

## DOCKETED

<b>Docket Number:</b>	12-AFC-03
<b>Project Title:</b>	Redondo Beach Energy Project
<b>TN #:</b>	202621
<b>Document Title:</b>	Record of Conversation Between CEC and Justin Pickard re Water Quality Information for Title 22 Recycled Water
<b>Description:</b>	Conversation between: Abdel-Karim Abulaban and Justin Pickard, WBMWD
<b>Filer:</b>	Cenne Jackson
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	6/27/2014 10:55:02 AM
<b>Docketed Date:</b>	6/27/2014

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*Siting and Environmental Protection Division*

**FILE: (2012-AFC-03)**

**PROJECT TITLE: Redondo Beach Energy Project**

<input checked="" type="checkbox"/> <b>Telephone</b>	310-660-6208	<input type="checkbox"/> <b>Meeting Location:</b>	
<b>NAME:</b>	Abdel-Karim Abulaban	<b>DATE:</b>	6/5/2014
		<b>TIME:</b>	3:07 p.m.
<b>WITH:</b>	Justin Pickard, Water Resources Engineer, WBMWD		
<b>SUBJECT:</b>	Water quality information for Title 22 recycled water		

**Background:** Staff contacted West Basin Municipal Water District (WBMWD) to get information on the water quality of the Title 22 recycled water that WBMWD could supply for construction and industrial uses at Redondo Beach Energy Project (RBEP). WBMWD provided the information as an attachment to an e-mail. The information included a table showing monthly recycled water quality for 2013 and a map showing the location of the recycled water line in the vicinity of the RBEP site. A copy of the e-mail is attached to this ROC.

<b>CC:</b>	<b>Signed:</b>
	<b>Name:</b> Abdel-Karim Abulaban

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**From:** Justin Pickard [<mailto:JustinP@westbasin.org>]  
**Sent:** Thursday, June 05, 2014 3:07 PM  
**To:** Abulaban, Abdel-Karim@Energy  
**Subject:** West Basin Recycled Water Pipeline Information

Hi Karim,

I apologize for not getting back to you sooner, it took some time to track this information down. I have attached a drawing showing the location and size of the pipeline and a summary of the water quality data for our Title 22 recycled water for calendar year 2013.

Please let me know if you need anything else.

Thanks,  
Justin



Justin Pickard, PE  
Water Resources Engineer  
310-660-6219 office  
310-418-5654 cell



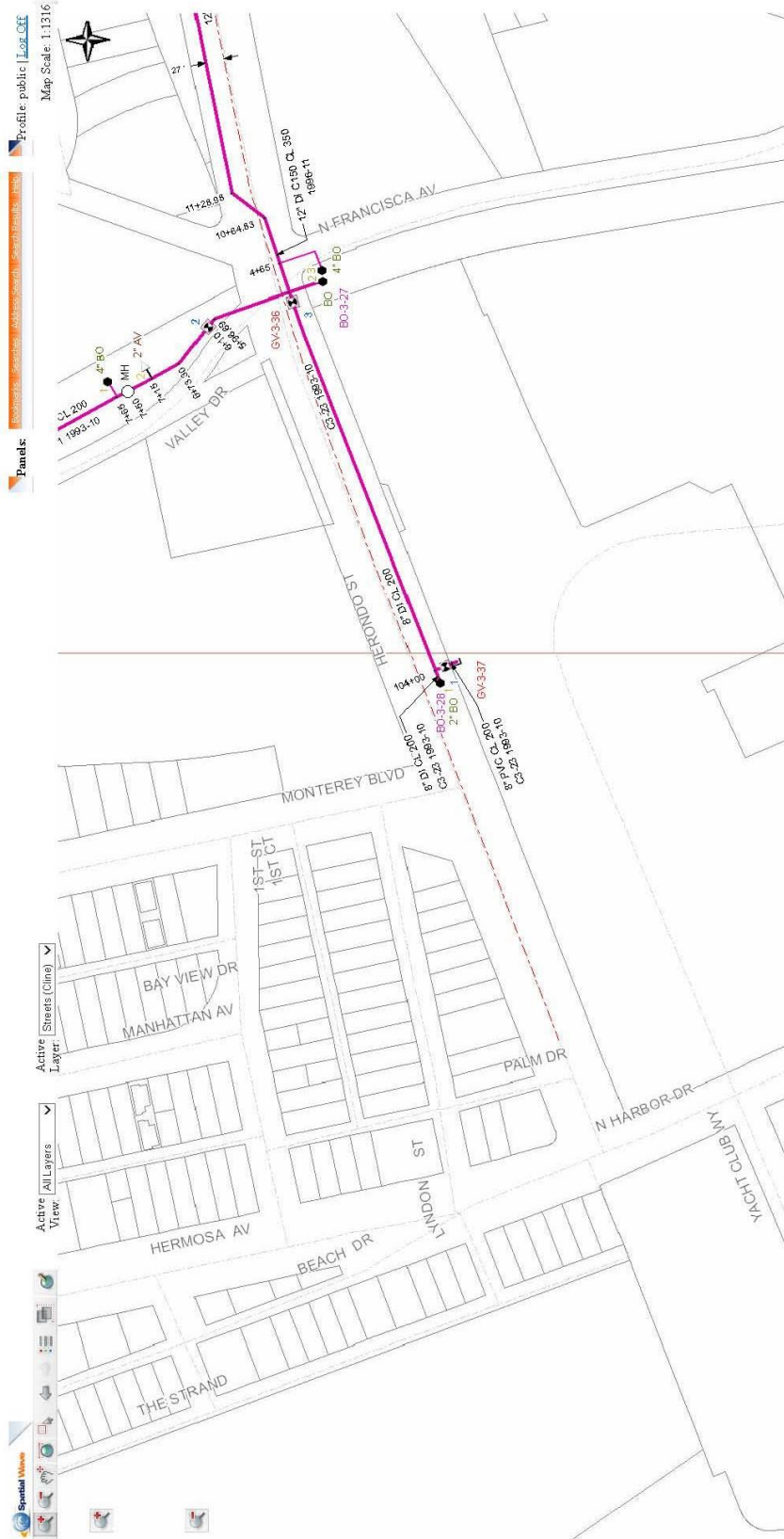
**MONTHLY REPORT OF RECYCLED WATER QUALITY**  
 for  
**LANDSCAPE AND INDUSTRIAL WATER USERS**  
**WEST BASIN WRP TITLE 22 PRODUCT WATER**  
 Period Covered:

