

TCEQ – 29J

Calculated % Change in Water Quality

Site Description:

This site is the difference in water quality between the RO membrane unit permeate, prior to discharging to waste Lagoon No. 3 and the Splitter Box's effluent blended water quality. The analysis that was performed at this site calculated the % change in water quality between the two sites described.

Protocol:

TCEQ – 29J Calculated % Change in Water Quality (between RO membrane unit permeate, prior to discharging to waste Lagoon No. 3 and the Splitter Box's effluent blended water quality)									
	5-min	15-min	2-hr	4-hr	1/day	1/day or Δ	2/week	1/week	S/30/E
Nitrate change					X				X
Chlorite change					X				
TOC change								X	
DOC change								X	
TTHM removal								X	
HAA5 removal								X	
Bromide removal								X	

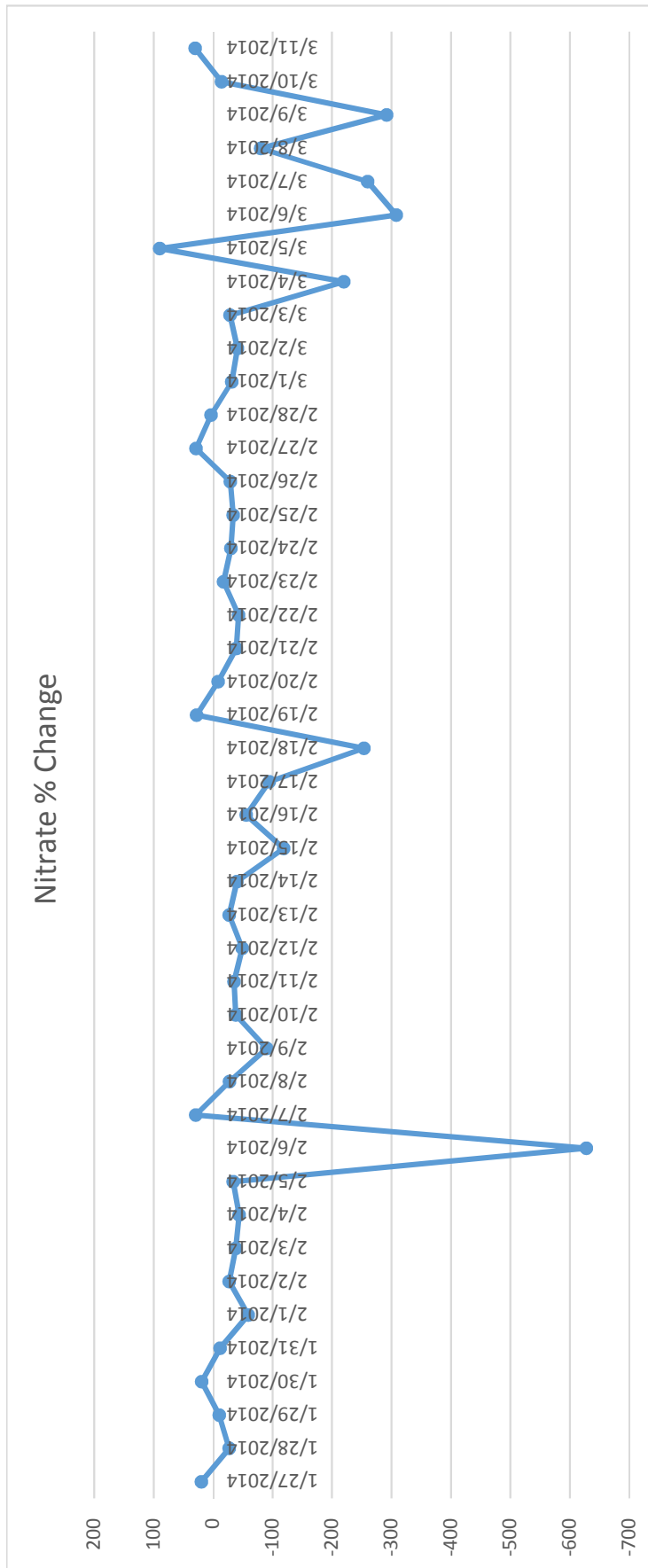
Summary Table:

