MAIN YARD SAMPLING PLAN SUMMARY

	Sample Location ID, Sampling Date, Coordinates and Analytical Parameters							Sampling Rationale								
Sampling Area	URS Sample Location ID	Chevron ID	Sampling Date	Sample Depth (ft)	Easting	Northing	Analytical Parameters (Abbreviations Defined in Notes at Bottom of Table)	No prior sample and near or at high OVM or TPH conc., or where NAPL or LNAPL is present	Delineate Soil Benzene Conc. >13 mg/Kg	Delineate Soil Benzo-(a)pyrene Conc. >10 mg/Kg	Delineate Soil Lead Conc. >800 mg/Kg	Confirm Anomalous Exceedance	Test for Hazardous Waste TCLP Character-istics	Delineate Benzene-Impacted GW	Delineate Lead-Impacted GW	Perform Remediation Bench Testing
AOC5	CMS-AOC5-SB01	S2195	11/2/2006	4.5 - 5.0	555859	622694	L, TCLP-L						x			
Bulk Station & Loading	CMS-BS-SB01	S2197	11/2/2006	3.5 - 4.0	558206	620705	L					x				
	CMS-LR-SB01	S2196	11/2/2006	1.0 - 1.5	558314	620987	L,V					x				
SWMU 27	CMS-SWMU27-SB01	S2209	11/7/2006	2.0 - 2.5; 2.5 - 3.0	556137	622778	SV,L,V, TCLP-L, TCLP-V	x			x		x			
	CMS-SWMU27-SB02	S2194	11/2/2006	1.0 - 1.5; 1.5 - 2.0	556128	622719	SV,L,V, TCLP-L, TCLP-V	x			x		x			
	CMS-SWMU27-SB03	S2193	11/2/2006	11.0 - 11.5	556246	622648	SV					x				
SWMU 38	CMS-SWMU38-SB01	S2186	10/31/2006	6.5 - 7.0	555915	622457	SV					x				
MY1	CMS-MY1-SB01	S2427	1/29/2007	1.0 - 1.5; 2.5 - 3.0	556356	621599	L,V, TCLP-L, TCLP-V					x	x			
MY3	CMS-MY3-SB01	S2160	10/18/2006	1.5 - 2.0	557554	620975	SV,V, TCLP-V	x					x			
	CMS-MY3-SB03	S2161	10/18/2006	6.0 - 6.5	557341	620846	SV,V	x								
	CMS-MY3-SB04	S2162	10/18/2006	2.0 - 2.5	557427	620806	SV,V					x				
	CMS-MY3-SB05	S2199	11/3/2006	13.0 - 13.5	557630	620868	L, TCLP-L					x	x			
NF2	CMS-NF2-GW2	S2159/H0982	10/17/2006	3.5 - 4.0	556272	622256	S:SV,V, TCLP-V;GW:SV,V	x					x	x		
	CMS-NF2-GW2	MW-262	5/14/2007 and 5/15/2007	2.0 - 12.0	556273	622250	V, SV	x						x		
	CMS-NF2-GW3	S2173/H0984	10/23/2006	8.0 - 8.5	556179	622340	S:SV,V, TCLP-V;GW:SV,V	x					x	x		
	CMS-NF2-GW3	MW-269	5/14/2007 and 5/15/2007	6.0 - 16.0	556190	622357	V, SV	x						x		
	CMS-NF2-SB02	S2185	10/31/2006	7.5 - 8.0	556163	622191	SV,V, TCLP-V	x					x			
	CMS-NF2-SB03	S2183	10/31/2006	9.0 - 9.5	556158	622271	SV,V, TCLP-V	x					x			
	CMS-NF2-SB04	S2184	10/31/2006	8.0 - 8.5	556221	622180	SV,V, TCLP-V	x					x			
	CMS-NF2-SB06	S2112 and S2155	10/16/2006	9.5 - 10.0; 14.5 - 15.0	556212	622283	SV,V, TCLP-V	x					x			
	CMS-NF2-SB07	S2158	10/17/2006	3.5 - 4.0	556265	622316	SV,V, TCLP-V	x					x			
	CMS-NF2-SB09	S2109 and S2154	10/16/2006	8.0 - 8.5; 19.5 - 20.0	556314	622214	SV	x								
NF3	CMS-NF3-GW2	S2212/H0995	11/9/2006	6.0 - 6.5; 11.0 - 11.5	556921	622317	S:L,V, TCLP-L, TCLP-V;GW:L,V				x		x		x	
	CMS-NF3-GW2	MW-268	5/16/2007 and 5/17/2007	5.0 - 15.0	556919	622314	V, L							x	x	
