA 200.7 Calcium, Total	Batch ID: W8C0874 Instr: ICP03 7.27	0.0160	Prepared: 03/15/18 09:43 0.100	mg/l	1	Analyst: JCK 03/19/18 17:25	
Method: EPA 200.8 Aluminum, Dissolved	Batch ID: W8C0790 Instr: ICPMS02 23	1.3	Prepared: 03/14/18 10:58 5.0	ua/l	1	Analyst: MTT 03/27/18 04:17	

8C02079

Page 4 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #6 (LL)

Sampled: 03/02/18 11:00 by ES/TM

8C02079-01 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Metals by EPA 200 Series Methods (Continued)

Method: EPA 200.8	Batch ID: W8C0790	Instr: ICPMS02	Prepared: 03/14/18 10:58	Analyst: MTT		
Aluminum, Total	580	1.3	5.0	ug/l	1	03/27/18 04:25
Antimony, Dissolved	1.5	0.045	0.50	ug/l	1	03/27/18 13:37
Antimony, Total	2.4	0.045	0.50	ug/l	1	03/27/18 13:43
Arsenic, Dissolved	0.76	0.074	0.40	ug/l	1	03/27/18 04:17
Arsenic, Total	1.1	0.074	0.40	ug/l	1	03/27/18 04:25
Cadmium, Dissolved	0.090	0.041	0.10	ug/l	1	03/27/18 04:17
Cadmium, Total	0.17	0.041	0.10	ug/l	1	03/27/18 04:25
Chromium, Dissolved	0.48	0.035	0.20	ug/l	1	03/27/18 04:17
Chromium, Total	2.3	0.035	0.20	ug/l	1	03/27/18 04:25
Copper, Dissolved	20	0.13	0.50	ug/l	1	03/27/18 04:17
Copper, Total	36	0.13	0.50	ug/l	1	03/27/18 04:25
Iron, Dissolved	34	0.91	20	ug/l	1	03/27/18 04:17
Iron, Total	1100	0.91	20	ug/l	1	03/27/18 04:25
Lead, Dissolved	0.42	0.031	0.20	ug/l	1	03/27/18 04:17
Lead, Total	8.2	0.031	0.20	ug/l	1	03/27/18 04:25
Nickel, Dissolved	2.2	0.045	0.80	ug/l	1	03/27/18 04:17
Nickel, Total	3.9	0.045	0.80	ug/l	1	03/27/18 04:25
Zinc, Dissolved	190	0.94	5.0	ug/l	1	03/27/18 04:17
Zinc, Total	280	0.94	5.0	ug/l	1	03/27/18 04:25

Microbiological Parameters by Standard Methods

Method: Enterolert	Batch ID: W8D0839	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Enterococcus	1600	10	10 MPN/100ml	10 03/03/18 16:15
Method: SM 9221B	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Total Coliform	46000	18	18 MPN/100ml	10 03/31/18 11:48
Method: SM 9221E	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Fecal Coliform	790		18 MPN/100ml	10 04/13/18 09:21
Method: SM 9221F	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
E. coli	790		18 MPN/100ml	10 04/13/18 09:21

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Acenaphthene	ND	2.2	25	ng/l	1	03/07/18 20:23	M-02
Acenaphthylene	ND	2.6	25	ng/l	1	03/07/18 20:23	M-02
Anthracene	ND	4.6	25	ng/l	1	03/07/18 20:23	M-02
Benzo (a) anthracene	ND	4.0	25	ng/l	1	03/07/18 20:23	M-02
Benzo (a) pyrene	ND	2.9	25	ng/l	1	03/07/18 20:23	M-02
Benzo (b) fluoranthene	ND	8.0	25	ng/l	1	03/07/18 20:23	M-02

8C02079

Page 5 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #6 (LL)

Sampled: 03/02/18 11:00 by ES/TM

8C02079-01 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)							
Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Benzo (g,h,i) perylene	ND	4.5	25	ng/l	1	03/07/18 20:23	M-02
Benzo (k) fluoranthene	ND	2.6	25	ng/l	1	03/07/18 20:23	M-02
Chrysene	4.2	2.6	25	ng/l	1	03/07/18 20:23	M-02
Dibenzo (a,h) anthracene	ND	6.0	25	ng/l	1	03/07/18 20:23	M-02
Fluoranthene	9.2	6.5	25	ng/l	1	03/07/18 20:23	M-02
Fluorene	ND	3.8	25	ng/l	1	03/07/18 20:23	M-02
Indeno (1,2,3-cd) pyrene	6.3	5.0	25	ng/l	1	03/07/18 20:23	M-02
Naphthalene	ND	2.6	25	ng/l	1	03/07/18 20:23	M-02
Phenanthrene	14	4.8	25	ng/l	1	03/07/18 20:23	M-02
Pyrene	11	3.4	25	ng/l	1	03/07/18 20:23	M-02
<i>Surrogate(s)</i>							
1,3-Dimethyl-2-nitrobenzene	69%	Conc: 346	50-150			03/07/18 20:23	M-02
Perylene-d12	83%	Conc: 417	50-150			03/07/18 20:23	M-02



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #7 (SG) Sampled: 03/02/18 11:45 by ES/TM

8C02079-02 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Anions by IC, EPA Method 300.0

Method: EPA 300.0	Batch ID: W8C0120	Instr: LC12	Prepared: 03/02/18 14:33	Analyst: jan		
Chloride, Total	5.0	0.10	0.50	mg/l	1	03/03/18 19:10
NO2+NO3 as N	1.6	0.020	0.11	mg/l	1	03/03/18 19:10
Sulfate as SO4	5.7	0.10	0.50	mg/l	1	03/03/18 19:10

Chlorinated Acids Herbicides by GC/ECD

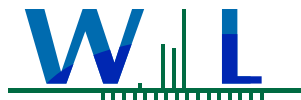
Method: EPA 515.3	Batch ID: W8C0259	Instr: GC08	Prepared: 03/06/18 08:38	Analyst: rmr
2,4,5-T	ND	0.070	0.20 ug/l	1 03/13/18 06:04
2,4,5-TP (Silvex)	ND	0.090	0.20 ug/l	1 03/13/18 06:04
2,4-D	ND	0.070	0.40 ug/l	1 03/13/18 06:04
2,4-DB	ND	0.070	2.0 ug/l	1 03/13/18 06:04
3,5-Dichlorobenzoic acid	ND	0.090	1.0 ug/l	1 03/13/18 06:04
Acifluorfen	ND	0.060	0.40 ug/l	1 03/13/18 06:04
Bentazon	ND	0.11	2.0 ug/l	1 03/13/18 06:04
Dalapon	ND	0.10	0.40 ug/l	1 03/13/18 06:04
DCPA	ND	0.070	0.10 ug/l	1 03/13/18 06:04
Dicamba	ND	0.12	0.60 ug/l	1 03/13/18 06:04
Dichloroprop	ND	0.080	0.30 ug/l	1 03/13/18 06:04
Dinoseb	ND	0.14	0.40 ug/l	1 03/13/18 06:04
Pentachlorophenol	0.27	0.040	0.20 ug/l	1 03/13/18 06:04
Picloram	ND	0.050	0.60 ug/l	1 03/13/18 06:04
Surrogate(s)				
2,4-DCAA	102%	Conc: 10.2	70-130	03/13/18 06:04

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

Method: EPA 160.4	Batch ID: W8C0107	Instr: FURN01	Prepared: 03/02/18 12:37	Analyst: mic	
Volatile Suspended Solids		203.1	5.0mg/l	1	03/05/18 12:30
Method: EPA 180.1	Batch ID: W8C0132	Instr: TURB01	Prepared: 03/02/18 17:39	Analyst: mnq	
Turbidity		160.024	0.10NTU	1	03/02/18 18:59
Method: EPA 335.4	Batch ID: W8C0680	Instr: AA01	Prepared: 03/13/18 09:43	Analyst: AJK	
Cyanide, Total		ND2.7	5.0ug/l	1	03/14/18 16:25
Method: EPA 350.1	Batch ID: W8C0197	Instr: AA06	Prepared: 03/05/18 11:39	Analyst: mnq	
Ammonia as N		1.00.048	0.10mg/l	1	03/06/18 18:32
Method: EPA 351.2	Batch ID: W8C0678	Instr: AA06	Prepared: 03/13/18 09:19	Analyst: mnq	
TKN		3.40.050	0.10mg/l	1	03/15/18 14:13
Method: EPA 365.1	Batch ID: W8C0216	Instr: AA01	Prepared: 03/05/18 13:53	Analyst: nat	
Phosphorus as P, Total		0.610.0070	0.050mg/l	1	03/08/18 15:57
Method: EPA 365.3	Batch ID: W8C0335	Instr: UVVIS04	Prepared: 03/06/18 16:41	Analyst: stg	
Phosphorus, Dissolved		0.490.0017	0.020mg/l	1	03/12/18 14:18

8C02079

Page 7 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Project Manager: Edmond G. Suher

Certificate of Analysis

FINAL REPORT

Reported:
04/16/2018 15:28

Sample Results

(Continued)