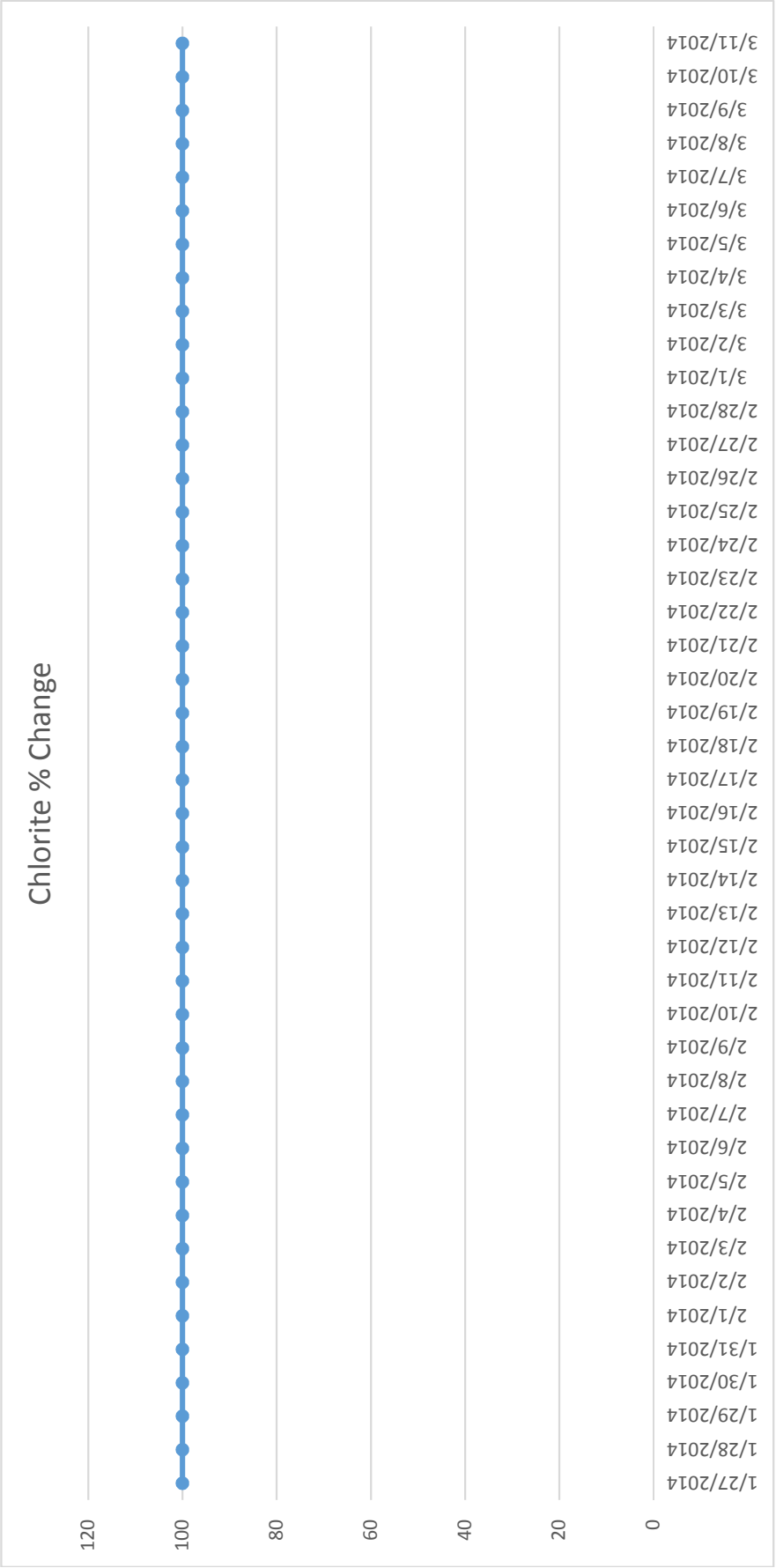
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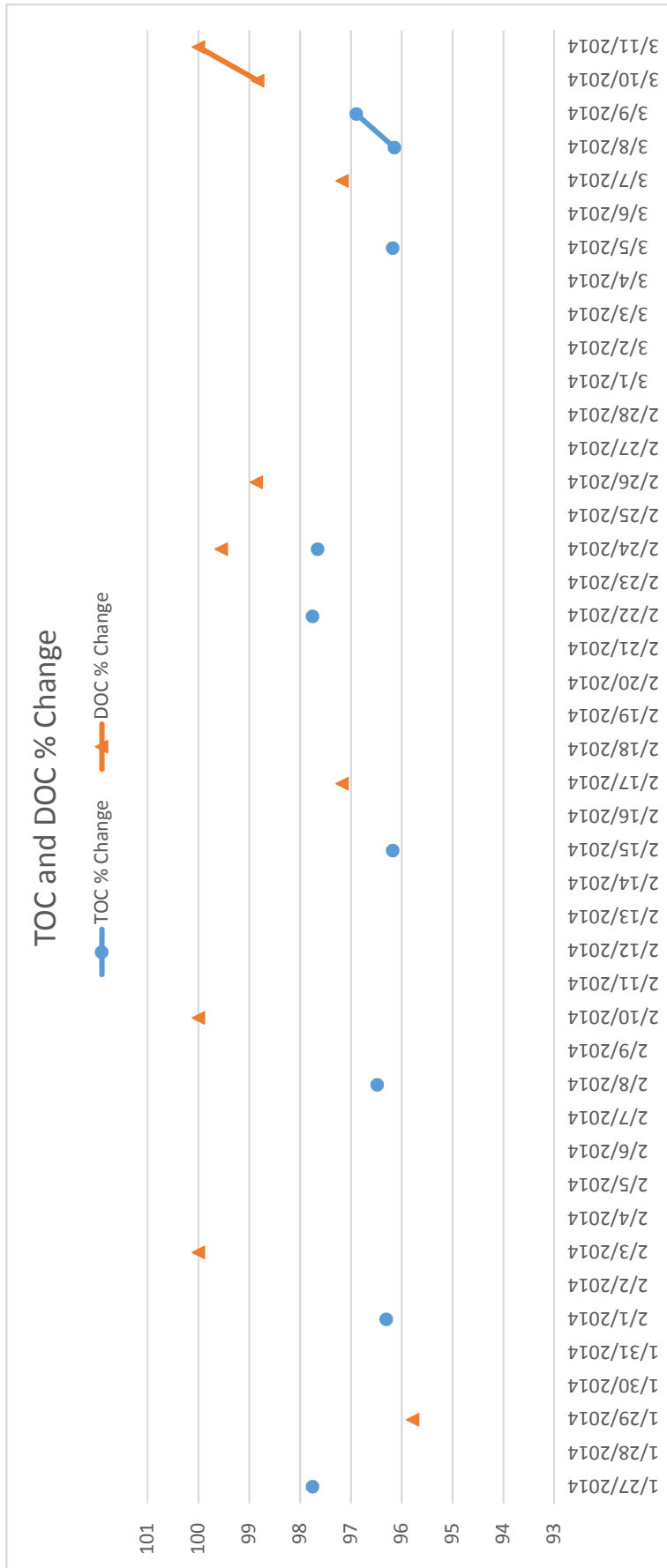
	Nitrate % Change	TOC % Change	DOC on-site % Change	DOC off-site % Change	TTHM % Change	HAA5 % Change	Bromide % Change	Chlorite % Change
Units	%	%	%	%	%	%	%	%
Min	-628	96	96	100	-175	100	90	100
Max	90	98	100	100	51	100	98	100
Avg	-69	97	99	100	-62	100	95	100
95th %	28	98	100	100	31	100	97	100

