Appendix A

Individual Test Run Summaries and Results

MONITORING & LABORATORY DIVISION
STATIONARY SOURCE TEST BRANCH

TEST SUMMARY AND RESULTS

FILE NO.: T-03-048
PROJECT NAME: ALTA Plating
RUN NO.: WP-2

SUMMARY OF TEST DATA

Volume of Gas Sampled (Vm):		454.2	cubic feet
Vm Meter Cal. Factor (Y)		1.002	
Meter Temperature (Tm):		520	deg. R
Barometric Pressure (Pb):		30.4	inches Hg
Avg. delta H Orifice Press. (dH avg):		5.100	inches H2O
Pb + dH avg:		30.78	inches Hg.
O2 in Stack (%O2):		20.90	percent
CO in Stack (%CO):		0.0000	percent
CO2 in Stack (%CO2):		0.00	percent
N2 in Stack (%N2):		79.10	percent
Pitot Tube Factor (Cp)		0.84	
Avg. of Sqrt. of Pitot Press. (/dP avg):		0.41	/(inches H2O)
Stack Temperature (Ts)		518	deg. R
Static Pressure		-0.28	inches H2O
Absolute Stack Pressure (Ps)		30.38	inches Hg
Stack Dimensions		12	inches dia.
Stack Area (As)		0.785	square feet
H2O in Impingers and Silica Gel (Vlc):		36.8	milliliters
Sampling Time (t):		360	minutes
Nozzle Diameter (Dn):		0.375	inches
Total Chromium Mass Collected (Mn):	<	85	nanograms
Hexavalent Cr. Mass Collected (Mn):	<	17	nanograms

CALCULATED RESULTS

Corrected Sample Volume (Vm std):		475.32	DSCF (68 deg.F
Water Vapor in Stack (Bws):		0.4	percent by volun
Stack Gas Molecular Wt, Dry (Md):		28.84	lb/lbmole
Stack Gas Molecular Wt, Wet		28.80	lb/lbmole
Stack Gas Velocity (Vs):		22.85	feet/second
Stack Gas Flow Rate (Qs):		1111	DSCFM(68 deg.
Isokinetic Ratio (%I):		121.8	percent
Total Cr Mass Conc. (Cs):	<	0.1788286	nanograms/dscf
Hex. Cr. Mass Conc. (Cs):	<	0.0357657	nanograms/dscf
Total Cr Mass Conc:	<	6.3152389	nanograms/dscr
Hex. Cr. Mass Conc:	<	1.2630478	nanograms/dscr
Total Cr. Emission Rate (Wm):	<	0.01	milligrams/hr To
Hex. Cr. Emission Rate (Wm):	<	0.00	milligrams/hr He

MONITORING & LABORATORY DIVISION
STATIONARY SOURCE TESTING BRANCH

TEST SUMMARY AND RESULTS

FILE NO.: T-03-058
PROJECT NAME: Sherm's Plating
RUN NO.: S1

SUMMARY OF TEST DATA

Volume of Gas Sampled (Vm):	319.624	cubic feet
Vm Meter Cal. Factor (Y)	1.002	
Meter Temperature (Tm):	520	deg. R
Barometric Pressure (Pb):	30.18	inches Hg
Avg. delta H Orifice Press. (dH avg):	2.582	inches H2O
Pb + dH avg:	30.37	inches Hg.
O2 in Stack (%O2):	20.90	percent
CO in Stack (%CO):	0.0000	percent
CO2 in Stack (%CO2):	0.00	percent
N2 in Stack (%N2):	79.10	percent
Pitot Tube Factor (Cp)	0.84	
Avg. of Sqrt. of Pitot Press. (/dP avg):	0.35	/(inches H2O)
Stack Temperature (Ts)	535	deg. R
Static Pressure	-0.23	inches H2O
Absolute Stack Pressure (Ps)	30.16	inches Hg
Stack Dimensions	12	inches dia.
Stack Area (As)	0.785	square feet
H2O in Impingers and Silica Gel (Vlc):	75.5	milliliters
Sampling Time (t):	360	minutes
Nozzle Diameter (Dn):	0.375	inches
Total Chromium Mass Collected (Mn):	19440	nanograms
Hexavalent Cr. Mass Collected (Mn):	19413	nanograms