Sample: Outfall #7 (SG) Sampled: 03/02/18 11:45 by ES/TM
8C02079-02 (Water) (Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)							
Method: EPA 410.4 Chemical Oxygen Demand	Batch ID: W8C0439 Instr: Inst 75	0.73	5.0	mg/l	1	Prepared: 03/07/18 19:59 Analyst: mnq 03/09/18 13:52	
Method: EPA 420.4 Phenolics	Batch ID: W8C0671 Instr: AA03 0.019	0.0042	0.010	mg/l	1	Prepared: 03/13/18 08:14 Analyst: YMT 03/15/18 17:59	
Method: SM 2320B Alkalinity as CaCO3	Batch ID: W8C0200 Instr: AA02 44	0.56	2.0	mg/l	1	Prepared: 03/05/18 12:05 Analyst: stg 03/05/18 15:47	
Method: SM 2510B Specific Conductance (EC)	Batch ID: W8C0388 Instr: AA02 130	0.23	2.0	umhos/cm	1	Prepared: 03/07/18 12:54 Analyst: stg 03/07/18 14:26	
Method: SM 2540C Total Dissolved Solids	Batch ID: W8C0298 Instr: Inst 83	4.0	10	mg/l	1	Prepared: 03/06/18 13:56 Analyst: ymt 03/08/18 09:30	
Method: SM 2540D Total Suspended Solids	Batch ID: W8C0106 Instr: OVEN11 74		5	mg/l	1	Prepared: 03/02/18 12:35 Analyst: mic 03/05/18 12:30	
Method: SM 4500O-G Dissolved Oxygen	Batch ID: W8C0117 Instr: Inst 9.07	0.500	1.00	mg/l	1	Prepared: 03/02/18 14:25 Analyst: mic 03/02/18 18:50	*
Method: SM 5210B Biochemical Oxygen Demand	Batch ID: W8C0102 Instr: Inst 20	2.0	2.0	mg/l	1	Prepared: 03/02/18 12:26 Analyst: mic 03/07/18 20:00	
Method: SM 5310B Total Organic Carbon (TOC)	Batch ID: W8C0370 Instr: TOC02 20	0.016	0.10	mg/l	1	Prepared: 03/07/18 09:23 Analyst: jlp 03/07/18 10:32	
Method: SM 5540C MBAS	Batch ID: W8C0129 Instr: UVVIS03 0.79	0.038	0.10	mg/l	2	Prepared: 03/02/18 17:02 Analyst: stg 03/02/18 19:30	
Hexavalent Chromium by IC							
Method: EPA 218.6 Chromium 6+	Batch ID: W8C0189 Instr: LC13 0.73	0.019	0.080	ug/l	4	Prepared: 03/07/18 15:56 Analyst: dil 03/08/18 15:46	M-05
Chromium 6+, Dissolved	0.73	0.019	0.080	ug/l	4	03/08/18 15:57	M-05
Hydrocarbons by GC/FID							
Method: EPA 8015D Diesel Range Organics	Batch ID: W8C0424 Instr: GC04 2.2	0.024	0.10	mg/l	1	Prepared: 03/07/18 16:53 Analyst: cam 03/14/18 04:08	
Oil Range Organics	2.3	0.33	0.50	mg/l	1	03/14/18 04:08	
Surrogate(s) n-Tetracosane	115% Conc: 0.288		64-155			03/14/18 04:08	
Metals by EPA 200 Series Methods							
Method: EPA 200.7 Calcium Hardness as CaCO3	Batch ID: [CALC] Instr: [CALC] 25.8		0.250	mg/l	1	Prepared: 03/15/18 09:43 Analyst: JCK 03/19/18 17:28	
Method: EPA 200.7 Calcium, Total	Batch ID: W8C0874 Instr: ICP03 10.4	0.0160	0.100	mg/l	1	Prepared: 03/15/18 09:43 Analyst: JCK 03/19/18 17:28	
Method: EPA 200.8 Aluminum, Dissolved	Batch ID: W8C0790 Instr: ICPMS02 19	1.3	5.0	ug/l	1	Prepared: 03/14/18 10:58 Analyst: MTT 03/27/18 04:32	

8C02079

Page 8 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Project Manager: Edmond G. Suher

Certificate of Analysis

FINAL REPORT

Reported:

04/16/2018 15:28

Sample Results

(Continued)

Sample: Outfall #7 (SG)

Sampled: 03/02/18 11:45 by ES/TM

8C02079-02 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Metals by EPA 200 Series Methods (Continued)

Method: EPA 200.8	Batch ID: W8C0790	Instr: ICPMS02	Prepared: 03/14/18 10:58	Analyst: MTT		
Aluminum, Total	670	1.3	5.0	ug/l	1	03/27/18 04:39
Antimony, Dissolved	2.4	0.045	0.50	ug/l	1	03/27/18 13:49
Antimony, Total	3.2	0.045	0.50	ug/l	1	03/27/18 13:52
Arsenic, Dissolved	1.6	0.074	0.40	ug/l	1	03/27/18 04:32
Arsenic, Total	1.9	0.074	0.40	ug/l	1	03/27/18 04:39
Cadmium, Dissolved	0.060	0.041	0.10	ug/l	1	03/27/18 04:32
Cadmium, Total	0.11	0.041	0.10	ug/l	1	03/27/18 04:39
Chromium, Dissolved	0.89	0.035	0.20	ug/l	1	03/27/18 04:32
Chromium, Total	2.6	0.035	0.20	ug/l	1	03/27/18 04:39
Copper, Dissolved	19	0.13	0.50	ug/l	1	03/27/18 04:32
Copper, Total	28	0.13	0.50	ug/l	1	03/27/18 04:39
Iron, Dissolved	42	0.91	20	ug/l	1	03/27/18 04:32
Iron, Total	1100	0.91	20	ug/l	1	03/27/18 04:39
Lead, Dissolved	0.19	0.031	0.20	ug/l	1	03/27/18 04:32
Lead, Total	4.5	0.031	0.20	ug/l	1	03/27/18 04:39
Nickel, Dissolved	2.6	0.045	0.80	ug/l	1	03/27/18 04:32
Nickel, Total	3.7	0.045	0.80	ug/l	1	03/27/18 04:39
Zinc, Dissolved	58	0.94	5.0	ug/l	1	03/27/18 04:32
Zinc, Total	90	0.94	5.0	ug/l	1	03/27/18 04:39

Microbiological Parameters by Standard Methods

Method: Enterolert	Batch ID: W8D0839	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Enterococcus	11000	10	10 MPN/100ml	10 03/03/18 16:15
Method: SM 9221B	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Total Coliform	33000	18	18 MPN/100ml	10 03/31/18 11:48
Method: SM 9221E	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Fecal Coliform	3500		18 MPN/100ml	10 04/13/18 09:21
Method: SM 9221F	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
E. coli	3500		18 MPN/100ml	10 04/13/18 09:21

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Acenaphthene	ND	2.2	25	ng/l	1	03/07/18 20:54	M-02
Acenaphthylene	ND	2.6	25	ng/l	1	03/07/18 20:54	M-02
Anthracene	5.4	4.6	25	ng/l	1	03/07/18 20:54	M-02
Benzo (a) anthracene	ND	4.0	25	ng/l	1	03/07/18 20:54	M-02
Benzo (a) pyrene	ND	2.9	25	ng/l	1	03/07/18 20:54	M-02
Benzo (b) fluoranthene	ND	8.0	25	ng/l	1	03/07/18 20:54	M-02

8C02079

Page 9 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #7 (SG)

Sampled: 03/02/18 11:45 by ES/TM

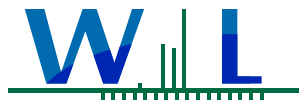
8C02079-02 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Benzo (g,h,i) perylene	4.5	4.5	25	ng/l	1	03/07/18 20:54	M-02
Benzo (k) fluoranthene	ND	2.6	25	ng/l	1	03/07/18 20:54	M-02
Chrysene	3.6	2.6	25	ng/l	1	03/07/18 20:54	M-02
Dibenzo (a,h) anthracene	ND	6.0	25	ng/l	1	03/07/18 20:54	M-02
Fluoranthene	9.2	6.5	25	ng/l	1	03/07/18 20:54	M-02
Fluorene	ND	3.8	25	ng/l	1	03/07/18 20:54	M-02
Indeno (1,2,3-cd) pyrene	7.8	5.0	25	ng/l	1	03/07/18 20:54	M-02
Naphthalene	ND	2.6	25	ng/l	1	03/07/18 20:54	M-02
Phenanthrene	14	4.8	25	ng/l	1	03/07/18 20:54	M-02
Pyrene	9.0	3.4	25	ng/l	1	03/07/18 20:54	M-02
Surrogate(s)							
1,3-Dimethyl-2-nitrobenzene	60%	Conc: 300	50-150			03/07/18 20:54	M-02
Perylene-d12	79%	Conc: 393	50-150			03/07/18 20:54	M-02



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #5 (RH) Sampled: 03/02/18 13:00 by ES/TM

8C02079-03 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Anions by IC, EPA Method 300.0

Method: EPA 300.0		Batch ID: W8C0120		Instr: LC12		Prepared: 03/02/18 14:33		Analyst: jan	
Chloride, Total		5.2		0.10		0.50		mg/l 1 03/03/18 19:28	
NO2+NO3 as N		1.3		0.020		0.11		mg/l 1 03/03/18 19:28	
Sulfate as SO4		6.4		0.10		0.50		mg/l 1 03/03/18 19:28	

Chlorinated Acids Herbicides by GC/ECD

Method: EPA 515.3	Batch ID: W8C0259	Instr: GC08	Prepared: 03/06/18 08:38	Analyst: rmr
2,4,5-T	ND	0.070	0.20 ug/l	1 03/13/18 06:41
2,4,5-TP (Silvex)	ND	0.090	0.20 ug/l	1 03/13/18 06:41
2,4-D	ND	0.070	0.40 ug/l	1 03/13/18 06:41
2,4-DB	ND	0.070	2.0 ug/l	1 03/13/18 06:41
3,5-Dichlorobenzoic acid	ND	0.090	1.0 ug/l	1 03/13/18 06:41
Acifluorfen	ND	0.060	0.40 ug/l	1 03/13/18 06:41
Bentazon	ND	0.11	2.0 ug/l	1 03/13/18 06:41
Dalapon	ND	0.10	0.40 ug/l	1 03/13/18 06:41
DCPA	ND	0.070	0.10 ug/l	1 03/13/18 06:41
Dicamba	ND	0.12	0.60 ug/l	1 03/13/18 06:41
Dichloroprop	ND	0.080	0.30 ug/l	1 03/13/18 06:41
Dinoseb	ND	0.14	0.40 ug/l	1 03/13/18 06:41
Pentachlorophenol	0.34	0.040	0.20 ug/l	1 03/13/18 06:41
Picloram	ND	0.050	0.60 ug/l	1 03/13/18 06:41
Surrogate(s)				
2,4-DCAA	100%	Conc: 10.0	70-130	03/13/18 06:41

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

Method: EPA 160.4	Batch ID: W8C0107	Instr: FURN01	Prepared: 03/05/18 12:00	Analyst: mic				
Volatile Suspended Solids		14	3.1	5.0	mg/l	1	03/05/18 12:30	
Method: EPA 180.1	Batch ID: W8C0132	Instr: TURB01	Prepared: 03/02/18 17:39	Analyst: mnq				
Turbidity		92	0.24	1.0	NTU	10	03/02/18 18:59	
Method: EPA 335.4	Batch ID: W8C0680	Instr: AA01	Prepared: 03/13/18 09:43	Analyst: AJK				
Cyanide, Total		ND	2.7	5.0	ug/l	1	03/14/18 16:26	
Method: EPA 350.1	Batch ID: W8C0197	Instr: AA06	Prepared: 03/05/18 11:39	Analyst: mnq				
Ammonia as N		0.92	0.048	0.10	mg/l	1	03/06/18 18:32	
Method: EPA 351.2	Batch ID: W8C0678	Instr: AA06	Prepared: 03/13/18 09:19	Analyst: mnq				
TKN		2.7	0.050	0.10	mg/l	1	03/15/18 14:13	
Method: EPA 365.1	Batch ID: W8C0216	Instr: AA01	Prepared: 03/05/18 13:53	Analyst: nat				
Phosphorus as P, Total		0.35	0.0056	0.040	mg/l	2	03/08/18 16:04	M-02
Method: EPA 365.3	Batch ID: W8C0335	Instr: UVVIS04	Prepared: 03/06/18 16:41	Analyst: stg				
Phosphorus, Dissolved		0.23	0.00083	0.010	mg/l	1	03/12/18 14:18	

