

## Beggs, Tauren R - DNR

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**Sent:** Tuesday, November 15, 2016 3:07 PM  
**To:** DuFresne, Kristin I - DNR  
**Subject:** Table 2  
**Attachments:** VPLE Groundwater Analytical Table.xls

Kristin, attached is a revised Table 2, split on 2 pages with a tabs on the bottom of the excel file. Please let me know if that will work for you.

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**TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
FORMER ONE HOUR MARTINIZING  
GEC PROJECT #2-0615-231**

Monitoring Well Sampling Date	NR 140		MW-1		MW-3		MW-4			MW-5			MW-7		MW-8		
	ES	PAL	4/20/2016	6/7/2016	4/20/2016	6/7/2016	4/20/2016	5/11/2016	6/7/2016	6/21/2016	5/11/2016	6/7/2016	6/21/2016	4/21/2016	6/7/2016	4/20/2016	6/7/2016
<b>PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/L)</b>																	
Benzene	5	0.5	<0.44	NA	<0.44	NA	<0.44	NA	NA	NA	NA	NA	NA	<0.44	NA	<0.44	NA
cis 1,2 Dichloroethene	70	7	<0.45	NA	24.3	NA	<0.45	NA	NA	NA	NA	NA	NA	<0.45	NA	<0.45	NA
trans 1,2 Dichloroethene	100	20	<0.54	NA	2.22	NA	<0.54	NA	NA	NA	NA	NA	NA	<0.54	NA	<0.54	NA
Ethylbenzene	700	140	<0.71	NA	<0.71	NA	<0.71	NA	NA	NA	NA	NA	NA	<0.71	NA	<0.71	NA
p-Isopropyltoluene	NE	NE	<1.1	NA	<1.1	NA	<1.1	NA	NA	NA	NA	NA	NA	<1.1	NA	<1.1	NA
Methyl tert-butyl ether	60	12	<1.1	NA	<1.1	NA	<1.1	NA	NA	NA	NA	NA	NA	<1.1	NA	<1.1	NA
Tetrachloroethene	5	0.5	<b>7.6</b>	NA	<b>760</b>	NA	0.89J	NA	NA	NA	NA	NA	NA	<b>14.3</b>	NA	<0.49	NA
Toluene	800	160	<0.44	NA	<0.44	NA	<0.44	NA	NA	NA	NA	NA	NA	<0.44	NA	<0.44	NA
Trichloroethene	5	0.5	<0.47	NA	<b>197</b>	NA	<0.47	NA	NA	NA	NA	NA	NA	<0.47	NA	<0.47	NA
1,2,4-Trimethylbenzene	480	96	<1.6	NA	<1.6	NA	<1.6	NA	NA	NA	NA	NA	NA	<1.6	NA	<1.6	NA
1,3,5-Trimethylbenzene			<1.5	NA	<1.5	NA	<1.5	NA	NA	NA	NA	NA	NA	NA	<1.5	NA	<1.5
Vinyl Chloride	0.2	0.02	<0.17	NA	<b>0.40J</b>	NA	<0.17	NA	NA	NA	NA	NA	NA	<0.17	NA	<0.17	NA
Xylenes, o	2000	400	<2.2	NA	<2.2	NA	<2.2	NA	NA	NA	NA	NA	NA	<2.2	NA	<2.2	NA
Xylenes, -m, -p			<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA	NA	NA	NA	NA	<0.9	NA	<0.9
<b>DETECTED POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) (µg/L)</b>																	
Acenaphthene	NE	NE	<0.016	<0.016	<0.016	<0.016	0.148J	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Acenaphthylene	NE	NE	<0.019	<0.019	<0.019	<0.019	0.8	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.095
Anthracene	3000	600	<0.019	<0.019	<0.019	<0.019	2.31	0.046J	0.04J	<0.019	0.0257J	0.036J	<0.019	0.037J	<0.019	<0.019	0.145
Benzo(a)anthracene	NE	NE	0.0258J	0.0194J	0.042J	<0.017	7.7	0.09	0.0264J	0.0228J	0.048J	0.057	0.041J	0.045J	<0.017	0.028J	0.024J