	CMS-NF3-GW3	S2202/H0991	11/6/2006	2.5 - 3.0	556826	622184	S:V; GW:V	x						x		
	CMS-NF3-GW3	MW-258	5/21/2007 and 5/22/2007	1.0 - 11.0	556829	622175	V							x		
	CMS-NF3-GW4	S2204/H0993	11/6/2006	2.0 - 2.5	556942	622149	S:V; GW:V	x						x		
	CMS-NF3-GW5	S2203/H0992	11/6/2006	5.0 - 5.5	556855	622112	S:V; GW:V	x						x		
	CMS-NF3-GW5	MW-259	5/21/2007 and 5/22/2007	5.0 - 15.0	556852	622110	V							x		
	CMS-NF3-GW6	S2180/H0990	10/30/2006	2.5 - 3.0; 5.5 - 6.0	556959	622219	S:L,V, TCLP-L, TCLP-V;GW:L,V				x		x	x		
NF3	CMS-NF3-GW6	MW-266	5/21/2007 and 5/22/2007	3.0 - 9.0	556978	622220	V, L							x		
	CMS-NF3-GW8	S2179/H0989	10/30/2006	7.0 - 7.5	557267	621997	S:SV,V, TCLP-V;GW:V		x				x	x		
	CMS-NF3-GW8	MW-263	5/16/2007 and 5/17/2007	11.0 - 20.0	557266	621993	V							x		
	CMS-NF3-GW9	S2205/H0994	11/6/2006	1.5 - 2.0	557120	622103	S:SV,V;GW:V		x					x		
	CMS-NF3-SB01	S2143	12/7/2006	2.0 - 2.5; 6.5 - 7.0	556844	622290	L,V, TCLP-L, TCLP-V				x		x			
	CMS-NF3-SB03	S2210	11/7/2006	0.5 - 1.0	556924	622241	L,R,V, TCLP-L, TCLP-V				x		x			x
	CMS-NF3-SB04	S2140	12/7/2006	5.0 - 5.5; 15.5 - 16.0	556901	622266	SV,L,V, TCLP-L, TCLP-V	x					x			
	CMS-NF3-SB05	S2206	11/7/2006	10.0 - 10.5	557132	621946	SV,V, TCLP-V	x					x			
	CMS-NF3-SB06	S2200	11/3/2006	2.5 - 3.0	557041	621967	SV,V, TCLP-V	x					x			
	CMS-NF3-SB07	S2419	1/9/2007	5.5 - 6.0	557075	622006	SV,V, TCLP-V	x					x			
	CMS-NF3-SB08	S2208	11/7/2006	2.5 - 3.0	557092	622054	SV,V, TCLP-V	x					x			
	CMS-NF3-SB10	S2207	11/7/2006	5.0 - 5.5	557182	621672	SV			x						
NF5	CMS-NF5-GW1	S2174/H0985	10/26/2006	4.5 - 5.0	557517	621850	S:L,V,TCLP-L, TCLP-V;GW:L,V				x		x	x	x	
	CMS-NF5-GW1	MW-267	5/22/2007 and 5/2320/07	3.0 - 15.0	557515	621844	V, L							x	x	
	CMS-NF5-GW2	S2178/H0988	10/26/2006	1.5 - 2.0	557430	621695	S:V, TCLP-V;GW:V		x				x	x		
	CMS-NF5-GW3	S2175/H0986	10/26/2006	3.0 - 3.5	557488	621616	S:V, TCLP-V;GW:V		x				x	x		
	CMS-NF5-GW3	MW-260	5/9/2007 and 5/10/2007	3.0 - 13.0	557485	621612	V							x		
	CMS-NF5-GW4	S2156/H0997	11/29/2006	7.0 - 7.5	557605	621751	S:V, TCLP-V;GW:V		x				x	x		
	CMS-NF5-GW4	MW-273	5/9/2007 and 5/10/2007	2.0 - 12.0	557605	621748	V							x		
	CMS-NF5-GW5	S2176/S2176/H0987	10/26/2006	1.0 - 1.5; 2.5 - 3.0	557509	621780	S:L,V, TCLP-L, TCLP-V;GW:L,R,V		x		x		x	x		x
	CMS-NF5-GW5	MW-261	5/9/2007 and 5/10/2007	2.0 - 12.0	557509	621773	V, L							x		
	CMS-NF5-SB01	S2211	11/7/2006	4.5 - 5.0	557511	621882	L, TCLP-L				x		x			
	CMS-NF5-SB02	S2189	11/1/2006	1.0 - 1.5; 3.0 - 3.5	557544	621826	L,V, TCLP-L, TCLP-V	x			x		x			
	CMS-NF5-SB03	S2128 and S2177	10/25/2006 and 10/26/2006	4.5 - 5.0; 7.5 - 8.0	557505	621761	R,V, TCLP-V						x			x
	CMS-NF5-SB04	S2188	11/1/2006	1.5 - 2.0; 2.5 - 3.0	557476	621692	L,R,V, TCLP-L, TCLP-V						x			x