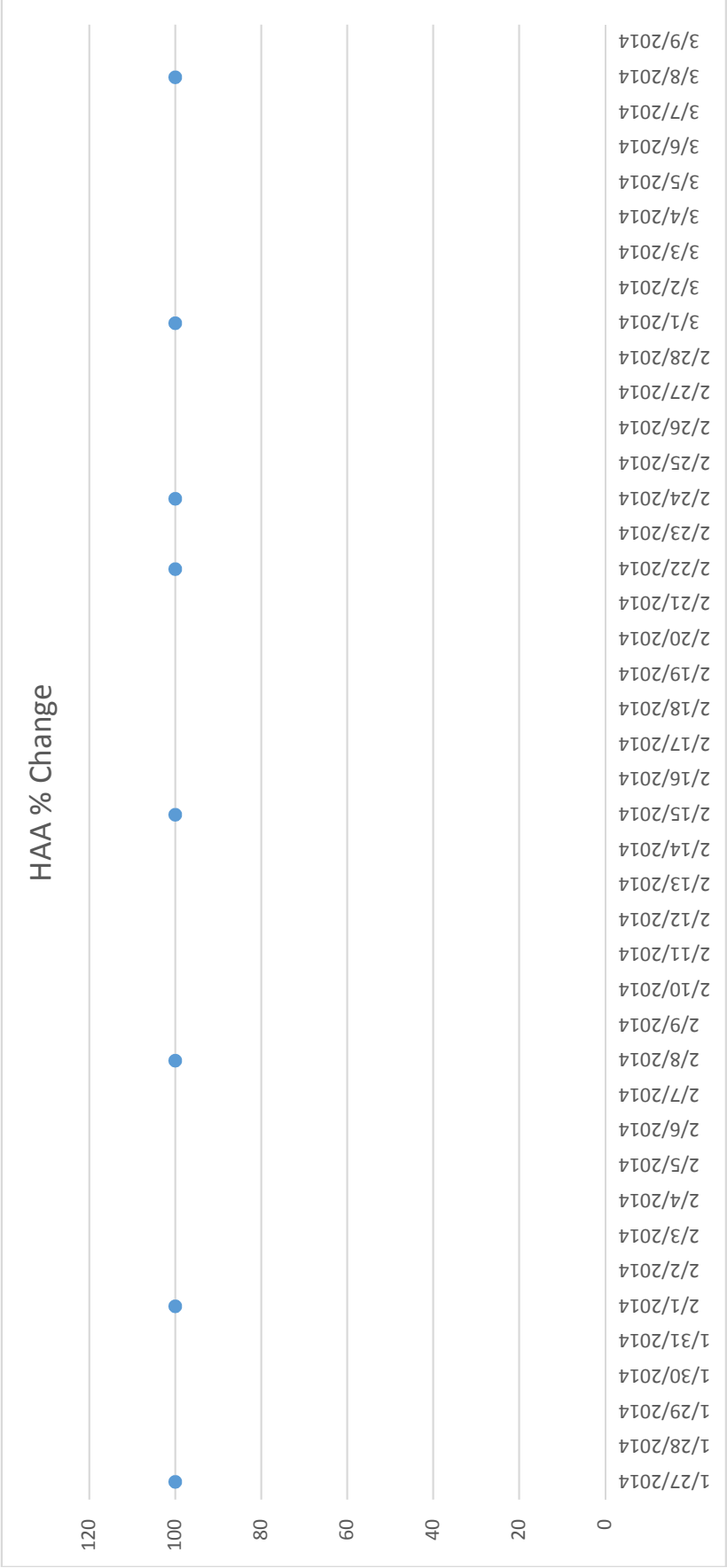
Conclusions:

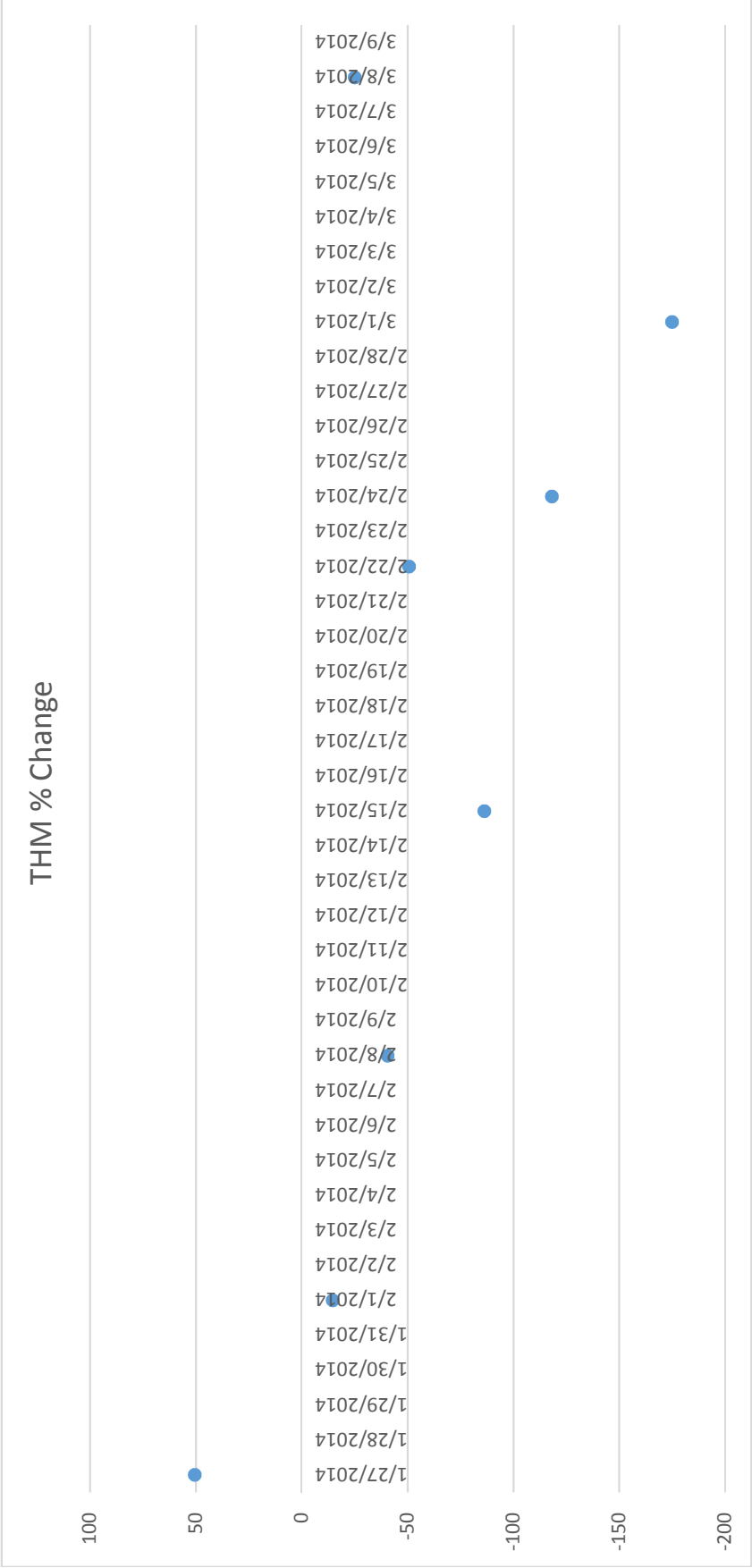
The percent change for these constituents demonstrate that the majority of them are increased with the addition of raw surface water from the lake. The exceptions are Nitrate and Total Trihalomethanes, which showed on average a 69% and 62% decrease, respectively.