8C02079

Page 11 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Project Manager: Edmond G. Suher

Certificate of Analysis

FINAL REPORT

Reported:

04/16/2018 15:28

Sample Results

(Continued)

Sample: Outfall #5 (RH) Sampled: 03/02/18 13:00 by ES/TM
8C02079-03 (Water) (Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)							
Method: EPA 410.4 Chemical Oxygen Demand	Batch ID: W8C0439 Instr: Inst 100	0.73	5.0	mg/l	1	Prepared: 03/07/18 19:59 Analyst: mnq 03/09/18 13:52	
Method: EPA 420.4 Phenolics	Batch ID: W8C0671 Instr: AA03 0.037	0.0042	0.010	mg/l	1	Prepared: 03/13/18 08:14 Analyst: YMT 03/15/18 18:00	
Method: SM 2320B Alkalinity as CaCO3	Batch ID: W8C0200 Instr: AA02 40	0.56	2.0	mg/l	1	Prepared: 03/05/18 12:05 Analyst: stg 03/05/18 15:47	
Method: SM 2510B Specific Conductance (EC)	Batch ID: W8C0388 Instr: AA02 120	0.23	2.0	umhos/cm	1	Prepared: 03/07/18 12:54 Analyst: stg 03/07/18 14:26	
Method: SM 2540C Total Dissolved Solids	Batch ID: W8C0298 Instr: Inst 90	4.0	10	mg/l	1	Prepared: 03/06/18 13:56 Analyst: ymt 03/08/18 09:30	
Method: SM 2540D Total Suspended Solids	Batch ID: W8C0106 Instr: OVEN11 44		5	mg/l	1	Prepared: 03/05/18 12:00 Analyst: mic 03/05/18 12:30	
Method: SM 4500O-G Dissolved Oxygen	Batch ID: W8C0117 Instr: Inst 8.55	0.500	1.00	mg/l	1	Prepared: 03/02/18 14:25 Analyst: mic 03/02/18 18:50	*
Method: SM 5210B Biochemical Oxygen Demand	Batch ID: W8C0102 Instr: Inst 23	2.0	2.0	mg/l	1	Prepared: 03/02/18 13:26 Analyst: mic 03/07/18 20:00	
Method: SM 5310B Total Organic Carbon (TOC)	Batch ID: W8C0370 Instr: TOC02 23	0.016	0.10	mg/l	1	Prepared: 03/07/18 09:23 Analyst: jlp 03/07/18 10:32	
Method: SM 5540C MBAS	Batch ID: W8C0129 Instr: UVVIS03 0.36	0.019	0.050	mg/l	1	Prepared: 03/02/18 17:02 Analyst: stg 03/02/18 19:30	
Hexavalent Chromium by IC							
Method: EPA 218.6 Chromium 6+	Batch ID: W8C0189 Instr: LC13 1.6	0.019	0.080	ug/l	4	Prepared: 03/07/18 15:56 Analyst: dil 03/08/18 16:09	M-05
Chromium 6+, Dissolved	1.5	0.019	0.080	ug/l	4	03/08/18 16:21	M-05
Hydrocarbons by GC/FID							
Method: EPA 8015D Diesel Range Organics	Batch ID: W8C0424 Instr: GC04 2.7	0.048	0.20	mg/l	2	Prepared: 03/07/18 16:53 Analyst: cam 03/14/18 14:39	
Oil Range Organics	4.0	0.66	1.0	mg/l	2	03/14/18 14:39	
Surrogate(s) n-Tetracosane	105% Conc: 0.263		64-155			03/14/18 14:39	
Metals by EPA 200 Series Methods							
Method: EPA 200.7 Calcium Hardness as CaCO3	Batch ID: [CALC] Instr: [CALC] 26.6		0.250	mg/l	1	Prepared: 03/15/18 09:43 Analyst: JCK 03/19/18 17:31	
Method: EPA 200.7 Calcium, Total	Batch ID: W8C0874 Instr: ICP03 10.7	0.0160	0.100	mg/l	1	Prepared: 03/15/18 09:43 Analyst: JCK 03/19/18 17:31	
Method: EPA 200.8 Aluminum, Dissolved	Batch ID: W8C0790 Instr: ICPMS02 95	1.3	5.0	ug/l	1	Prepared: 03/14/18 10:58 Analyst: MTT 03/27/18 04:47	

8C02079

Page 12 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

(Continued)

Sample: Outfall #5 (RH)

Sampled: 03/02/18 13:00 by ES/TM

8C02079-03 (Water)

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-----	-------	-----	----------	-----------

Metals by EPA 200 Series Methods (Continued)

Method: EPA 200.8	Batch ID: W8C0790	Instr: ICPMS02	Prepared: 03/14/18 10:58	Analyst: MTT		
Aluminum, Total	2200	1.3	5.0	ug/l	1	03/27/18 04:54
Antimony, Dissolved	4.1	0.045	0.50	ug/l	1	03/27/18 13:55
Antimony, Total	6.1	0.045	0.50	ug/l	1	03/27/18 13:57
Arsenic, Dissolved	2.1	0.074	0.40	ug/l	1	03/27/18 04:47
Arsenic, Total	2.7	0.074	0.40	ug/l	1	03/27/18 04:54
Cadmium, Dissolved	0.11	0.041	0.10	ug/l	1	03/27/18 04:47
Cadmium, Total	0.20	0.041	0.10	ug/l	1	03/27/18 04:54
Chromium, Dissolved	1.5	0.035	0.20	ug/l	1	03/27/18 04:47
Chromium, Total	5.1	0.035	0.20	ug/l	1	03/27/18 04:54
Copper, Dissolved	32	0.13	0.50	ug/l	1	03/27/18 04:47
Copper, Total	57	0.13	0.50	ug/l	1	03/27/18 04:54
Iron, Dissolved	93	0.91	20	ug/l	1	03/27/18 04:47
Iron, Total	2300	0.91	20	ug/l	1	03/27/18 04:54
Lead, Dissolved	1.4	0.031	0.20	ug/l	1	03/27/18 04:47
Lead, Total	18	0.031	0.20	ug/l	1	03/27/18 04:54
Nickel, Dissolved	3.5	0.045	0.80	ug/l	1	03/27/18 04:47
Nickel, Total	8.8	0.045	0.80	ug/l	1	03/27/18 04:54
Zinc, Dissolved	120	0.94	5.0	ug/l	1	03/27/18 04:47
Zinc, Total	190	0.94	5.0	ug/l	1	03/27/18 04:54

Microbiological Parameters by Standard Methods

Method: Enterolert	Batch ID: W8D0839	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Enterococcus	7300	10	10 MPN/100ml	10 03/03/18 16:15
Method: SM 9221B	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Total Coliform	130000	18	18 MPN/100ml	10 03/31/18 11:48
Method: SM 9221E	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
Fecal Coliform	13000		18 MPN/100ml	10 03/30/18 12:45
Method: SM 9221F	Batch ID: W8D0838	Instr: Inst	Prepared: 03/02/18 16:15	Analyst: kvm
E. coli	4500		18 MPN/100ml	10 03/30/18 12:45

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Acenaphthene	ND	4.3	50	ng/l	1	03/07/18 21:25	M-02
Acenaphthylene	ND	5.2	50	ng/l	1	03/07/18 21:25	M-02
Anthracene	ND	9.1	50	ng/l	1	03/07/18 21:25	M-02
Benzo (a) anthracene	ND	7.9	50	ng/l	1	03/07/18 21:25	M-02
Benzo (a) pyrene	ND	5.8	50	ng/l	1	03/07/18 21:25	M-02
Benzo (b) fluoranthene	ND	16	50	ng/l	1	03/07/18 21:25	M-02

8C02079

Page 13 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Sample Results

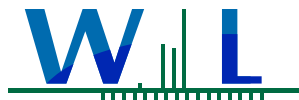
(Continued)

Sample: Outfall #5 (RH)
8C02079-03 (Water)

Sampled: 03/02/18 13:00 by ES/TM

(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)							
Method: EPA 625.1	Batch ID: W8C0255	Instr: GCMS15	Prepared: 03/06/18 08:27	Analyst: EFC			
Benzo (g,h,i) perylene	14	9.0	50	ng/l	1	03/07/18 21:25	M-02
Benzo (k) fluoranthene	ND	5.2	50	ng/l	1	03/07/18 21:25	M-02
Chrysene	8.7	5.2	50	ng/l	1	03/07/18 21:25	M-02
Dibenzo (a,h) anthracene	ND	12	50	ng/l	1	03/07/18 21:25	M-02
Fluoranthene	15	13	50	ng/l	1	03/07/18 21:25	M-02
Fluorene	ND	7.5	50	ng/l	1	03/07/18 21:25	M-02
Indeno (1,2,3-cd) pyrene	18	9.9	50	ng/l	1	03/07/18 21:25	M-02
Naphthalene	ND	5.3	50	ng/l	1	03/07/18 21:25	M-02
Phenanthrene	12	9.6	50	ng/l	1	03/07/18 21:25	M-02
Pyrene	23	6.8	50	ng/l	1	03/07/18 21:25	M-02
<i>Surrogate(s)</i>							
1,3-Dimethyl-2-nitrobenzene	55%	Conc: 554	50-150			03/07/18 21:25	M-02
Perylene-d12	79%	Conc: 787	50-150			03/07/18 21:25	M-02



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

Anions by IC, EPA Method 300.0

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0120 - EPA 300.0											
Blank (W8C0120-BLK1)						Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	ND	0.10	0.50	mg/l							
NO2+NO3 as N	0.0230	0.020	0.11	mg/l							B-07
Sulfate as SO4	ND	0.10	0.50	mg/l							
LCS (W8C0120-BS1)						Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	9.86	0.10	0.50	mg/l	10.0		99	90-110			
NO2+NO3 as N	3.95	0.020	0.11	mg/l	4.04		98	90-110			
Sulfate as SO4	9.88	0.10	0.50	mg/l	10.0		98	90-110			
Matrix Spike (W8C0120-MS1)						Source: 8C02076-03 Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	149	1.0	5.0	mg/l	100	48.8	100	76-118			
NO2+NO3 as N	51.2	0.20	1.1	mg/l	40.4	10.8	100	84-115			
Sulfate as SO4	190	1.0	5.0	mg/l	100	84.6	104	78-111			
Matrix Spike (W8C0120-MS2)						Source: 8C02079-01 Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	107	1.0	5.0	mg/l	100	5.00	102	76-118			
NO2+NO3 as N	42.4	0.20	1.1	mg/l	40.4	1.12	102	84-115			
Sulfate as SO4	107	1.0	5.0	mg/l	100	3.20	103	78-111			
Matrix Spike Dup (W8C0120-MSD1)						Source: 8C02076-03 Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	149	1.0	5.0	mg/l	100	48.8	100	76-118	0.3	20	
NO2+NO3 as N	51.7	0.20	1.1	mg/l	40.4	10.8	101	84-115	0.9	20	
Sulfate as SO4	191	1.0	5.0	mg/l	100	84.6	106	78-111	0.6	20	
Matrix Spike Dup (W8C0120-MSD2)						Source: 8C02079-01 Prepared: 03/02/18 Analyzed: 03/03/18					
Chloride, Total	108	1.0	5.0	mg/l	100	5.00	103	76-118	0.3	20	
NO2+NO3 as N	42.3	0.20	1.1	mg/l	40.4	1.12	102	84-115	0.2	20	
Sulfate as SO4	107	1.0	5.0	mg/l	100	3.20	104	78-111	0.3	20	