Benzo(a)pyrene	0.2	0.02	0.0313J	<0.021	0.0302J	<0.021	<b>17.2</b>	<b>0.289</b>	0.082	0.05J	0.119	0.049J	0.037J	0.17	<0.021	0.066J	0.023J
Benzo(b)fluoranthene	0.2	0.02	0.066J	<0.018	0.058	<0.018	<b>33</b>	<b>0.63</b>	0.194	0.127	<b>0.218</b>	0.055J	0.044J	<b>0.35</b>	<0.018	0.15	0.038J
Benzo(g,h,i)perylene	NE	NE	0.066J	<0.025	0.0314J	<0.025	21.3	0.4	0.142	0.105	0.193	0.045J	0.036J	0.33	<0.025	0.091	<0.025
Benzo(k)fluoranthene	NE	NE	0.0298J	<0.016	0.032J	<0.016	9	0.171	0.081	0.047J	0.066	0.046J	0.0263J	0.147	<0.016	0.053	0.034J
Chrysene	0.2	0.02	0.04J	<0.02	0.047J	<0.02	<b>18.2</b>	<b>0.32</b>	0.097	0.056J	0.115	0.054J	0.038J	<b>0.202</b>	<0.02	0.078	0.0274J
Dibenz(a,h)anthracene	NE	NE	<0.025	<0.025	<0.025	<0.025	3.3	0.046J	<0.025	<0.025	<0.025	<0.025	<0.025	0.033J	<0.025	<0.025	<0.025
Fluoranthene	400	80	0.051J	0.0214J	0.064	<0.017	27.9	0.48	0.144	0.096	0.152	0.047J	0.039J	0.285	<0.017	0.088	0.045J
Fluorene	400	80	<0.021	<0.021	<0.021	<0.021	0.23J	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Indeno(1,2,3-cd)pyrene	NE	NE	0.053J	<0.023	0.032J	<0.023	22.1	0.41	0.109	0.075	0.162	0.0291J	0.0287J	0.272	<0.023	0.083	<0.023
1-Methylnaphthalene	NE	NE	<0.024	<0.024	<0.024	<0.024	<0.12	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
2-Methylnaphthalene	NE	NE	<0.024	<0.024	<0.024	<0.024	<0.12	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Naphthalene	100	10	<0.019	0.036J	<0.019	0.0286J	0.11J	<0.019	0.0263J	<0.019	<0.019	0.0276J	<0.019	<0.019	0.0251J	<0.019	0.0194J
Phenanthrene	NE	NE	0.0242J	<0.055	0.0273	<0.055	9.2	0.179	0.081	0.059	0.053J	<0.055	<0.055	0.086	<0.055	0.032J	0.06
Pyrene	250	50	0.049J	<0.02	0.06J	<0.02	24.2	0.39	0.122	0.08	0.138	0.045J	0.04J	0.278	<0.02	0.074	0.038J
<b>RCRA METALS (µg/L)</b>																	
Arsenic	10	1	<0.6	NA	<0.6	NA	<0.6	NA	NA	NA	NA	NA	NA	<0.6	NA	<0.6	NA
Barium	2000	400	73	NA	77	NA	51	NA	NA	NA	NA	NA	NA	57	NA	37	NA
Cadmium	5	0.5	<0.3	NA	<0.3	NA	<0.3	NA	NA	NA	NA	NA	NA	<0.3	NA	<0.3	NA
Chromium	100	10	<1.8	NA	<1.8	NA	<1.8	NA	NA	NA	NA	NA	NA	<1.8	NA	<1.8	NA
Copper	1300	130	7.3J	NA	5.2J	NA	<4.8	NA	NA	NA	NA	NA	NA	<4.8	NA	<4.8	NA
Lead	15	1.5	<0.8	NA	<0.8	NA	<0.8	NA	NA	NA	NA	NA	NA	<0.8	NA	<0.8	NA
Mercury	2	0.2	<0.11	NA	<0.11	NA	<0.11	NA	NA	NA	NA	NA	NA	<0.11	NA	<0.11	NA
Nickel	100	20	4.3J	NA	4.0J	NA	<2	NA	NA	NA	NA	NA	NA	3.3J	NA	2.5J	NA
Selenium	50	10	<1.1	NA	1.2J	NA	<1.1	NA	NA	NA	NA	NA	NA	2.9J	NA	1.2J	NA
Silver	50	10	<8.4	NA	<8.4	NA	<8.4	NA	NA	NA	NA	NA	NA	<8.4	NA	<8.4	NA
Zinc	5000	2500	<6.4	NA	<6.4	NA	39	NA	NA	NA	NA	NA	NA	<6.4	NA	<6.4	NA