	CMS-NF5-SB05	S2214	11/29/2006	5.5 - 6.0	557513	621730	V, TCLP-V		x				x			
	CMS-NF5-SB06	S2157	10/17/2006	8.0 - 8.5	557527	621679	V, TCLP-V		x				x			
	CMS-NF5-SB07	S2198	11/3/2006	3.0 - 3.5; 3.5 - 4.0	557646	621701	L,V, TCLP-L, TCLP-V						x			
	CMS-NF5-SB08	S2187	11/1/2006	1.5 - 2.0; 6.5 - 7.0	557429	621578	L,V, TCLP-L, TCLP-V						x			
NF5	CMS-NF5-SB09	S2191	11/1/2006	7.5 - 8.0	557691	621891	V, TCLP-V						x			
	CMS-NF5-SB10	S2190	11/1/2006	10.0 - 10.5	557722	621917	V, TCLP-V						x			
	CMS-NF5-SB11	S2192	11/1/2006	8.5 - 9.0	557675	622078	L, TCLP-L						x			
NF6	CMS-NF6-GW1	S2108 and S2420	10/13/2006 and 1/9/2007	3.5 - 4.0; 8.5 - 9.0	557876	621530	S:V, TCLP-V;GW:V						x	x		
	CMS-NF6-GW1	MW-243	12/5/2006	3.5 - 8.5	557875	621528	V							x		
	CMS-NF6-GW2	S2166/H0983	10/19/2006	10.0 - 10.5	557610	621252	S:SV,V, TCLP-V;GW:V	x					x	x		
	CMS-NF6-GW2	MW-264	5/15/2007 and 5/16/2007	4.0 - 14.0	557610	621246	V							x		
	CMS-NF6-GW3	S2213/H0996	11/9/2006	7.5 - 8.0	557715	621148	S:SV,V, TCLP-V;GW:SV,V	x					x	x		
	CMS-NF6-GW3	MW-265	5/15/2007 and 5/16/2007	3.0 - 13.0	557717	621145	V, SV							x		
	CMS-NF6-SB01	S2171	10/23/2006	9.5 - 10.0	557860	621620	V, TCLP-V						x			
	CMS-NF6-SB02	S2170	10/23/2006	7.5 - 8.0	557822	621593	SV,V, TCLP-V		x				x			
	CMS-NF6-SB03	S2172	10/23/2006	14.0 - 14.5	557875	621592	V, TCLP-V		x				x			
	CMS-NF6-SB04	S2168	10/20/2006	7.0 - 7.5	557951	621583	SV			x						
	CMS-NF6-SB05	S2165	10/19/2006	4.0 - 4.5	557906	621503	SV,V, TCLP-V	x	x				x			
	CMS-NF6-SB06	S2181	10/30/2006	5.0 - 5.5	558014	621472	L, TCLP-L						x			
	CMS-NF6-SB07	S2201	11/3/2006	5.0 - 5.5	557734	621448	SV,V, TCLP-V	x					x			
	CMS-NF6-SB08	S2215	11/29/2006	8.5 - 9.0	557691	621409	SV,V, TCLP-V	x					x			
	CMS-NF6-SB09	S2217	11/29/2006	2.5 - 3.0	557817	621378	SV,V, TCLP-V	x					x			
	CMS-NF6-SB10	S2125 and S2216	10/25/2006 and 11/29/2006	11.5 - 12.0; 19.5 - 20.0	557706	621334	SV,V, TCLP-V	x					x			
	CMS-NF6-SB11	S2163	10/18/2006	4.0 - 4.5	557631	621311	SV,V, TCLP-V	x					x			
	CMS-NF6-SB12	S2152	10/16/2006	4.0 - 4.5	557690	621272	SV,V, TCLP-V	x					x			
	CMS-NF6-SB15	S2164	10/19/2006	4.0 - 4.5	557776	621212	SV,V, TCLP-V	x					x			
	CMS-NF6-SB17	S2117	10/18/2006 and 1/29/2007	9.0 - 9.5; 19.0 - 19.5	557583	621196	SV,V, TCLP-V	x					x			
	CMS-NF6-SB19	S2151	10/16/2006	10.0 - 10.5	557716	621092	SV,V, TCLP-V	x					x			
	CMS-NF6-SB20	S2116 and S2218	10/18/2006 and 11/29/2006	8.5 - 9.0; 19.0 - 19.5	557663	621218	SV,V, TCLP-V	x					x			
	CMS-NF6-SB21	S2167	10/20/2006	5.0 - 5.5	557784	621315	SV,V, TCLP-V	x					x			
	CMS-NF6-SB22	S2153	10/16/2006	0.0 - 0.5	557691	621518	SV,V, TCLP-V	x					x			
	CMS-NF6-SB23	S2169	10/20/2006	5.5 - 6.0	557857	621450	SV,V, TCLP-V	x					x			
	CMS-NF6-SB24	S2182	10/31/2006	0.0 - 0.5; 15 - 15.5	557745	621662	SV,L,V, TCLP-L, TCLP-V						x			