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Chlorinated Acids Herbicides by GC/ECD

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
---------	--------	-----	-----	-------	-------------	---------------	------	--------	-----	-------	-----------

Batch: W8C0259 - EPA 515.3

Blank (W8C0259-BLK1)

Prepared: 03/06/18 Analyzed: 03/13/18

2,4,5-T	ND	0.070	0.20	ug/l
2,4,5-TP (Silvex)	ND	0.090	0.20	ug/l
2,4-D	ND	0.070	0.40	ug/l
2,4-DB	ND	0.070	2.0	ug/l
3,5-Dichlorobenzoic acid	ND	0.090	1.0	ug/l
Acifluorfen	ND	0.060	0.40	ug/l
Bentazon	ND	0.11	2.0	ug/l
Dalapon	ND	0.10	0.40	ug/l
DCPA	ND	0.070	0.10	ug/l
Dicamba	ND	0.12	0.60	ug/l
Dichloroprop	ND	0.080	0.30	ug/l
Dinoseb	ND	0.14	0.40	ug/l
Pentachlorophenol	ND	0.040	0.20	ug/l
Picloram	ND	0.050	0.60	ug/l

Surrogate(s)

2,4-DCAA	11.3	ug/l	10.0	113	70-130
----------	------	------	------	-----	--------

LCS (W8C0259-BS1)

Prepared: 03/06/18 Analyzed: 03/13/18

2,4,5-T	4.42	0.070	0.20	ug/l	4.00	111	70-130
2,4,5-TP (Silvex)	4.31	0.090	0.20	ug/l	4.00	108	70-130
2,4-D	9.00	0.070	0.40	ug/l	8.00	113	70-130
2,4-DB	17.1	0.070	2.0	ug/l	16.0	107	70-130
3,5-Dichlorobenzoic acid	8.67	0.090	1.0	ug/l	8.00	108	70-130
Acifluorfen	4.47	0.060	0.40	ug/l	4.00	112	70-130
Bentazon	16.5	0.11	2.0	ug/l	16.0	103	70-130
Dalapon	8.99	0.10	0.40	ug/l	8.00	112	70-130
DCPA	4.36	0.070	0.10	ug/l	4.00	109	70-130
Dicamba	8.74	0.12	0.60	ug/l	8.00	109	70-130
Dichloroprop	8.69	0.080	0.30	ug/l	8.00	109	70-130
Dinoseb	4.59	0.14	0.40	ug/l	4.00	115	70-130
Pentachlorophenol	4.18	0.040	0.20	ug/l	4.00	105	70-130
Picloram	4.56	0.050	0.60	ug/l	4.00	114	70-130

Surrogate(s)

2,4-DCAA	11.7	ug/l	10.0	117	70-130
----------	------	------	------	-----	--------

Matrix Spike (W8C0259-MS1)

Source: 8C02008-01

Prepared: 03/06/18 Analyzed: 03/13/18

2,4,5-T	4.56	0.070	0.20	ug/l	4.00	ND	114	70-130
2,4,5-TP (Silvex)	4.66	0.090	0.20	ug/l	4.00	ND	117	70-130
2,4-D	9.08	0.070	0.40	ug/l	8.00	ND	114	70-130



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

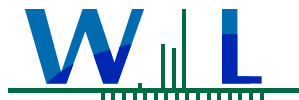
Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Chlorinated Acids Herbicides by GC/ECD (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W8C0259 - EPA 515.3 (Continued)											
Matrix Spike (W8C0259-MS1)			Source: 8C02008-01			Prepared: 03/06/18 Analyzed: 03/13/18					
2,4-DB	17.7	0.070	2.0	ug/l	16.0	ND	110	70-130			
3,5-Dichlorobenzoic acid	8.53	0.090	1.0	ug/l	8.00	ND	107	70-130			
Acifluorfen	4.60	0.060	0.40	ug/l	4.00	ND	115	70-130			
Bentazon	17.1	0.11	2.0	ug/l	16.0	ND	107	70-130			
Dalapon	8.55	0.10	0.40	ug/l	8.00	ND	107	70-130			
DCPA	4.46	0.070	0.10	ug/l	4.00	ND	111	70-130			
Dicamba	8.83	0.12	0.60	ug/l	8.00	ND	110	70-130			
Dichloroprop	8.80	0.080	0.30	ug/l	8.00	ND	110	70-130			
Dinoseb	4.61	0.14	0.40	ug/l	4.00	ND	115	70-130			
Pentachlorophenol	4.22	0.040	0.20	ug/l	4.00	ND	106	70-130			
Picloram	4.50	0.050	0.60	ug/l	4.00	ND	112	70-130			
<i>Surrogate(s)</i>											
2,4-DCAA			11.3	ug/l	10.0		113	70-130			
Matrix Spike (W8C0259-MS2)			Source: 8C02079-01			Prepared: 03/06/18 Analyzed: 03/13/18					
2,4,5-T	3.49	0.070	0.20	ug/l	4.00	ND	87	70-130			
2,4,5-TP (Silvex)	4.48	0.090	0.20	ug/l	4.00	ND	112	70-130			
2,4-D	9.61	0.070	0.40	ug/l	8.00	ND	120	70-130			
2,4-DB	19.0	0.070	2.0	ug/l	16.0	ND	119	70-130			
3,5-Dichlorobenzoic acid	8.44	0.090	1.0	ug/l	8.00	ND	105	70-130			
Acifluorfen	4.20	0.060	0.40	ug/l	4.00	ND	105	70-130			
Bentazon	19.0	0.11	2.0	ug/l	16.0	ND	119	70-130			
Dalapon	9.10	0.10	0.40	ug/l	8.00	ND	114	70-130			
DCPA	3.82	0.070	0.10	ug/l	4.00	ND	96	70-130			
Dicamba	8.52	0.12	0.60	ug/l	8.00	ND	107	70-130			
Dichloroprop	9.73	0.080	0.30	ug/l	8.00	ND	122	70-130			
Dinoseb	4.46	0.14	0.40	ug/l	4.00	ND	112	70-130			
Pentachlorophenol	3.94	0.040	0.20	ug/l	4.00	0.262	92	70-130			
Picloram	3.75	0.050	0.60	ug/l	4.00	ND	94	70-130			
<i>Surrogate(s)</i>											
2,4-DCAA			11.8	ug/l	10.0		118	70-130			
Matrix Spike Dup (W8C0259-MSD1)			Source: 8C02008-01			Prepared: 03/06/18 Analyzed: 03/13/18					
2,4,5-T	4.50	0.070	0.20	ug/l	4.00	ND	112	70-130	1	30	
2,4,5-TP (Silvex)	4.70	0.090	0.20	ug/l	4.00	ND	117	70-130	0.8	30	
2,4-D	9.01	0.070	0.40	ug/l	8.00	ND	113	70-130	0.8	30	
2,4-DB	17.4	0.070	2.0	ug/l	16.0	ND	109	70-130	1	30	
3,5-Dichlorobenzoic acid	8.53	0.090	1.0	ug/l	8.00	ND	107	70-130	0	30	
Acifluorfen	4.48	0.060	0.40	ug/l	4.00	ND	112	70-130	3	30	



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

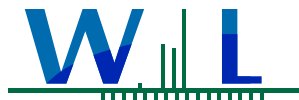
Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Chlorinated Acids Herbicides by GC/ECD (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0259 - EPA 515.3 (Continued)											
Matrix Spike Dup (W8C0259-MSD1)			Source: 8C02008-01			Prepared: 03/06/18 Analyzed: 03/13/18					
Bentazon	18.3	0.11	2.0	ug/l	16.0	ND	114	70-130	7	30	
Dalapon	8.67	0.10	0.40	ug/l	8.00	ND	108	70-130	1	30	
DCPA	4.44	0.070	0.10	ug/l	4.00	ND	111	70-130	0.5	30	
Dicamba	8.87	0.12	0.60	ug/l	8.00	ND	111	70-130	0.5	30	
Dichloroprop	8.64	0.080	0.30	ug/l	8.00	ND	108	70-130	2	30	
Dinoseb	4.54	0.14	0.40	ug/l	4.00	ND	114	70-130	1	30	
Pentachlorophenol	4.19	0.040	0.20	ug/l	4.00	ND	105	70-130	0.8	30	
Picloram	4.42	0.050	0.60	ug/l	4.00	ND	110	70-130	2	30	
<i>Surrogate(s)</i>											
2,4-DCAA			11.2	ug/l	10.0		112	70-130			
Matrix Spike Dup (W8C0259-MSD2)			Source: 8C02079-01			Prepared: 03/06/18 Analyzed: 03/13/18					
2,4,5-T	3.50	0.070	0.20	ug/l	4.00	ND	88	70-130	0.3	30	
2,4,5-TP (Silvex)	4.13	0.090	0.20	ug/l	4.00	ND	103	70-130	8	30	
2,4-D	9.09	0.070	0.40	ug/l	8.00	ND	114	70-130	6	30	
2,4-DB	17.2	0.070	2.0	ug/l	16.0	ND	107	70-130	10	30	
3,5-Dichlorobenzoic acid	8.14	0.090	1.0	ug/l	8.00	ND	102	70-130	4	30	
Acifluorfen	4.08	0.060	0.40	ug/l	4.00	ND	102	70-130	3	30	
Bentazon	18.3	0.11	2.0	ug/l	16.0	ND	115	70-130	4	30	
Dalapon	9.05	0.10	0.40	ug/l	8.00	ND	113	70-130	0.6	30	
DCPA	3.68	0.070	0.10	ug/l	4.00	ND	92	70-130	4	30	
Dicamba	8.32	0.12	0.60	ug/l	8.00	ND	104	70-130	2	30	
Dichloroprop	8.34	0.080	0.30	ug/l	8.00	ND	104	70-130	15	30	
Dinoseb	4.07	0.14	0.40	ug/l	4.00	ND	102	70-130	9	30	
Pentachlorophenol	3.69	0.040	0.20	ug/l	4.00	0.262	86	70-130	7	30	
Picloram	3.60	0.050	0.60	ug/l	4.00	ND	90	70-130	4	30	
<i>Surrogate(s)</i>											
2,4-DCAA			10.7	ug/l	10.0		107	70-130			