NE = NR 140 ES not established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

Italics indicated analytical results above NR 140 PAL

Bold indicates analytical results above NR 140 ES

**TABLE 2 (Continued)**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**FORMER ONE HOUR MARTINIZING**  
**GEC PROJECT #2-0615-231**

Monitoring Well	NR 140		MW-8		MW-10		MW-11		MW-12		MW-13		MW-14		TW-4		TW-5	
Sampling Date	ES	PAL	4/20/2016	6/7/2016	4/21/2016	6/7/2016	4/21/2016	6/7/2016	4/20/2016	6/7/2016	4/20/2016	6/7/2016	4/21/2016	6/7/2016	4/21/2016	6/7/2016	4/21/2016	6/7/2016
<b>PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/L)</b>																		
Benzene	5	0.5	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA
cis 1,2 Dichloroethene	70	7	<0.45	NA	<0.45	NA	<0.45	NA	<0.45	NA	<0.45	NA	<0.45	NA	<0.45	NA	<0.45	NA
trans 1,2 Dichloroethene	100	20	<0.54	NA	<0.54	NA	<0.54	NA	<0.54	NA	<0.54	NA	<0.54	NA	<0.54	NA	<0.54	NA
Ethylbenzene	700	140	<0.71	NA	<0.71	NA	<0.71	NA	<0.71	NA	<0.71	NA	<0.71	NA	<0.71	NA	<0.71	NA
p-Isopropyltoluene	NE	NE	<1.1	NA	<1.1	NA	<1.1	NA	1.32J	NA	<0.71	NA	1.83J	NA	1.83J	NA	1.83J	NA
Methyl tert-butyl ether	60	12	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA
Tetrachloroethene	5	0.5	<0.49	NA	<0.49	NA	<0.49	NA	<0.49	NA	<0.49	NA	<0.49	NA	<0.49	NA	<0.49	NA
Toluene	800	160	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA	<0.44	NA
Trichloroethene	5	0.5	<0.47	NA	<0.47	NA	<0.47	NA	<0.47	NA	<0.47	NA	<0.47	NA	<0.47	NA	<0.47	NA
1,2,4-Trimethylbenzene	480	96	<1.6	NA	<1.6	NA	<1.6	NA	<1.6	NA	<1.6	NA	<1.6	NA	<1.6	NA	<1.6	NA
1,3,5-Trimethylbenzene			<1.5	NA	<1.5	NA	<1.5	NA	<1.5	NA	<1.5	NA	<1.5	NA	<1.5	NA	<1.5	NA
Vinyl Chloride	0.2	0.02	<0.17	NA	<0.17	NA	<0.17	NA	<0.17	NA	<0.17	NA	<0.17	NA	<0.17	NA	<0.17	NA
Xylenes, o	2000	400	<2.2	NA	<2.2	NA	<2.2	NA	<2.2	NA	<2.2	NA	<2.2	NA	<2.2	NA	<2.2	NA
Xylenes, -m, -p			<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA	<0.9	NA
<b>DETECTED POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) (µg/L)</b>																		
Acenaphthene	NE	NE	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Acenaphthylene	NE	NE	<0.019	0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019
Anthracene	3000	600	<0.019	0.145	<0.019	<0.019	<0.019	0.0295J	<0.019	<0.019	<0.019	0.068	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019
Benzo(a)anthracene	NE	NE	0.028J	0.024J	0.0264J	<0.017	0.0184J	0.057	0.0225J	0.036J	0.0249J	0.122	<0.017	<0.017	0.077	<0.017	0.0248J	<0.017
Benzo(a)pyrene	0.2	0.02	0.066J	0.023J	0.038J	<0.021	0.027J	0.052J	0.0232J	0.0299J	0.042J	0.137	<0.021	<0.021	0.13	<0.021	<0.021	<0.021
Benzo(b)fluoranthene	0.2	0.02	0.15	0.038J	0.074	<0.018	0.054J	0.062	0.043J	0.036J	0.075	0.143	0.0207J	<0.018	<b>0.282</b>	<0.018	0.034J	<0.018