Constituent	Unit	Period Covered												Annual Average
		JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SEP	OCT	NOV	DEC	
T.D.S.	mg/L	780	870	870	760	840	940	920	910	870	880	840		862
pH	pH units	6.9	6.9	6.8	6.9	6.9	6.9	6.9	7.0	7.1	7.2	7.1	7.2	7.0
SODIUM	mg/L	156	186	189	168	181	195	190	194	176	188	169		181
CALCIUM	mg/L	43	54	49	44	51	55	58	55	55	55	49		52
MAGNESIUM	mg/L	21	26	26	23	24	26	28	29	26	27	24		26
SAR	meq/L	4.8	5.2	5.4	5.1	5.2	5.4	5.1	5.3	4.9	5.2	4.9	#DIV/0!	#DIV/0!
EC <sub>w</sub> (TDS/640)	mmho/cm	1.2	1.4	1.4	1.2	1.3	1.5	1.4	1.4	1.4	1.4	1.3	0.0	1.3
CHLORIDE	mg/L	275	331	261	288	313	301	306	312	280	275	285	274	292
BORON	mg/L	0.55	0.35	0.36	0.33	0.33	0.38	0.37	0.38	0.42	0.42	0.36		0.38
NITRATE (as N)	mg/L as N	3.9	3.8	4.0	3.4	2.6	3.4	3.6	4.2	2.0	2.1	2.1	0.87	3.0
AMMONIA (as N)	mg/L as N	44	40	41	42	44	41	42	38	41	42	48	46	42
TOTAL PHOSPHATE	mg/L as PO <sub>4</sub>	0.71	0.74	0.71	0.83	0.40	1.42	1.11	1.26	1.39	2.03			1.1
O-PHOSPHATE	mg/L as PO <sub>4</sub>	0.59	0.71	0.42	0.65	0.11	1.1	0.78	0.91	1.2	1.6	0.42		0.8
POTASSIUM	mg/L	18	18	20	17	19	19	18	18	18	18	18		18
TOT. ALKALINITY	mg/L as CaCO <sub>3</sub>	233	224	242	215	232	249	238	249	269	311	290		250
BICARBONATE	mg/L as CaCO <sub>3</sub>	233	224	242	215	232	249	238	249	269	311	290		250
BOD	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		3
C.O.D.	mg/L	33	31	36	33	39	28	33	32	28	39	38		34
IRON	mg/L	0.32	0.24	0.45	0.56	0.38	0.27	0.29	0.26	0.23	0.26	0.51		0.34
HARDNESS	mg/L as CaCO <sub>3</sub>	196	243	230	204	226	245	260	254	246	249	221		234
MANGANESE	mg/L	0.17	0.17	0.16	0.21	0.187	0.16	0.15	0.156	0.13	0.096	0.12		0.16
SULFIDE	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		0.1
SILICA	mg/L	16	16	19	15	14	17	18	19	18	18	19	15	17
SULFATE	mg/L	86	133	102	101	115	141	148	167	134	140	144	125	128
T.O.C.	mg/L	11	8.8	8.9	9.2	9.2	8.7	9.1	9.1	9.2	9.5	10	11	9
T.S.S.	mg/L	2	2	3	3	2	1	1	2	1	2	2	3	2

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WebMapplet - Map

<http://wbgis01/webmapplet/map.aspx?user=public>