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

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

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0102 - SM 5210B											
Blank (W8C0102-BLK1)						Prepared: 03/02/18 Analyzed: 03/07/18					
Biochemical Oxygen Demand	ND	2.0	2.0	mg/l							
Blank (W8C0102-BLK2)						Prepared: 03/02/18 Analyzed: 03/07/18					
Biochemical Oxygen Demand	ND	2.0	2.0	mg/l							
LCS (W8C0102-BS1)						Prepared: 03/02/18 Analyzed: 03/07/18					
Biochemical Oxygen Demand	184	2.0	2.0	mg/l	198		93	85-115			
Duplicate (W8C0102-DUP1)						Source: 8C02037-01 Prepared: 03/02/18 Analyzed: 03/07/18					
Biochemical Oxygen Demand	7.51	2.0	2.0	mg/l		7.38			2	20	
Batch: W8C0106 - SM 2540D											
Blank (W8C0106-BLK1)						Prepared: 03/02/18 Analyzed: 03/05/18					
Total Suspended Solids	ND		5	mg/l							
LCS (W8C0106-BS1)						Prepared: 03/02/18 Analyzed: 03/05/18					
Total Suspended Solids	50.0		5	mg/l	54.4		92	90-110			
Duplicate (W8C0106-DUP1)						Source: 8B27112-02 Prepared: 03/02/18 Analyzed: 03/05/18					
Total Suspended Solids	927		5	mg/l		963			4	20	
Duplicate (W8C0106-DUP2)						Source: 8C02037-01 Prepared: 03/02/18 Analyzed: 03/05/18					
Total Suspended Solids	2.00		5	mg/l		3.00			40	20	R-03
Batch: W8C0107 - EPA 160.4											
Blank (W8C0107-BLK1)						Prepared: 03/02/18 Analyzed: 03/05/18					
Volatile Suspended Solids	ND	3.1	5.0	mg/l							
LCS (W8C0107-BS1)						Prepared: 03/02/18 Analyzed: 03/05/18					
Volatile Suspended Solids	37	3.1	5.0	mg/l	38.6		96	90-110			
Duplicate (W8C0107-DUP1)						Source: 8B27112-02 Prepared: 03/02/18 Analyzed: 03/05/18					
Volatile Suspended Solids	180	3.1	5.0	mg/l		170			3	15	
Duplicate (W8C0107-DUP2)						Source: 8C02037-01 Prepared: 03/02/18 Analyzed: 03/05/18					
Volatile Suspended Solids	ND	3.1	5.0	mg/l		ND				15	
Batch: W8C0129 - SM 5540C											
Blank (W8C0129-BLK1)						Prepared & Analyzed: 03/02/18					
MBAS	ND	0.019	0.050	mg/l							
LCS (W8C0129-BS1)						Prepared & Analyzed: 03/02/18					
MBAS	0.183	0.019	0.050	mg/l	0.200		91	82-115			
Matrix Spike (W8C0129-MS1)						Source: 8C01028-49 Prepared & Analyzed: 03/02/18					
MBAS	0.252	0.019	0.050	mg/l	0.200	0.0557	98	74-123			
Matrix Spike Dup (W8C0129-MSD1)						Source: 8C01028-49 Prepared & Analyzed: 03/02/18					
MBAS	0.251	0.019	0.050	mg/l	0.200	0.0557	98	74-123	0.6	20	
Batch: W8C0132 - EPA 180.1											
Blank (W8C0132-BLK1)						Prepared & Analyzed: 03/02/18					

8C02079

Page 19 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0132 - EPA 180.1 (Continued)											
Blank (W8C0132-BLK1)						Prepared & Analyzed: 03/02/18					
Turbidity	ND	0.024	0.10	NTU							
LCS (W8C0132-BS1)						Prepared & Analyzed: 03/02/18					
Turbidity	6.84	0.024	0.10	NTU	6.99		98	90-110			
Duplicate (W8C0132-DUP1)						Source: 8C02033-02 Prepared & Analyzed: 03/02/18					
Turbidity	1.45	0.024	0.10	NTU		1.43			1	10	
Batch: W8C0197 - EPA 350.1											
Blank (W8C0197-BLK1)						Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	ND	0.048	0.10	mg/l							
Blank (W8C0197-BLK2)						Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	ND	0.048	0.10	mg/l							
LCS (W8C0197-BS1)						Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.249	0.048	0.10	mg/l	0.250		99	90-110			
LCS (W8C0197-BS2)						Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.260	0.048	0.10	mg/l	0.250		104	90-110			
Matrix Spike (W8C0197-MS1)						Source: 8C02090-01 Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.423	0.048	0.10	mg/l	0.250	0.162	105	90-110			
Matrix Spike (W8C0197-MS2)						Source: 8C02090-02 Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.549	0.048	0.10	mg/l	0.250	0.300	100	90-110			
Matrix Spike Dup (W8C0197-MSD1)						Source: 8C02090-01 Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.422	0.048	0.10	mg/l	0.250	0.162	104	90-110	0.2	15	
Matrix Spike Dup (W8C0197-MSD2)						Source: 8C02090-02 Prepared: 03/05/18 Analyzed: 03/06/18					
Ammonia as N	0.541	0.048	0.10	mg/l	0.250	0.300	97	90-110	1	15	
Batch: W8C0200 - SM 2320B											
Blank (W8C0200-BLK1)						Prepared & Analyzed: 03/05/18					
Alkalinity as CaCO3	ND	0.56	2.0	mg/l							
LCS (W8C0200-BS1)						Prepared & Analyzed: 03/05/18					
Alkalinity as CaCO3	243	0.56	2.0	mg/l	250		97	94-108			
Duplicate (W8C0200-DUP1)						Source: 8C02079-01 Prepared & Analyzed: 03/05/18					
Alkalinity as CaCO3	24.8	0.56	2.0	mg/l		24.0			3	15	
Batch: W8C0216 - EPA 365.1											
Blank (W8C0216-BLK1)						Prepared: 03/05/18 Analyzed: 03/08/18					
Phosphorus as P, Total	ND	0.0014	0.010	mg/l							
LCS (W8C0216-BS1)						Prepared: 03/05/18 Analyzed: 03/08/18					
Phosphorus as P, Total	0.0476	0.0014	0.010	mg/l	0.0500		95	90-110			
Matrix Spike (W8C0216-MS1)						Source: 8B28049-04 Prepared: 03/05/18 Analyzed: 03/08/18					
Phosphorus as P, Total	0.274	0.0028	0.020	mg/l	0.0500	0.222	104	90-110			

8C02079

Page 20 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0216 - EPA 365.1 (Continued)											
Matrix Spike (W8C0216-MS2)	Source: 8B28042-01				Prepared: 03/05/18		Analyzed: 03/08/18				
Phosphorus as P, Total	0.308	0.0028	0.020	mg/l	0.0500	0.252	112	90-110			MS-02
Matrix Spike Dup (W8C0216-MSD1)	Source: 8B28049-04				Prepared: 03/05/18		Analyzed: 03/08/18				
Phosphorus as P, Total	0.344	0.0028	0.020	mg/l	0.100	0.222	122	90-110	23	20	MS-02
Matrix Spike Dup (W8C0216-MSD2)	Source: 8B28042-01				Prepared: 03/05/18		Analyzed: 03/08/18				
Phosphorus as P, Total	0.304	0.0028	0.020	mg/l	0.0500	0.252	104	90-110	1	20	
Batch: W8C0298 - SM 2540C											
Blank (W8C0298-BLK1)					Prepared: 03/06/18		Analyzed: 03/08/18				
Total Dissolved Solids	ND	4.0	10	mg/l							
LCS (W8C0298-BS1)					Prepared: 03/06/18		Analyzed: 03/08/18				
Total Dissolved Solids	822	4.0	10	mg/l	824		100	96-102			
Duplicate (W8C0298-DUP1)	Source: 8C02124-02				Prepared: 03/06/18		Analyzed: 03/08/18				
Total Dissolved Solids	4100	4.0	10	mg/l		4110			0.3	10	
Duplicate (W8C0298-DUP2)	Source: 8C05061-01				Prepared: 03/06/18		Analyzed: 03/08/18				
Total Dissolved Solids	1100	4.0	10	mg/l		1110			2	10	
Batch: W8C0335 - EPA 365.3											
Blank (W8C0335-BLK1)					Prepared: 03/06/18		Analyzed: 03/12/18				
Phosphorus, Dissolved	ND	0.00083	0.010	mg/l							
LCS (W8C0335-BS1)					Prepared: 03/06/18		Analyzed: 03/12/18				
Phosphorus, Dissolved	0.201	0.00083	0.010	mg/l	0.200		100	90-110			
Matrix Spike (W8C0335-MS1)	Source: 8C02079-01				Prepared: 03/06/18		Analyzed: 03/12/18				
Phosphorus, Dissolved	0.396	0.00083	0.010	mg/l	0.200	0.189	104	90-110			
Matrix Spike Dup (W8C0335-MSD1)	Source: 8C02079-01				Prepared: 03/06/18		Analyzed: 03/12/18				
Phosphorus, Dissolved	0.392	0.00083	0.010	mg/l	0.200	0.189	102	90-110	1	20	
Batch: W8C0370 - SM 5310B											
Blank (W8C0370-BLK1)					Prepared & Analyzed: 03/07/18						
Total Organic Carbon (TOC)	ND	0.016	0.10	mg/l							
LCS (W8C0370-BS1)					Prepared & Analyzed: 03/07/18						
Total Organic Carbon (TOC)	1.05	0.016	0.10	mg/l	1.00		105	85-115			
Matrix Spike (W8C0370-MS1)	Source: 8B28092-01				Prepared & Analyzed: 03/07/18						
Total Organic Carbon (TOC)	22.7	0.016	0.10	mg/l	5.00	18.6	82	76-115			
Matrix Spike Dup (W8C0370-MSD1)	Source: 8B28092-01				Prepared & Analyzed: 03/07/18						
Total Organic Carbon (TOC)	23.4	0.016	0.10	mg/l	5.00	18.6	97	76-115	3	20	
Batch: W8C0388 - SM 2510B											
Blank (W8C0388-BLK1)					Prepared & Analyzed: 03/07/18						
Specific Conductance (EC)	ND	0.23	2.0	umhos/cm							
LCS (W8C0388-BS1)					Prepared & Analyzed: 03/07/18						