TCEQ-29J: Calculated % Change in Water Quality

(between RO membrane unit permeate, prior to discharging to waste Lagoon No. 3 and the Splitter Box's effluent blended water quality)

Daily data

Date	TCEQ-29J	
	Nitrate % Change	Chlorite % Change
1/27/2014	19.7	100
1/28/2014	-27	100
1/29/2014	-11	100
1/30/2014	19.2	100
1/31/2014	-12	100
2/1/2014	-59	100
2/2/2014	-27	100
2/3/2014	-38	100
2/4/2014	-44	100
2/5/2014	-34	100
2/6/2014	-628	100
2/7/2014	29	100
2/8/2014	-28	100
2/9/2014	-90	100
2/10/2014	-38	100
2/11/2014	-35	100
2/12/2014	-49	100
2/13/2014	-27	100
2/14/2014	-40	100
2/15/2014	-119	100
2/16/2014	-56	100
2/17/2014	-94	100
2/18/2014	-254	100
2/19/2014	27.9	100
2/20/2014	-8.5	100
2/21/2014	-39	100
2/22/2014	-43	100
2/23/2014	-17	100
2/24/2014	-30	100
2/25/2014	-34	100
2/26/2014	-29	100
2/27/2014	28.5	100
2/28/2014	3.39	100
3/1/2014	-32	100
3/2/2014	-41	100
3/3/2014	-29	100

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Daily data

Date	TCEQ-29J	
	Nitrate % Change	Chlorite % Change
3/4/2014	-220	100
3/5/2014	90	100
3/6/2014	-308	100
3/7/2014	-260	100
3/8/2014	-80	100
3/9/2014	-292	100
3/10/2014	-14	100
3/11/2014	30	100

TCEQ-29J: Calculated % Change in Water Quality

(between RO membrane unit permeate, prior to dishcharging to waste Lagoon No. 3 and
the Splitter Box's effluent blended water quality)

Weekly data

		TCEQ-29J					
	Date	TOC % Change	DOC on-site % Change	DOC % Change	TTTHM % Change	HAA5 % Change	Bromide % Change
Week 1	1/27/2014						
	1/28/2014						
	1/29/2014	97.75	95.8	100	50.6	100	95.429
	1/30/2014						
	1/31/2014						
	2/1/2014						
	2/2/2014						
Week 2	2/3/2014	96.3	100	100	-15	100	89.512
	2/4/2014						
	2/5/2014						
	2/6/2014						
	2/7/2014						
	2/8/2014						
	2/9/2014						
Week 3	2/10/2014	96.48	100	100	-41	100	95.439
	2/11/2014						
	2/12/2014						
	2/13/2014						
	2/14/2014						
	2/15/2014						
	2/16/2014						
Week 4	2/17/2014	96.18	97.2	100	-86	100	96.25
	2/18/2014						
	2/19/2014						
	2/20/2014						
	2/21/2014						
	2/22/2014						
	2/23/2014						
Week 5	2/24/2014	97.75	99.5	100	-51	100	95.81
	2/25/2014						
	2/26/2014	97.66	98.9	100	-118	100	97.29
	2/27/2014						
	2/28/2014						
	3/1/2014						

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Weekly data

		TCEQ-29J					
	Date	TOC % Change	DOC on-site % Change	DOC % Change	TTTHM % Change	HAA5 % Change	Bromide % Change
	3/2/2014						
Week 6	3/3/2014			100	-175	100	97.54
	3/4/2014						
	3/5/2014						
	3/6/2014						
	3/7/2014	96.18	97.2				
	3/8/2014						
	3/9/2014						
Week 7	3/10/2014	96.15	98.8	100	-25	100	98.39
	3/11/2014	96.89	100				