Benzo(g,h,i)perylene	NE	NE	0.091	<0.025	0.043J	<0.025	0.038J	0.042J	<0.025	0.027J	0.059J	0.13	<0.025	<0.025	0.142	<0.025	0.0251J	<0.025
Benzo(k)fluoranthene	NE	NE	0.053	0.034J	0.0314J	<0.016	0.0235J	0.044J	<0.016	0.0275J	0.032J	0.144	<0.016	<0.016	0.108	<0.016	<0.016	<0.016
Chrysene	0.2	0.02	0.078	0.0274J	0.051J	<0.02	0.038J	0.056J	<0.020	0.0282J	0.042J	0.12	<0.020	<0.02	0.186	<0.02	0.0205J	<0.02
Dibenz(a,h)anthracene	NE	NE	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.081	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Fluoranthene	400	80	0.088	0.045J	0.07	<0.017	0.053J	0.055	<0.017	0.0282J	0.0298J	0.114	<0.017	<0.017	0.34	<0.017	0.0273J	<0.017
Fluorene	400	80	<0.021	<0.021	0.037J	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0232J	0.0238J	<0.021	<0.021	<0.021	<0.021	<0.021
Indeno(1,2,3-cd)pyrene	NE	NE	0.083	<0.023	0.044J	<0.023	0.03J	0.038J	<0.023	<0.023	0.05J	0.136	<0.023	<0.023	0.143	<0.023	<0.023	<0.023
1-Methylnaphthalene	NE	NE	<0.024	<0.024	0.1	<0.024	<0.024	<0.024	0.084	<0.024	0.115	<0.024	0.114	<0.024	<0.024	<0.024	<0.024	<0.024
2-Methylnaphthalene	NE	NE	<0.024	<0.024	0.13	<0.024	<0.024	<0.024	0.139	<0.024	0.152	<0.024	0.208	<0.024	<0.024	<0.024	<0.024	<0.024
Naphthalene	100	10	<0.019	0.0194J	0.126	0.0213J	0.029J	0.0249J	0.184	<0.019	0.17	<0.019	0.161	<0.019	0.0208J	0.0198J	<0.019	<0.019
Phenanthrene	NE	NE	0.032J	0.06	0.08	<0.055	0.038J	0.064	0.041J	<0.055	0.037J	0.101	0.056	<0.055	0.179	<0.055	<0.017	<0.055
Pyrene	250	50	0.074	0.038J	0.062	<0.02	0.044J	0.049J	<0.020	0.028J	0.0299J	0.112	<0.020	<0.02	0.28	<0.02	0.0271	<0.02
<b>RCRA METALS (µg/L)</b>																		
Arsenic	10	1	<0.6	NA	0.6J	NA	<0.6	NA	<0.6	NA	2.2	NA	<0.6	NA	<0.6	NA	<0.6	NA
Barium	2000	400	37	NA	102	NA	103	NA	93	NA	120	NA	104	NA	58	NA	158	NA
Cadmium	5	0.5	<0.3	NA	<0.3	NA	<0.3	NA	<0.3	NA	<0.3	NA	<0.3	NA	<0.3	NA	<0.3	NA
Chromium	100	10	<1.8	NA	<1.8	NA	<1.8	NA	<1.8	NA	<1.8	NA	<1.8	NA	<1.8	NA	<1.8	NA
Copper	1300	130	<4.8	NA	<4.8	NA	<4.8	NA	5.0J	NA	5.2J	NA	10J	NA	10J	NA	9.7J	NA
Lead	15	1.5	<0.8	NA	<0.8	NA	<0.8	NA	<0.8	NA	<0.8	NA	<0.8	NA	<0.8	NA	<0.8	NA
Mercury	2	0.2	<0.11	NA	<0.11	NA	<0.11	NA	<0.11	NA	<0.11	NA	<0.11	NA	<0.11	NA	<0.11	NA
Nickel	100	20	2.5J	NA	<2	NA	2.7J	NA	3.8J	NA	<2	NA	2.4J	NA	7.9	NA	3.3J	NA
Selenium	50	10	1.2J	NA	<1.1	NA	<1.1	NA	<1.1	NA	<1.1	NA	2.1J	NA	<1.1	NA	<1.1	NA
Silver	50	10	<8.4	NA	<8.4	NA	<8.4	NA	<8.4	NA	<8.4	NA	<8.4	NA	<8.4	NA	<8.4	NA
Zinc	5000	2500	<6.4	NA	<6.4	NA	<6.4	NA	<6.4	NA	<6.4	NA	<6.4	NA	7.1J	NA	<6.4	NA

NE = NR 140 ES not established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

Italics indicated analytical results above NR 140 PAL

Bold indicates analytical results above NR 140 ES