

APPENDIX II
PROCESS INFORMATION

Wet Gas Scrubber Emission Compliance Test - September 2010
Operating Parameters

Cyanide

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/14/10	9:20 - 11:40	67.6	3258	3236	121497	0.25	115.04	6.8	6.9	1.23	1.34
9/14/10	12:56 - 15:06	67.7	3243	3225	118673	0.25	115.02	6.8	6.9	1.20	1.31
9/14/10	16:10 - 18:20	68.2	3248	3221	115354	0.25	114.96	6.8	6.9	1.19	1.28
9/21/10	9:09 - 11:28	69.8	3234	3213	129787	0.32	115.03	6.8	6.8	1.21	1.34

Gaseous Parameters

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/14/10	9:25 - 10:25	67.6	3258	3238	121497	0.25	115.00	6.8	6.9	1.25	1.33
9/14/10	10:50 - 11:50	68.2	3256	3236	119709	0.25	115.07	6.8	6.9	1.23	1.32
9/14/10	12:56 - 13:56	68.2	3242	3225	118673	0.25	115.05	6.8	6.9	1.20	1.30

Lead

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/15/10	9:47 - 11:23	69.9	3297	3230	118946	0.25	115.03	6.8	6.9	1.25	1.37
9/15/10	14:21 - 15:56	69.9	3245	3225	116672	0.25	115.03	6.8	6.9	1.21	1.31
9/15/10	17:03 - 18:53	69.8	3245	3225	116336	0.25	115.02	6.8	6.9	1.22	1.32

Sulfur Trioxide/Sulfuric Acid Mist

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/15/10	9:49 - 12:17	69.9	3297	3228	118946	0.25	115.03	6.8	6.9	1.24	1.37
9/15/10	15:15 - 17:01	69.9	3244	3223	116672	0.25	115.04	6.8	6.9	1.21	1.31
9/15/10	19:15 - 20:31	69.8	3245	3224	118080	0.25	115.02	6.8	6.9	1.22	1.33

Ammonia

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/16/10	13:27 - 14:33	69.0	3241	3222	120369	0.31	115.70	6.8	6.9	1.22	1.37
9/16/10	15:00 - 16:03	69.0	3240	3223	118774	0.31	115.00	6.8	6.9	1.21	1.31
9/17/10	8:36 - 9:40	63.7	3141	3124	119576	0.31	115.01	6.8	6.9	1.19	1.27

Benzene

Date	Time Range of Testing	Average Feed Throughput (MBPD)	Maximum Scrubber Liquid Flow Rate (gpm)	Minimum Scrubber Liquid Flow Rate (gpm)	Maximum Flue Gas Flow Rate (dscfm)	Sulfur content of Feed (% weight)	Average Water Supply Rate - Sour Water Stripper (gpm)	Minimum Scrubbing Liquid pH	Maximum Scrubbing Liquid pH	Minimum Scrubber Pressure Drop (psig)	Maximum Scrubber Pressure Drop (psig)
9/17/10	11:45 - 12:45	65.0	3141	3124	118038	0.31	114.99	6.8	6.9	1.18	1.24
9/17/10	13:35 - 14:35	65.6	3617	3120	116404	0.31	114.99	6.8	6.9	1.17	1.27
9/17/10	15:24 - 16:24	66.2	3141	3119	116458	0.31	115.01	6.8	6.9	1.19	1.31