CALCULATED RESULTS

Corrected Sample Volume (Vm std):	330.08	DSCF (68 deg.F)
Water Vapor in Stack (Bws):	1.1	percent by volume
Stack Gas Molecular Wt, Dry (Md):	28.84	lb/lbmole
Stack Gas Molecular Wt, Wet	28.72	lb/lbmole
Stack Gas Velocity (Vs):	19.49	feet/second
Stack Gas Flow Rate (Qs):	904	DSCFM(68 deg.F)
Isokinetic Ratio (%I):	103.9	percent
Total Cr Mass Conc. (Cs):	58.89486	nanograms/dscf
Hex. Cr. Mass Conc. (Cs):	58.813061	nanograms/dscf
Total Cr Mass Conc:	2079.8411	nanograms/dscm
Hex. Cr. Mass Conc:	2076.9524	nanograms/dscm
Total Cr. Emission Rate (Wm):	3.20	milligrams/hr Total Cr.
Hex. Cr. Emission Rate (Wm):	3.19	milligrams/hr Hex. Cr.

MONITORING & LABORATORY DIVISION
STATIONARY SOURCE TESTING BRANCH

TEST SUMMARY AND RESULTS

FILE NO.: T-03-058
PROJECT NAME: Sherm's Plating
RUN NO.: S2

SUMMARY OF TEST DATA

Volume of Gas Sampled (Vm):	350.011	cubic feet
Vm Meter Cal. Factor	1.002	
Meter Temperature (Tm):	520	deg. R
Barometric Pressure (Pb):	30.05	inches Hg
Avg. delta H Orifice Press. (dH avg):	3.256	inches H2O
Pb + dH avg:	30.29	inches Hg.
O2 in Stack (%O2):	20.90	percent
CO in Stack (%CO):	0.0000	percent
CO2 in Stack (%CO2):	0.00	percent
N2 in Stack (%N2):	79.10	percent
Pitot Tube Factor (Cp)	0.84	
Avg. of Sqrt. of Pitot Press. (/dP avg):	0.39	/(inches H2O)
Stack Temperature (Ts)	535	deg. R
Static Pressure	-0.29	inches H2O
Absolute Stack Pressure (Ps)	30.03	inches Hg
Stack Dimensions	12	inches dia.
Stack Area (As)	0.785	square feet
H2O in Impingers and Silica Gel (Vlc):	43.6	milliliters
Sampling Time (t):	360	minutes
Nozzle Diameter (Dn):	0.375	inches
Total Chromium Mass Collected (Mn):	22600	nanograms
Hexavalent Cr. Mass Collected (Mn):	21490	nanograms

CALCULATED RESULTS

Corrected Sample Volume (Vm std):	360.50	DSCF (68 deg.F)
Water Vapor in Stack (Bws):	0.6	percent by volume
Stack Gas Molecular Wt, Dry (Md):	28.84	lb/lbmole
Stack Gas Molecular Wt, Wet	28.77	lb/lbmole
Stack Gas Velocity (Vs):	22.19	feet/second
Stack Gas Flow Rate (Qs):	1030	DSCFM(68 deg.F)
Isokinetic Ratio (%I):	99.6	percent
Total Cr Mass Conc. (Cs):	62.690096	nanograms/dscf
Hex. Cr. Mass Conc. (Cs):	59.611069	nanograms/dscf
Total Cr Mass Conc:	2213.8678	nanograms/dscm
Hex. Cr. Mass Conc:	2105.1336	nanograms/dscm
Total Cr. Emission Rate (Wm):	3.87	milligrams/hr Total Cr.
Hex. Cr. Emission Rate (Wm):	3.68	milligrams/hr Hex. Cr.

MONITORING & LABORATORY DIVISION
STATIONARY SOURCE TESTING BRANCH

TEST SUMMARY AND RESULTS

FILE NO.: T-03-058
PROJECT NAME: Sherm's Plating
RUN NO.: S3

SUMMARY OF TEST DATA

Volume of Gas Sampled (Vm):	287.56	cubic feet
Vm Meter Cal. Factor	1.002	
Meter Temperature (Tm):	520	deg. R
Barometric Pressure (Pb):	30.01	inches Hg
Avg. delta H Orifice Press. (dH avg):	2.719	inches H2O
Pb + dH avg:	30.21	inches Hg.
O2 in Stack (%O2):	20.90	percent
CO in Stack (%CO):	0.0000	percent
CO2 in Stack (%CO2):	0.00	percent
N2 in Stack (%N2):	79.10	percent
Pitot Tube Factor (Cp)	0.84	
Avg. of Sqrt. of Pitot Press. (/dP avg):	0.36	/(inches H2O)
Stack Temperature (Ts)	532	deg. R
Static Pressure	-0.19	inches H2O
Absolute Stack Pressure (Ps)	30.00	inches Hg
Stack Dimensions	12	inches dia.
Stack Area (As)	0.785	square feet
H2O in Impingers and Silica Gel (Vlc):	64.1	milliliters
Sampling Time (t):	312	minutes
Nozzle Diameter (Dn):	0.375	inches
Total Chromium Mass Collected (Mn):	22730	nanograms
Hexavalent Cr. Mass Collected (Mn):	23693	nanograms