8C02079

Page 21 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

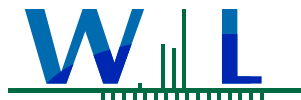
(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0388 - SM 2510B (Continued)											
LCS (W8C0388-BS1)						Prepared & Analyzed: 03/07/18					
Specific Conductance (EC)	195	0.23	2.0	umhos/cm	200		97	95-105			
Duplicate (W8C0388-DUP1)						Source: 8B16001-01 Prepared & Analyzed: 03/07/18					
Specific Conductance (EC)	928	0.23	2.0	umhos/cm		913			2	5	
Batch: W8C0439 - EPA 410.4											
Blank (W8C0439-BLK1)						Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	ND	0.73	5.0	mg/l							
LCS (W8C0439-BS1)						Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	92.4	0.73	5.0	mg/l	100		92	90-110			
Duplicate (W8C0439-DUP1)						Source: 8C02107-01 Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	7360	3.6	25	mg/l		8150			10	15	
Matrix Spike (W8C0439-MS1)						Source: 8C02053-03 Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	210	2.9	20	mg/l	200	21.6	94	90-110			
Matrix Spike (W8C0439-MS2)						Source: 8C02053-04 Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	230	2.9	20	mg/l	200	43.8	93	90-110			
Matrix Spike Dup (W8C0439-MSD1)						Source: 8C02053-03 Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	209	2.9	20	mg/l	200	21.6	94	90-110	0.4	15	
Matrix Spike Dup (W8C0439-MSD2)						Source: 8C02053-04 Prepared: 03/07/18 Analyzed: 03/09/18					
Chemical Oxygen Demand	227	2.9	20	mg/l	200	43.8	92	90-110	2	15	
Batch: W8C0671 - EPA 420.4											
Blank (W8C0671-BLK1)						Prepared: 03/13/18 Analyzed: 03/15/18					
Phenolics	ND	0.0042	0.010	mg/l							
LCS (W8C0671-BS1)						Prepared: 03/13/18 Analyzed: 03/15/18					
Phenolics	0.101	0.0042	0.010	mg/l	0.100		101	90-110			
Matrix Spike (W8C0671-MS1)						Source: 8C02122-02 Prepared: 03/13/18 Analyzed: 03/15/18					
Phenolics	0.258	0.0042	0.010	mg/l	0.250	0.0111	99	90-110			
Matrix Spike Dup (W8C0671-MSD1)						Source: 8C02122-02 Prepared: 03/13/18 Analyzed: 03/15/18					
Phenolics	0.252	0.0042	0.010	mg/l	0.250	0.0111	96	90-110	2	20	
Batch: W8C0678 - EPA 351.2											
Blank (W8C0678-BLK1)						Prepared: 03/13/18 Analyzed: 03/15/18					
TKN	ND	0.050	0.10	mg/l							
Blank (W8C0678-BLK2)						Prepared: 03/13/18 Analyzed: 03/15/18					
TKN	ND	0.050	0.10	mg/l							
LCS (W8C0678-BS1)						Prepared: 03/13/18 Analyzed: 03/15/18					
TKN	1.09	0.050	0.10	mg/l	1.00		109	90-110			
LCS (W8C0678-BS2)						Prepared: 03/13/18 Analyzed: 03/15/18					
TKN	1.04	0.050	0.10	mg/l	1.00		104	90-110			

8C02079

Page 22 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W8C0678 - EPA 351.2 (Continued)											
Matrix Spike (W8C0678-MS1)											
TKN	1.30	0.050	0.10	mg/l	1.00	0.195	111	90-110			MS-01
Matrix Spike (W8C0678-MS2)											
TKN	1.21	0.050	0.10	mg/l	1.00	0.198	102	90-110			
Matrix Spike Dup (W8C0678-MSD1)											
TKN	1.28	0.050	0.10	mg/l	1.00	0.195	109	90-110	1	10	
Matrix Spike Dup (W8C0678-MSD2)											
TKN	1.26	0.050	0.10	mg/l	1.00	0.198	107	90-110	4	10	
Batch: W8C0680 - EPA 335.4											
Blank (W8C0680-BLK1)											
Cyanide, Total	ND	2.7	5.0	ug/l							
LCS (W8C0680-BS1)											
Cyanide, Total	52.0	2.7	5.0	ug/l	50.0		104	90-110			
Matrix Spike (W8C0680-MS1)											
Cyanide, Total	94.0	2.7	5.0	ug/l	100	ND	94	90-110			
Matrix Spike Dup (W8C0680-MSD1)											
Cyanide, Total	95.5	2.7	5.0	ug/l	100	ND	96	90-110	2	20	

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:
04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

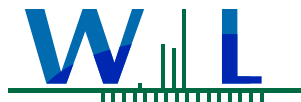
(Continued)

Hexavalent Chromium by IC

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W8C0189 - EPA 218.6											
Blank (W8C0189-BLK1)						Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	ND	0.0048	0.020	ug/l							
Chromium 6+, Dissolved	ND	0.0048	0.020	ug/l							
LCS (W8C0189-BS1)						Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	4.82	0.0048	0.020	ug/l	5.00		96	90-110			
Chromium 6+, Dissolved	4.82	0.0048	0.020	ug/l	5.00		96	90-110			
Matrix Spike (W8C0189-MS1)						Source: 8C02079-01 Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	19.8	0.019	0.080	ug/l	20.0	0.353	97	88-112			M-05
Chromium 6+, Dissolved	19.8	0.019	0.080	ug/l	20.0	0.357	97	88-112			M-05
Matrix Spike (W8C0189-MS2)						Source: 8C02079-02 Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	20.1	0.019	0.080	ug/l	20.0	0.734	97	88-112			M-05
Chromium 6+, Dissolved	20.1	0.019	0.080	ug/l	20.0	0.733	97	88-112			M-05
Matrix Spike Dup (W8C0189-MSD1)						Source: 8C02079-01 Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	19.8	0.019	0.080	ug/l	20.0	0.353	97	88-112	0.3	10	M-05
Chromium 6+, Dissolved	19.8	0.019	0.080	ug/l	20.0	0.357	97	88-112	0.3	10	M-05
Matrix Spike Dup (W8C0189-MSD2)						Source: 8C02079-02 Prepared: 03/05/18 Analyzed: 03/08/18					
Chromium 6+	20.2	0.019	0.080	ug/l	20.0	0.734	97	88-112	0.4	10	M-05
Chromium 6+, Dissolved	20.2	0.019	0.080	ug/l	20.0	0.733	97	88-112	0.4	10	M-05

Hydrocarbons by GC/FID

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W8C0424 - EPA 8015D											
Blank (W8C0424-BLK1)						Prepared: 03/07/18 Analyzed: 03/14/18					
Diesel Range Organics	0.0357	0.024	0.10	mg/l							
Oil Range Organics	ND	0.33	0.50	mg/l							
Surrogate(s)											
n-Tetracosane			0.289	mg/l	0.250		116	64-155			
LCS (W8C0424-BS1)						Prepared: 03/07/18 Analyzed: 03/14/18					
Diesel Range Organics	0.622	0.024	0.10	mg/l	0.500		124	56-136			
Surrogate(s)											
n-Tetracosane			0.301	mg/l	0.250		120	64-155			
LCS Dup (W8C0424-BSD1)						Prepared: 03/07/18 Analyzed: 03/14/18					
Diesel Range Organics	0.582	0.024	0.10	mg/l	0.500		116	56-136	7	25	
Surrogate(s)											
n-Tetracosane			0.300	mg/l	0.250		120	64-155			



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Metals by EPA 200 Series Methods

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
---------	--------	-----	-----	-------	-------------	---------------	------	--------	-----	-------	-----------

Batch: W8C0790 - EPA 200.8

Blank (W8C0790-BLK1)

Prepared: 03/14/18 Analyzed: 03/27/18

Aluminum, Dissolved	ND	1.3	5.0	ug/l							
Aluminum, Total	1.35	1.3	5.0	ug/l							
Antimony, Dissolved	ND	0.045	0.50	ug/l							
Antimony, Total	ND	0.045	0.50	ug/l							
Arsenic, Dissolved	ND	0.074	0.40	ug/l							
Arsenic, Total	ND	0.074	0.40	ug/l							
Cadmium, Dissolved	ND	0.041	0.10	ug/l							
Cadmium, Total	ND	0.041	0.10	ug/l							
Chromium, Dissolved	0.0400	0.035	0.20	ug/l							
Chromium, Total	ND	0.035	0.20	ug/l							
Copper, Dissolved	ND	0.13	0.50	ug/l							
Copper, Total	ND	0.13	0.50	ug/l							
Iron, Dissolved	ND	0.91	20	ug/l							
Iron, Total	ND	0.91	20	ug/l							
Lead, Dissolved	ND	0.031	0.20	ug/l							
Lead, Total	ND	0.031	0.20	ug/l							
Nickel, Dissolved	0.0700	0.045	0.80	ug/l							
Nickel, Total	ND	0.045	0.80	ug/l							
Zinc, Dissolved	ND	0.94	5.0	ug/l							
Zinc, Total	ND	0.94	5.0	ug/l							

LCS (W8C0790-BS1)

Prepared: 03/14/18 Analyzed: 03/27/18

Aluminum, Dissolved	49.5	1.3	5.0	ug/l	50.0		99	85-115			
Aluminum, Total	49.5	1.3	5.0	ug/l	50.0		99	85-115			
Antimony, Dissolved	51.8	0.045	0.50	ug/l	50.0		104	85-115			
Antimony, Total	51.8	0.045	0.50	ug/l	50.0		104	85-115			
Arsenic, Dissolved	50.4	0.074	0.40	ug/l	50.0		101	85-115			
Arsenic, Total	50.4	0.074	0.40	ug/l	50.0		101	85-115			
Cadmium, Dissolved	50.0	0.041	0.10	ug/l	50.0		100	85-115			
Cadmium, Total	50.0	0.041	0.10	ug/l	50.0		100	85-115			
Chromium, Dissolved	49.9	0.035	0.20	ug/l	50.0		100	85-115			
Chromium, Total	49.9	0.035	0.20	ug/l	50.0		100	85-115			
Copper, Dissolved	51.6	0.13	0.50	ug/l	50.0		103	85-115			
Copper, Total	51.6	0.13	0.50	ug/l	50.0		103	85-115			
Iron, Dissolved	1110	0.91	20	ug/l	1050		106	85-115			
Iron, Total	1110	0.91	20	ug/l	1050		106	85-115			
Lead, Dissolved	49.3	0.031	0.20	ug/l	50.0		99	85-115			
Lead, Total	49.3	0.031	0.20	ug/l	50.0		99	85-115			