Notes:
GW = Groundwater
S = Soil
L = lead (tetra ethyl lead and total lead analyses)
V = volatile organic compounds (VOCs) analysis
SV = semi-volatile organic compounds analysis (benzo(a)pyrene)
R = perform remediation bench testing
OVM = organic vapor meter
TPH = total petroleum hydrocarbons
NAPL = non-aqueous phase liquid
LNAPL = light non-aqueous phase liquid
TCLP = toxicity characteristic leaching procedure

LEGEND:

- ACTIVE MONITORING WELL, RECOVERY WELL, OR PIEZOMETER
- SOIL BORING ID FOR A CMS SAMPLE LOCATION
- GROUNDWATER MONITORING LOCATION WITH LNAPL PRESENT IN SECOND QUARTER 2007
- SOIL BORING LOCATION WHERE NO NAPL IS PRESENT.
- SOIL BORING LOCATION WHERE NAPL IS PRESENT.
- SOIL BORING LOCATION WITH ORGANIC VAPOR METER (OVM) DATA
- SHEET PILING
- SLURRY WALL

ESTIMATED GROUNDWATER BENZENE DISTRIBUTION:
- 1–10 ug/L
- 10–100 ug/L
- 100–1,000 ug/L
- 1,000–10,000 ug/L
- >10,000 ug/L

ESTIMATED DELINEATION OF GROUNDWATER LEAD CONCENTRATIONS:
- 5–50 ug/L
- >50 ug/L

ESTIMATED DELINEATION OF SOIL VOC CONCENTRATIONS AS MEASURED BY AN ORGANIC VAPOR METER (OVM):
- 1,000 ppm
- 300 ppm
- 100 ppm

ESTIMATED DELINEATION OF TCLP BENZENE CONCENTRATIONS:
- 0.5 mg/L
- 5 mg/L

ESTIMATED DELINEATION OF TCLP LEAD CONCENTRATIONS:
- 5 mg/L
- 50 mg/L

ESTIMATED EXTENT OF LEAD IMPACTED SOILS:
- 800–8,000 mg/Kg
- >8,000 mg/Kg

ESTIMATED EXTENT OF BENZENE IMPACTED SOILS:
- 13–100 mg/Kg
- >100 mg/Kg

ESTIMATED EXTENT OF BENZO(A)PYRENE IMPACTED SOILS:
- >10 mg/Kg

ABBREVIATIONS:

OVM: ORGANIC VAPOR METER
VOC: VOLATILE ORGANIC COMPOUND
TCLP: TOXIC CHARACTERISTIC LEACHING PROCEDURE

NOTES:

1. THE LATEST LNAPL THICKNESS DISTRIBUTION FOR THE SITE IS SHOWN IN FIGURE 12. THE INDICATION OF THE PRESENCE OF LNAPL IN THIS FIGURE IS LIMITED TO THE MONITORING WELLS SAMPLED IN THE SECOND QUARTER 2007.
2. THE DISTRIBUTION OF ARSENIC CONTAMINATED SOIL IN THE MAIN YARD AND EAST YARD IS SHOWN IN FIGURES 8 AND 9, RESPECTIVELY.

CHEVRON PRODUCTS COMPANY
PERTH AMBOY, NEW JERSEY
CORRECTIVE MEASURES STUDY

MAIN YARD SUMMARY OF PRINCIPAL CONTAMINANTS OF CONCERN DISTRIBUTION IN SOIL AND GROUNDWATER

Chevron
Asphalt
Perth Amboy

DATE: 11/17/08
URS JOB NO: 38547450
FIGURE 5