CALCULATED RESULTS

Corrected Sample Volume (Vm std):	295.40	DSCF (68 deg.F)
Water Vapor in Stack (Bws):	1.0	percent by volume
Stack Gas Molecular Wt, Dry (Md):	28.84	lb/lbmole
Stack Gas Molecular Wt, Wet	28.73	lb/lbmole
Stack Gas Velocity (Vs):	20.33	feet/second
Stack Gas Flow Rate (Qs):	943	DSCFM(68 deg.F)
Isokinetic Ratio (%I):	102.9	percent
Total Cr Mass Conc. (Cs):	76.945787	nanograms/dscf
Hex. Cr. Mass Conc. (Cs):	80.205743	nanograms/dscf
Total Cr Mass Conc:	2717.3001	nanograms/dscm
Hex. Cr. Mass Conc:	2832.4237	nanograms/dscm
Total Cr. Emission Rate (Wm):	4.35	milligrams/hr Total Cr.
Hex. Cr. Emission Rate (Wm):	4.54	milligrams/hr Hex. Cr.

MONITORING & LABORATORY DIVISION
STATIONARY SOURCE TESTING BRANCH

TEST SUMMARY AND RESULTS

FILE NO.: T-03-058
PROJECT NAME: 14th & S WH
RUN NO.: SP

SUMMARY OF TEST DATA

Volume of Gas Sampled (Vm):	342.696	cubic feet
Vm Meter Cal. Factor	1.002	
Meter Temperature (Tm):	520	deg. R
Barometric Pressure (Pb):	30.03	inches Hg
Avg. delta H Orifice Press. (dH avg):	2.900	inches H2O
Pb + dH avg:	30.24	inches Hg.
O2 in Stack (%O2):	20.90	percent
CO in Stack (%CO):	0.0000	percent
CO2 in Stack (%CO2):	0.00	percent
N2 in Stack (%N2):	79.10	percent
Pitot Tube Factor (Cp)	0.84	
Avg. of Sqrt. of Pitot Press. (/dP avg):	0.38	/(inches H2O)
Stack Temperature (Ts)	530	deg. R
Static Pressure	-0.24	inches H2O
Absolute Stack Pressure (Ps)	30.01	inches Hg
Stack Dimensions	12	inches dia.
Stack Area (As)	0.785	square feet
H2O in Impingers and Silica Gel (Vlc):	29.4	milliliters
Sampling Time (t):	360	minutes
Nozzle Diameter (Dn):	0.375	inches
Total Chromium Mass Collected (Mn):	48	nanograms*
Hexavalent Cr. Mass Collected (Mn):	48	nanograms*

CALCULATED RESULTS

Corrected Sample Volume (Vm std):	352.43	DSCF (68 deg.F)
Water Vapor in Stack (Bws):	0.4	percent by volume
Stack Gas Molecular Wt, Dry (Md):	28.84	lb/lbmole
Stack Gas Molecular Wt, Wet	28.79	lb/lbmole
Stack Gas Velocity (Vs):	21.56	feet/second
Stack Gas Flow Rate (Qs):	1012	DSCFM(68 deg.F)
Isokinetic Ratio (%I):	99.2	percent
Total Cr Mass Conc. (Cs):	0.1361969	nanograms/dscf*
Hex. Cr. Mass Conc. (Cs):	0.1361969	nanograms/dscf
Total Cr Mass Conc:	4.8097223	nanograms/dscm*
Hex. Cr. Mass Conc:	4.8097223	nanograms/dscm
Total Cr. Emission Rate (Wm):	0.01	milligrams/hr Total Cr.
Hex. Cr. Emission Rate (Wm):	0.01	milligrams/hr Hex. Cr.

* Total Cr < 100ng; therefore, used Hex. Cr for Total Cr