8C02079

Page 25 of 31



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0790 - EPA 200.8 (Continued)											
LCS (W8C0790-BS1)					Prepared: 03/14/18 Analyzed: 03/27/18						
Nickel, Dissolved	50.3	0.045	0.80	ug/l	50.0		101	85-115			
Nickel, Total	50.3	0.045	0.80	ug/l	50.0		101	85-115			
Zinc, Dissolved	54.0	0.94	5.0	ug/l	50.0		108	85-115			
Zinc, Total	54.0	0.94	5.0	ug/l	50.0		108	85-115			
Matrix Spike (W8C0790-MS1)					Source: 8C02079-03 Prepared: 03/14/18 Analyzed: 03/27/18						
Aluminum, Total	2360	1.3	5.0	ug/l	50.0	2240	260	70-130			MS-02
Antimony, Total	53.4	0.045	0.50	ug/l	50.0	6.06	95	70-130			
Arsenic, Total	52.2	0.074	0.40	ug/l	50.0	2.69	99	70-130			
Cadmium, Total	49.8	0.041	0.10	ug/l	50.0	0.200	99	70-130			
Chromium, Total	54.6	0.035	0.20	ug/l	50.0	5.08	99	70-130			
Copper, Total	106	0.13	0.50	ug/l	50.0	57.1	98	70-130			
Iron, Total	3540	0.91	20	ug/l	1050	2320	116	70-130			
Lead, Total	66.5	0.031	0.20	ug/l	50.0	17.9	97	70-130			
Nickel, Total	55.2	0.045	0.80	ug/l	50.0	8.85	93	70-130			
Zinc, Total	243	0.94	5.0	ug/l	50.0	195	96	70-130			
Matrix Spike Dup (W8C0790-MSD1)					Source: 8C02079-03 Prepared: 03/14/18 Analyzed: 03/27/18						
Aluminum, Total	2240	1.3	5.0	ug/l	50.0	2240	14	70-130	5	30	MS-02
Antimony, Total	55.5	0.045	0.50	ug/l	50.0	6.06	99	70-130	4	30	
Arsenic, Total	52.4	0.074	0.40	ug/l	50.0	2.69	99	70-130	0.4	30	
Cadmium, Total	49.8	0.041	0.10	ug/l	50.0	0.200	99	70-130	0.1	30	
Chromium, Total	54.0	0.035	0.20	ug/l	50.0	5.08	98	70-130	1	30	
Copper, Total	105	0.13	0.50	ug/l	50.0	57.1	95	70-130	1	30	
Iron, Total	3350	0.91	20	ug/l	1050	2320	98	70-130	5	30	
Lead, Total	65.0	0.031	0.20	ug/l	50.0	17.9	94	70-130	2	30	
Nickel, Total	54.7	0.045	0.80	ug/l	50.0	8.85	92	70-130	0.8	30	
Zinc, Total	242	0.94	5.0	ug/l	50.0	195	95	70-130	0.2	30	
Batch: W8C0874 - EPA 200.7											
Blank (W8C0874-BLK1)					Prepared: 03/15/18 Analyzed: 03/19/18						
Calcium, Total	ND	0.0160	0.100	mg/l							
LCS (W8C0874-BS1)					Prepared: 03/15/18 Analyzed: 03/19/18						
Calcium, Total	46.6	0.0160	0.100	mg/l	50.2		93	85-115			
Matrix Spike (W8C0874-MS1)					Source: 8C03010-01 Prepared: 03/15/18 Analyzed: 03/19/18						
Calcium, Total	60.2	0.0160	0.100	mg/l	50.2	13.9	92	70-130			
Matrix Spike Dup (W8C0874-MSD1)					Source: 8C03010-01 Prepared: 03/15/18 Analyzed: 03/19/18						
Calcium, Total	60.3	0.0160	0.100	mg/l	50.2	13.9	93	70-130	0.3	30	



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W8D0838 - SM 9221F											
Blank (W8D0838-BLK1)					Prepared: 03/02/18 Analyzed: 04/13/18						
E. coli	ND		1.8	MPN/100ml							
Fecal Coliform	ND		1.8	MPN/100ml							
Total Coliform	ND	1.8	1.8	MPN/100ml							
Batch: W8D0839 - Enterolert											
Blank (W8D0839-BLK1)					Prepared: 03/02/18 Analyzed: 03/03/18						
Enterococcus	ND	1.0	1.0	MPN/100ml							



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
---------	--------	-----	-----	-------	-------------	---------------	------	--------	-----	-------	-----------

Batch: W8C0255 - EPA 625.1

Blank (W8C0255-BLK1)

Prepared: 03/06/18 Analyzed: 03/07/18

1-Methylnaphthalene	ND	0.56	5.0	ng/l							
1-Methylphenanthrene	ND	0.98	5.0	ng/l							
2,6-Dimethylnaphthalene	ND	0.65	5.0	ng/l							
2-Methylnaphthalene	ND	0.82	5.0	ng/l							
Acenaphthene	ND	0.43	5.0	ng/l							
Acenaphthylene	ND	0.52	5.0	ng/l							
Anthracene	ND	0.91	5.0	ng/l							
Benzo (a) anthracene	ND	0.79	5.0	ng/l							
Benzo (a) pyrene	ND	0.58	5.0	ng/l							
Benzo (b) fluoranthene	ND	1.6	5.0	ng/l							
Benzo (e) pyrene	ND	0.95	5.0	ng/l							
Benzo (g,h,i) perylene	ND	0.90	5.0	ng/l							
Benzo (k) fluoranthene	ND	0.52	5.0	ng/l							
Biphenyl	ND	0.49	5.0	ng/l							
Chrysene	ND	0.52	5.0	ng/l							
Dibenzo (a,h) anthracene	ND	1.2	5.0	ng/l							
Fluoranthene	ND	1.3	5.0	ng/l							
Fluorene	ND	0.75	5.0	ng/l							
Indeno (1,2,3-cd) pyrene	ND	0.99	5.0	ng/l							
Naphthalene	ND	0.53	5.0	ng/l							
Perylene	ND	3.0	5.0	ng/l							
Phenanthrene	ND	0.96	5.0	ng/l							
Pyrene	ND	0.68	5.0	ng/l							

Surrogate(s)

1,3-Dimethyl-2-nitrobenzene			72.4	ng/l	100		72	50-150			
Perylene-d12			68.5	ng/l	100		69	50-150			

LCS (W8C0255-BS1)

Prepared: 03/06/18 Analyzed: 03/07/18

Acenaphthene	28.6	0.43	5.0	ng/l	50.0		57	50-150			
Acenaphthylene	29.8	0.52	5.0	ng/l	50.0		60	50-150			
Anthracene	27.1	0.91	5.0	ng/l	50.0		54	50-150			
Benzo (a) anthracene	31.5	0.79	5.0	ng/l	50.0		63	50-150			
Benzo (a) pyrene	34.2	0.58	5.0	ng/l	50.0		68	50-150			
Benzo (b) fluoranthene	33.5	1.6	5.0	ng/l	50.0		67	50-150			
Benzo (g,h,i) perylene	32.6	0.90	5.0	ng/l	50.0		65	50-150			
Benzo (k) fluoranthene	33.1	0.52	5.0	ng/l	50.0		66	50-150			
Chrysene	30.5	0.52	5.0	ng/l	50.0		61	50-150			
Dibenzo (a,h) anthracene	31.4	1.2	5.0	ng/l	50.0		63	50-150			

8C02079

Page 28 of 31

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:
04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0255 - EPA 625.1 (Continued)											
LCS (W8C0255-BS1)					Prepared: 03/06/18 Analyzed: 03/07/18						
Fluoranthene	28.3	1.3	5.0	ng/l	50.0		57	50-150			
Fluorene	27.4	0.75	5.0	ng/l	50.0		55	50-150			
Indeno (1,2,3-cd) pyrene	34.4	0.99	5.0	ng/l	50.0		69	50-150			
Naphthalene	28.5	0.53	5.0	ng/l	50.0		57	50-150			
Phenanthrene	29.1	0.96	5.0	ng/l	50.0		58	50-150			
Pyrene	27.5	0.68	5.0	ng/l	50.0		55	50-150			
<i>Surrogate(s)</i>											
1,3-Dimethyl-2-nitrobenzene			75.6	ng/l	100		76	50-150			
Perylene-d12			69.3	ng/l	100		69	50-150			
LCS Dup (W8C0255-BSD1)					Prepared: 03/06/18 Analyzed: 03/07/18						
Acenaphthene	37.1	0.43	5.0	ng/l	50.0		74	50-150	26	30	
Acenaphthylene	36.4	0.52	5.0	ng/l	50.0		73	50-150	20	30	
Anthracene	36.3	0.91	5.0	ng/l	50.0		73	50-150	29	30	
Benzo (a) anthracene	38.6	0.79	5.0	ng/l	50.0		77	50-150	20	30	
Benzo (a) pyrene	40.5	0.58	5.0	ng/l	50.0		81	50-150	17	30	
Benzo (b) fluoranthene	39.3	1.6	5.0	ng/l	50.0		79	50-150	16	30	
Benzo (g,h,i) perylene	37.7	0.90	5.0	ng/l	50.0		75	50-150	15	30	
Benzo (k) fluoranthene	38.4	0.52	5.0	ng/l	50.0		77	50-150	15	30	
Chrysene	38.1	0.52	5.0	ng/l	50.0		76	50-150	22	30	
Dibenzo (a,h) anthracene	36.5	1.2	5.0	ng/l	50.0		73	50-150	15	30	
Fluoranthene	37.5	1.3	5.0	ng/l	50.0		75	50-150	28	30	
Fluorene	36.3	0.75	5.0	ng/l	50.0		73	50-150	28	30	
Indeno (1,2,3-cd) pyrene	40.7	0.99	5.0	ng/l	50.0		81	50-150	17	30	
Naphthalene	36.4	0.53	5.0	ng/l	50.0		73	50-150	24	30	
Phenanthrene	37.1	0.96	5.0	ng/l	50.0		74	50-150	24	30	
Pyrene	36.8	0.68	5.0	ng/l	50.0		74	50-150	29	30	
<i>Surrogate(s)</i>											
1,3-Dimethyl-2-nitrobenzene			81.4	ng/l	100		81	50-150			
Perylene-d12			77.3	ng/l	100		77	50-150			
Matrix Spike (W8C0255-MS1)					Source: 8C03022-01 Prepared: 03/06/18 Analyzed: 03/07/18						
Acenaphthene	31.9	0.43	5.0	ng/l	50.0	ND	64	50-150			
Acenaphthylene	31.3	0.52	5.0	ng/l	50.0	ND	63	50-150			
Anthracene	31.6	0.91	5.0	ng/l	50.0	ND	63	50-150			
Benzo (a) anthracene	27.1	0.79	5.0	ng/l	50.0	ND	54	50-150			
Benzo (a) pyrene	19.5	0.58	5.0	ng/l	50.0	ND	39	50-150			MS-05
Benzo (b) fluoranthene	21.8	1.6	5.0	ng/l	50.0	ND	44	50-150			MS-05
Benzo (g,h,i) perylene	13.6	0.90	5.0	ng/l	50.0	ND	27	50-150			MS-05
Benzo (k) fluoranthene	19.3	0.52	5.0	ng/l	50.0	ND	39	50-150			MS-05



