



Stantec

**Alberta Infrastructure and Transportation
Turner Valley Gas Plant
Anomalous Discharges along the Containment Wall
Water Elevations Collected June 26th, 2008**

Well Name	Depth to Water (mBTOC)	Groundwater Elevation (mAMSL)	Difference in Groundwater Elevation Across the Containment Wall (m)
07-MW01	2.265	1194.772	0.462
07-MW02	4.215	1194.310	
07-MW03	2.785	1194.265	1.005
07-MW04	4.132	1193.260	
07-MW05	2.285	1193.133	0.727
07-MW06	3.676	1192.406	
07-MW07	2.052	1192.404	0.676
07-MW08	3.394	1191.728	
07-MW09	2.514	1191.718	0.204
07-MW10	2.768	1191.514	
07-MW11	2.524	1195.311	
07-MW12	2.976	1196.881	0.172
07-MW13	3.168	1196.709	

Note: odd numbered wells are on the inside of the containment wall

Water levels collected by Daniel Chavez and Scott McKean



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**Alberta Infrastructure and Transportation
Turner Valley Gas Plant
Anomalous Discharges along the Containment Wall
Water Samples Collected July 7th, 2008**

	AENV Tier 1		River Downstream	Anomalous Discharges				River Upstream
	Groundwater Guidelines [mg/L]	Surface water Guidelines [mg/L]		S1	S2	S3	S4	
Benzene	<0.005	<0.005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	<0.024	<0.024	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	<0.0024	<0.0024	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Xylenes	<0.3	<0.3	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
F1	<2.2	none	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
F2	<1.1	none	<0.05	0.07	<0.05	0.05	<0.05	<0.05
PAH			All <0.00001	All <0.00001			All <0.00001	All <0.00001
Acenaphthene	<0.0012	<0.0058			0.00012	0.00013		
Fluorene	<0.0014	<0.003			0.0003	0.0004		
Phenanthrene	<0.0015	<0.0004			0.00002			
Total Aluminum	<0.1	<0.1	0.025	<0.05	0.214	<0.05	0.019	0.263
Total Nickel	<0.025	<0.025		<0.005	<0.005	<0.005	0.0013	0.0012
Total Barium	<1	none	0.083	0.106	0.155	0.125	0.0991	0.0609
Dissolved Iron	<0.3	<0.3	0.202	2.4	3.08	1.21	<0.03	<0.03
Dissolved Manganese	<0.05	none						

All above criteria because naturally high

Analysis conducted by ALS Laboratory

Samples collected by Eric Campbell, Daniel Chavez, and Steve Sterling

Note: iron and manganese exceed Tier 1 criteria, but they are naturally elevated in the area