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C0255 - EPA 625.1 (Continued)											
Matrix Spike (W8C0255-MS1)	Source: 8C03022-01				Prepared: 03/06/18 Analyzed: 03/07/18						
Chrysene	23.5	0.52	5.0	ng/l	50.0	ND	47	50-150			MS-05
Dibenzo (a,h) anthracene	13.5	1.2	5.0	ng/l	50.0	ND	27	50-150			MS-05
Fluoranthene	30.1	1.3	5.0	ng/l	50.0	ND	60	50-150			
Fluorene	31.7	0.75	5.0	ng/l	50.0	ND	63	50-150			
Indeno (1,2,3-cd) pyrene	15.5	0.99	5.0	ng/l	50.0	ND	31	50-150			MS-05
Naphthalene	29.2	0.53	5.0	ng/l	50.0	ND	58	50-150			
Phenanthrene	31.8	0.96	5.0	ng/l	50.0	2.24	59	50-150			
Pyrene	29.7	0.68	5.0	ng/l	50.0	ND	59	50-150			
<i>Surrogate(s)</i>											
1,3-Dimethyl-2-nitrobenzene			67.9	ng/l	100		68	50-150			
Perylene-d12			68.0	ng/l	100		68	50-150			
Matrix Spike Dup (W8C0255-MSD1)	Source: 8C03022-01				Prepared: 03/06/18 Analyzed: 03/07/18						
Acenaphthene	35.7	0.43	5.0	ng/l	50.0	ND	71	50-150	11	30	
Acenaphthylene	36.4	0.52	5.0	ng/l	50.0	ND	73	50-150	15	30	
Anthracene	35.1	0.91	5.0	ng/l	50.0	ND	70	50-150	11	30	
Benzo (a) anthracene	31.9	0.79	5.0	ng/l	50.0	ND	64	50-150	16	30	
Benzo (a) pyrene	21.4	0.58	5.0	ng/l	50.0	ND	43	50-150	10	30	MS-05
Benzo (b) fluoranthene	24.9	1.6	5.0	ng/l	50.0	ND	50	50-150	13	30	
Benzo (g,h,i) perylene	14.5	0.90	5.0	ng/l	50.0	ND	29	50-150	6	30	MS-05
Benzo (k) fluoranthene	22.2	0.52	5.0	ng/l	50.0	ND	44	50-150	14	30	MS-05
Chrysene	28.3	0.52	5.0	ng/l	50.0	ND	57	50-150	18	30	
Dibenzo (a,h) anthracene	13.8	1.2	5.0	ng/l	50.0	ND	28	50-150	2	30	MS-05
Fluoranthene	34.7	1.3	5.0	ng/l	50.0	ND	69	50-150	14	30	
Fluorene	35.1	0.75	5.0	ng/l	50.0	ND	70	50-150	10	30	
Indeno (1,2,3-cd) pyrene	17.4	0.99	5.0	ng/l	50.0	ND	35	50-150	12	30	MS-05
Naphthalene	34.0	0.53	5.0	ng/l	50.0	ND	68	50-150	15	30	
Phenanthrene	35.9	0.96	5.0	ng/l	50.0	2.24	67	50-150	12	30	
Pyrene	34.9	0.68	5.0	ng/l	50.0	ND	70	50-150	16	30	
<i>Surrogate(s)</i>											
1,3-Dimethyl-2-nitrobenzene			77.3	ng/l	100		77	50-150			
Perylene-d12			70.6	ng/l	100		71	50-150			



WECK LABORATORIES, INC.

AEI-CASC Consulting
2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505

Certificate of Analysis

FINAL REPORT

Project Number: MS4 - Storm Water Monitoring 2017-2018

Reported:

04/16/2018 15:28

Project Manager: Edmond G. Suher



Notes and Definitions

Item	Definition
*	The recommended holding time for this analysis is only 15 minutes. The sample was analyzed as soon as it was possible but it was received and analyzed past holding time.
B-07	This analyte was found in the method blank at levels above the MDL but below the reporting limit.
M-02	Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.
M-05	Due to the nature of matrix interferences, sample was diluted prior to analysis. The MDL and MRL were raised due to the dilution.
M-06	Due to the high concentration of analyte inherent in the sample, sample was diluted prior to preparation. The MDL and MRL were raised due to this dilution.
MS-01	The spike recovery for this QC sample is outside of established control limits possibly due to sample matrix interference.
MS-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
MS-05	The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
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.



WECK LABORATORIES, INC.

Analytical Laboratory Service - Since 1964

Analytical Service Quotation

Contact: Ed Suher
Client Name: AEI-CASC Consulting
Address: 2740 W. Magnolia Blvd., Ste.102
Burbank, CA 91505
Phone: (818) 841-9004
Fax: (818) 841-8013

Printed: 10/18/2017
Effective: 10/17/17
Expires: 06/30/18

Project: MS4 - Storm Water Monitoring 2017-2018

EL MONTE

Code	Method	Qty	TAT * (workdays)
Water			
200.7 Hardness	_Varies	1	15
Alkalinity, total - SM 2320B	SM 2320B	1	15
Aluminum - EPA 200.8	EPA 200.8	1	15
Aluminum, dissolved - EPA 200.8	EPA 200.8	1	15
Ammonia-N - EPA 350.1	EPA 350.1	1	15
Antimony - EPA 200.8	EPA 200.8	1	15
Antimony, dissolved - EPA 200.8	EPA 200.8	1	15
Arsenic - EPA 200.8	EPA 200.8	1	15
Arsenic, dissolved - EPA 200.8	EPA 200.8	1	15
Biochemical Oxygen Demand - SM5210B	SM 5210B	1	15
Cadmium - EPA 200.8	EPA 200.8	1	15
Cadmium, dissolved - EPA 200.8	EPA 200.8	1	15
Chemical Oxygen Demand - EPA 410.4	EPA 410.4	1	15
Chloride - EPA 300.0	EPA 300.0	1	15
Chromium - EPA 200.8	EPA 200.8	1	15
Chromium, dissolved - EPA 200.8	EPA 200.8	1	15
Chromium, Hexavalent - EPA 218.6	EPA 218.6	1	15
Chromium, Hexavalent, dissolved - EPA 218.6	EPA 218.6	1	15
Copper - EPA 200.8	EPA 200.8	1	15
Copper, dissolved - EPA 200.8	EPA 200.8	1	15
Cyanide, Total - ASTM D 7511	ASTM D7511	1	15
Dissolved Oxygen - SM 4500-G	SM 4500-G	1	15
E.Coli Coliform by Enumeration SM9221 F	SM 9221F	1	15
Enterococcus - Enterolert	Enterolert	1	15
EPA 515.3 - Chlorinated Acid Herbicides	EPA 515.3	1	15
EPA 8015B - Diesel & Oil Range Organics (DRO/ORO)	EPA 8015D	1	15
Fecal Coliform by Enumeration SM9221E 3 dilutions	SM 9221E	1	15
Iron - EPA 200.8	EPA 200.8	1	15
Iron, dissolved - EPA 200.8	EPA 200.8	1	15
Lead - EPA 200.8	EPA 200.8	1	15
Lead, dissolved - EPA 200.8	EPA 200.8	1	15
MBAS - SM 5540 C	SM 5540C	1	15
Mercury, Diss, low-level - EPA 1631E	EPA 1631E	1	15
Mercury, total, low-level - EPA 1631E	EPA 1631E	1	15
Nickel - EPA 200.8	EPA 200.8	1	15
Nickel, dissolved - EPA 200.8	EPA 200.8	1	15
Nitrite+Nitrate-N - EPA 300.0	EPA 300.0	1	15
PAHs low level in water by GC/MS/MS	GC/MS/MS	1	15
Phenolics in water - EPA 420.4	EPA 420.4	1	15
Phosphorus Dissolved - EPA 365.3	EPA 365.3	1	15

Bid Project: AEI-CASC Consulting - MS4 - Storm Water Monitoring 2017-2018

Weck Laboratories, Inc. 14859 East Clark Avenue, City of Industry, CA 91745. Phone: (626) 336-2139

www.wecklabs.com



Code	Method	Qty	TAT * (workdays)
Phosphorus, Total as P - EPA 365.1	EPA 365.1	1	15
Specific Conductance (EC) - SM 2510B	SM 2510B	1	15
Sulfate - EPA 300.0	EPA 300.0	1	15
Total Coliforms by Enumeration SM9221B 3 dil.	SM 9221B	1	15
Total Dissolved Solids - SM 2540C	SM 2540C	1	15
Total Kjeldahl Nitrogen by EPA 351.2	EPA 351.2	1	15
Total Organic Carbon - SM 5310C	SM 5310C	1	15
Total Suspended Solids - SM2540D	SM 2540D	1	15
Turbidity - EPA 180.1	EPA 180.1	1	15
Volatile Suspended Solids - 160.4	EPA 160.4	1	15
Zinc - EPA 200.8	EPA 200.8	1	15
Zinc, dissolved - EPA 200.8	EPA 200.8	1	15
Additional Items (If requested or applicable, will be charged at listed rates)			
Afterhours - Holiday 10p before-8a after /hr/empl		1	
Afterhours - Rain Event - Standby flat fee		1	
Afterhours - Weekday 10p-8a /hour/employee		1	
Afterhours - Weekday 6p-10p /hour/employee		1	
Afterhours - Weekend 10p Fri-8a Mon /hr/empl		1	
Extra per micro dilution		1	
Filtration Fee		1	

200.7 Hardness consists of:
Calcium - EPA 200.7

Marilyn Romero
Client Services Manager

* Subject to Capacity

Payment terms are NET 30 days from invoice date. New accounts require payment prior to the release of test results until a credit application has been approved. Weck Laboratories accepts credit card payments (VISA/Master Card, American Express). Credit application/credit card approval form and Weck Laboratories' terms & conditions can be found at www.wecklabs.com under Resources. Paperless reports (PDF) are included while mailed paper reports are available at additional cost

Method Reporting Limits (MRL) and Method Detection Limits (MDL) are based upon specified sample volume or weight. When matrix interferences are apparent, sample amounts may be reduced during the preparation step and/or may be diluted prior to analysis. This is done to reduce analytical interference and instrumental contamination and will result in elevated MRL/ MDL on the test report.